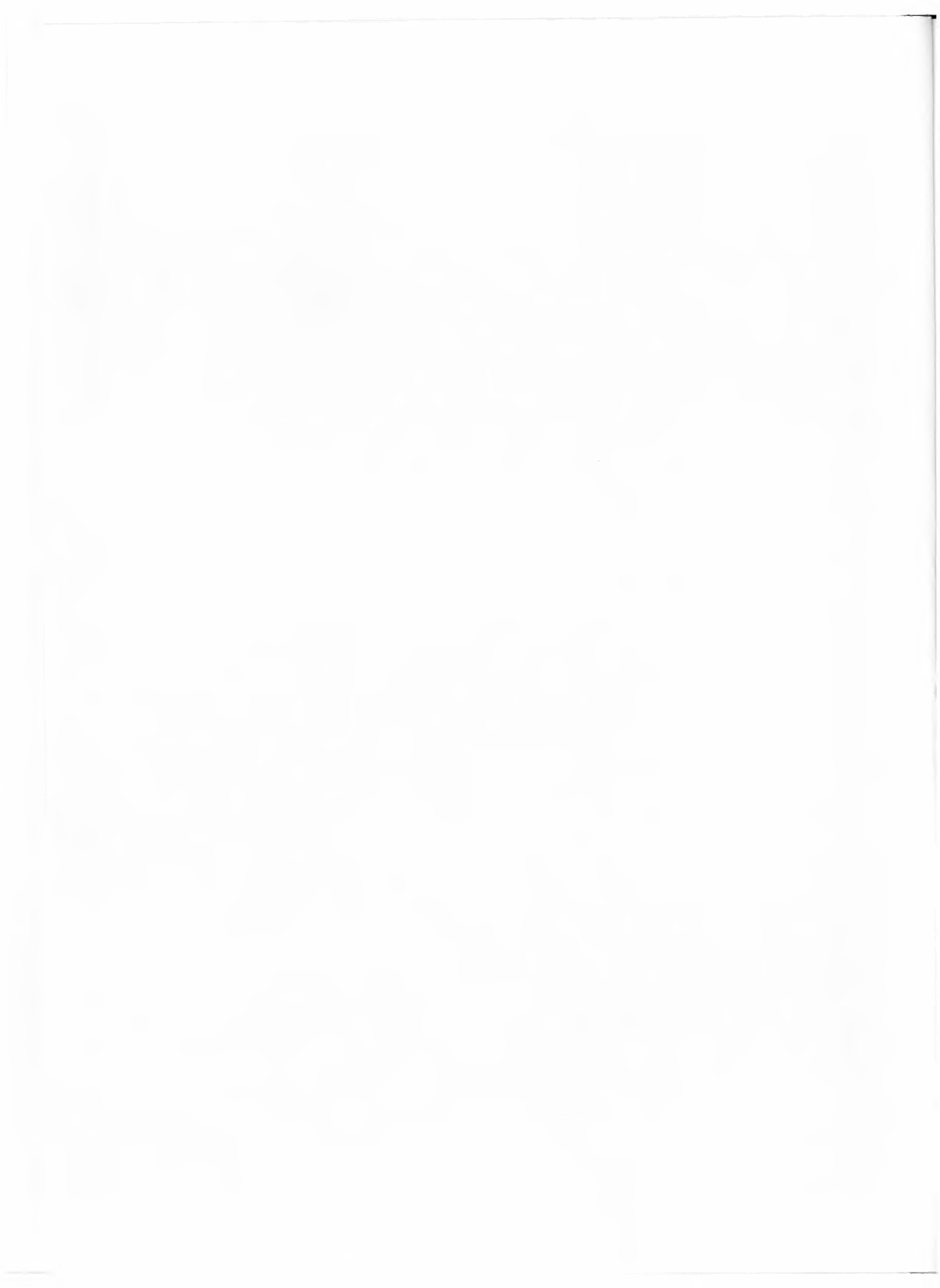


INVENTORY OF GREEK WETLANDS AS NATURAL RESOURCES



THE GOULANDRIS NATURAL HISTORY MUSEUM
GREEK BIOTOPE/WETLAND CENTRE





THE GOULANDRIS NATURAL HISTORY MUSEUM
GREEK BIOTOPE/WETLAND CENTRE

**Inventory of Greek Wetlands
as Natural Resources
(First Approximation)**

English Edition

Georgios C. Zalidis and Antonios L. Mantzavelas

(Editors)

DECEMBER 1995

The Greek Biotope/Wetland Centre (EKBY) was established in 1991, as a result of a proposal to CEC by the Greek Ministry of Environment, Physical Planning and Public Works, under CEC Contract Number B91/91/sin/8192 signed by the Commission of European Communities (DG XI) and the Goulandris Natural History Museum.

This document may be cited as follows:

Zalidis C. G. and A. L. Mantzavelas (Editors). 1994. Inventory of Greek wetlands as natural resources (First approximation). Greek Biotope/Wetland Centre (EKBY). English edition. xvi + 448 pp.

No part of this publication may be reproduced without the prior written permission of the Greek Biotope/Wetland Centre, 14th km Thessaloniki - Mihaniona, 570 01 Thessaloniki, Greece.

*I tried to find you everywhere
In the cities, in the papyrus.
I saw the traces of your form
In the wild meadow flowers.
I found you, lady of the lake,
Lady of the river, lady of my heart,
In the shining pebbles that built the cities,
In the lush papyrus,
Your name (Aysha) drawn in dewdrops
On the wings of the birds of
The river where light and sadness flowed.*

(Extract, on papyrus, by an unknown Arab of
the Middle Ages)

CENTRAL PROJECT TEAM

P. A. Gerakis

Agricultural Scientist - Ecologist

E. Gourvelou

Biologist

G. Zalidis

Agricultural Scientist (Coordinator Project Manager)

S. Kazantzidis

Biologist - Ornithologist

E. Koutrakis

Biologist - Ichthyologist

N. Lambrinos

Geologist - Geomorphologist

A. Mantzavclas

Forester (Deputy Project Manager)

L. Nikolaou

Technical Assistant

S. Dafis

Forester - Ecologist

G. Spyropoulos

Technical Assistant

S. Hatjigiannakis

Agricultural Scientist - Land Reclamation Specialist

ACKNOWLEDGMENTS

This inventory could not have been completed without the dedication of civil servants throughout Greece, and especially those working in the Ministry of Environment Physical Planning and Public Works and the Ministry of Agriculture. We are particularly grateful for the assistance and encouragement offered by the central services of the above ministries, especially by Mrs. Dimitra Spala, Head of the Department of Environmental Management of the Ministry of Environment.

Members of environmental organizations from all over Greece have also sent in valuable information.

The specialists Vasilios Goutner, Achilleas Dimitropoulos, Hans Jerrentrup, Savvas Kazantzidis, Georgios Catsadorakis, Theodoros Naziridis, Evangelia Economidou and Fotis Pergantis undertook the difficult task of checking most of the data collected. They brought to the work long experience and common sense, and made valuable recommendations to improve reliability in the future.

The map of Greek wetlands was produced jointly by EKBV and the Panhellenic Association of Surveyors. Processing and drawing of the map was done by a special working party consisting of Michalis Karteris, Konstantinos Katsambalos, Chrysoula Kourteli, Nicholas Lambropoulos and Theodoros Tsialas. Mr. Lambropoulos contributed to the project with advice on wider technical matters.

Through the efforts of the representative of the American Center in Thessaloniki, Mr. James Ellickson-Brown and his assistant Mrs. Maria Makri, financing was secured for a trip to the States by the Coordinator Project Manager. The latter was warmly received by the specialists in inventory, monitoring and mapping at the Fish and Wildlife Service, Smithsonian Institute and Environmental Protection Agency. The results of this trip were especially favourable for EKBV, leading to its involvement in the sub-project "Inventory and Monitoring of Wetlands" of the MedWet project, and its association with IWRB through the assistance of the Ministry of Environment as well as the beginning of its contacts with the CORINE Biotopes project of the European Commission.

Asst. Prof. of Ecology Mrs. Myrto D. Pyrovetsi suggested several improvements to the text and assisted in the clarification of the terms wetland function, value, use and resource.

Suggestions and scientific information for certain wetlands were provided by Ms. Chrysoula Athanasiou, responsible for the WWF Red Alert Project, and the project's associates Ms. Angeliki Dimitriou, economist, and Ms. Stella Kladara, civil engineer.

Mr Robert Masters' assistance in the translation of the text from Greek into English was proved extremely valuable.

Throughout the various stages of the project, assistance was provided by the entire EKBV staff, especially Mrs. Eftichia Alexandridou, Maria Anagnostopoulou and Eva Papastergiadou.

The central project team takes great pleasure in warmly thanking all of the above individuals and services, hoping that the result will be worthy of the labour and time they so willingly offered.

The project was started at a very difficult time for EKBY. We are grateful to our Chairperson Mrs. Niki Goulandris, who embraced our efforts, supported us when difficulties arose and personally intervened to solve many problems.

The Central Project Team

FOREWORD TO THE ORIGINAL GREEK EDITION

Inventory: a concept which the ecologist readily associates with a terse description and mere listing of numbers and averages, alien to the modern ecological approach of examining functions and mechanisms, revealing countless interactions among living creatures, and documenting cause and effect. Inventory is the first, essential chore for the devoted protector of nature. It is routine work, for people with few ambitions in science or the active protection of nature; an office and computer matter, far removed from the wonderful wetland landscape.

Understandably, these were the thoughts of the EKBY project team who in the autumn of 1991 undertook to draw up an inventory of Greek wetlands. We were starting something new compared to what we had been trained to do, without knowing where we should be heading, and with ambitions limited to locating the existing Greek wetlands and measuring their areas. The team's decision was to finish as soon as possible with this chore, so as to move on to other, more attractive work in research, public awareness and management.

As the time passed, the project seemed to become less unpleasant or easy. It became more difficult as we searched for ways to collect and store data, and as we started to grapple with the human factor outside EKBY; the civil service, which was to be our main source of information. The main questions we had to answer were:

- What exactly would the final product be? A simple improvement in the older lists, or something new?
- Would all wetlands be recorded, or just the most important ones?
- Was the questionnaire method unavoidable? To whom would it be addressed? Would civil servants respond as they had done twenty years ago, or would they be indifferent?
- How should the questionnaire be designed to extract as much information as possible without alarming the recipient and without leading only to vague and subjective answers?
- What would happen if the questionnaire was not answered by every recipient, or if some answered hurriedly in order to get this "nuisance" off their hands? Would we attempt to cross-check the answers? In what way?
- How could we minimize the number of gross errors found in older but still valuable lists? In other words, how could we control the reliability of a project whose source of information was so subjective?

We were not put off by other problems, such as the database, or compatibility with other international and Community efforts. We believed that technical problems beyond our knowledge would be solved with the assistance of our friends.

Since I began working in 1960, I have yet to remember a project which started with such dim prospects and such doubts as to where we were heading. We started with limited ambitions and a limited budget. Our intention was simply to locate all wetlands existing in Greece in the year EKBY started operations, that is, a verification of the list

by Tsiouris and Gerakis (1991). From the very first months it became obvious that this was not enough. Although the actual procedure of verification proved to be a "treasure hunt" it was anything but a chore. Much thought was needed before we collected more information on all the Greek wetlands, small or big, significant or "insignificant".

The questionnaire method was new to us, since we were used to collecting raw data. The method was unavoidable in spite of our reservations, and the fact that it was the one used by other countries for their lists did not reassure us. However, which questionnaire and which inventory sheet? The Ramsar Convention's Wetland Information Sheet was all very well, but it was soon obvious that it could be improved. We would have preferred radical changes, but this would have limited the compatibility of the Greek inventory with those of other countries. The CORINE Biotopes of the European Commission was also good in its way, but it led to dead ends and sometimes to confusion if not used properly.

Following eight consecutive designs, we decided on a final questionnaire which was sent to government departments, environmental organizations and experts. The last two groups responded immediately in a positive way as expected. The surprise came from the civil service. After a short delay, all replied. In the vast majority of cases the civil servants, many of whom obviously knew little about wetlands, answered in the best possible way. Those of us who have worked for the government even for a short time can tell if a document is the result of belief in the importance of the subject, or of the desire to get rid of a nuisance. The answers given by the civil servants showed that those who replied were objective and conscientious. This is yet another indication that the majority of civil servants are a very important factor in the conservation of the natural environment in Greece, and that they could contribute far more if Greek society would only make the resources available.

The most serious problem was the reliability of the answers, and I am sure this will be the question the reader will ask upon opening the present volume. We decided that the only way to achieve a tolerable level of reliability was to cross-check the data (by sending the questionnaire for each wetland to more than one recipient), and to have a team of wetland scientists use their knowledge and experience, and most of all their common sense, to screen this data. Naturally, in these cases the responsibility for any errors is EKBYS. EKBYS employees carried out additional screening and excluded information if from the scientific point of view it was doubtful. In other words, we consider this volume a joint effort (EKBYS staff, civil servants, environmental organizations and outside associates) where positive points are concerned, and EKBYS's responsibility where weaknesses occur. The last statement is in no way an apology in advance, since the result should be judged on the basis of the objectives, the funding and the time available, and should be compared to the results of similar efforts in other countries.

The previous paragraph was not written to avoid the reader's query as to the level of reliability. The answer is that the level of reliability differs from wetland to wetland, based on the information available. For example, we would give high marks to the information sheets covering the eleven wetlands of international importance, for which many studies have been conducted, and low marks to the sheets covering small, distant wetlands. Data on area, where available, is quite satisfactory, while where biotic

characteristics are concerned, essential information may be missing, since such characteristics change easily, especially in less known wetlands. Overall, reliability is greater in comparison with previous efforts. The inventory is certainly not without its weaknesses, and we would be happy to hear about them from the recipients of this work, since inventories by definition are repeated; the inventory is a continuous activity by EKBY, and is directly related to monitoring. Some team members insisted that one of the "missions" of the present volume is to motivate a large number of experts to check information and identify errors. We have therefore made a plea to the 8000 readers of "Amphibion" (the EKBY's bimonthly newsletter) to send us suggestions for corrections.

In addition to the bald facts, which can be fully understood only if the reader first carefully reads the explanatory text, this volume adds three more important things to the Greek wetland bibliography. First is the presentation of information in dynamic form; second, a more complete map of Greek wetlands drawn using modern methods; and third, significant progress in the clarification of the terms function, value and use.

In presenting this volume, we feel that we are not giving just numbers but a living project, a collective creation, which changes with time like any living organism. It is a living project also in that it describes one of the liveliest yet most vulnerable parts of our civilization. This volume contains obituaries for lost wetlands. All of us who contributed to this work are determined to make an effort so that the next issue does not include new obituaries. Let us not forget that the relationship between man and the wetlands is a love affair with a thousand faces.

We, too, are looking everywhere, as the Arab poet did, for the lady of the lake, the lady of the river, hoping that we will some day hand her more beauty and wealth than that bequeathed by the previous generation.

P. A. Gerakis

Thessaloniki 1994

FOREWORD TO THE ENGLISH EDITION

This volume contains the translation in English of the original Greek version. The benefits of such an attempt are obvious e.g. dissemination of information to the widest possible audience etc. However, there is one specific objective which needs to be pointed out namely the wish of EKBY and its external collaborators to receive criticism and inputs from the hundreds of non-Greek speaking scientists and nature lovers who have devoted and are devoting their valuable financial and time resources to the study and conservation of the natural environment of Greece. The editors would be most grateful to receive all suggestions for improving the reliability of the information.

The translation started a few months after the Greek edition was published. Therefore the editors had the opportunity to revise certain chapters and sections as new data and the criticism from Greek-speaking scientists were being collected. The sections that have been revised are:

- *The wetland flora.* The recorded species have been reclassified to categories that reflect more appropriate their life forms and provide great help in the identification and delineation of wetland habitats according to the system used by MedWet for the classification of Mediterranean wetlands.
- *The wetland fauna.* The distribution and threatened-endangered categories of fish, reptile, bird and mammal species recorded for each wetland have been checked by literature references, since errors had been noticed on these fields after the publication of the original Greek edition.
- *The present legal protection status.* The wetlands characterized as "Mediterranean Specially Protected Areas" (Barcelona Convention), have been revised using the new catalogue published by UNEP/IUCN.
- *The drained wetlands of Greece.* Additional information on wetland names, date of drainage and reason of drainage are incorporated.

The bibliography is enriched since more references were used to revise the Greek edition. Information on wetlands that are not included in the inventory is being collected but not incorporated to this volume. These wetlands will be included in a future edition after the collection of information about their characteristics.

In putting this volume into circulation we take the opportunity to express our deepest appreciation to the countless non-Greek speaking scientists and members of expatriate organizations for their long and invaluable contribution to the cause of environmental conservation in Greece and particularly to the establishment and operation of the Greek Biotope / Wetland Centre.

P. A. Gerakis

Thessaloniki 1995

CONTENTS

	Page
LIST OF TABLES	xiii
LIST OF MAPS	xiv
ABSTRACT	xv
 PART A: INTRODUCTION-MATERIALS AND METHODS - RESULTS - EVALUATION AND PERSPECTIVES	 1
 1. INTRODUCTION	 3
1.1. Definitions	3
1.2. Wetland classification	5
1.3. The purpose of the wetland inventory	8
1.4. A survey of the bibliography	9
1.5. Aims of the Greek wetlands inventory	10
 2. MATERIALS AND METHODS	 10
2.1. Design of the questionnaire	10
2.2. Distribution of the questionnaire	11
2.3. Compilation and screening of the completed questionnaires	11
2.4. Design and development of database	12
2.5. Organization of database	12
2.5.1. Date	12
2.5.2. Information on the recipients who completed the questionnaire	12
2.5.3. Wetland name(s)	12
2.5.4. Wetland code	12
2.5.5. Part (s) of the wetland complex	14
2.5.6. Geographical co-ordinates	14
2.5.7. Administrative region	14
2.5.8. Prefecture (s)	14
2.5.9. Location	14
2.5.10. Altitude above sea level	14
2.5.11. Area or length of wetland	15
2.5.12. Wetland type	15
2.5.13. Biotic characteristics	15
2.5.14. Most significant present values	16
2.5.15. Significant present uses	17
2.5.16. Factors changing the wetland's ecological character	17
2.5.17. Present legal protection status	18
2.5.18. Most significant positive actions	18
2.5.19. Drained wetlands	18
2.5.20. Principal bibliography used	18
2.6. Map of Greek wetlands	19

3. RESULTS AND DISCUSSION	19
4. PROJECT EVALUATION AND PERSPECTIVES	24
PART B: COMPILED INFORMATION SHEETS	25
BIBLIOGRAPHY	417
APPENDIX: Site Data Sheet	429
INDEX: Index of the Greek Wetlands	439

LIST OF TABLES

	Page
Table 1: Ramsar Bureau classification of wetland types	6
Table 2: Classification of wetlands and deepwater habitats	7
Table 3: Total number and area of Greek wetlands by each wetland type	20
Table 4: Type, number and area of the wetlands in each administrative region	21
Table 5: Drained wetlands of Greece	22
Table 6: Representative flora species in Greek wetlands	23

LIST OF MAPS

	Page
1. EVROS DELTA	34
2. ISMARIDA LAKE - RODOPI LAGOONS	52
3. VISTONIDA LAKE - PORTO LAGOS LAGOONS	58
4. NESTOS DELTA	72
5. KERKINI RESERVOIR	80
6. VOLVI LAKE - KORONIA LAKE	96
7. AXIOS DELTA - LOUDIAS ESTUARY - ALIAKMONAS DELTA - ALYKI KITROUS LAGOON	110
8. MIKRI PRESPA LAKE	154
9. AMVRAKIKOS GULF	226
10. ACHELOOS DELTA - AITOLIKO LAGOON - MESOLONGI LAGOON - KLISOVA LAGOON - EVINOS ESTUARY	258
11. KOTYCHI LAGOON - LAMIA MARSH - PROKOPOU LAKE - ARAXOS LAGOON	282

INVENTORY OF GREEK WETLANDS AS NATURAL RESOURCES¹

G.C. Zalidis and A.L. Mantzavelas
(Editors)

ABSTRACT

This study is the first approximation to an inventory of Greek wetlands in order to create the national archives of wetland information. The objectives of this project were to: a) collect data related to characteristics, functions, threats of the wetlands and positive actions related to their use, b) design and develop a data base for the above information, and c) depict these data on a digitized thematic map.

The project consisted of the following stages:

1. Design of the questionnaire in a way that it would be easily understood, easily answered, comprehensive, and compatible with other international data bases (Ramsar Bureau, CORINE Biotopes).
2. Distribution of the questionnaire with the help of the Ministry of Environment, Physical Planning and Public Works to the civil servants involved with wetlands. In addition it was distributed to all NGOs.
3. Cross-checking of the completed questionnaires by a team of wetland experts.
4. Design and development of a data base to input and treat wetland data.
5. Depiction of the location of the different types of Greek wetlands proportional to their size on a scale of 1:1000000

The results were: a) the publication of the inventory data sheets for 378 Greek wetlands. These data sheets contain information on the location, the area, the most important biotic and abiotic characteristics, the values, the uses, the pressures threatening the wetlands, the legal status, and the positive actions b) the number and the location of drained wetlands, c) the preliminary results on wetland flora in Greece and e) a digitized map of Greek wetlands.

¹ This work has been funded and coordinated by the Greek Biotope/Wetland Centre (EKBY). Implementation began with the help of the Ministry of Environment, Physical Planning and Public Works, and was completed with the collaboration of many public services, organizations and individuals.

INVENTORY OF GREEK WETLANDS AS NATURAL RESOURCES

ΥΠΟΥΡΓΕΙΟ ΠΕΡΙΒΑΛΛΟΝΤΟΣ ΚΑΙ ΦΥΣΙΚΩΝ ΠΟΡΩΝ

ΔΙΕΥΘΥΝΣΗ ΓΕΩΓΡΑΦΙΚΩΝ ΕΡΕΥΝΩΝ

Τμήμα Β

ΕΛΛΑΔΑ

Η παρούσα μελέτη πραγματοποιήθηκε στο πλαίσιο του προγράμματος «Ενδεικτική Μελέτη για την Κατάσταση των Βιότοπων στην Ελλάδα» (Ε.Π.Ε.Β.), με την επιμέλεια του Γ. Γ. Χρηστάκη, Διευθυντή του Τμήματος Β της Διεύθυνσης Γεωγραφικών Ερευνών.

Οι εργασίες της μελέτης πραγματοποιήθηκαν με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

Η μελέτη πραγματοποιήθηκε με τη βοήθεια των μελών του Τμήματος Β, καθώς και των μελών των Περιφερειακών Διευκρίνισης.

PART A

**INTRODUCTION-MATERIALS AND METHODS-RESULTS-EVALUATION
AND PERSPECTIVES**

INVENTORY OF GREEK WETLANDS AS NATURAL RESOURCES

2007

MINISTER OF ENVIRONMENT AND NATURAL RESOURCES
AUTHORITY FOR THE ENVIRONMENT

1. INTRODUCTION

1.1. Definitions

Defining the term "wetland" was proven a most difficult and intriguing task. A very well definition is the one stated in Article 1 of the Ramsar Convention: "Wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". In addition, Article 2 states that wetlands may incorporate "riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands".

When the Ramsar Convention was drawn up, in 1971, the scientific knowledge on wetlands were limited. In retrospect, examination of the definition shows that the team that drew it up consisted mainly of people primarily concerned about the future of wetlands as part of mankind's natural heritage. As a result it was impossible for such people to foresee that this definition had certain limitations that would create difficulties for lawyers and educators. An example of this is the English term "marsh", which refers only to inundated areas with herbaceous vegetation and therefore does not include swamps, where woody vegetation predominates.

Another limitation of the Ramsar definition is the ambiguity in the term "areas temporarily covered by water". Covered for how long during the year? Is the minimum period of inundation per year and the frequency per decade to be the same everywhere on Earth and for all types of wetland? Such questions are not merely academic; they show how necessary it is to answer the general question which troubles hundreds of researchers facing practical problems in applying wetland protection laws: How far does the wetland extend landward?

The answer to this question should be looked up in the relevant literature. Cowardin et al (1979) mentions the following definition which was adopted by the US Fish and Wildlife Service: "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water". According to this definition an area should have one or more of the following three attributes in order to be classified as a wetland: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water, or covered by shallow water at some time during the growing season of each year.

Feirabend and Zelazny (1987) used the following definition known in the USA as US Army Corps of Engineers definition and enshrined in various laws (e.g. US Food Security Act of 1986): "Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions".

These two definitions have apparently been considered identical and accepted by the Federal Interagency Committee for Wetland Delineation (1989), since they both

include the three essentials, namely suitable hydrological conditions, hydric soils and hydrophytic vegetation. These criteria could also be used in Greece to determine how far the wetland extends landward (Mantzavelas and Zalidis 1995). It is obvious from these definitions that theoretically there could be wetlands that do not adjoin permanent or seasonal bodies of water and others which are never covered by surface water. In fact such wetlands usually comprise a very small percentage of the total wetland complex.

It is obvious from the preceding paragraphs, that the question of what is and what is not a wetland is by its nature difficult to be explicitly answered, as will always be the case with transitional zones and spatially and temporally dynamic states. An indication of this difficulty is that internationally respected publications on wetlands (at least those we are aware of) do not attempt to define a wetland precisely (e.g. Mitsch and Gosselink 1986). The British wetland expert E. Maltby, in his popularized book "Waterlogged Wealth" (1986), after mentioning without comments the Ramsar and United States definitions, gives his own "feel" of a wetland: "Wetland is a collective term for ecosystems whose formation has been dominated by water, and whose processes and characteristics are largely controlled by water. A wetland is a place that has been wet enough for a long enough time to develop specially adapted vegetation and other organisms".

The determination and application of the identification criteria of wetlands is a matter of great social and political importance in the United States and Canada, since even small changes in the definition can lead to vast tracts of land being subjected to, or freed from, conservation legislation. Although further discussion of this question would be to digress, certain additional clarification is necessary.

The legally approved definition of wetland in Greece, seems to be the one adopted by the Ramsar Convention. The Greek Government could adopt a supplementary definition which would be of scientific and practical value, provided that such a supplement concerns the extension of the designated area landward and not its limitation in the direction of the associated body of water.

The concepts of wetland, waterbody, coastal zone, forested area, etc., may be overlapping both functionally and geographically since clear boundaries do not exist in Nature. For example, a shallow freshwater lake is a water resource but also a wetland, and a hydric soil with flourishing hydrophytic vegetation is a wetland resource but also a soil resource or even a forest resource if the vegetation consists of forest tree species. Thus the legislation, management plans and conservation measures relating to one of these concepts covers to a varying degree one or more of the other.

The tendency to give special treatment to wetlands (study, conservation and management) began only a few decades ago, when scientists started to realize that while wetland ecosystems have much in common with dry land and deep water systems, they also have their own special characteristics, due to the fact that they are "intermediate" and "transitional" systems. Thus they have additional, special requirements regarding their management and conservation; needs which often transcend national borders (e.g. wetland biodiversity, particularly regarding birds).

The environmental policy makers in Greece have in many cases wander about the special characteristics of wetland resources and their special requirements regarding

their management and conservation which would trigger additional legal provisions, scientific studies and administrative structure for the wetlands. Law 1739/87 on the protection of Water Resources considers many common types of wetland (e.g. lakes, rivers) that make up a large proportion of the total Greek wetland area, but does not consider marshes or lagoons. In addition, Law 1739/87 gives limited (though valuable) consideration to the "ecological value" of freshwater, since it is concerned mainly with the water use for domestic water supplies, irrigation and fishing. It is also not certain that the forest-related laws fully cover wetlands with emergent herbaceous vegetation.

1.2. Wetland classification

As explained earlier the definition of wetland adopted by the Ramsar Convention is unclear. Based on this definition the Ramsar Bureau proposed a wetland classification system which is simple and user friendly for all countries, and contains familiar terms and meanings (Table 1). This system has been approved by the Fourth Meeting of the representatives of the countries which have signed the Ramsar Convention (1990). Since the first priority of those who proposed the system was to facilitate its generalized use, classification was not based on the most appropriate terminology for wetland types (T. Jones personal communication 1990).

The Ramsar classification system is not the only one proposed. Many countries, even research teams, have used their own systems. The best-documented system was established by Cowardin *et al.* (1979) (Table 2). However, its application would require a lot of information which is available only for a limited number of wetlands in a few countries.

Classification in basic and applied science always leads to fruitful discussion. Disputes are lessened when priorities are set right from the beginning regarding the aims which the system is supposed to achieve. The Ramsar Bureau's priority intends to facilitate communication among all scientists. Accepting this priority, EKBY has adopted the Ramsar system in the present study, recognizing at the same time the scientific superiority of the system formulated by the US Fish and Wildlife Service (Cowardin *et al.* 1979) and the need to continue raising this issue so that a more appropriate system may be found which will be strictly hierarchical and commonly accepted. Such a system would be more helpful in drawing up more general management policies than the existing ones.

TABLE 1: RAMSAR BUREAU CLASSIFICATION OF WETLAND TYPES AS APPROVED BY THE FOURTH MEETING OF THE CONTRACTING PARTIES, (MONTREUX 1990).

Marine and Coastal Wetlands

1. Marine waters - permanent shallow waters less than six metres deep at low tide; includes sea bays, straits.
2. Subtidal aquatic beds; includes kelp beds, sea-grasses, tropical marine meadows.
3. Coral reefs.
4. Rocky marine shores; includes rocky offshore islands, sea cliffs.
5. Sand, shingle or pebble beaches; includes sand bars, spits, sandy islets.
6. Estuarine waters; permanent waters of estuaries and estuarine systems of deltas.
7. Intertidal mud, sand or salt flats.
8. Intertidal marshes; includes saltmarshes, salt meadows, saltings, raised saltmarshes, tidal brackish and freshwater marshes.
9. Intertidal forested wetlands; includes mangrove swamps, nipa swamps, tidal freshwater swamp forests.
10. Brackish to saline lagoons with one or more relatively narrow connections with the sea.
11. Freshwater lagoons and marshes in the coastal zone; includes delta lagoon and marsh systems.

Inland Wetlands

1. Permanent rivers and streams; includes waterfalls.
2. Seasonal and irregular rivers and streams.
3. Inland deltas (permanent).
4. Riverine floodplains; includes river flats, flooded river basins, seasonally flooded grassland, savanna and palm savanna.
5. Permanent freshwater lakes (over 8 ha.); includes large oxbow lakes.
6. Seasonal freshwater lakes (over 8 ha.), floodplain lakes.
7. Permanent and seasonal, brackish, saline or alkaline lakes, flats and marshes.
8. Permanent freshwater ponds (below 8 ha.), marshes and swamps on inorganic soils; with emergent vegetation waterlogged for at least most of the growing season.
9. Seasonal freshwater ponds and marshes on inorganic soil; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.
10. Shrub swamps; shrub-dominated freshwater marsh, shrub carr, alder thicket; on inorganic soils.
11. Freshwater swamp forest; seasonally flooded forest, wooded swamps; on inorganic soils.
12. Peatlands; shrub or open bogs, fens.
13. Forested peatlands; peat swamp forest.
14. Alpine and tundra wetlands; includes alpine meadows, tundra pools, temporary waters from snowmelt.
15. Freshwater springs, oases.
16. Geothermal wetlands.

Man-made Wetlands

1. Water storage areas; reservoirs, barrages, hydro-electric dams, impoundments (generally over 8 ha.).
2. Ponds, including farm ponds, stock ponds, small tanks (generally below 8 ha.).
3. Aquaculture ponds; fish ponds, shrimp ponds.
4. Salt exploitation; salt pans, salines.
5. Excavations; gravel pits, borrow pits, mining pools.
6. Wastewater treatment; sewage farms, settling ponds, oxidation basins.
7. Irrigated land and irrigation channels; rice fields, canals, ditches.
8. Seasonally flooded arable land, farm land.

TABLE 2: CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS (Cowardin *et al.* 1979)

System	Subsystem	Class
Marine	Subtidal	Rock Bottom Unconsolidated Bottom Aquatic Bed Reef
	Intertidal	Aquatic Bed Reef Rocky Shore Unconsolidated Shore
Estuarine	Subtidal	Rock Bottom Unconsolidated Bottom Aquatic Bed Reef
	Intertidal	Aquatic Bed Reef Rocky Shore Unconsolidated Shore Emergent Wetland Scrub-Shrub Wetland Forested Wetland
Riverine	Tidal	Rock Bottom Unconsolidated Bottom Aquatic Bed Streambed Rocky Shore Unconsolidated Shore Emergent Wetland
	Lower Perennial	Rock Bottom Unconsolidated Bottom Aquatic Bed Rocky Shore Unconsolidated Shore Emergent Wetland
	Upper Perennial	Rock Bottom Unconsolidated Bottom Aquatic Bed Rocky Shore Unconsolidated Shore
	Intermittent	Streambed
Lacustrine	Limnetic	Rock Bottom Unconsolidated Bottom Aquatic Bed
	Littoral	Rock Bottom Unconsolidated Bottom Aquatic Bed Rocky Shore Unconsolidated Shore Emergent Wetland
Palustrine		Rock Bottom Unconsolidated Bottom Aquatic Bed Unconsolidated Shore Moss-Lichen Wetland Emergent Wetland Scrub-Shrub Wetland Forested Wetland

1.3. The purpose of the wetland inventory

The inventory of a country's natural resources, in other words the gathering of data on the whereabouts, size and quality of these resources, is a prerequisite for policy-making, conservation, utilization and planning of activities associated with their utilization.

The importance of these inventories is shown by the fact that all countries have such projects in progress. International organizations such as the Food and Agriculture Organization (FAO) of the UN, and the World Bank have funded resource inventories in developing countries, since this will encourage the flow of investment from developed countries to the developing countries and the better use of natural resources. Inventories of natural resources such as forests, soils and freshwater have been started in recent decades in various countries.

The value of an inventory of the world's wetlands as distinct natural resources, (i.e. distinct from soil and water resources), has been recognized far more recently than was the case with the other resources. National governments and international bodies appear to agree that a wetland inventory is necessary because:

- a. It is clear that "one cannot protect something which one is not sure exists, or if it exists, where is to be found".
- b. Many wetlands are considered international resources for particular reasons (e.g. migratory birds, trans-border deltas, lakes and rivers). Hence, the inventory presents an opportunity for international co-operation on information exchange and methods of gathering, processing and communicating of such information.
- c. The maps drawn up from an inventory are frequently useful in general physical planning studies. They can form the basis for studies on the delineation of conservation areas and administrative units. There are cases where the lack of such maps hinders investment.
- d. An inventory shows better than almost anything else the gaps in scientific knowledge, the level of governmental knowledge about wetlands and the society's awareness of the value of such resources. Thus an inventory can help to establish priorities for research and public awareness.
- e. The inventory is in itself a beneficial scientific activity, a challenge for over-specialized scientists to see wetland values as a whole.
- f. Designing an inventory project and the subsequent data processing encourages interdisciplinary co-operation. Additionally, such co-operation offers an opportunity of using modern information technology.
- g. An inventoried wetland has a better chance of being protected through legislation than one which, though perhaps of greater importance, is unknown.
- h. An inventory is a rich and valuable source of data for public awareness programmes. A map of Greek wetlands or derivative thematic maps or maps appropriately simplified and printed as posters can be distributed to thousands of recipients.
- i. The data from regularly repeated inventories, together with appropriate monitoring programmes, (which can be considered as inextricably bound up with the concept of an inventory) render the study of the changes through time possible.

- j. The appropriate processing of the inventory data, which is possible with a carefully designed programme, is useful for the identification of trends, the comparison between national and international wetlands, and the evaluation of priority conservation actions.

During the Fourth International Wetlands Conference in Ohio, USA in 1992, the co-ordinators of ambitious regional inventory projects stressed that "wetland inventories by themselves do not save wetlands". However, they do help mankind to appreciate the wealth of the natural heritage, to learn from the mistakes and to develop more sustainable policies of wetland use. Inventories represent the baseline upon which wetland's future trends can be monitored.

1.4. A survey of the bibliography

The search of the relevant bibliography proved that there is not a complete and uniform inventory system for Greek wetlands. An earlier survey by the Army Geographical Service resulted in the publication of a list of principal Greek rivers and lakes by the Greek National Statistical Service (1987).

Efforts to register some important Greek wetlands have been published in several international directories and inventories (Olney 1964, Luther and Rzóska 1971, Carp 1980, Scott 1980, Rose and Taylor 1993, Grimmett and Jones 1989, UNEP/IUCN 1989, Jones 1993). Amongst this literature, with an exception of the eleven Ramsar sites (Jones 1993), plus a few other large wetlands, there is very little information on the characteristics, functions and values of wetland sites and the threats they face.

The first national specific inventory (Dorikos 1981), which is still valuable, contains data on 115 wetlands throughout Greece. However, this inventory contains data gathered by the Prefectures, which have not been checked by specialists.

Other significant studies which provide inventory data for many Greek wetlands are: Economidou 1981, Hallmann 1982, CEC CORINE Biotopes Programme 1988, Heliotis 1988, Malakou et al 1988, Kourteli and Economou 1990, Papayannis 1990, Pyrovetsi 1990, Psilovikos 1990.

The most extensive list to date, regarding the number of wetlands included, is that of Tsiouris and Gerakis (1991), which however contains no data on the characteristics of each wetland. In spite of the mass of useful data of all the above studies, none of them can be considered as an inventory in the proper sense of the word.

The lack of an integrated data base becomes particularly apparent when the authorities attempt to draw up a plan for upgrading and managing the wetlands. These attempts are hindered because: a) quantitative data and information about the wetlands are not available, b) processing of data is difficult due to its volume, complexity and varying methods of collection, c) the integration of the various studies (on characteristics, functions, threats, etc.) into a uniform inventory system is impossible, d) there is no uniform system of data collection for the wetland or the catchment area, and e) it is difficult to make use of the above data in an integrated system of planning and management.

The need for a comprehensive project for wetland inventory in Greece is obvious; a project that will constitute a complete and systematic data base for a variety

of purposes. It must be stressed that this project is only the first step in the systematic inventory of Greek wetlands, which will document the need for a far more ambitious project.

1.5. Aims of the Greek wetland inventory

The wetlands inventory project which started in November 1991, aims to create a national data base for all Greek wetlands and the catchment areas which will include descriptive and geographical information, the principal structural and functional characteristics, the threats they are subject to and all relevant activities (positive and negative) which are taking place or being planned (Zalidis 1993). Data will be stored in a way that is easily accessible at both the national and Community level. An archive with multiple information layers will be created.

The present work includes the following information on wetlands: a) the area, b) the principal biotic characteristics, c) the values, d) the uses, e) the factors causing wetland's degradation, f) the Present legal protection status, g) the most significant positive actions which have been undertaken or planned for the preservation of the wetlands.

The specific aims of the project are: a) collection of the above data, b) design and development of a data base to store descriptive and geographical information, c) preparation of a digitized thematic map showing the location and extent of Greek wetlands, and d) publication of a book with the reports on all the inventoried wetlands.

This project is based on a rapid assessment of the present situation and is thus only the first step towards a complete inventory of Greek wetlands. It certainly does not provide a detailed record, but forms the basis for ongoing updating of the data, both in terms of volume and of detail and reliability. The publication of the results form by themselves the basis for collecting suggestions for the presence of mistakes in order to improve data reliability.

Once this data base has been completed, it will provide technical support to scientists and administrators responsible for the natural, biological and economic wealth of wetlands and the catchment areas (Zalidis *et al.* 1993a). It will also be possible to use this data in policy making, planning, and management of Greece's natural resources.

2. MATERIALS AND METHODS

The Greek wetlands inventory project was comprised of the following stages: a) design of questionnaire, b) distribution and completion of the questionnaire, c) checking of completed questionnaires by a team of experts, d) design and development of a data base, e) presentation of the results.

2.1. Design of the questionnaire

The first task in collecting the data for the inventory was to design the questionnaire, bearing in mind that it would be completed in general by non-experts.

Thus the questionnaire has to be easily understood and answered and its completion should not be time consuming. For these reasons a simple classification system of wetland types was adopted based on the one used by the Ramsar Bureau (Table 1). Answers to specialized questions, such as those concerning flora and fauna, were required only in cases where the recipient felt that he was in a position to provide such information.

In designing the questionnaire it was taken into account that the questions should be compatible with those of other data bases, such as the Ramsar Data Base, so that data concerning Greek wetlands would be easily transferable. The Ramsar Wetlands Information Sheet, after being modified and improved was used as a basis for the construction of a Site Data Sheet (SDS), (Appendix), which could be easily answered, processed and inserted into a data base. The compiled information for each wetland (even those presenting minimal information) is cited in part B (Compiled Information Sheets) of the present publication.

2.2. Distribution of the questionnaire

The next task in the inventory project was to distribute the questionnaire. An effort was made to obtain answers from more than one source for each wetland, in order to cross-check the information. Through the valuable assistance of the Ministries of Environment and Agriculture the questionnaire was distributed to many environmental organizations, as well as individuals and groups concerned with wetland conservation.

To facilitate completion, the questionnaire was accompanied by: a) a list of wetlands located in each prefecture as well as in the neighbouring prefectures based on the "Inventory of basic Greek wetlands" (Dorikos 1981), and that compiled by Tsiouris and Gerakis (1991), and b) a sample of a completed questionnaire. At this stage the research team was in contact with the recipients to expedite completion and return of the questionnaires.

2.3. Compilation and screening of the completed questionnaires

Following the previous stage the research team proceed to the compilation and screening of the completed questionnaires. The aim of this stage was: a) to identify possible weaknesses or omissions in the answers, and b) to group additional data and information. This work resulted in the completion of the Site Data Sheet (SDS), for each wetland, which was the first step towards the construction of a data base. The completed SDS, along with the completed questionnaires, was sent to wetland experts who cross-checked the information.

The final discussion concerning the inventory data and the data base format was the objective of a workshop which took place at EKBY in which a team of experts (in the fields of natural and computer sciences) participated. Apart from the staff of EKBY the following scientists were invited to the workshop: a) G. Catsadorakis, Agios Germanos, Florina, b) A. Dimitropoulos, Goulandris Museum of Natural History, Athens, c) E. Economidou, Goulandris Museum of Natural History, Athens, d) V. Goutner, Aristotle University of Thessaloniki, Dept. of Biology, e) H. Jerrentrup and Th. Naziridis, EPO, Chrysoupolis, f) S. Kazantzidis, Thessaloniki, g) F. Pergantis, KOPEA, Aitoliko. Absent from the workshop were Messrs. G. Catsadorakis G. and A. Dimitropoulos who sent their comments in writing.

At this point the editors wish to state that they bear the final responsibility of all errors in this volume.

2.4. Design and development of data base

The design and development of the data base were the next task. The GRIN (GREEK INventory) data base was developed which is designed in order to meet the following needs: a) to be compatible with similar data bases of international or European inventories, b) to be user-friendly, c) to be easily processed, d) to be easily transferable to other programmes for statistical processing or processing with GIS.

To construct a programme, we used Clipper 5.0. The files were constructed on the DBase III Plus so that the updating of various fields would be possible and data would be easily processed. Each file consists of a number of fields (numeric, alphanumeric, logic) depending on the type and number of the inventory data sheet parameters. The size and contents of these fields is specified by the inventory data sheets.

The transformation of the data base files to word-processing files was done with GRIN software, and the final processing by the word processor Word 6.0 for Windows 3.1.

2.5. Organization of data base

The organization of data on the GRIN base follows a steady structure with a specific number of fields in accordance with the system described below. It should be emphasized that the following explanations must be taken into consideration by the reader prior to the study of the inventory data.

2.5.1. Date

This is the date that the questionnaires were completed by the recipients. In the case where more than one questionnaire were completed for a wetland by various recipients, the date entered is that of the most recently completed questionnaire.

2.5.2. Information on the recipients who completed the questionnaire

Name, address and telephone number of compiler(s).

2.5.3. Wetland name(s)

Name by which the wetland is most commonly known and other names, if any.

2.5.4. Wetland code

The code of each wetland consists of three parts which derive in accordance with the following system:

(a) Code of the administrative region to which the wetland belongs in accordance with the following classification system used by the European Statistics Committee of the European Communities (Eurostat), known as NUTS (Nomenclature of Territorial Units for Statistics).

Where the wetland belongs to more than one administrative region, of the same level in the classification system, the code number used is that of the administrative region of the next higher classification level.

100	Vorcia Ellada (Northern Greece)	110	Anatoliki Makedonia-Thraki	111	Evros
				112	Xanthi
				113	Rodopi
				114	Drama
				115	Kavala
		120	Kentriki Makedonia	121	Imathia
				122	Thessaloniki
				123	Kilkis
				124	Pella
				125	Pieria
				126	Serres
				127	Chalkidiki
		130	Dytiki Makedonia	131	Grevena
				132	Kastoria
				133	Kozani
				134	Florina
		140	Thessalia	141	Karditsa
				142	Larisa
				143	Magnisia
				144	Trikala
				144	Trikala
200	Kentriki Ellada (Central Greece)	210	Ipeiros	211	Arta
				212	Thesprotia
				213	Ioannina
				214	Preveza
		220	Ionia Nisia	221	Zakynthos
				222	Cephalinia
				223	Kerkyra
				224	Lefkada
		230	Dytiki Ellada	231	Aitolokarnania
				232	Achaia
				233	Ileia
		240	Sterea Ellada	241	Voiotia
				242	Evvoia
				243	Evrytania
				244	Fthiotida
				245	Fokida
		250	Peloponnisos	251	Argolida
				252	Arkadia
				253	Korinthia
				254	Lakonia
				255	Messinia
200	Attiki				
400	Nisia (Islands)	410	Vorcio Aigaio	411	Lesvos
				412	Samos
				413	Chios
		420	Notio Aigaio	421	Dodecanisos
				422	Kyklades
		430	Kriti	431	Irakleio
				432	Lasithi
				433	Rethymni
				434	Chania

It must be noted that the above system is geographically arbitrary since it bears no relation whatsoever to the standards set decades ago concerning what the geographical

regions of Sterea Ellada, Peloponnese etc. include. It is clear that there is complete inconsistency between the geography and the names given to the Administrative Regions.

(b) Wetland input number on the GRIN data base. Input is in geographical order, starting with Anatoliki Makedonia-Thraki region and the Evros Prefecture. If the wetland is part of a complex or is included along with other wetlands in a larger complex (e.g. wetland complex of international importance in accordance with the Ramsar Convention) the order of input in the data base may change to allow a consolidated presentation of the questionnaire.

(c) Code which receives a different value rating in individual wetlands, wetland complexes and parts of a wetland complex. The term complex is used for very large wetlands (e.g. deltas) where the wetland parts are obvious. These wetland parts are entered separately when distinguishable, on the basis of structural or functional criteria, as special wetlands; this does not negate the fact that they are part of a larger complex.

On the basis of the aforementioned analysis, codification of wetlands is done in accordance with the following system:

a) Individual Wetland: /000, b) Wetland Complex: /100,/200, etc., c) Wetland parts: /100,/120, etc.

2.5.5. Part (s) of the wetland complex

Name(s) of the wetland part (s) in a wetland complex.

2.5.6. Geographical co-ordinates

East longitude and North latitude of the wetland centre, defined from the digitized base map of the Army Geographical Service, scale of 1:1000000 (Projection System EGSA '87).

2.5.7. Administrative region

Name of the Administrative region to which the wetland belongs, and corresponding NUTS code.

2.5.8. Prefecture(s)

Name of the prefecture to which the wetland belongs and corresponding NUTS code. If the wetland belongs to more than one prefecture, all of them are mentioned, the first being the prefecture containing the largest section of the wetland.

2.5.9. Location

Compass bearing (i.e. NE, S) and distance in km of the wetland from the nearest village, town or city. In the case of linear wetlands (e.g. rivers) location of source, general flow direction and location where its waters are discharged into the sea are given.

2.5.10. Altitude above sea level

Altitude above sea level (in metres) of the centre for wetlands such as lakes, swamps etc., highest and lowest altitudes for linear wetlands (e.g. rivers).

2.5.11. Area or Length of wetland

Area (in ha) for lakes, marshes, etc., or length (in km) for linear wetlands (e.g. rivers).

2.5.12 Wetland Type

Type and corresponding code in accordance with the Ramsar Bureau classification system, as follows:

LAGOON				J
ESTUARY				F
DELTA	COASTAL			F
	INLAND			L
MARSH	COASTAL	PERMANENTLY FLOODED	SALINE-BRACKISH WATER	H
			FRESH WATER	K
	INLAND	PERIODICALLY FLOODED	SALINE-BRACKISH WATER	H
			FRESH WATER	K
		PERMANENTLY FLOODED	SALINE-BRACKISH WATER	Q
			FRESH WATER	S
		PERIODICALLY FLOODED	SALINE-BRACKISH WATER	R
			FRESH WATER	T
RIVER		PERMANENTLY FLOODED		M
		PERIODICALLY FLOODED		N
LAKE	COASTAL	PERMANENTLY FLOODED	SALINE-BRACKISH WATER	Q
			FRESH WATER	K
	INLAND	PERIODICALLY FLOODED	SALINE-BRACKISH WATER	R
			FRESH WATER	K
		PERMANENTLY FLOODED	SALINE-BRACKISH WATER	Q
			FRESH WATER	O
		PERIODICALLY FLOODED	SALINE-BRACKISH WATER	R
			FRESH WATER	P
SPRING				Y
PEATLAND				U
RESERVOIR				6
CANAL-TRENCH				9
SALT PAN				5

Where more than one wetland type appears, the predominant type is mentioned first, this being the type that classifies the wetland, followed by an (*); the remaining types follow.

2.5.13. Biotic characteristics

Flora: The flora of the wetlands has been classified in categories based on the classification system established by Cowardin *et al.* (1979) and adopted by MedWet sub-project "Inventory and monitoring of Mediterranean wetlands" (Zalidis *et al.* 1995b). Description of the categories of flora is given below. An indicative list of plant species per each category has been recorded for each wetland (if available). **We emphasize that this is not a complete list of species.**

CATEGORIES OF FLORA OF WETLAND AREAS

1. **Aquatic bed plants:** Species growing principally on or below the surface of the water (algal species, rooted vascular plants, and floating vascular plants).
 2. **Emergents:** Erect, rooted plant species (species growing in areas commonly known as marshes, wet meadows, saltmarshes and wet grasslands).
 3. **Scrubs and Shrubs:** Woody plant species less than 6 m in height.
 4. **Trees:** Woody plant species more than 6 m in height.
 5. **Dunes and Sandy Shores plants:** Non-wetland species growing in arid areas close to wetlands.
-

Fauna: The aim of the present project was not the creation of complete wildlife catalogues. However, an indicative list of animal species is given for each wetland in accordance with the following system:

- a. **Fish:** List of only the endemic species and subspecies (+), endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992) and Economidis P. (1991), recorded for each wetland.
- b. **Reptiles:** List of only the endemic species and subspecies (+), endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992), recorded for the wetland.
- c. **Birds:** List of only the endangered species (E), vulnerable (V) and rare (R) species according to Karandeinos (1992), and description of their presence in the wetland (N=Nesting birds, P=Permanent presence, M=Migratory birds, W=Wintering birds).
- c. **Mammals:** List of only the endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992), which are found at the greater area of each wetland.

Amphibians are not included since information on their distribution is not available. **We emphasize that these are not complete lists of species.**

2.5.14. Most significant present values

Most significant present values of the wetland for man, deriving from the wetland's natural functions, and estimates of their significance in accordance with the following scale: 1=small, 2=medium, 3=great.

We have identified 18 value types that a wetland may have, namely: 1) Biological (in terms of biodiversity), 2) Drinking water, 3) Irrigation water, 4) Fishing, 5) Fodder, 6) Game support, 7) Logging, 8) Salt production potential, 9) Hydroelectric power potential, 10) Sand extraction potential, 11) Scientific, 12) Cultural, 13) Recreational, 14) Educational, 15) Flood control, 16) Anti-erosive, 17) Water quality improving, 18) Climatic (for the region surrounding the wetland). When transferring the data to the Site Data Sheets the biological, flood-control, anti-erosive, water quality improving and climatic values were excluded; these may be part of a special study in a later stage, after compilation of the relevant data.

At this point we should explain the terms function, value and use of the wetlands (see also Tsiouris and Gerakis 1991). By function we mean the physical, chemical, and biological processes taking place in a wetland, e.g. ground water recharge, modification of flooding patterns, sediment trapping, solar radiation assimilation, food-chain support,

etc. Wetlands do not all perform the same functions, nor do they perform them in the same way, since wetlands differ in their characteristics and each is a unique case. Wetland's values for man derive from wetland's functions. More than one value may derive from one function, or a value may derive from a combination of functions. EKBY has counted 18 values that a Greek wetland may have (see above). The value of a specific wetland today may be utilized by man or not. Examples: If "Sand extraction potential" value which derives from "sediment trapping" function is utilized by man, gives rise to "sand extraction" use. One of the values and uses deriving from the function called "solar radiation assimilation and food-chain support" is fishing. Naturally, the extend of a use depends mainly on economic factors but also on the need to preserve the wetland ecosystem through wise management. Certain wetland values cannot be assessed in monetary terms, nor should they become a bargaining chip between users (e.g. biological value in terms of biodiversity). The subject of functions, values and uses deserves further development, which is outside the scope of the present publication.

2.5.15. Significant present uses

Most commonly a wetland may be used for: 1) Drinking water supply, 2) Irrigation water supply, 3) Fishing, 4) Aquaculture, 5) Grazing, 6) Hunting, 7) Wood supply, 8) Salt production, 9) Hydroelectricity production, 10) Sand extraction, 11) Recreation, 12) Tourism, 13) Sports, 14) Environmental education.

The assessment of the intensity of use is according to the following scale: 1=low, 2=medium, 3=high.

2.5.16. Factors changing the wetland's ecological character

Pollution. Types of pollution: 1) Municipal wastewater, 2) Municipal solid waste, 3) Industrial wastewater, 4) Industrial solid waste, 5) Sewage from tourist facilities, 6) Point source agricultural pollution, 7) Non-point source agricultural pollution, 8) Transboundary pollution. The assessment of the intensity of pollution is in accordance with the following scale: 1=small, 2=medium, 3=great.

Other anthropogenic activities. The most important anthropogenic activities which have produced or are producing drastic changes in the wetlands, mainly as regards their structural characteristics (abiotic and biotic) and their functions are listed below with an estimate of their impact, in accordance with the following scale: 1=small, 2=medium, 3=great.

Anthropogenic activities: 1) Drainage, 2) Non-sustainable sand extraction, 3) Land clearing, 4) Land filling, 5) Over pumping of ground water, 6) Diversion of water courses, 7) Dams or other installations for retention and storage of water, 8) Irrigation schemes, 9) Construction or expansion of road network, 10) Construction or expansion of railway network, 11) Construction or expansion of airport, 12) Construction of racecourse or speedway, 13) Establishment of new housing facilities or expansion of old ones, 14) Establishment of new industrial facilities or expansion of old ones, 15) Establishment of new tourist facilities or expansion of old ones, 16) Establishment or expansion of livestock facilities, 17) Establishment or expansion of cultivated fields, 18) Overdrilling (for water), 19) Intensive fish farming or other aquaculture, 20) Intensive

recreational facilities, 21) Intensive sports facilities, 22) Illegal or non-sustainable hunting, 23) Illegal or non-sustainable wood cutting, 24) Overfishing, 25) Overgrazing, 26) Sedimentation, 27) Change of water salinity, 28) Import of exotic species of flora-fauna, 29) Drop in water level (other than that due to natural causes).

2.5.17. Present legal protection status

The present legal protection status given is that which specifically concerns wetland conservation in accordance with the following system: 1) Wetland of international importance in accordance with the Ramsar Convention, 2) Special Protection Area (Directive 79/409/EEC), 3) Mediterranean Specially Protected Area (Barcelona Convention), 4) National park, Nature reserve, Areas of natural beauty, 5) Common Ministerial Decision for the delineation of protected areas, 6) Establishment of housing control zones (ZOE), 7) Regulation on surface and ground water utilization, 8) Regulation on threshold values for harmful substances in effluents, 9) Regulation on waste disposal, 10) Regulation on the establishment and operation of industrial facilities, 11) Regulation on the use of farming and fishing machinery, 12) Health regulations, 13) Game refuge, 14) Prohibition of fishing, 15) Prohibition of grazing, 16) Prohibition of hunting, 17) Prohibition of logging, 18) Prohibition of land clearing, 19) Prohibition of excavations-drilling, 20) Prohibition of new pumping installations, 21) Prohibition of establishment and operation of industrial plants, 22) Prohibition of waste disposal, 23) Prohibition of entrance to the wetland.

The following are not mentioned: National laws and decrees which promote conservation (L.1650/86 covering the environment, L.1739/87 covering water resources, forest code etc.); directive 92/43/EEC on habitats and wild flora and fauna; the Bern Convention, etc.

2.5.18. Most significant positive actions

Positive actions which have taken place, are taking place or are being planned for the conservation of the wetlands.

The following are mentioned as positive actions: 1) Inclusion in International-European biotopes/wetlands catalogues (Important bird Area, ICBP-IWRB, CORINE biotopes), 2) Ecological studies, 3) Studies on geology, hydrogeology, geophysics, 4) Soil surveys, 5) Chemical studies, 6) Fishing studies, 7) Land planning studies, 8) Delineation and management studies, 9) Development programmes-studies, 10) Environmental impact assessment studies, 11) Studies for the restoration-rehabilitation of the wetland, 12) Establishment of wastewater treatment facilities, 13) Forest conservation projects, 14) Public awareness projects.

2.5.19. Drained wetlands

Inventory of the Greek wetlands which have been drained (wetland's name, year of drainage and reason for drainage).

2.5.20. Principal bibliography used

Reference is made only to the sources used in completing the Site Data Sheets and cross-checking the questionnaires.

2.6. Map of Greek wetlands

The digitized thematic scale 1:1,000,000 map of Greek wetlands was produced using: a) data from EKBY's descriptive data base in which are entered the type of wetland (delta, estuary, lake, lagoon, river, etc.), the name, the prefecture in which it is located, the co-ordinates of its centre (latitude and longitude) and the area of about 400 wetlands, and b) the existing digitized AGS (Army Geographical Service) data base with a scale of 1:1,000,000.

A check of the first draft of the map showed that the wetland co-ordinates were incorrect and needed small or large adjustments for nearly all the wetlands. This was due to the fact that in the EKBY base, this column had been drawn up using various maps with different projections and scales, with the result that systematic errors or inaccuracies were introduced.

In the second draft the positions were corrected and the individual parts of wetland complexes were grouped together. The wetlands were divided by size into five groups, represented on the map by the circles of five diameters ranging from 2 mm for the smallest to 16 mm for the largest wetlands. The coastline and national borders and the hydrological network were obtained from the digitized base of the Army Geographical Service. Finally, wetlands or wetland complexes of international importance were indicated by a special symbol.

In the final draft all the wetlands were carefully checked against the processed questionnaires, and the result, the fruit of the co-operation between EKBY and the Panhellenic Association of Land Surveying Engineers (PALSE) can be seen in the map which accompanies this publication.

3. RESULTS AND DISCUSSION

In presenting the results of the study we wish to point out once more that this is part of a wider and more ambitious project which aims at creating the National Archives for the Natural Environment. This project will be an ongoing one, as such an archive must be continuously updated, expanded and made more detailed and reliable.

The digitized scale 1:1,000,000 map is the first attempt in order to create an archive with multiple information layers for the biotic and abiotic features of the ecosystems of Greece. Such an effort is an essential tool because: a) it connects the spatial with the descriptive information, b) it allows for addition and processing of data, and c) it provides ready access in codified form to the input data of each simulation.

On the basis of the results of the digitized map of Greece and the processing of the data base using G.I.S., Table 3 was drawn up, which gives the number of wetlands and the total wetland area for each wetland type (deltas, marshes, lakes etc.), for the whole of Greece. Greece has 378 wetlands with a total area of about 200000 hectares.

Table 3. Total number and area of Greek wetlands by each wetland type.

Wetland type	Number of sites	% of total no. of sites	Area (ha)	% of total area	Length (km)
Deltas	12	3.2	68030	33.58	
Marshes	75	19.8	5832.6	2.88	
Lakes	56	14.8	59767.3	29.50	
Lagoons*	60	15.9	28766.5	14.20	
Springs	17	4.5	133.1	0.06	
Estuaries	42	11.1	4264.6	2.10	
Reservoirs	25	6.6	35823.5	17.68	
Rivers	91	24.1	-	-	4268
TOTAL	378	100.0	202617.6	100.00	4268

*The lagoons located in wetland complexes are not counted as separate wetlands.

Existing parts of complex wetlands (e.g. deltas, made up of smaller wetlands) could be counted separately rising the total number to 408.

The total area or length of each type of wetland is given for each administrative region in Table 4. As the table shows, in Northern Greece (Anatoliki Makedonia - Thraki, Kentriki and Dytiki Makedonia and Thessalia) there are 118 wetlands, or 31% of the total number. The rest of the continental Greece (Ipeiros, Dytiki Ellada, Sterea Ellada, Peloponnisos and Attiki) contains 151 (40%), while 109 (29%) are in the islands and Crete (Ionia Nisia, Nisia Voreio Aigaio, Nisia Notio Aigaio and Kriti). As regards area or length, Northern Greece contains 48% (97479 ha) of the total wetland area and 56% (2389 km) of the total length of linear wetlands (e.g. rivers). The corresponding figures are, for the rest of continental Greece, 48% (97608 ha) and 37% (1588 km), and for the islands and Crete 4% (7530 ha) and 7% (294 km).

Table 5 gives, by region, the wetlands that have been drained, together with the year of drainage, the reason, and the possibility of restoring the wetland. The reason for wetland loss and the possibility of partial restoration could provide examples in Greece and the Mediterranean on which strong arguments may be based against further wetland loss.

Additionally, an indicative list of wetland plant species was drawn up (Table 6), although it was decided that a detailed inventory of all the biotic characteristics (flora and fauna) of the wetlands lay outside the remit of this project and should be dealt with in separate publications.

In addition to the numerical results, this project has also produced additional benefits which may be summarized as follows:

(a) Development of a wetlands information network. The contribution of the Ministry of Environment, Physical Planning and Public Works and the Ministry of Agriculture in making this inventory possible laid the groundwork for the development of an invaluable network of contacts and co-operation with the civil service. This network may contribute to the development and co-ordination of wetland conservation projects,

Table 4. Type, number and area of the wetlands in each administrative region

	WETLAND TYPE																TOTAL		
	Delta		Marsh		Lake		Lagoon		Spring		Estuary		Reservoir		River				
	Number of wetlands	Area (ha)	Number of wetlands	Area (ha)	Number of wetlands	Area (ha)	Number of wetlands	Area (ha)	Number of wetlands	Area (ha)	Number of wetlands	Area (ha)	Number of wetlands	Area (ha)	Number of wetlands	Length (km)	Number of wetlands	Area (ha)	Length (km)
ANATOLIKI MAKEDONIA-THRAKI	2	23000	-	-	2	4540	2	4020	3	53	-	-	-	-	13	720	22	31613	720
KENTRIKI MAKEDONIA	2	6200	9	1045	6	18680	5	2290	3	10	7	3034	2	7335	9	524	43	38594	524
DYTIKI MAKEDONIA	-	-	-	-	6	13684.4	-	-	-	-	-	-	3	7660	7	493	16	21344.4	493
THESSALIA	1	2600	13	201.9	3	97	4	68.5	3	9.6	2	15.6	3	2935	8	649	37	5927.6	649
IPEIROS	4	24750	2	65	13	3214	3	213	1	8.5	1	40	2	5400	8	466	34	33690.5	466
DYTIKI ELLADA	1	6650	5	634.5	8	16645	9	17000	1	8	5	387	2	3050	10	350	41	44374.5	350
STEREA ELLADA	1	3030	6	276.6	4	2135	4	561.5	4	30	4	116	5	8705	11	496	39	14854.1	496
PELOPONNISOS	1	1800	7	1130	4	640	6	430	1	6	3	34.5	1	145	7	276	30	4185.5	276
ATTIKI	-	-	2	66	3	14.5	1	83	-	-	-	-	1	340	-	-	7	503.5	-
IONIA NISIA	-	-	2	48.4	3	14.4	10	2114.5	-	-	4	23.6	-	-	2	20	21	2200.9	20
NISIA - VOREIO AIGAIO	-	-	12	1656	-	-	6	1335	-	-	2	75	1	200	1	8	22	3266	8
NISIA - NOTIO AIGAIO	-	-	11	390.2	3	43	7	252	-	-	-	-	2	22	6	65	29	707.2	65
KRITI	-	-	6	319	1	60	3	399	1	8	14	538.9	3	31.5	9	201	37	1356.4	201

Table 5: Drained wetlands of Greece

ADMINISTRATIVE REGION	NAME	PREFECTURE	DATE OF DRAINAGE	REASON OF DRAINAGE	POSSIBILITY FOR RESTORATION
ANATOLIKI MAKEDONIA-THRAKI	Lekanis Marsh	Kavala - Xanthi	1960	Expansion of agriculture	UNKNOWN
	Tenagi Filippon	Kavala - Drama	1935	Expansion of agriculture	UNKNOWN
KENTRIKI MAKEDONIA	Kleidi Lagoon	Imathia	1974	Expansion of agriculture	NO
	Giannitson Lake	Pella- Imathia- Thessaloniki	1935	Expansion of agriculture	NO
	Lantza Lake	Thessaloniki	1960	Expansion of agriculture	UNKNOWN
	Mavrouda Lake	Thessaloniki	1960	Expansion of agriculture	YES
	Artzan Lake	Kilkis	1935	Expansion of agriculture	UNKNOWN
	Amatovou Lake	Kilkis	1935	Expansion of agriculture	UNKNOWN
	Azapiko Marsh	Chalkidiki	in the late eighties	Expansion of agriculture - Establishment of new housing facilities	UNKNOWN
	Neos Marmaras Marsh	Chalkidiki	in the late eighties	Expansion of agriculture - Establishment of new housing facilities	UNKNOWN
	Sozopoli Marsh	Chalkidiki	1977	Establishment of new housing facilities - Land filling	UNKNOWN
	Achinou Lake	Serres	Thirties	Expansion of agriculture	UNKNOWN
	Amyres Marsh	Serres	Eighties	-	UNKNOWN
DYTIKI MAKEDONIA	Sari Giol Marsh	Kozani	1951	Expansion of agriculture	UNKNOWN
THESSALIA	Kallipefkis Lake	Larisa	1907	Expansion of agriculture	YES
	Karla Lake	Magnisia - Larisa	1962	Expansion of agriculture	YES
	Skopelos Marsh	Magnisia	1965	Establishment of new housing facilities	UNKNOWN
IPEIROS	Lapsista Marsh	Ioannina	1959	Expansion of agriculture	UNKNOWN
	Kastriisa Marsh	Ioannina	1970	Expansion of agriculture	UNKNOWN
	Amfithea (Strounio)	Ioannina	1973	Expansion of agriculture	UNKNOWN
	Koutselio Marsh	Ioannina	1950	Expansion of agriculture	UNKNOWN
	Lagatsa Marsh	Ioannina	1959	Expansion of agriculture - Establishment of new housing facilities	NO
IONIA NISIA	Ropas	Kerkyra	1905	-	YES
DYTIKI ELLADA	Mesa Tholo Lagoon	Aitolokarmania	1969-70	Expansion of agriculture	UNKNOWN
	Pritsala Marsh	Aitolokarmania	1969-70	Expansion of agriculture	UNKNOWN
	Agoulinita Lake	Ileia	1969	Expansion of agriculture	YES
	Mouria Lake	Ileia	1969	Expansion of agriculture	YES
	Kasta Lagoon	Achaia	1969	Expansion of agriculture	UNKNOWN
	Akosi Marsh	Achaia	-	-	UNKNOWN
STEREA ELLADA	Kopaida Lake	Viotia	1886	Expansion of agriculture	UNKNOWN
	Xyniada Lake	Fthiotida	1950	Expansion of agriculture	YES
PELOPONNISOS	Kandilas Lake	Arkadia	1985-86	Expansion of agriculture	NO
NISIA - NOTIO AIGAIO	Koulouki Estuary (Leros)	Dodecanisos	1970	Land filling - Establishment of recreational facilities	NO
	Laki Marsh (Leros)	Dodecanisos	1970	Establishment of new housing facilities	NO
	Lampi Marsh (Kos)	Dodecanisos	-	Establishment of new housing facilities	NO
	Gavrio Marsh (Andros)	Kyklades	1977-78	Establishment of new housing facilities	NO
	Achladi Varis Estuary (Syros)	Kyklades	1977-80	Establishment of new tourist facilities	NO
	Galissas Marsh (Syros)	Kyklades	1970-72	Establishment of new tourist facilities	NO
	Foinikas Marsh (Syros)	Kyklades	1967-70	Establishment of new tourist facilities	NO
	Ptelia Estuary (Mykonos)	Kyklades	1970-80	Establishment of new tourist facilities	NO
	Kalafatis Estuary (Mykonos)	Kyklades	1970-80	Establishment of recreational facilities	UNKNOWN

Table 6: Representative flora species in Greek wetlands

1. AQUATIC BED PLANTS

Azolla filiculoides
Callitriche obtusangula
Ceratophyllum demersum
Ceratophyllum submersum
Groelandia densa
Hydrocharis morsus-ranae
Lemna gibba
Lemna minor
Lemna trisulca
Myriophyllum spicatum
Myriophyllum verticillatum
Najas gracilima
Najas marina
Najas minor
Nuphar lutea
Nymphaea alba
Nymphoides peltata
Polygonum amphibium
Potamogeton crispus
Potamogeton filiformis
Potamogeton gramineus
Potamogeton lucens
Potamogeton natans
Potamogeton nodosus
Potamogeton pectinatus
Potamogeton perfoliatus
Potamogeton pussilus
Potamogeton trichoides
Ranunculus aquatilis
Ranunculus fluitans
Ranunculus trichophyllus
Riccia fluitans
Ricciocarpos natans
Ruppia maritima
Salvinia natans
Spirodella polyrrhiza
Trapa natans

Urticularia minor
Urticularia vulgaris
Vallisneria spiralis
Wolffia arrhiza
Zannichelia palustris
Zostera nana

2. EMERGENTS

Aeluropus litoralis
Alisma gramineum
Alisma plantago-aquatica
Apium graveolens
Arthrocnemum fruticosum
Arthrocnemum glaucum
Arundo donax
Aster tripolium
Atriplex hastata
Atriplex rosea
Bassia hirsuta
Bupleurum tenuissimum
Bupleurum tricopodum
Butomus umbellatus
Calamagrostis epigeios
Carex distans
Carex divisa
Carex vulpina
Cirsium creticum
Crypsis aculeata
Cyperus fuscus
Cyperus longus
Cyperus rotundus
Eleocharis palustris
Epilobium hirsutum
Equisetum arvense
Equisetum maximum
Geranium dissectum
Glyceria plicata
Halimione portulacoides

Halocnemum strobilaceum
Holcus lanatus
Holoschoenus vulgaris
Hordeum maritimum
Juncus acutus
Juncus articulatus
Juncus bufonius
Juncus gerardii
Juncus heldreichianus
Juncus maritimus
Juncus subulatus
Limonium bellidiflorum
Limonium gmelinii
Limonium vulgare
Lycopus europaeus
Lythrum salicaria
Lythrum virgatum
Mentha pulegium
Montia verna
Narcissus tazetta
Nasturtium officinale
Oenanthe aquatica
Oenanthe fistulosa
Phragmites australis
Picreus badius
Picreus longus
Plantago major
Polygonon maritimum
Polygonon monspeliensis
Psylurus aristatus
Puccinellia distans
Puccinellia festuciformis
Ranunculus muricatus
Ranunculus sardous
Ranunculus velutinus
Rumex conglomeratus
Rumex conglomeratus
Rumex crispus

Rumex hydrolapathum
Salicornia europaea
Salicornia fruticosa
Salicornia herbacea
Salicornia radicans
Salsola soda
Scirpus lacustris
Scirpus litoralis
Scirpus maritimus
Scirpus tabernaemontani
Sparganium erectum
Spergularia marina
Spergularia media
Spergularia salina
Statice angustifolia
Suaeda maritima
Suaeda splendens
Trifolium fragiferum
Typha angustifolia
Typha domingensis
Typha latifolia
Veronica anagallis-aquatica
Veronica anagalloides

3. SCRUBS AND SHRUBS

Aristolochia clematis
Nerium oleander
Periploca graeca
Tamarix hampeana
Tamarix parviflora
Tamarix smyrnensis
Vitex agnus-castus

4. TREES

Alnus glutinosa
Clematis vitalba

Eucalyptus sp.
Fraxinus angustifolia
Phoenix theophrastii
Platanus orientalis
Populus alba
Populus nigra
Salix alba
Salix fragilis
Salix triandra
Ulmus minor

5. DUNES AND SANDY SHORES PLANTS

Agropyrum junceum
Agrostis alba
Amaranthus albus
Amaranthus retroflexus
Ammophila arenaria
Ammophila arundinacea
Anthemis peregrina
Anthemis tomentosa
Artemisia campestris
Artemisia maritima
Atriplex tatarica
Bromus secalinus
Cakile maritima
Calystegia soldanella
Centaurea diffusa
Centaurea spinosa
Chondrilla juncea
Cichorium intybus
Convolvulus soldanella
Cuscuta australis
Cynanchum acutum

Diotis maritima
Elymus arenarius
Elymus giganteus
Eryngium campestre
Eryngium maritimum
Euphorbia paralias
Galilea mucronata
Glycyrrhiza echinata
Heliotropium dolosum
Hypochoeris radicata
Inula viscosa
Lactuca saligna
Lagedium tataricum
Lagurus oratus
Malcolmia flexuosa
Matthiola tricuspidata
Medicago marina
Melilotus albus
Pancratium maritimum
Polygonum arenarium
Polygonum maritimum
Raphanus raphanistrum
Salsola kali
Seseli tortuosum
Sporolobus arenarius
Sporolobus pungens
Statice sinuata
Suaeda maritima
Tragus racemosus
Tribulus terrestris
Verbascum pinnatifidum
Vulpia fasciculata
Vulpia myurus
Xanthium spinosum

and wise wetland management. An equally positive response came from environmental organizations, groups and individuals concerned with the preservation of wetlands, to whom completing the questionnaire gave the chance to examine more closely the existing situation in the wetlands, and the problems they face.

(b) Creating a data base of Greek wetlands. A comprehensive library of studies and projects on Greek wetlands was created, while the GRIN data base provides rapid, user-friendly access to the inventory data.

(c) Specialist participation. The project provided an opportunity to specialists in various disciplines to work together in evaluating the data, and to better appreciate the lack of quantitative information on wetlands.

(d) Dissemination of information. Even when the questionnaires were still being collected, some data were starting to be used in reports to the Greek Government and to the European Commission.

4. PROJECT EVALUATION AND PERSPECTIVES

The results of the project may be evaluated as follows:

1. The data collected far exceeded expectations thanks to an enthusiastic response by civil servants, members of environmental organizations and scientists.
2. The materials and methods used are subject to the usual limitations of questionnaires. Therefore the reliability of the results is expected to vary widely from wetland to wetland, and within the same wetland from subject to subject. The checking of the data by experts using their experience plus educated guesswork improved reliability, but the degree of improvement will become clear only when the inventory is published. Comments upon the published results of the inventory will be taken into account in order to further improve reliability. The data base can be continuously updated and improved.

As regards perspectives, the project team recommends that this project be continued as follows:

- a. Mapping of Greek wetlands using a standard procedure developed in a previous project (Zalidis et al. 1993).
- b. Planning of a second inventory based on the analysis of the first, to acquire more reliable data. This will aim at giving a better picture of Greek wetlands and could become the base line for monitoring physical changes, degradation, conservation, etc. in these wetlands.
- c. Enriching the Greek wetland archive with more quantitative information.
- d. Linking up the wetland archive with other environmental archives to create a national archive for the natural environment.

PART B

COMPILED INFORMATION SHEETS

1. The first step in the inventory of Greek wetlands as natural resources is the identification of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

2. The second step is the classification of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

3. The third step is the evaluation of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

4. The fourth step is the management of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

5. The fifth step is the monitoring of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

6. The sixth step is the reporting of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

7. The seventh step is the conservation of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

8. The eighth step is the restoration of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

9. The ninth step is the research of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

10. The tenth step is the education of the public. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

11. The eleventh step is the funding of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

12. The twelfth step is the implementation of the wetlands. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

13. The thirteenth step is the evaluation of the implementation. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

14. The fourteenth step is the reporting of the implementation. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

15. The fifteenth step is the conservation of the implementation. This is done by using the criteria established in the Ramsar Convention, which defines wetlands as areas of marsh, peat or other wet areas, which are permanently or seasonally flooded or saturated with water, and which are used for agriculture, forestry, or other purposes.

INSTRUCTIONS TO THE READER OF THE COMPILED INFORMATION SHEETS

The organization of the information on the inventory data sheet follows a steady structure with a specific number of fields in accordance with the following system. **It should be emphasized that the following explanations must be taken into consideration by the reader prior to the study of the inventory data.**

Wetland name(s): Name by which the wetland is most commonly known and other names, if any.

Wetland code: Code by which the wetland is registered in the data base.

Example: 111(a) 003(b) 000(c)

(a) Code of the administrative region to which the wetland belongs.

(b) Wetland input number on the GRIN database.

(c) Code which receives a different value rating in individual wetlands, wetland complexes and wetland parts according to the following system: a) Individual Wetland: /000, b) Wetland Complex: /100, /200, etc., c) Wetland parts: /100, /120, etc.

Part (s) of the wetland complex: Name(s) of the wetland part(s) in a complex.

Geographical co-ordinates: East longitude and North latitude of the wetland's centre defined from the digitized base map of the Army Geographical Service, scale 1:1000000 (Projection System EGSA '87). In the case of linear wetlands (e.g. rivers) co-ordinates are not given.

Administrative region: Name of the Administrative Region to which the wetland belongs, and corresponding NUTS code.

Prefecture(s): Name of the prefecture to which the wetland belongs and corresponding NUTS code. If the wetland belongs to more than one prefecture, all of them are mentioned, the first being the prefecture containing the largest section of the wetland.

Location: Compass bearing (i.e. NE, S) and distance in km of the wetland from the nearest village, town or city. In the case of linear wetlands (e.g. rivers) location of source, general flow direction and location where its waters are discharged into the sea are given.

Altitude above sea level: Altitude above sea level (in meters) of the centre for wetlands such as lakes, swamps etc., highest and lowest altitudes for linear wetlands (e.g. rivers).

Area or Length of wetland: Area (in ha) for lakes, marshes, etc., and length (in km) for linear wetlands (e.g. rivers).

Wetland Type: Type and corresponding code in accordance with the Ramsar Bureau classification system. Where more than one wetland type appears, the predominant type is mentioned first, this being the type that classifies the wetland, followed by an (*); the remaining types follow.

Biotic characteristics:

Flora: Classification of flora found in the wetlands in categories (aquatic bed plants, emergents, scrubs and shrubs, trees and dunes and sandy shores plants), including an indicative list of plant species for each category, if available. **We emphasize that these are not complete lists of species.**

Fauna: Indicative list of animal species in accordance with the following system: a) Fish: List of only the endemic species and subspecies (+), endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992) and Economidis P. (1991), recorded for each wetland. b) Reptiles: List of only the endemic species and subspecies (+), endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992), recorded for the wetland. c) Birds: List of only the endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992), and description of their presence in the wetland (N=Nesting birds, P=Permanent presence, M=Migratory birds, W=Wintering birds). d) Mammals: List of only the endangered (E), vulnerable (V) and rare (R) species according to Karandeinos (1992), which are found at the greater area of each wetland. **We emphasize that these are not complete lists of species.**

Most significant present values: Most significant present values of the wetland for man and estimates of their significance in accordance with the following scale: 1=small, 2= medium, 3=great.

Significant present uses: The significant present uses of the wetland as a natural resource by Man, including an assessment of the intensity of each use in accordance with the following scale: 1=low, 2=medium, 3=high.

Factors changing wetland's ecological character:

Pollution: The most important sources of pollution including an assessment of their intensity in accordance with the following scale: 1=small, 2=medium, 3=great.

Other anthropogenic activities: The most important anthropogenic activities which have produced or are producing drastic changes in the wetlands, mainly as regards their structural characteristics (abiotic and biotic) and their functions including an estimate of their impact, in accordance with the following scale: 1=small, 2=medium, 3=great.

Present legal protection status: The existing legislation which specifically concerns the conservation of the wetland.

Most significant positive actions: Positive actions which have been undertaken, or planned for the conservation of the wetland.

Principal bibliography used: Reference is made only to the sources used in completing the Site Data Sheets and cross-checking the questionnaires.

... ..

... ..

... ..

... ..

... ..

... ..

... ..

... ..

... ..

... ..

EVROS RIVER

Wetland Code: 111003000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location: Rises in Bulgaria and discharges into the Thracian Sea. Consists the natural borderline between Greece and Turkey and a small part of the borderline between Greece and Bulgaria.

Altitude above sea level (m): *Min.:* 0 *Max.:* 80

Area (ha): -

Length (km): 204 (within Greece)

Wetland Type: Permanent river (M)*, Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Ceratophyllum sp.*, *Lemna minor*, *Potamogeton sp.*, *Trapa natans*, b) Emergents: *Phragmites australis*, *Typha sp.*, c) Trees: *Salix sp.*, *Populus sp.*, *Platanus orientalis*, *Fraxinus angustifolia*, *Alnus sp.*, *Ulmus campestris*

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Rutilus rutilus mariza* (+), *Chondrostoma vardarensis* (+, V), *Alburnus alburnus strumicae* (+), *Vimba melanops* (+, R/E), *Carassius carassius* (R/E), *Cobitis strumicae* (+), *Sabanejewia aurata balcanica* (+, V), b) Birds: *Ciconia nigra* (E, M), *Haliaeetus albicilla* (E, W), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V), *Falco naumanni* (V, M)

Most significant present values: Irrigation water (3), Fishing (1), Scientific (2), Cultural (1), Recreational (2)

Significant present uses: Irrigation water supply (3), Fishing (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (3), Non-point source agricultural pollution (3), Transboundary pollution (3)

Other anthropogenic activities: Land filling (2), Diversion of water courses (2), Overpumping of ground water (2), Irrigation schemes (3)

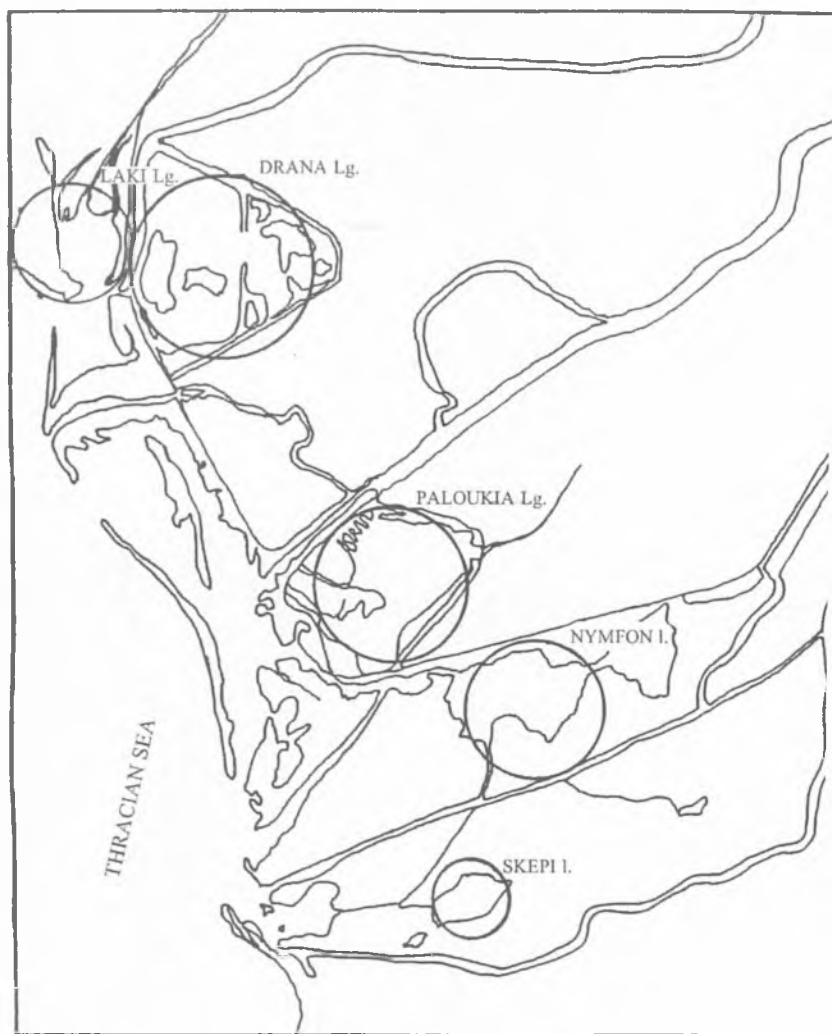
Present legal protection status: Prohibition of entrance to the wetland

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes) for the riparian forest of Evros-Orestiada, Studies on geology-hydrogeology-geophysics, Ecological studies

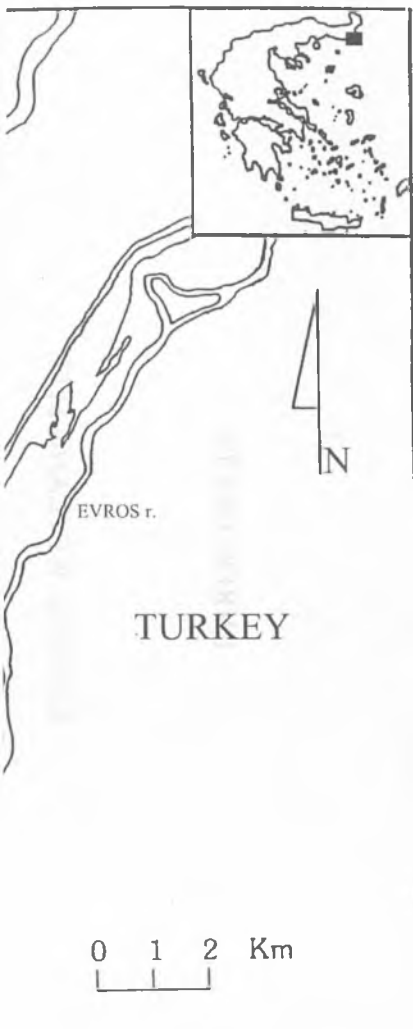
Principal bibliography used: Economidis P. (1991)

EVROS DELTA

RAMSAR WETLAND SITE



EVROS DELTA



LEGEND



: WETLAND

COPYRIGHT EKBY



EVROS DELTA OR AINISIO DELTA (Wetland Complex)

Wetland Code: 111004100

Part(s) of the wetland complex: Skepi Lake, Nymfon Lake, Paloukia Lagoon, Drana Lagoon, Laki Lagoon

Geographical Coordinates: Longitude: 26°04'01'' Latitude: 40°50'09''

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location: 2 km S of the Monastiraki village.

Altitude above sea level (m): 0

Area (ha): 11000

Length (km): -

Wetland Type: Coastal delta (F)*, Lagoon (J), Coastal permanently flooded freshwater lake (K), Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Canal - Trench (9)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Potamogeton* sp., *Trapa natans*, *Zostera nana*, *Ruppia maritima*, b) Emergents: *Salicornia europaea*, *S. radicans*, *Suaeda maritima*, *S. splendens*, *Puccinellia festuciformis*, *Halimione portulacoides*, *Arthrocnemum fruticosum*, *A. glaucum*, *Halocnemum strobilaceum*, *Aeluropus litoralis*, *Limonium gmelinii*, *L. bellidiflorum*, *Artemisia monogyna*, *Juncus* sp., *Mentha pulegium*, *Trifolium* sp., *Apium graveolens*, *Agropyrum elongatum*, *Oenanthe* sp., *Scirpus* sp., *Phragmites australis*, *Typha angustifolia*, *T. latifolia*, c) Scrubs and shrubs: *Tamarix smyrnensis*, d) Trees: *Salix* sp., *Populus* sp., *Platanus orientalis*, *Fraxinus angustifolia*, *Alnus* sp., *Ulmus campestris*, e) Dunes and sandy shores plants: *Atriplex tatarica*, *Cakile maritima*, *Polygonum maritimum*, *Elymus* sp., *Diotis maritima*, *Pancratium maritimum*, *Euphorbia paralias*, *Eryngium maritimum*, *Artemisia* sp.

Fauna: a) Fish: *Rutilus rutilus mariza* (+), *Leuciscus cephalus macedonicus* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio bulgaricus* (+), *Alburnus alburnus strumicae* (+), *Vimba melanops* (+, R/E), *Carassius carassius* (R/E), *Cobitis strumicae* (+), *Sabanejewia aurata balcanica* (+, V), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, M), *T. tadorna* (V, N, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, N), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M),

Recurvirostra avosetta (V, N, W), *Burhinus oedicnemus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Clamator glandarius* (R), c) **Mammals:** *Rhinolophus ferrumequinum* (V), *R. hipposideros* (V), *R. euryale* (E), *Eptesicus serotinus* (E), *Myotis bechsteini* (R), *M. blythi* (V), *M. myotis* (E), *M. mystacinus* (E), *Nyctalus lasiopterus* (E), *N. noctula* (E), *Pipistrellus pipistrellus* (E), *P. nathusii* (E), *Plecotus austriacus* (E), *Citellus citellus* (V), *Dryomys nitedula* (R), *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felix silvestris* (E)

Most significant present values: Irrigation water (3), Fodder (3), Game support (3), Logging (2), Sand extraction potential (2), Scientific (3), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Irrigation water supply (3), Aquaculture (1), Grazing (3), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (2), Non-point source agricultural pollution (2), Transboundary pollution (2)

Other anthropogenic activities: Drainage (3), Non-sustainable sand extraction (1), Diversion of water courses (3), Irrigation schemes (2), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3), Illegal or non-sustainable wood cutting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Game refuge (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Establishment of wastewater treatment facilities, Ecological studies, Public awareness programs

Principal bibliography used: Babalonas (1979), Economidis P. (1991), Goutner and Kazantzidis (1992), Gouvis et al. (1985), Grimmet and Jones (1989), Malakou et al. (1988), Meininger (1990)

SKEPI LAKE (Part of Evros Delta Complex)

Wetland Code: 111005110

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location:

Altitude above sea level (m): 1

Area (ha): 46

Length (km): -

Wetland Type: Coastal permanently flooded freshwater lake (K)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Ceratophyllum sp.*, *Nymphaea alba*, *Lemna minor*, *Potamogeton sp.*, *Trapa natans*, b) Emergents: *Scirpus sp.*, *Phragmites australis*, *Typha angustifolia*, *T. latifolia*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, M), *T. tadorna* (V, N, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, N), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Clamator glandarius* (R)

Most significant present values: Fishing (2), Game support (3), Scientific (1), Cultural (1), Recreational (2), Educational (2)

Significant present uses: Fishing (2), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2), Transboundary pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Gouvis et al. (1985)

NYMFON LAKE (Part of Evros Delta Complex)
--

Wetland Code: 111006120

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location:

Altitude above sea level (m): 1

Area (ha): 260

Length (km): -

Wetland Type: Coastal permanently flooded freshwater lake (K)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Ceratophyllum sp.*, *Nymphaea alba*, *Lemna minor*, *Potamogeton sp.*, *Trapa natans*, b) Emergents: *Scirpus sp.*, *Phragmites australis*, *Typha angustifolia*, *T. latifolia*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, M), *T. tadorna* (V, N, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, N), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraetus pennatus* (V, M), *H. fasciatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Clamator glandarius* (R)

Most significant present values: Fodder (2), Game support (2), Scientific (3)

Significant present uses: Grazing (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Non-point source agricultural pollution (2), Transboundary pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Babalonas (1979), Goutner and Kazantzidis (1992), Gouvis et al. (1985)

PALOUKIA LAGOON (Part of Evros Delta Complex)
--

Wetland Code: 111007130

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location:

Altitude above sea level (m): 0

Area (ha): 280

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Salicornia europaea*, *S. radicans*, *Suaeda maritima*, *S. splendens*, *Puccinellia festuciformis*, *Halimione portulacoides*, *Arthrocnemum fruticosum*, *A. glaucum*, *Halocnemum strobilaceum*, *Aeluropus litoralis*, *Limonium gmelinii*, *L. bellidiflorum*, *Artemisia monogyna*, *Juncus sp.*, *Mentha pulegium*, *Trifolium sp.*, *Apium graveolens*, *Agropyrum elongatum*, *Oenanthe sp.*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, M), *T. tadorna* (V, N, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, N), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Clamator glandarius* (R)

Most significant present values: Game support (3), Scientific (2), Recreational (2), Educational (3)

Significant present uses: Aquaculture (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Non-point source agricultural pollution (2),

Transboundary pollution (2)

Other anthropogenic activities: Construction or expansion of road network (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Babalonas (1979), Goutner and Kazantzidis (1992), Gouvis et al. (1985), Meininger (1990)

DRANA LAGOON (Part of Evros Delta Complex)

Wetland Code: 111008140

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location:

Altitude above sea level (m): 0

Area (ha): 500

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Zostera nana*, *Ruppia maritima*, b) Emergents: *Salicornia europaea*, *S. radicans*, *Suaeda maritima*, *S. splendens*, *Puccinellia festuciformis*, *Halimione portulacoides*, *Arthrocnemum fruticosum*, *A. glaucum*, *Halocnemum strobilaceum*, *Aeluropus litoralis*, *Limonium gmelinii*, *L. bellidiflorum*, *Artemisia monogyna*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, M), *T. tadorna* (V, N, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, N), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Burhinus oedienemus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Clamator glandarius* (R)

Most significant present values: Fodder (3), Game support (2), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Grazing (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Land filling (1), Construction or expansion of road network (1), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Goutner and Kazantzidis (1992), Meininger (1990), Gouvis et al. (1985)

LAKI LAGOON (Part of Evros Delta Complex)
--

Wetland Code: 111009150

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location:

Altitude above sea level (m): 0

Area (ha): 200

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H), Estuary (F)

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *S. radicans*, *Suaeda maritima*, *S. splendens*, *Puccinellia festuciformis*, *Halimione portulacoides*, *Arthrocnemum fruticosum*, *A. glaucum*, *Halocnemum strobilaceum*, *Aeluropus litoralis*, *Limonium gmelinii*, *L. bellidiflorum*, *Artemisia monogyna*, *Juncus* sp., *Mentha pulegium*, *Trifolium* sp., *Apium graveolens*, *Agropyrum elongatum*, *Oenanthe* sp., *Scirpus* sp., *Phragmites australis*, *Typha angustifolia*, *T. latifolia*, b) Scrubs and shrubs: *Tamarix smyrnensis*, c) Dunes and sandy shores plants: *Atriplex tatarica*, *Cakile maritima*, *Polygonum maritimum*, *Elymus* sp., *Diotis maritima*, *Pancratium maritimum*, *Euphorbia paralias*, *Eryngium maritimum*, *Artemisia* sp.

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, M), *T. tadorna* (V, N, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, N), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicnemus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Clamator glandarius* (R)

Most significant present values: Fodder (3), Game support (2), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Grazing (3), Hunting (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Land filling (1), Construction or expansion of road network (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Game refuge (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Babalonas (1979), Goutner and Kazantzidis (1992), Gouvis et al. (1985)

VATOS RIVER

Wetland Code: 111011000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Evros (GR111)

Location: Rises in the Saos mountain or Fegari of Samothraki, flows S and discharges into the Aegean Sea, 1 km S of the Profitis Ilias village of Samothraki.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1400

Area (ha): -

Length (km): 10

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*

Most significant present values: Fodder (1), Game support (3), Scientific (2), Educational (1)

Significant present uses: Grazing (1), Hunting (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LISSOS RIVER OR FILIOURIS RIVER

Wetland Code: 113013000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Rodopi (GR113)

Location: Rises in the Rodopi mountain Range, flows SW and discharges into the Thracian Sea.

Altitude above sea level (m): *Min.:* 0 *Max.:* 900

Area (ha): -

Length (km): 50

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Salix sp.*, *Populus sp.*, *Platanus orientalis*

Fauna: a) Fish: *Leuciscus cephalus macedonicus* (+), *Gobio gobio bulgaricus* (+), *Chalcalburnus chalcoides macedonicus* (+, V), *Cobitis strumicae* (+), b) Birds: *Ciconia nigra* (E, N), *Neophron percnopterus* (V, N), *Gyps fulvus* (V), *Aquila pomarina* (V, M), *Aquila chrysaetos* (V), *Hieraaetus pennatus* (V, M)

Most significant present values: Irrigation water (2)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Economidis P. (1991), Grimmet and Jones (1989)

KOMPSATOS RIVER OR POLYANTHOS RIVER

Wetland Code: 110016000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Rodopi (GR113), Xanthi (GR112)

Location: Rises in the central Rodopi mountain range, flows S and discharges into the Vistonida lake, 1 Km W of the Polyantos village.

Altitude above sea level (m): *Min.:* 5 *Max.:* 1100

Area (ha): -

Length (km): 60

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Salix sp.*, *Populus sp.*, *Platanus orientalis*

Fauna: Birds: *Ciconia nigra* (E, M), *Neophron percnopterus* (V, N, M), *Gyps fulvus* (V), *Buteo rufinus* (R, N, M), *Aquila pomarina* (V, N, M), *Aquila chrysaetos* (V), *Hieraaetus pennatus* (V, N, M)

Most significant present values: Drinking water (1), Irrigation water (1), Fodder (3), Game support (3), Logging (2), Scientific (3), Cultural (3), Recreational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (1), Grazing (3), Hunting (3), Wood supply (2), Recreation (1)

Factors changing the wetland's ecological character:

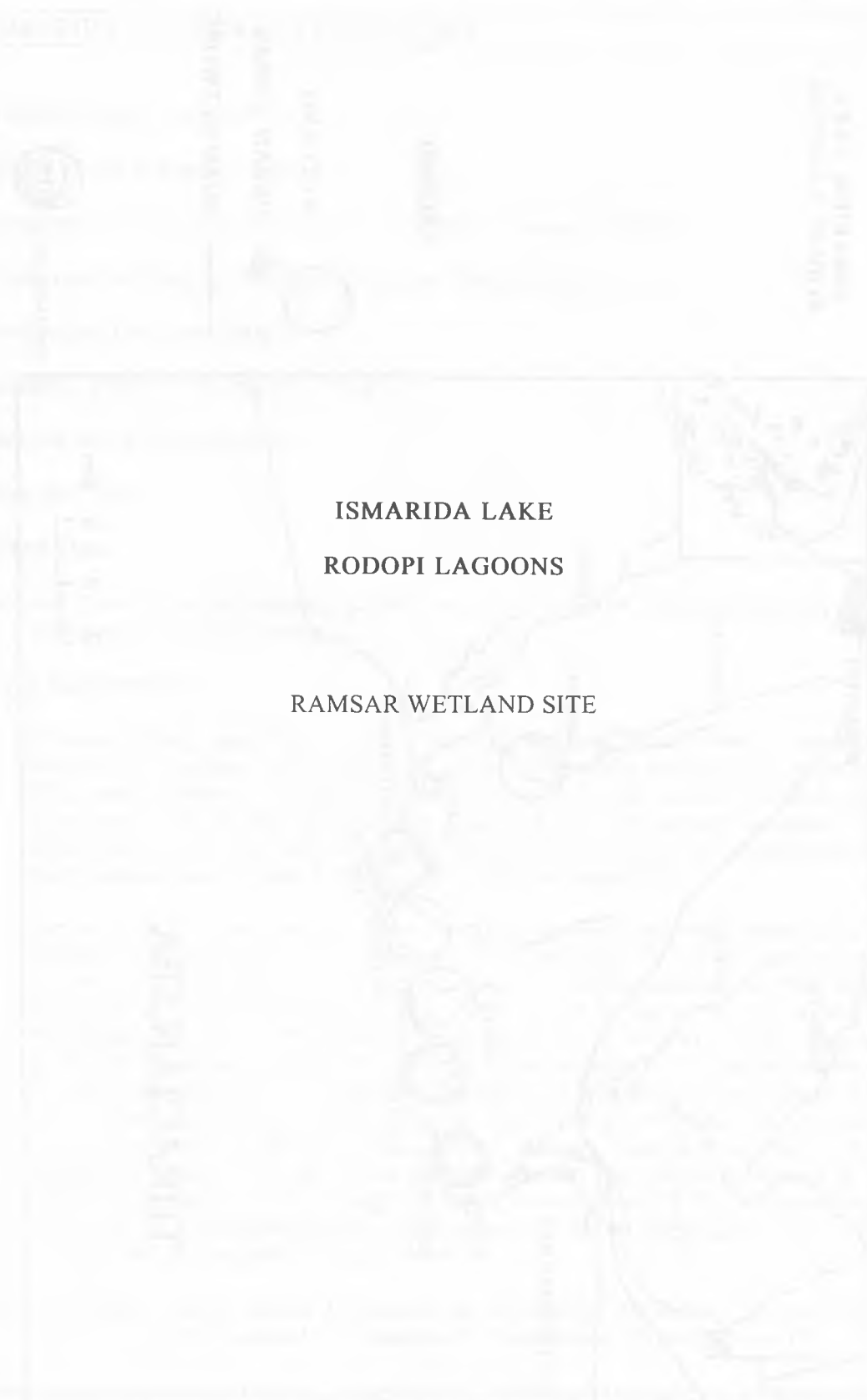
Pollution: Municipal wastewater (1), Municipal solid wastes (1), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

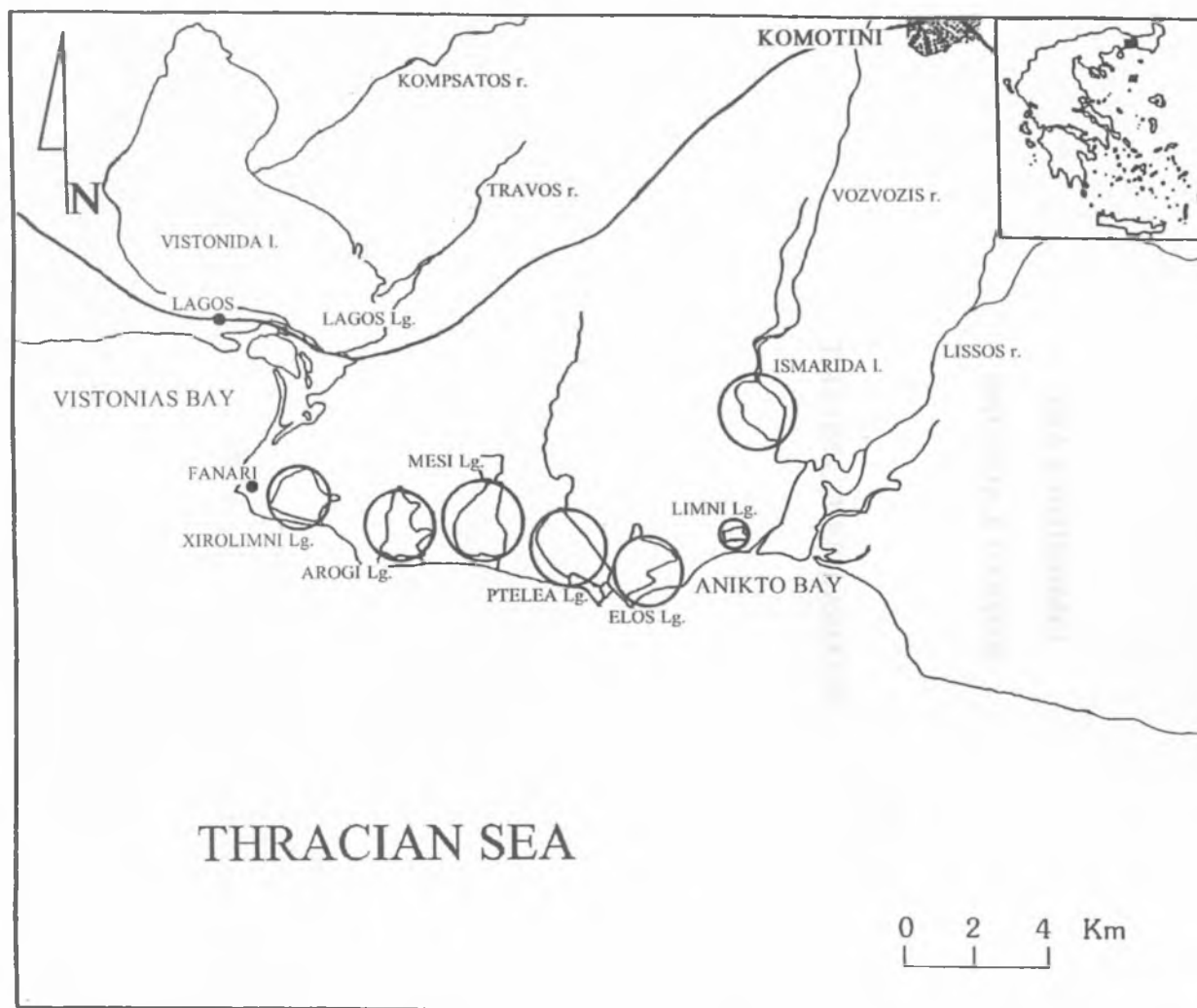
Other anthropogenic activities: Illegal or non-sustainable hunting (3), Illegal or non-sustainable wood cutting (1)

Present legal protection status: Special Protection Area (79/409/EEC) for Kompsatos Valley, Game refuge (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Kompsatos Valley

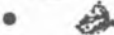
Principal bibliography used: Grimmet and Jones (1989)





ISMARIDA LAKE RODOPI LAGOONS

LEGEND

-  : WETLAND
-  : URBAN AREAS
-  : ROAD NETWORK

COPYRIGHT EKBY



ISMARIDA LAKE OR MATRIKOU LAKE

Wetland Code: 113018000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°19'26" Latitude: 40°59'32"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Rodopi (GR113)

Location: 3 km S of the Pagouria village.

Altitude above sea level (m): 28

Area (ha): 340

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Inland periodically flooded freshwater marsh (T), Estuary (F)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Trapa natans*, *Lemna minor*, *Nuphar lutea*, *Ceratophyllum submersum*, *Nymphaea alba*, *Nymphoides peltata*, *Ranunculus trichophyllus*, *Najas minor*, *Potamogeton natans*, *P. nodosus*, *P. crispus*, *P. trichoides*, *Zannichelia palustris*, b) Emergents: *Alisma plantago-aquatica*, *Juncus acutus*, *Phragmites australis*, *Typha angustifolia*, *T. latifolia*, *Scirpus lacustris*, *Plantago* sp., *Trifolium* sp. c) Trees: *Salix* sp., *Populus alba*, *Alnus glutinosa*, *Ulmus minor*, *Fraxinus angustifolia*.

Fauna: a) Fish: *Alosa caspia vistonica* (+, E), *Leuciscus cephalus macedonicus* (+), *Cobitis strumicae* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, N), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, N, M), *Anser erythropus* (E, W), *A. anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, N), *T. tadorna* (V, W), *Netta rufina* (R, W, M), *Aythya nyroca* (V, W, M), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Circus aeruginosus* (V, W, M), *Aquila heliaca* (E, W, M), *Falco naumanni* (V, M), *F. biarmicus* (V, P), *Porzana parva* (R, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Larus genei* (E, W, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), *Coracias garrulus* (V, N, M), *Oenanthe isabellina* (R), *Lanius nubicus* (R, M), c) Mammals: *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (2), Fishing (3), Fodder (2), Game support (3), Sand extraction potential (2), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (2), Fishing (3), Grazing (2), Sand extraction (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (3), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (1), Overpumping of ground water (2), Establishment of new industrial facilities or expansion of old ones (2), Illegal or non-sustainable hunting (3), Change of water salinity (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with RODOPI LAGOONS), Special Protection Area (79/409/EEC), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Drosos et al. (1986), Economidis P. (1991), Grimmet and Jones (1989), Kizilou (1989), Meininger (1990), Papastergiadou (1990)

RODOPI LAGOONS (Wetland Complex)

Wetland Code: 113019200

Part(s) of the wetland complex: Limni Lagoon, Elos Lagoon, Ptelea Lagoon, Mesi Lagoon or Alyki Lagoon, Arogi Lagoon or Karatzas Lagoon or Mavrolimni Lagoon, Xirolimni Lagoon or Fanari Lagoon

Geographical Coordinates: Longitude: 25°13'34" Latitude: 40°56'54"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Rodopi (GR113)

Location: 1 km E of the Fanari village.

Altitude above sea level (m): 0

Area (ha): 3460

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H), Salt pan (5)

Biotic characteristics:

Flora: a) Emergents: *Halimione portulacoides*, *Halocnemum strobilaceum*, *Salicornia europaea*, *Artemisia monogyna*, *Aeluropus litoralis*, *Juncus maritimus*, b) Dunes and sandy shores plants: *Pancratium maritimum*, *Euphorbia paralias*, *E. peplis*, *Suaeda maritima*, *Salsola kali*, *Ammophila arenaria*

Fauna: Birds: *Phalacrocorax aristotelis* (V), *Phoenicopiterus ruber* (R, W), *Tadorna tadorna* (V, W), *Haliaeetus albicilla* (E, W, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M)

Most significant present values: Fodder (2), Game support (2), Salt production potential (1), Scientific (2), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Grazing (1), Salt production (1), Recreation (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (2), Establishment or expansion of

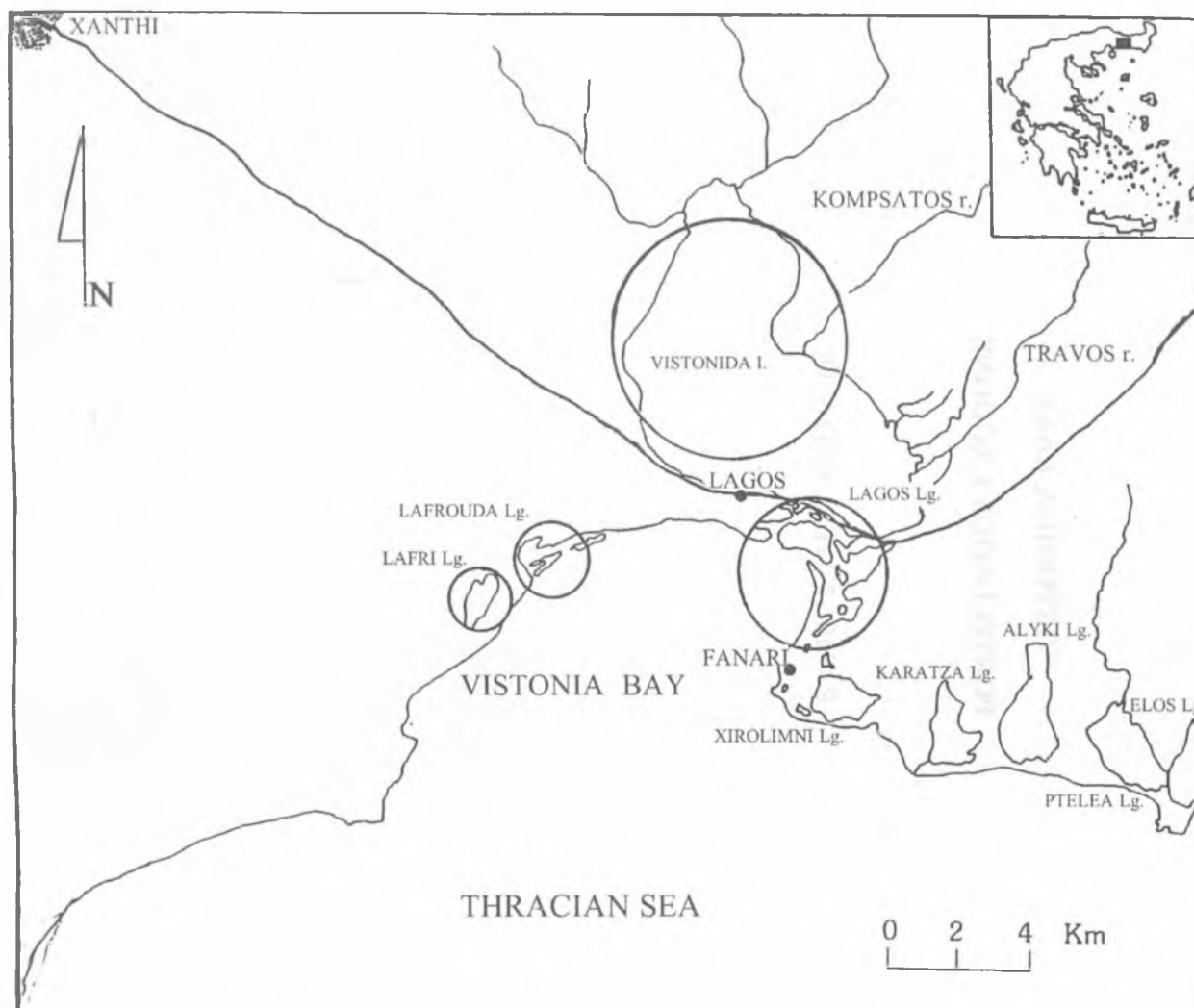
cultivated fields (2), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with ISMARIDA LAKE), Special Protection Area (79/409/EEC), Prohibition of fishing (during reproduction period), Prohibition of grazing, Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Land planning studies, Ecological studies

Principal bibliography used: Dounas et al. (1986), Grimmet and Jones (1989), Kizilou (1989), Meininger (1990)





VISTONIDA LAKE PORTO LAGOS LAGOONS

LEGEND

-  : WETLAND
-   : URBAN AREAS
-  : ROAD NETWORK

COPYRIGHT EKBY



VISTONIDA LAKE

Wetland Code: 110026000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°06'55" Latitude: 41°02'47"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Rodopi (GR113), Xanthi (GR112)

Location: Southern boundaries between the prefectures of Xanthi and Rodopi. About 1 km N of the Porto Lagos village, Prefecture of Xanthi.

Altitude above sea level (m): 2

Area (ha): 4200

Length (km): -

Wetland Type: Coastal permanently flooded freshwater lake (K)*, Inland permanently flooded freshwater marsh (S), Inland periodically flooded saline-brackish water marsh (R), Inland periodically flooded freshwater marsh (T), Estuary (F), Inland delta (L)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Trapa natans*, *Lemna minor*, *Myriophyllum sp.*, *Hydrocharis morsus-ranae*, b) Emergents: *Juncus acutus*, *Phragmites australis*, *Typha angustifolia*, *Arundo donax*, c) Scrubs and shrubs: *Tamarix sp.*, d) Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*, *Alnus glutinosa*, *Fraxinus angustifolia*, *Ulmus minor*.

Fauna: a) Fish: *Alosa caspia vistonica* (+, E), *Leuciscus cephalus macedonicus* (+), *Gobio gobio bulgaricus* (+), *Chalcalburnus chalcoides macedonicus* (+, V), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser erythropus* (E, W), *A. anser* (E, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, N, M), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Neophron percnopterus* (V, M), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W, M), *A. heliaca* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *F. biarmicus* (V), *Porzana parva* (R, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicnemus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Acrocephalus melanopogon* (R, M), *Lanius nubicus* (R, N, M), c) Mammals: *Glis glis* (V), *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Capreolus capreolus* (V)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Sand extraction potential (2), Scientific (3), Cultural (3), Recreational (3), Educational (1)

Significant present uses: Irrigation water supply (3), Fishing (3), Aquaculture (3), Grazing (3), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (2), Industrial solid wastes (1), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (3), Non-sustainable sand extraction (1), Land filling (2), Diversion of water courses (3), Establishment of new industrial facilities or expansion of old ones (3), Dams or other installations for retention and storage of water (1), Irrigation schemes (2), Establishment or expansion of cultivated fields (1), Overfishing (2), Illegal or non-sustainable hunting (2), Illegal or non-sustainable wood cutting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with PORTO LAGOS LAGOONS), Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Game refuge (part of the wetland), Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Land planning studies, Fishing studies, Establishment of wastewater treatment facilities, Ecological studies

Principal bibliography used: Economidis P. (1991), Fytianos et al. (1986), Giannakopoulou (1989), Grimmet and Jones (1989), Jerrentrup (1989), Kizilou (1989), Malakou et al. (1988), Meininger (1990), Voliotis et al. (1986)

PORTO LAGOS LAGOONS (Wetland Complex)
--

Wetland Code: 110027300

Part(s) of the wetland complex: Lafri Lagoon, Lafrouda Lagoon, Lagos Lagoon

Geographical Coordinates: Longitude: 25°04'40" Latitude: 41°00'48"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Rodopi (GR113), Xanthi (GR112)

Location: Next to the Porto Lagos village.

Altitude above sea level (m): 0

Area (ha): 560

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Salt pan (5)

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum fruticosum*, *Salicornia europaea*, *Aeluropus litoralis*, *Juncus maritimus*, *Juncus acutus*, b) Dunes and sandy shores plants: *Pancratium maritimum*, *Suaeda maritima*, *Euphorbia peplis*, *Ammophila arenaria*

Fauna: a) Reptiles: *Dermochelys coriacea* (E), b) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ciconia nigra* (E, M), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Anser erythropus* (E, W), *A. anser* (E, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, N, M), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Neophron percnopterus* (V, M), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W, M), *A. heliaca* (E, W), *A. chrysaetos* (V), *Hieraetus pennatus* (V, M), *Falco naumanni* (V, M), *F. biarmicus* (V), *Porzana parva* (R, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *L. audouinii* (E, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Lanius nubicus* (R, N, M), c) Mammals: *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Fishing (3), Fodder (3), Game support (2), Salt production potential (1), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (1), Grazing (3), Salt production (1), Recreation (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Industrial wastewater (1), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with VISTONIDA LAKE), Special Protection Area (79/409/EEC), Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Delineation and management studies, Fishing studies, Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Jerrentrup (1989), Kizilou (1989), Malakou et al. (1988), Meininger (1990), Voliotis et al. (1986)

LAFRI LAGOON (Part of Porto Lagos Lagoons Complex)

Wetland Code: 112028310

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Xanthi (GR112)

Location:

Altitude above sea level (m): 0

Area (ha): 150

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents, b) Dunes and sandy shores plants

Fauna: a) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ciconia nigra* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser erythropus* (E, W), *A. anser* (E, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, N, M), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Neophron percnopterus* (V, M), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W, M), *A. heliaca* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *F. biarmicus* (V), *Porzana parva* (R, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *L. audouinii* (E, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Lanius nubicus* (R, N, M), b) Mammals: *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felis silvestris* (E)

Most significant present values: Fishing (3), Fodder (3), Game support (2), Salt production potential (1), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (1), Grazing (3), Salt production (1), Recreation (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (1), Sewage from tourist

facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with PORTO LAGOS LAGOONS), Special Protection Area (79/409/EEC)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Meininger (1990)

LAFROUDA LAGOON (Part of Porto Lagos Lagoons Complex)
--

Wetland Code: 112029320

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Xanthi (GR112)

Location:

Altitude above sea level (m): 0

Area (ha): 110

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants

Fauna: a) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ciconia nigra* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser erythropus* (E, W), *A. anser* (E, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, N, M), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Neophron percnopterus* (V, M), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W, M), *A. heliaca* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *F. biarmicus* (V), *Porzana parva* (R, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *L. audouinii* (E, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Lanius nubicus* (R, N, M). b) Mammals: *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felis silvestris* (E)

Most significant present values: Fishing (3), Fodder (3), Game support (2), Salt production potential (1), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (1), Grazing (3), Salt production (1), Recreation (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (1), Sewage from tourist

facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with PORTO LAGOS LAGOONS), Special Protection Area (79/409/EEC)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Meininger (1990)

LAGOS LAGOON (Part of Porto Lagos Lagoons Complex)

Wetland Code: 112030330

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Xanthi (GR112)

Location:

Altitude above sea level (m): 0

Area (ha): 300

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (S)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum fruticosum*, *Salicornia europaea*, *Aeluropus litoralis*, *Juncus maritimus*, *Juncus acutus*, b) Trees, c) Dunes and sandy shores plants: *Pancratium maritimum*, *Suaeda maritima*, *Euphorbia peplis*, *Ammophila arenaria*

Fauna: a) Reptiles: *Dermochelys coriacea* (E), b) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ciconia nigra* (E, M), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Anser erythropus* (E, W), *A. anser* (E, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, N, M), *Oxyura leucocephala* (E, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Neophron percnopterus* (V, M), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W, M), *A. heliaca* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *F. biarmicus* (V), *Porzana parva* (R, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedienemus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *L. audouinii* (E), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, P), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Lanius nubicus* (R, N, M), c) Mammals: *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felis silvestris* (E)

Most significant present values: Fishing (3), Fodder (3), Game support (2), Salt production potential (1), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (1), Grazing (3), Salt production (1), Recreation (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (1), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with PORTO LAGOS LAGOONS), Special Protection Area (79/409/EEC)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Meininger (1990)

NESTOS RIVER

Wetland Code: 110031000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Drama (GR114), Xanthi (GR112), Kavala (GR115)

Location: Rises in Bulgaria, flows SE and discharges into the Thracean Sea.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1500

Area (ha): -

Length (km): 150 (within Greece)

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Ceratophyllum sp.*, *Ranunculus fluitans*, *Lemna minor*, *Potamogeton sp.*, b) Trees: *Platanus orientalis*, *Alnus glutinosa*, *Salix sp.*, *Populus sp.*

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Leuciscus cephalus macedonicus* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio bulgaricus* (+), *Barbus cyclolepis strumicae* (+), *Alburnoides bipunctatus strymonicus* (+), *Orthrias brandti bureschi* (+), *Cobitis strumicae* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Ergetta alba* (E, W), *Ciconia nigra* (E, M), *Neophron percnopterus* (V, N, M), *Gyps fulvus* (V), *Aquila pomarina* (V, M), *A. chrysaetos* (V, P), *Hieraaetus pennatus* (V, M), c) Mammals: *Canis lupus* (V), *Canis aureus* (V), *Lutra lutra* (V), *Capreolus capreolus* (V)

Most significant present values: Irrigation water (3), Fodder (3), Game support (3), Logging (3), Hydroelectric power potential (3), Sand extraction potential (1), Scientific (3), Cultural (2), Recreational (3)

Significant present uses: Irrigation water supply (2), Grazing (3), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

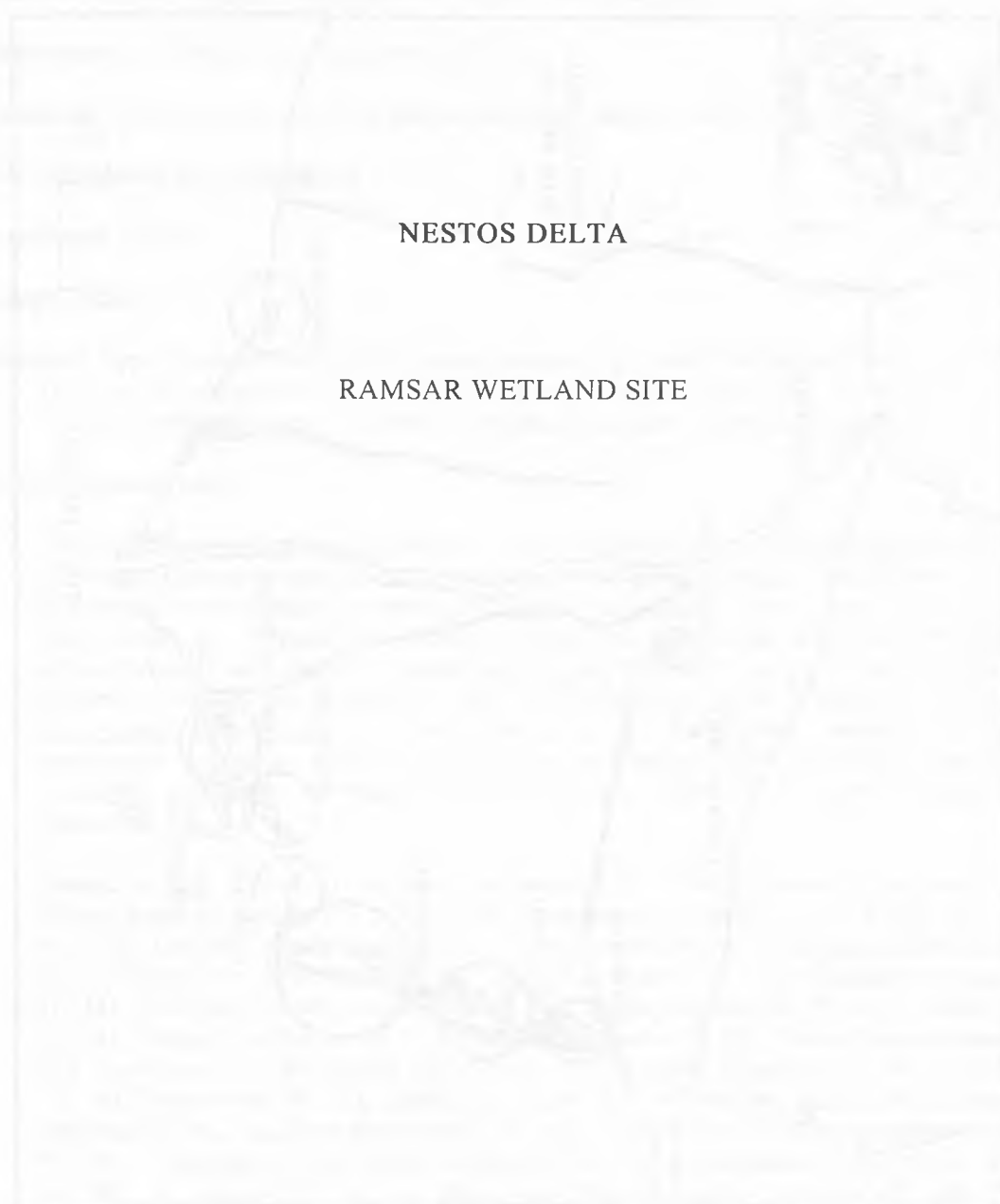
Pollution: Municipal solid wastes (2), Industrial wastewater (2), Non-point source agricultural pollution (1), Transboundary pollution (2)

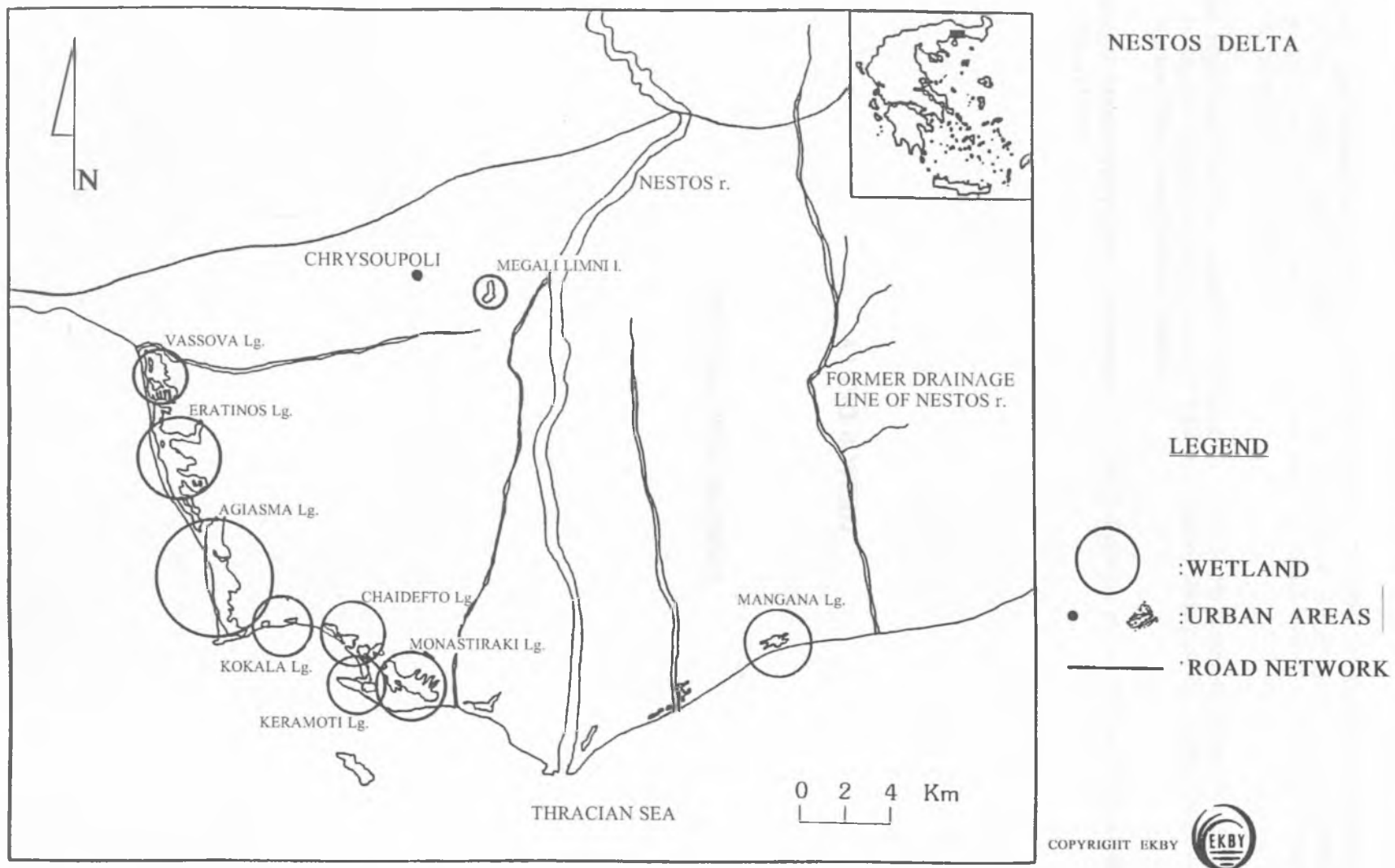
Other anthropogenic activities: Non-sustainable sand extraction (2), Diversion of water courses (3), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Illegal logging (2)

Present legal protection status: Special Protection Area (79/409/EEC) for Nestos Gorge and Nestos Valley, Aesthetic forest (Nestos Gorge), Game refuge (part of the wetland), Prohibition of logging, Prohibition of land clearing, Prohibition of excavations-drilling, Prohibition of waste disposal

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Nestos Gorge and Nestos Valley. Land planning studies

Principal bibliography used: Economidis P. (1991), Fytianos et al. (1986), Grimmet and Jones (1989)





NESTOS DELTA (Wetland Complex)

Wetland Code: 110032400

Part(s) of the wetland complex: Agiasma Lagoon or Gkoumpournou Lagoon, Vassova Lagoon, Eratinos Lagoon, Kokala Lagoon, Keramotis Lagoon, Chaidefto Lagoon, Monastiraki Lagoon, Mangana Lagoon, Megali Limni Lagoon

Geographical Coordinates: Longitude: 24°47'09" · Latitude: 40°54'37"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Xanthi (GR112), Kavala (GR115)

Location: At the boundaries of the Prefectures of Kavala and Xanthi.

Altitude above sea level (m): 0

Area (ha): 12000

Length (km): -

Wetland Type: Coastal delta (F)*, Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Potamogeton* sp., b) Emergents: *Salicornia europaea*, *Halimione portulacoides*, *Suaeda maritima*, *Halocnemum strobilaceum*, *Juncus maritimus*, *Arthrocnemum glaucum*, *A. fruticosum*, *Juncus acutus*, *Sparganium erectum*, *Ranunculus* sp., *Phragmites australis*, *Typha* sp., *Equisetum maximum*, *Puccinellia distans*, *Spergularia salina*, c) Scrubs and shrubs: *Tamarix* sp., d) Trees: *Populus* sp., *Platanus orientalis*, *Alnus glutinosa*, *Salix* sp., *Fraxinus oxyphylla*, *Ulmus minor*, e) Dunes and sandy shores plants: *Agropyrum junceum*, *Ammophila arenaria*, *Eryngium maritimum*, *Cynodon dactylon*, *Pancratium maritimum*, *Diotis maritima*, *Sporolobus arenarius*, *Calystegia soldanella*, *Atriplex tatarica*, *Salsola kali*, *Xanthium spinosum*, *Euphorbia paralias*

Fauna: a) Fish: *Leuciscus cephalus macedonicus* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio bulgaricus* (+), *Alburnoides bipunctatus strymonicus* (+), *Vimba melanops* (+, R/E), *Orthrias brandti bureschi* (+), *Cobitis strumicae* (+), b) Reptiles: *Caretta caretta* (E), c) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Ergetta alba* (E, W), *Ardea purpurea* (V, N, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Anser anser* (E, W), *Branta ruficollis* (E, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, M), *Neophron percnopterus* (V, M), *Gyps fulvus* (V), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W), *A. heliaca* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *F. biarmicus* (V, P), *Porzana parva* (R, M), *Himantopus himantopus* (V,

N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicnemus* (V, N, M), *Glareola pratincola* (V, N, M), *Hoplopterus spinosus* (E, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Acrocephalus melanopogon* (R, M), *Ficedula semitorquata* (R, M), *Lanius nubicus* (R, N, M), d) Mammals: *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felix silvestris* (E)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Fodder (3), Logging (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (1), Aquaculture (3), Grazing (3), Wood supply (3), Recreation (1), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (1), Industrial solid wastes (1), Sewage from tourist facilities (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3), Transboundary pollution (2)

Other anthropogenic activities: Drainage (3), Land filling (1), Diversion of water courses (3), Construction or expansion of airport (3), Establishment of new housing facilities or expansion of old ones (3), Establishment of new industrial facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Overpumping of ground water (3), Irrigation schemes (3), Establishment or expansion of cultivated fields (3), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (3), Illegal logging (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Game refuge, Prohibition of logging, Prohibition of land clearing, Prohibition of waste disposal

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Studies for the restoration-rehabilitation of the wetland, Fishing studies, Establishment of wastewater treatment facilities, Ecological studies

Principal bibliography used: Dounas et al. (1986), Economidis P. (1991), Grimmet and Jones (1989), Kizilou (1989), Malakou et al. (1988), Meininger (1990)

ANGITIS RIVER

Wetland Code: 100043000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Anatoliki Makedonia-Thraki (GR110), Kentriki Makedonia (GR120)

Prefecture(s): Drama (GR114), Serres (GR126)

Location: Rises in the Rodopi mounthain range, flows SW and meets the Strimonas river.

Altitude above sea level (m): *Min.:* 10 *Max.:* 1600

Area (ha): -

Length (km): 57

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants. b) Emergents: *Phragmites australis*, *Typha sp.*, c) Trees: *Salix sp.*, *Populus sp.*, *Alnus glutinosa*, *Platanus orientalis*

a) Fish: *Cobitis punctilineata* (-). b) Mammals: *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Fishing (1), Fodder (1), Game support (1), Scientific (2), Recreational (3)

Significant present uses: Irrigation water supply (3), Fishing (1), Aquaculture (1), Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (2), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Irrigation schemes (2), Overfishing (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Economidis P. (1991)

MAARA ANGITIS SPRINGS

Wetland Code: 114044000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°53'56" Latitude: 41°11'54"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Drama (GR114)

Location: 1 km N of the Angitis village.

Altitude above sea level (m): 110

Area (ha): 5

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Fauna: Fish: *Eudontomyzon hellenicus*

Most significant present values: Scientific (2), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Recreation (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Papastergiadou (1990), Papastergiadou and Babalonas (1992)

AGIA VARVARA SPRINGS

Wetland Code: 114045000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°09'00" Latitude: 41°09'00"

Administrative Region: Anatoliki Makedonia-Thraki (GR110)

Prefecture(s): Drama (GR114)

Location: Within the city of Drama.

Altitude above sea level (m): 100

Area (ha): 45

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Scientific (1), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Aquaculture (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Industrial wastewater (1)

Other anthropogenic activities:

Present legal protection status:

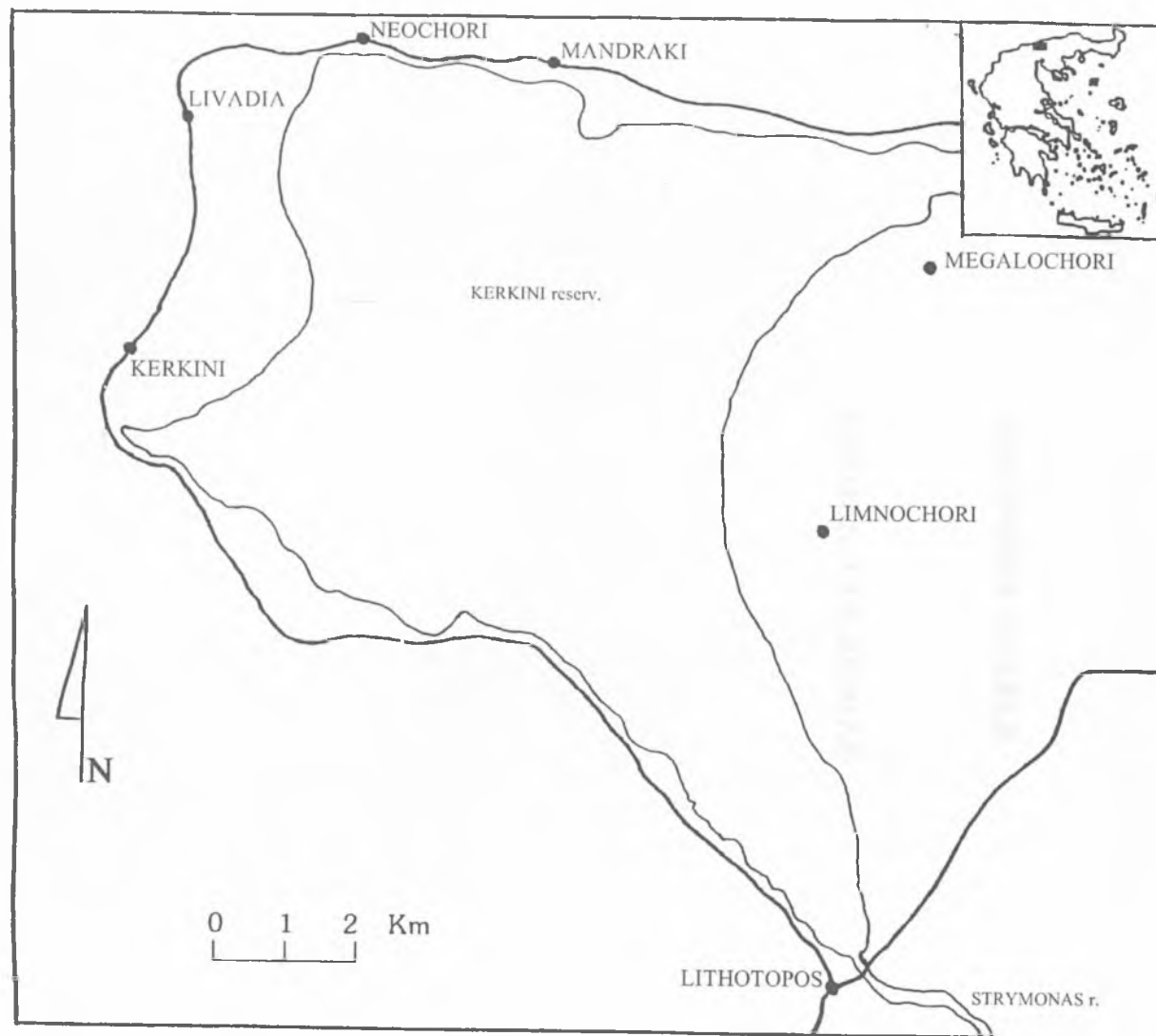
Most significant positive actions: Studies for the restoration-rehabilitation of the wetland

Principal bibliography used:



KERKINI RESERVOIR

RAMSAR WETLAND SITE



KERKINI RESERVOIR

LEGEND

- :URBAN AREAS
- :ROAD NETWORK

KERKINI RESERVOIR

Wetland Code: 126046000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°08'00" Latitude: 41°13'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Serres (GR126)

Location: 1 km E of the Kerkini village.

Altitude above sea level (m): 40

Area (ha): 7300

Length (km): -

Wetland Type: Reservoir (6)*, Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T), Inland delta (L), Canal - Trench (9)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Trapa natans*, *Nymphaea alba*, *Salvinia natans*, *Riccia fluitans*, *Callitriche obtusangula*, *Myriophyllum spicatum*, *M. verticillatum*, *Nymphoides peltata*, *Urticularia vulgaris*, *Polygonum amphibium*, *Ranunculus trichophyllus*, *Lemna gibba*, *L. minor*, *Spirodella polyrrhiza*, *Najas graccilima*, *Potamogeton crispus*, *P. gramineus*, *P. pectinatus*, *P. perfoliatus*, *Zannichelia palustris*, b) Emergents: *Cyperus* sp., *Ranunculus* sp., *Phragmites australis*, *Scirpus tabernaemontani*, *Typha angustifolia*, c) Trees: *Salix* sp., *Alnus glutinosa*, *Populus* sp.

Fauna: a) Fish: *Leuciscus cephalus macedonicus* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio bulgaricus* (+), *Barbus cyclolepis strumicae* (+), *Alburnus alburnus strumicae* (+), *Alburnoides bipunctatus strymonicus* (+), *Vimba melanops* (+, R/E), *Cobitis strumicae* (+), b) Birds: *Phalacrocorax pygmaeus* (E, N, W), *Pelecanus onocrotalus* (E, W, M), *P. crispus* (E, W, M), *Egretta alba* (E, N, W), *Ardea purpurea* (V, N), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, N), *Platalea leucorodia* (E, N), *Anser anser* (E, W), *Tadorna tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, P), *Neophron percnopterus* (V, M), *Circus aeruginosus* (V, W, M), *C. pygargus* (E, M), *Aquila pomarina* (V, N, M), *A. clanga* (E, W), *A. heliaca* (E, W), *A. chrysaetos* (V, P), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Larus melanocephalus* (V, M), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, N, M), *C. niger* (V, N, M), *Clamator glandarius* (R, M), *Coracias garrulus* (V, N, M), *Picus canus* (R, P), *Turdus torquatus* (R, W), c) Mammals: *Glis glis* (V), *Canis lupus* (V), *C. aureus* (V), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Fishing (3), Game support (3), Logging (1), Sand extraction potential (1), Scientific (3), Recreational (2), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (3), Recreation (1), Environmental education (3)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (2), Non-point source agricultural pollution (2), Transboundary pollution (3)

Other anthropogenic activities: Land filling (2), Diversion of water courses (3), Irrigation schemes (3), Establishment or expansion of livestock facilities (2), Overfishing (3), Illegal or non-sustainable hunting (3), Illegal logging (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), Ministerial Decision for the delineation of protected areas, Game refuge, Prohibition of grazing, Prohibition of logging, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies, Public awareness programs

Principal bibliography used: Arianoutsou-Faragitaki et al. (1986), Babalonas and Papastergiadou (1989), Papastergiadou and Babalonas (1992), Economidis P. (1991), Grimmet and Jones (1989), Papastergiadou (1990), Pyrovetsi and Papastergiadou (1992)

STRYMONAS RIVER

Wetland Code: 126047000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Serres (GR126)

Location: Rises in Bulgaria where the 2/3 of its watershed is located. Entering Greece, flows through the natural river bed of Roupel and through the artificial river bed of Vironia and discharges into the artificial lake Kerkini. Below the Lithotopos dam which is Kerkini's outlet, the Strymonas river flows S, SE and discharges into the Strymonikos Gulf, 1 km E of the Amfipolis village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 80

Area (ha): -

Length (km): 110 (within Greece)

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Hydrocharis morsus-ranae*, b) Emergents: *Typha sp.*, c) Trees: *Salix sp.*, *Populus sp.*, *Platanus orientalis*

Fauna: Fish: *Salmo trutta* (R/V/E), *Leuciscus cephalus macedonicus* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio bulgaricus* (+), *Barbus cyclolepis strumicae* (+), *Alburnus alburnus strumicae* (+), *Alburnoides bipunctatus strymonicus* (+), *Vimba melanops* (+, R/E), *Orthrias brandti bureschi* (+), *Cobitis strumicae* (+)

Most significant present values: Irrigation water (3), Fodder (3), Game support (3), Logging (3), Sand extraction potential (2), Scientific (2), Cultural (3), Recreational (1)

Significant present uses: Irrigation water supply (3), Grazing (3), Hunting (3), Wood supply (3), Sand extraction (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Industrial wastewater (3), Non-point source agricultural pollution (3), Transboundary pollution (3)

Other anthropogenic activities: Diversion of water courses (3), Irrigation schemes (3), Illegal or non-sustainable hunting (2), Illegal or non-sustainable wood cutting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Economidis P. (1991), Fytianos et al. (1986), Papastergiadou (1990)

STRYMONAS ESTUARY

Wetland Code: 126048000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°49'23" Latitude: 40°48'23"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Serres (GR126)

Location: 1 km E of the Nea Kerdyllia village, Prefecture of Serres.

Altitude above sea level (m): 0

Area (ha): 800

Length (km): -

Wetland Type: Estuary (F)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants

Fauna: a) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Phoenicopiterus ruber* (R, W), *Tadorna tadorna* (V, W), *Haliaeetus albicilla* (E, M), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W, M), *Burhinus oedicephalus* (V, M), *Glareola pratincola* (V, N, M), *Larus melanocephalus* (V, M), *Chlidonias hybridus* (V, M), b) Mammals: *Lutra lutra* (V)

Most significant present values: Fishing (3), Fodder (3), Game support (2), Sand extraction potential (1), Scientific (2), Cultural (3), Recreational (3)

Significant present uses: Fishing (3), Aquaculture (1), Grazing (2), Sand extraction (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Industrial wastewater (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Grimmet and Jones (1989)

DOIRANI LAKE

Wetland Code: 123050000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°46'26" Latitude: 41°13'01"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Kilkis (GR123)

Location: Next to the Doirani village.

Altitude above sea level (m): 146

Area (ha): 1500 (within Greece)

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Emergents: *Typha sp.*, *Phragmites sp.*, b) Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*, *Alnus glutinosa*, c) Dunes and sandy shores plants

Fauna: a) Fish: *Rutilus rutilus dojranensis* (+), *Gobio gobio balcanicus* (+), *Alburnus alburnus macedonicus* (+), *Sabanejewia aurata balcanica* (+, V), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, W, M), *Coracias garrulus* (V, N, M)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Game support (3), Scientific (2), Recreational (2), Educational (1)

Significant present uses: Irrigation water supply (3), Fishing (3), Grazing (3), Hunting (3), Recreation (1), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Sewage from tourist facilities (3), Agricultural point source pollution (1), Non-point source agricultural pollution (3), Transboundary pollution (3)

Other anthropogenic activities: Overfishing (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used: Economidis P. (1991), Economidis and Voyadjis (1985), Fytianos et al. (1986)

FORMER LAKE ARTZAN MARSH

Wetland Code: 123051000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°39'00" Latitude: 41°01'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Kilikis (GR123)

Location: 2 km W of the Vafeiochori village.

Altitude above sea level (m): 30

Area (ha): 150

Length (km):

Wetland Type: Inland periodically flooded freshwater marsh (T)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum sp.*, *Potamogeton sp.*, *Ranunculus sp.*, *Trapa natans*, *Vallisneria spiralis*, b) Emergents: *Phragmites australis*, *Juncus sp.*, *Carex sp.*, c) Scrubs and shrubs: *Tamarix sp.*

Fauna: Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Circus aeruginosus* (V, W, M), *Chlidonias hybridus* (V, M)

Most significant present values: Fodder (3), Game support (1), Scientific (3), Recreational (1)

Significant present uses: Grazing (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (3), Establishment or expansion of cultivated fields (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992c), Vavdinoudis et al. (1991)

PIKROLIMNI LAKE

Wetland Code: 123052000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°48'00" Latitude: 40°50'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Kilkis (GR123)

Location: 2 km E of the Mikrokampos village.

Altitude above sea level (m): 47

Area (ha): 400

Length (km): -

Wetland Type: Inland periodically flooded saline-brackish water lake (R)*

Biotic characteristics:

Flora: Emergents: *Suaeda maritima*, *Crypsis aculeata*, *Puccinellia convoluta*, *Elymus elongatus*

Fauna: Birds: *Tadorna tadorna* (V, W), *Recurvirostra avosetta* (V, W)

Most significant present values: Scientific (2)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Babalonas and Papastergiadou (1990)

GALLIKOS RIVER OR ECHEDOROS RIVER

Wetland Code: 120053000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Kilikis (GR123), Thessaloniki (GR122)

Location: Rises in the Krousia mountain, flows S and discharges into the Thermaikos Gulf, 0.2 km w of the Kalochori village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 400

Area (ha): -

Length (km): 65

Wetland Type: Intermittent river (N)*

Biotic characteristics:

Flora: a) Emergents, b) Scrubs and shrubs: *Tamarix sp.*, c) Trees

Fauna: Fish: *Leuciscus cephalus vardarensis* (+), *Gobio gobio balcanicus* (+), *Cobitis vardarensis* (+), *Sabanejewia aurata balcanica* (+, V)

Most significant present values: Drinking water (3), Irrigation water (1), Fodder (3), Game support (3), Sand extraction potential (2), Scientific (1), Cultural (2), Educational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (1), Grazing (3), Hunting (3), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (3), Industrial solid wastes (3), Agricultural point source pollution (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Non-sustainable sand extraction (2), Establishment of new industrial facilities or expansion of old ones (3), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Establishment of housing control zones (ZOE), Health regulations, Game refuge (part of the wetland)

Most significant positive actions: Land planning studies, Establishment of wastewater treatment facilities, Chemical studies, Ecological studies

Principal bibliography used: Economidis P. (1991), Economidis and Voyadjis (1985), Mavroudis and Panoras (1993)

AXIOS RIVER

Wetland Code: 120054000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Kilkis (GR123), Thessaloniki (GR122)

Location: Rises in the former Yougoslavia where the 91% of its watershed is located, flows E and S, and discharges into the Thermaikos Gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 70

Area (ha): -

Length (km): 70 (within Greece)

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants, b) Emergents, c) Scrubs and shrubs: *Tamarix sp.*, d) Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*, *Alnus glutinosa*

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Rutilus rutilus dojranensis* (+), *Leuciscus cephalus vardarensis* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio balcanicus* (+), *G. kessleri banarensis* (+, V/R), *G. uranoscopus elimeius* (+, V/R), *Barbus barbus macedonicus* (+), *Alburnus alburnus macedonicus* (+), *Alburnoides bipunctatus thessalicus* (+), *Vimba melanops* (+, R/E), *Orthrias barbatulus vardarensis* (+, V), *Cobitis vardarensis* (+), *Sabanejewia aurata balcanica* (+, V), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Milvus migrans* (E, M), *Burhinus oedicephalus* (V, M), *Glareola pratincola* (V, M), *Larus melanocephalus* (V, M)

Most significant present values: Drinking water (3), Irrigation water (3), Fodder (3), Game support (3), Logging (3), Sand extraction potential (2), Scientific (2), Cultural (2), Recreational (2), Educational (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Grazing (3), Hunting (3), Wood supply (2), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (2), Agricultural point source pollution (2), Non-point source agricultural pollution (3), Transboundary pollution (3)

Other anthropogenic activities: Non-sustainable sand extraction (3), Diversion of water

courses (3), Establishment of new industrial facilities or expansion of old ones (2), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Irrigation schemes (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Regulation on threshold values for harmful substances in effluents, Game refuge (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Establishment of wastewater treatment facilities, Chemical studies, Ecological studies

Principal bibliography used: Economidis P. (1991), Economidis and Voyadjis (1985), Fytianos et al. (1986), Grimmet and Jones (1989), Kazantzidis and Athanasiou (1992), Mavroudis and Panoras (1993), Samanidou and Fytianos (1987), Voulgaropoulos et al. (1987)

RICHIOS RIVER OR RENTINA GORGE

Wetland Code: 122055000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 0.2 km SE of the Rentina village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 40

Area (ha): -

Length (km): 10

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *L. trisulca*, *Hydrocharis morsus-ranae*, *Ceratophyllum submersum*, *Ricciocarpos natans*, *Ranunculus fluitans*, *Vallisneria spiralis*, *Wolffia arrhiza*, *Najas marina*, *N. minor*, *Potamogeton crispus*, *P. natans*, *P. nodosus*, *P. pectinatus*, *Salvinia natans*, b) Emergents, c) Trees: *Platanus orientalis*, *Alnus glutinosa*, *Salix sp.*

Fauna: Birds: *Hieraaetus pennatus* (V, M)

Most significant present values: Irrigation water (3), Fodder (1), Game support (3), Logging (1), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Grazing (1), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

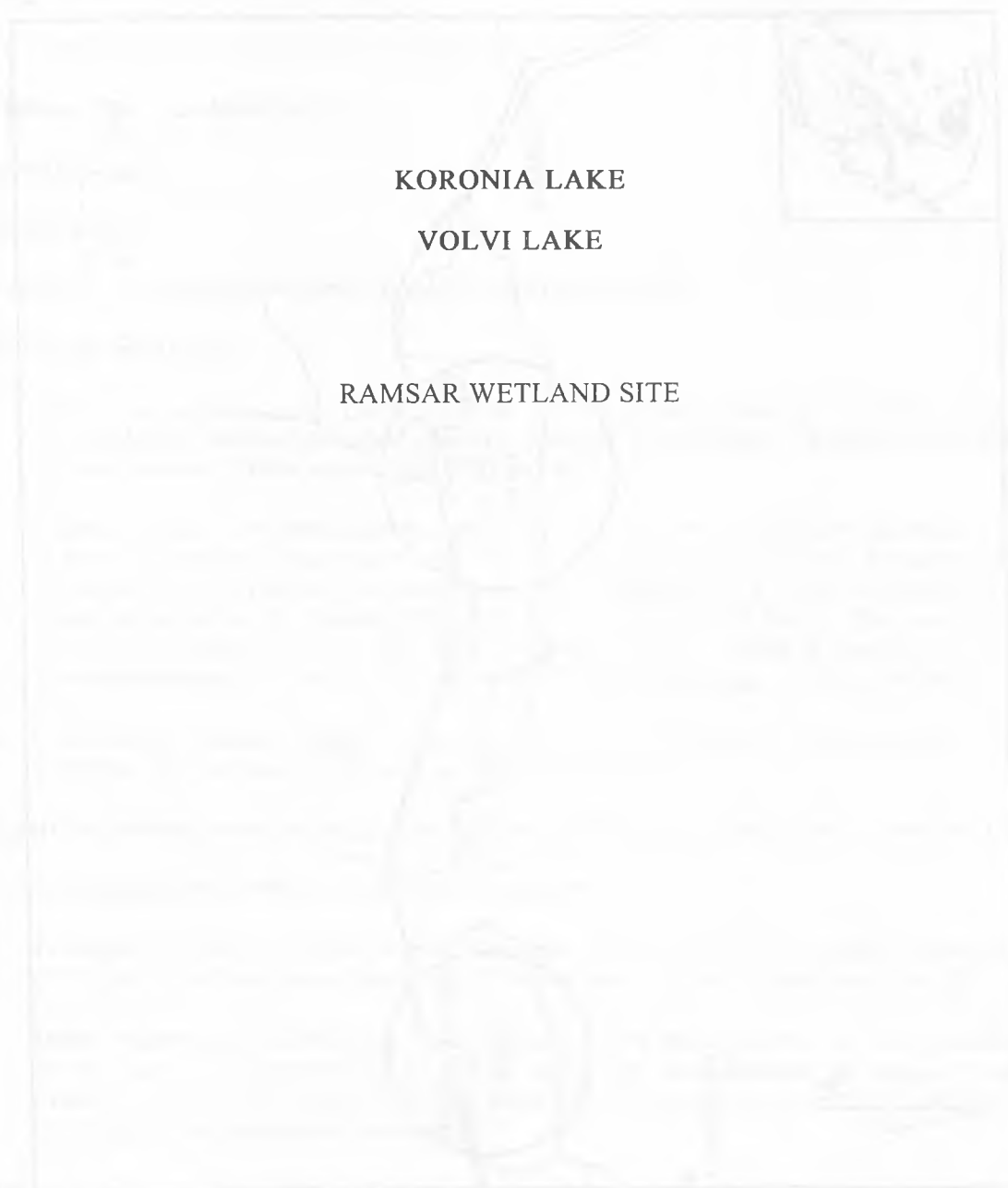
Pollution: Municipal wastewater (1), Non-point source agricultural pollution (2)

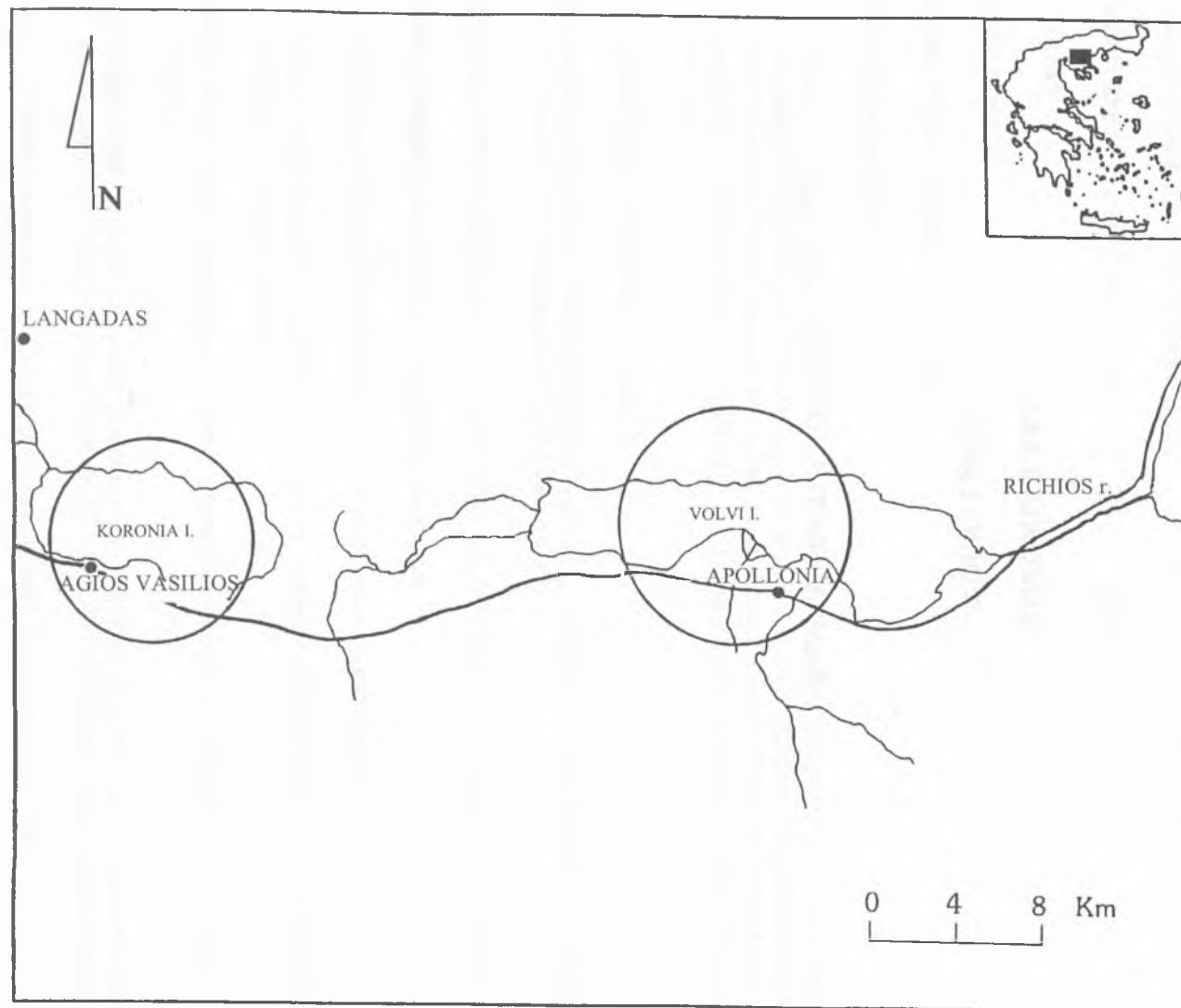
Other anthropogenic activities: Irrigation schemes (2), Illegal or non-sustainable hunting (2), Illegal logging (2)

Present legal protection status: Special Protection Area (79/409/EEC), Prohibition of logging

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies

Principal bibliography used: Grimmet and Jones (1989), Papastergiadou (1990)





VOLVI LAKE KORONIA LAKE

LEGEND

-  :WETLAND
-   :URBAN AREAS
-  :ROAD NETWORK

COPYRIGHT EKBY



KORONIA LAKE OR LAGADAS LAKE OR AGIOY VASILIOU LAKE

Wetland Code: 122056000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°08'48" Latitude: 40°41'21"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: Next to the Agios Vasilios village.

Altitude above sea level (m): 75

Area (ha): 4620

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Potamogeton sp.*, *Najas marina*, *Ceratophyllum submersum*, *Myriophyllum spicatum*, b) Emergents: *Phragmites australis*, *Scirpus lacustris*, *Typha angustifolia*, c) Trees: *Salix sp.*

Fauna: a) Fish: *Leuciscus cephalus macedonicus* (+), *Barbus cyclolepis strumicae* (+), *Alburnus alburnus macedonicus* (+), *Cobitis strumicae* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, N), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *Hieraaetus pennatus* (V, M), *Coracias garrulus* (V, N), c) Mammals: *Citellus citellus* (V)

Most significant present values: Irrigation water (3), Fishing (3), Game support (2), Scientific (3), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Fishing (3), Grazing (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (3), Agricultural point source pollution (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Establishment of new industrial facilities or expansion of old ones (3), Overpumping of ground water (3), Establishment or expansion of livestock facilities (3), Establishment or expansion of cultivated fields (3), Overfishing (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the

Ramsar Convention (registered jointly with VOLVI LAKE), Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Health regulations, Game refuge, Prohibition of fishing (during reproduction period)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Fishing studies, Establishment of wastewater treatment facilities, Ecological studies, Public awareness programs

Principal bibliography used: Economidis P. (1991), Fytianos et al. (1986), Grimmet and Jones (1989), Ministry of Agriculture (1988), Paulidis et al. (1986), Papastergiadou (1990), Voulgaropoulos et al. (1987)

VOLVI LAKE

Wetland Code: 122057000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°29'01" Latitude: 40°41'01"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 39 km NE of the city of Thessaloniki.

Altitude above sea level (m): 37

Area (ha): 6860

Length (km):

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Trapa natans*, *Lemna minor*, *Potamogeton* sp., *Myriophyllum* sp., *Ceratophyllum* sp., *Azolla filiculoides*, *Hydrocharis morsus-ranae*, *Najas marina*, *Ranunculus trichophyllus*, *Vallisneria spiralis*, b) Emergents: *Phragmites australis*, *Scirpus lacustris*, *Typha angustifolia*, *Alisma plantago-aquatica*, c) Trees: *Populus* sp., *Platanus orientalis*

Fauna: a) Fish: *Alosa macedonica* (+), *Leuciscus cephalus macedonicus* (+), *Barbus cyclolepis strumicae* (+), *Alburnus alburnus macedonicus* (+), *Chalcalburnus chalcoides macedonicus* (+, V), *Vimba melanops* (+, R/E), *Cobitis strumicae* (+), *Silurus aristotelis* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Tadorna ferruginea* (E, W), *T. tadorna* (V), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, N), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *Hieraaetus pennatus* (V, M), *Coracias garrulus* (V, N), c) Mammals: *Rhinolophus* spp., *Myotis* spp., *Pipistrellus* spp., *Nyctalus* spp., *Citellus citellus* (V), *Meles meles* (V), *Felix silvestris* (E)

Most significant present values: Drinking water (1), Irrigation water (3), Fishing (3), Fodder (3), Game support (2), Logging (2), Scientific (3), Cultural (2), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (3), Aquaculture (3), Grazing (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Agricultural point source pollution (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Overpumping of ground water (2), Dams or other installations for retention and storage of water (3), Irrigation schemes (3), Establishment or expansion of livestock facilities (2), Overfishing (3), Illegal or non-sustainable hunting (3), Illegal logging (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with KORONIA LAKE), Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Game refuge, Prohibition of fishing (during reproduction period), Prohibition of logging

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Fishing studies, Establishment of wastewater treatment facilities, Ecological studies, Public awareness programs

Principal bibliography used: Economidis G. (1991), Economidis P. (1991), Grimmet and Jones (1989), Ministry of Agriculture (1988), Moustaka (1988), Paulidis et al. (1986), Papastergiadou (1990), Vafiadis et al. (1990)

EPANOMI LAGOON

Wetland Code: 122058000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°56'14" Latitude: 40°25'41"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 5 km SW of the Epanomi village.

Altitude above sea level (m): 1

Area (ha): 500

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Scirpus maritimus*, *Arthrocnemum fruticosum*, *Salicornia europaea*, *Halimione portulacoides*, *Juncus acutus*, *J. maritimus*, *Aeluropus litoralis*, b) Scrubs and shrubs: *Tamarix hampeana*, c) Dunes and sandy shores plants: *Atriplex tatarica*, *Eryngium maritimum*, *Elymus sp.*, *Artemisia campestris*, *Ammophila arenaria*, *Salsola kali*

Fauna: a) Birds: *Phalacrocorax pygmaeus* (E, W), *Ardea purpurea* (V, M), *Egretta alba* (E, W), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W), *Circus aeruginosus* (V, N, W), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, M, W), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Larus melanocephalus* (V, M), *L. genei* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, M), b) Mammals: *Citellus citellus* (V), *Meles meles* (V)

Most significant present values: Fodder (2), Game support (2), Scientific (2), Cultural (1), Recreational (3), Educational (2)

Significant present uses: Grazing (2), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB), Ecological studies

Principal bibliography used: Goutner et al. (1992), Grimmet and Jones (1989), Topiotechniki Ltd. (1992b)

ALYKI ANGELOCHORIOU OR MEGALO EMVOLO LAGOON
--

Wetland Code: 122059000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°49'53" Latitude: 40°30'15"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 1 km SW of the Angelochori village.

Altitude above sea level (m): 0

Area (ha): 250

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5), Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum fruticosum*, *Salicornia europaea*, *Halimione portulacoides*, *Juncus acutus*, *J. maritimus*, *Aeluropus litoralis*, *Typha angustifolia*, b) Scrubs and shrubs: *Tamarix hampeana*, b) Dunes and sandy shores plants: *Atriplex tatarica*, *Eryngium maritimum*, *Artemisia campestris*, *Ammophila arenaria*, *Salsola kali*, *Xanthium sp.*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Ardea purpurea* (V, M), *Egretta alba* (E, W), *Platalea leucorodia* (E, M), *Ciconia nigra* (E, M), *Phoenicopiterus ruber* (R, W), *Tadorna tadorna* (V, N, M), *Buteo rufinus* (R, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, M), *Burhinus oedicnemus* (V, M), *Glareola pratincola* (V, N, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Coracias garrulus* (V, M), *Acrocephalus melanopogon* (R, M)

Most significant present values: Fishing (1), Game support (2), Salt production potential (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Fishing (1), Salt production (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB), Ecological studies, Public awareness programs

Principal bibliography used: Goutner et al. (1992), Grimmet and Jones (1989), Topiotechniki Ltd. (1992b)

PALIOURA MARSH

Wetland Code: 122060000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°52'31" Latitude: 40°27'48"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 3 km S of the Nea Michaniona village.

Altitude above sea level (m): 1

Area (ha): 60

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Dunes and sandy shores plants

Most significant present values: Fodder (3), Game support (3), Sand extraction potential (1), Scientific (1), Cultural (1), Recreational (3), Educational (1)

Significant present uses: Grazing (3), Hunting (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (1), Non-sustainable sand extraction (1), Land filling (1), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Public awareness programs

Principal bibliography used:

GALLIKOS ESTUARY OR ECHEDOROS ESTUARY

Wetland Code: 122063000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°54'40" Latitude: 40°39'14"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 0.2 km W of the Kalochori village.

Altitude above sea level (m): 0

Area (ha): 1800

Length (km): -

Wetland Type: Estuary (F)* Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Myriophyllum spicatum*, b) Emergents: *Phragmites australis*, *Arthrocnemum fruticosum*, *Salicornia europaea*, *Halimione portulacoides*, *Juncus acutus*, *J. maritimus*, *Aeluropus litoralis*, *Typha angustifolia*, *Oenanthe aquatica*, *Lycopus europaeus*, b) Scrubs and shrubs: *Tamarix hampeana*, c) Trees: *Salix sp.*, *Populus sp.*

Fauna: a) Fish: *Leuciscus cephalus vardarensis* (+), *Gobio gobio balcanicus* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, N, W), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Glareola pratincola* (V, M), *Larus melanocephalus* (V, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M)

Most significant present values: Fodder (3), Game support (3), Logging (3), Scientific (2), Cultural (2)

Significant present uses: Grazing (2), Hunting (3), Wood supply (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (2), Agricultural point source pollution (3), Non-point source agricultural pollution (3)

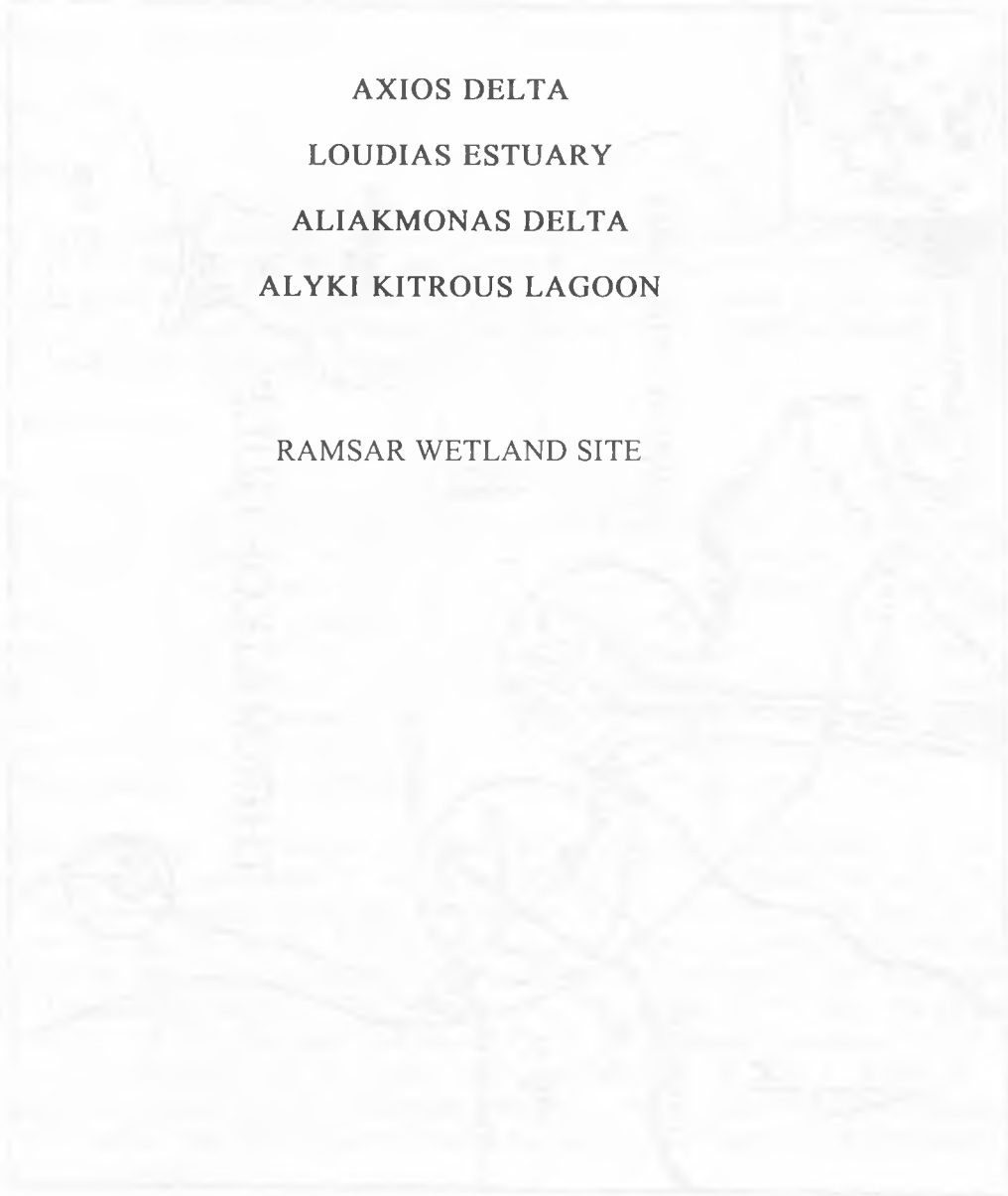
Other anthropogenic activities: Land filling (2), Diversion of water courses (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of

new industrial facilities or expansion of old ones (2), Establishment or expansion of livestock facilities (3), Illegal or non-sustainable hunting (3), Illegal or non-sustainable wood cutting (2)

Present legal protection status: Regulation on threshold values for harmful substances in effluents, Prohibition of waste disposal

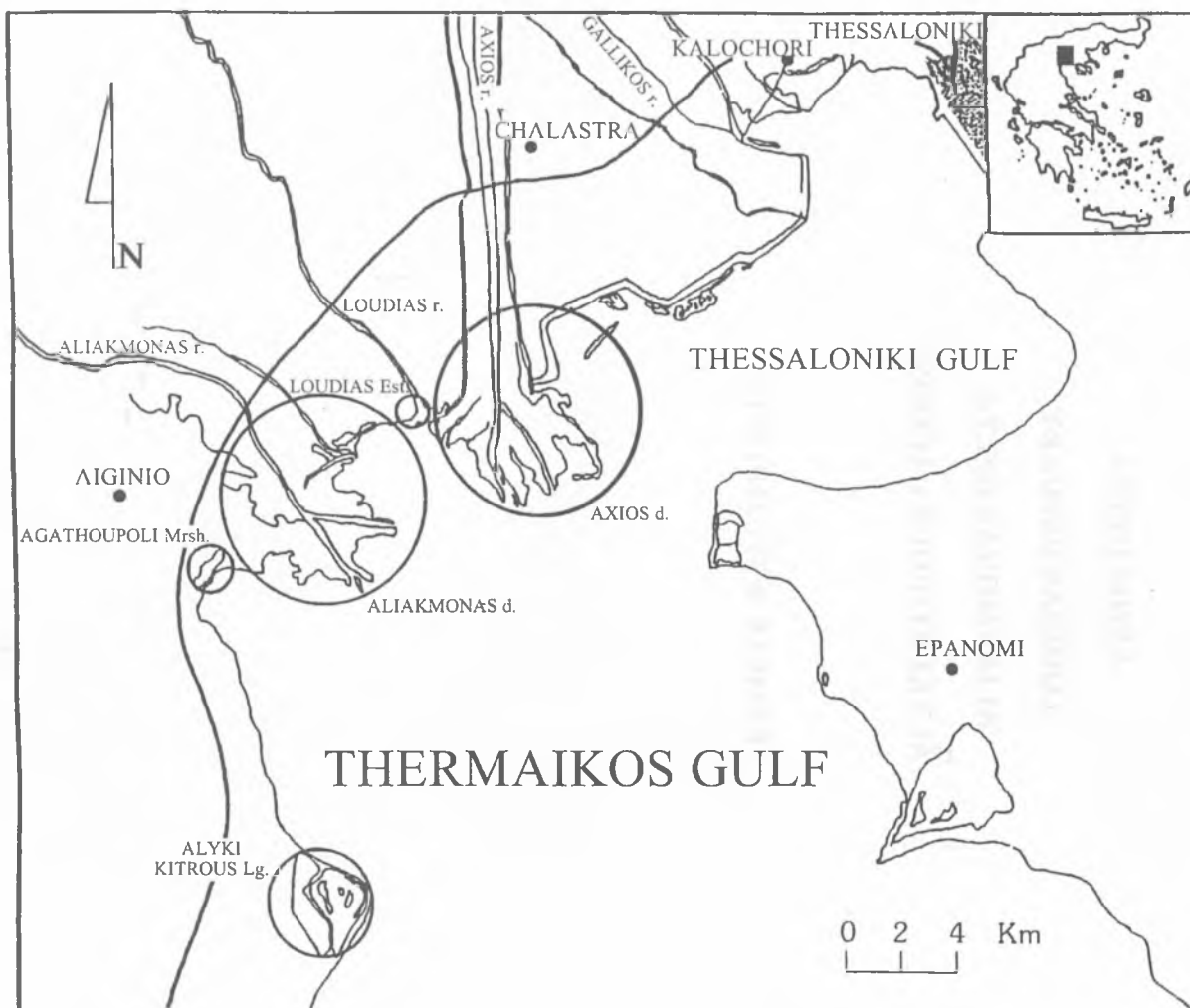
Most significant positive actions: Studies on geology-hydrogeology-geophysics, Chemical studies, Public awareness programs

Principal bibliography used: Athanasiou (1990), Dimitriou et al. (1986), Economidis and Voyadjis (1985), Economidis P. (1991), Goutner et al. (1992), Kazantzidis and Athanasiou (1992), Topiotechniki Ltd. (1992b)



AXIOS DELTA
LOUDIAS ESTUARY
ALIAKMONAS DELTA
ALYKI KITROUS LAGOON

RAMSAR WETLAND SITE



AXIOS DELTA
LOUDIAS ESTUARY
ALIAKMONAS DELTA
ALYKI KITROUS LAGOON

LEGEND

-  : WETLAND
-   : URBAN AREAS
-  : ROAD NETWORK

COPYRIGHT EKBY



AXIOS DELTA

Wetland Code: 122064000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°43'28" Latitude: 40°32'03"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Thessaloniki (GR122)

Location: 7 km S of the Chalastra town.

Altitude above sea level (m): 0

Area (ha): 2200

Length (km): -

Wetland Type: Coastal delta (F)*, Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Inland permanently flooded saline-brackish water marsh (Q), Inland periodically flooded saline-brackish water marsh (R), Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T), Canal - Trench (9)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, b) Emergents: *Salicornia europaea*, *Aster tripolium*, *Puccinellia festuciformis*, *Arthrocnemum fruticosum*, *A. perenne*, *Halocnemum strobilaceum*, *Halimione portulacoides*, *Limonium* sp., *Hordeum hystrix*, *Juncus maritimus*, *Aeluropus litoralis*, *Spergularia* sp., *Juncus* sp., *Trifolium* sp., *Mentha* sp., *Carex* sp., *Phragmites australis*, *Typha* sp., *Bolboschoenus maritimus*, *Butomus umbellatus*, *Eleocharis pallustris*, c) Scrubs and shrubs: *Tamarix* sp., d) Trees: *Salix* sp., *Populus* sp., *Alnus glutinosa*, e) Dunes and sandy shores plants: *Salsola kali*, *Euphorbia peplis*, *Xanthium stumarium*, *Cakile maritima*, *Atriplex* sp., *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Verbascum pinnatifidum*, *Ephedra distachya*, *Artemisia campestris*, *Diotis maritima*, *Medicago marina*, *Pancreatium maritimum*

Fauna: a) Birds: *Phalacrocorax pygmaeus* (E, N), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, N), *Plegadis falcinellus* (E, N, M), *Platalea leucorodia* (E, N, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Tadorna tadorna* (V, N, W), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Circus aeruginosus* (V, N, W), *Aquila pomarina* (V, M), *A. clanga* (E, W), *Hieraaetus pennatus* (V, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicnemus* (V, N, M), *Glareola pratincola* (V, N, M), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, W), *Gelochelidon nilotica* (E, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), b) Mammals: *Citellus citellus* (V), *Canis lupus* (V), *Canis aureus* (V), *Lutra lutra* (V), *Meles meles* (V), *Felix silvestris* (E)

Most significant present values: Fishing (3), Fodder (3), Game support (2), Logging (2), Sand extraction potential (2), Scientific (3), Cultural (3), Recreational (2), Educational (3)

Significant present uses: Fishing (3), Aquaculture (1), Grazing (3), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (3), Industrial wastewater (2), Agricultural point source pollution (2), Non-point source agricultural pollution (3), Transboundary pollution (3)

Other anthropogenic activities: Drainage (2), Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of new industrial facilities or expansion of old ones (2), Irrigation schemes (2), Establishment or expansion of cultivated fields (1), Establishment or expansion of livestock facilities (3), Illegal or non-sustainable hunting (3), Illegal logging (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with LOUDIAS ESTUARY, ALIAKMONAS DELTA, and ALYKI KITROUS LAGOON), Special Protection Area (79/409/EEC), Regulation on threshold values for harmful substances in effluents, Game refuge, Prohibition of logging

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Athanasiou (1990), Babalonas (1992), Babalonas and Papastergiadou (1988), Dimitriou et al. (1986), Economidis P. (1991), Economidis and Voyadjis (1985), Gerakis et al. (1988), Grimmet and Jones (1989), Kazantzidis and Athanasiou (1992), Konstantinidis (1989), Mavroudis and Panoras (1993), Samanidou and Fytianos (1987), Topiotechniki Ltd. (1992a), Zalidis et al. (1993b)

LOUDIAS ESTUARY

Wetland Code: 121065000

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Imathia (GR121)

Location: 9 km S of the Chalastra town.

Altitude above sea level (m): 0

Area (ha): 20

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, b) Emergents: *Juncus sp.*, *Trifolium sp.*, *Mentha sp.*, *Carex sp.*, *Phragmites australis*, *Typha sp.*, *Bolboschoenus marotimus*, *Butomus umbellatus*, *Eleocharis pallustris*, c) Scrubs and shrubs: *Tamarix sp.*

Most significant present values: Irrigation water (3)

Significant present uses: Irrigation water supply (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with AXIOS DELTA, ALIAKMONAS DELTA, and ALYKI KITROUS LAGOON), Special Protection Area (79/409/EEC), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies

Principal bibliography used: Athanasiou (1990), Babalonas (1992), Babalonas and Papastergiadou (1988), Dounas et al. (1986), Economidis P. (1991), Grimmet and Jones (1989), Kazantzidis and Athanasiou (1992), Konstantinidis (1989), Topiotechniki Ltd. (1992a)

ALIAKMONAS DELTA (Wetland Complex)**Wetland Code:** 120066500**Part(s) of the wetland complex:** Agathoupoli Marsh**Geographical Coordinates:** Longitude: 22°37'43" Latitude: 40°30'45"**Administrative Region:** Kentriki Makedonia (GR120)**Prefecture(s):** Imathia (GR121), Pieria (GR125)**Location:** 5 km N, NE of the Aiginio town.**Altitude above sea level (m):** 1**Area (ha):** 4000**Length (km):** -**Wetland Type:** Coastal delta (F)*, Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Inland permanently flooded saline-brackish water marsh (Q), Inland periodically flooded saline-brackish water marsh (R), Inland periodically flooded freshwater marsh (T), Canal - Trench (9)**Biotic characteristics:**

Flora: a) Aquatic bed plants: *Lemna minor*, b) Emergents: *Salicornia europaea*, *Aster tripolium*, *Puccinellia festuciformis*, *Arthrocnemum fruticosum*, *A. perenne*, *Halocnemum strobilaceum*, *Halimione portulacoides*, *Limonium sp.*, *Hordeum hystrix*, *Juncus maritimus*, *Aeluropus litoralis*, *Spergularia sp.*, *Juncus acutus*, *Trifolium sp.*, *Mentha sp.*, *Carex sp.*, *Phragmites australis*, *Typha sp.*, *Bolboschoenus marotimus*, *Butomus umbellatus*, *Eleocharis pallustris*, c) Scrubs and shrubs: *Tamarix sp.*, d) Trees: *Salix sp.*, *Populus sp.*, *Alnus glutinosa*, e) Dunes and sandy shores plants: *Salsola kali*, *Euphorbia peplis*, *Xanthium stumarium*, *Cakile maritima*, *Atriplex sp.*, *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Verbascum pinnatifidum*, *Ephedra distachya*, *Artemisia campestris*, *Diotis maritima*, *Medicago marina*, *Pancratium maritimum*

Fauna: a) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Tadorna tadorna* (V, W), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, W), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, W), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias hybridus* (V, M), *C. niger* (V, M), b) Mammals: *Citellus citellus* (V), *Canis aureus* (V), *Lutra lutra* (V), *Meles meles* (V), *Felis silvestris* (E)

Most significant present values: Irrigation water (3), Fodder (3), Game support (2), Logging (3), Scientific (3), Recreational (3)**Significant present uses:** Irrigation water supply (3), Aquaculture (1), Grazing (3), Wood

supply (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (2), Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (3), Illegal or non-sustainable hunting (3), Illegal or non-sustainable wood cutting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with AXIOS DELTA, LOUDIAS ESTUARY, and ALYKI KITROUS LAGOON), Special Protection Area (79/409/EEC), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Fishing studies, Ecological studies, Public awareness programs

Principal bibliography used: Athanasiou (1990), Babalonas (1992), Babalonas and Papastergiadou (1988), Dimitriou et al. (1986), Economidis P. (1991), Economidis and Voyadjis (1985), Grimmet and Jones (1989), Kazantzidis and Athanasiou (1992), Topiotechniki Ltd. (1992a)

AGATHOUPOLI MARSH (Part of Aliakmonas Delta Complex)

Wetland Code: 125067510

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pieria (GR125)

Location: 2 km E of the Agathoupolis village.

Altitude above sea level (m):

Area (ha):

Length (km):

Wetland Type: Coastal periodically flooded freshwater marsh (K)*

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *Aster tripolium*, *Puccinellia festuciformis*, *Arthrocnemum fruticosum*, *A. perenne*, *Halocnemum strobilaceum*, *Halimione portulacoides*, *Limonium* sp., *Hordeum hystrix*, *Juncus maritimus*, *Aeluropus litoralis*, *Spergularia* sp., *Juncus* sp., *Trifolium* sp., *Mentha* sp., *Carex* sp., *Phragmites australis*, b) Scrubs and shrubs: *Tamarix* sp., c) Dunes and sandy shores plants: *Salsola kali*, *Euphorbia peplis*, *Xanthium stumarium*, *Cakile maritima*, *Atriplex* sp., *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Verbascum pinnatifidum*, *Ephedra distachya*, *Artemisia campestris*, *Diotis maritima*, *Medicago marina*, *Pancratium maritimum*

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, W), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M)

Most significant present values:

Significant present uses:

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with ALIAKMONAS DELTA), Special Protection Area (79/409/EEC)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Kazantzidis and Athanasiou (1992)

ALYKI KITROUS LAGOON

Wetland Code: 125068000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°39'00" Latitude: 40°22'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pieria (GR125)

Location: 3 km E of the Kitros village at Atherida Cape.

Altitude above sea level (m): 0

Area (ha): 1500

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5), Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *Aster tripolium*, *Puccinellia festuciformis*, *Arthrocnemum fruticosum*, *A. perenne*, *Halocnemum strobilaceum*, *Halimione portulacoides*, *Limonium sp.*, *Hordeum hystrix*, *Juncus maritimus*, *Aeluropus litoralis*, *Spergularia sp.*, *Juncus sp.*, *Trifolium sp.*, *Mentha sp.*, *Carex sp.*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants: *Salsola kali*, *Euphorbia peplis*, *Xanthium stumarium*, *Cakile maritima*, *Atriplex sp.*, *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Verbascum pinnatifidum*, *Ephedra distachya*, *Artemisia campestris*, *Diotis maritima*, *Medicago marina*, *Pancreatium maritimum*

Fauna: a) Birds: *Phalacrocorax pygmaeus* (E, W), *Ardea purpurea* (V, M), *Egretta alba* (E, W), *Platalea leucorodia* (E, M), *Phoenicopiterus ruber* (R, W), *Anser anser* (E, W), *Tadorna tadorna* (V, N, M, W), *Haliaeetus albicilla* (E, W), *Aquila clanga* (E, W), *Circus pygargus* (E, M), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, M, W), *Burhinus oedicephalus* (V, N, M), *Glareola pratincola* (V, N, M), *Larus melanocephalus* (V, N, M), *L. genei* (E, N, M), *Gelochelidon nilotica* (E, N, M), *Chlidonias niger* (V, M), *C. hybridus* (V, M), b) Mammals: *Citellus citellus* (V), *Canis aureus* (V)

Most significant present values: Fodder (3), Game support (2), Salt production potential (3), Scientific (3), Cultural (1), Recreational (2)

Significant present uses: Grazing (3), Salt production (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3), Establishment or expansion of livestock facilities (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with AXIOS DELTA, LOUDIAS ESTUARY, and ALIAKMONA DELTA), Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Game refuge, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies

Principal bibliography used: Babalonas (1992), Grimmet and Jones (1989), Kazantzidis and Athanasiou (1992), Papakostas (1990), Topiotechniki Ltd. (1992a)

LOUDIAS RIVER OR MAVRONERI RIVER

Wetland Code: 120069000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pella (GR124), Imathia (GR121), Thessaloniki (GR122)

Location: Constructed canal which drains the plane of Thessaloniki and discharges into the Thermaikos Gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 3

Area (ha): -

Length (km): 75

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna sp.*, *Potamogeton sp.*, b) Emergents: *Phragmites australis*, *Typha sp.*

Fauna: Fish: *Rutilus macedonicus* (+), *Gobio gobio balcanicus* (+), *Gobio kessleri banarescui* (+, V/R), *Gobio uranoscopus elimeius* (+, V/R), *Cobitis vardarensis* (+), *Sabanejewia aurata balcanica* (+, V)

Most significant present values: Irrigation water (3), Fodder (3), Game support (3), Scientific (1), Cultural (1), Recreational (1)

Significant present uses: Irrigation water supply (3), Grazing (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Diversion of water courses (1), Establishment of new housing facilities or expansion of old ones (2), Establishment of new industrial facilities or expansion of old ones (2), Irrigation schemes (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions: Ecological studies, Public awareness programs

Principal bibliography used: Dimitriou et al. (1986), Economidis P. (1991), Fytianos et al. (1986), Mavroudis and Panoras (1993)

ARAVISSOS SPRINGS

Wetland Code: 124070000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°18'00" Latitude: 40°51'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pella (GR124)

Location: 0.5 km SE of the Aravissos village.

Altitude above sea level (m): 43

Area (ha): 5

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Scientific (3), Cultural (3), Recreational (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Agricultural point source pollution (1)

Other anthropogenic activities: Overpumping of ground water (3), Irrigation schemes (3)

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Public awareness programs

Principal bibliography used:

ALMOPAIOS RIVER OR ROIDAS RIVER

Wetland Code: 124071000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pella (GR124)

Location: Rises in the Voras mountain, flows S, meets the circulatory canal through which it discharges into the Aliakmonas river.

Altitude above sea level (m): *Min.:* 350 *Max.:* 1900

Area (ha): -

Length (km): 74

Wetland Type: Intermittent river (N)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Potamogeton* sp., *Polygonum* sp.,
b) Emergents: *Phragmites australis*, c) Trees: *Salix* sp., *Platanus orientalis*

Fauna: a) Fish: *Salmo trutta* (R/V/E), b) Birds: *Neophron percnopterus* (V, M), *Ciconia nigra* (E, M)

Most significant present values: Irrigation water (3), Game support (1), Sand extraction potential (2), Scientific (2), Recreational (2), Educational (1)

Significant present uses: Irrigation water supply (3), Hunting (1), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (2), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Non-sustainable sand extraction (2), Diversion of water courses (1), Overpumping of ground water (3), Dams or other installations for retention and storage of water (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Almopaios Gorge, Ecological studies

Principal bibliography used: Anagnostopoulou (1992), Grimmet and Jones (1989)

EDESSAIOS RIVER OR AGRAS RIVER

Wetland Code: 124073000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pella (GR124)

Location: Rises in the Nision springs and through the circulatory canal discharges into the Aliakmonas river.

Altitude above sea level (m): *Min.:* 480 *Max.:* 800

Area (ha): -

Length (km): 34

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Salix purpurea*, *Populus nigra*

Most significant present values: Irrigation water (3), Hydroelectric power potential (3), Scientific (2), Cultural (2), Recreational (3)

Significant present uses: Irrigation water supply (2), Aquaculture (3), Hydroelectricity production (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (2), Establishment of new industrial facilities or expansion of old ones (2), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Irrigation schemes (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

AGRAS RESERVOIR

Wetland Code: 124074000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°00'12" Latitude: 40°48'22"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pella (GR124)

Location: 1.5 km NW of the Edessa city.

Altitude above sea level (m): 350

Area (ha): 35

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum verticillatum*, *Urticularia minor*, *Urticularia vulgaris*, *Vallisneria spiralis*, *Potamogeton sp.*, b) Emergents. c) Trees: *Salix sp.*, *Platanus orientalis*, *Populus sp.*

Most significant present values: Irrigation water (2), Recreational (1)

Significant present uses: Irrigation water supply (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Papastergiadou (1990)

NISIOU LAKE

Wetland Code: 124075000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°55'01" Latitude: 40°48'57"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Pella (GR124)

Location: 1.2 km S of the Nisios settlement.

Altitude above sea level (m): 475

Area (ha): 1000

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Spring (Y), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Typha angustifolia*, b) Trees: *Salix sp.*

Fauna: a) Birds: *Phalacrocorax pygmaeus* (E, W), *Ardea purpurea* (V, M), *Neophron percnopterus* (V, M), *Buteo rufinus* (R, M), *Chlidonias niger* (V, M), b) Mammals: *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Fishing (1), Game support (2), Hydroelectric power potential (3), Scientific (1), Cultural (2), Recreational (3)

Significant present uses: Irrigation water supply (3), Fishing (1), Hydroelectricity production (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities:

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992d)

VEGORITIDA LAKE

Wetland Code: 100076000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°47'00" Latitude: 40°46'00"

Administrative Region: Kentriki Makedonia (GR120), Dytiki Makedonia (GR130)

Prefecture(s): Pella (GR124), Kozani (GR133), Florina (GR134)

Location: 0.5 km SW of the Arnissa town, Prefecture of Pella and 0.1 km E of the Agios Pandeimonas village, Prefecture of Florina.

Altitude above sea level (m): 523

Area (ha): 4300

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ceratophyllum sp.*, *Potamogeton sp.*, *Vallisneria spiralis*, *Myriophyllum spicatum*, *Najas marina*, *Najas minor*, b) Emergents: *Phragmites australis*

Fauna: a) Fish: *Rutilus rutilus vegariticus* (+), b) Birds: *Netta rufina* (R, W), *Anser anser* (E, W), *Mergus merganser* (E, W), *Recurvirostra avosetta* (V, M)

Most significant present values: Drinking water (1), Irrigation water (3), Fishing (1), Game support (3), Hydroelectric power potential (3), Sand extraction potential (1), Scientific (2), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (2), Aquaculture (1), Hunting (3), Hydroelectricity production (3), Sand extraction (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Industrial wastewater (2), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (3), Non-sustainable sand extraction (1), Establishment of new tourist facilities or expansion of old ones (1), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies, Public awareness programs

Principal bibliography used: Economidis P. (1991), Fytianos et al. (1986), Grimmet and Jones (1989), Papastergiadou (1990)

IERISSOS RIVER ESTUARY

Wetland Code: 127077000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°49'21" Latitude: 40°28'19"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: About 10 km N of the Ierissos village.

Altitude above sea level (m): 1

Area (ha): 150

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents, b) Trees: *Platanus orientalis*, *Alnus glutinosa*, *Salix sp.*, c) Dunes and sandy shores plants

Most significant present values: Fodder (1), Game support (2), Logging (2), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Grazing (1), Hunting (2), Wood supply (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KALATZIS MARSH

Wetland Code: 127078000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°50'21" Latitude: 40°25'41"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 5 km N of the Ierissos village.

Altitude above sea level (m): 0

Area (ha): 20

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*, Estuary (F)

Biotic characteristics:

Flora: a) Emergents, b) Scrubs and shrubs, c) Trees, d) Dunes and sandy shores plants

Most significant present values: Fodder (3), Game support (3), Scientific (1), Recreational (3), Educational (1)

Significant present uses: Grazing (3), Hunting (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (1), Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

VOURVOUROU LAGOON

Wetland Code: 127079000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°47'26" Latitude: 40°11'22"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 1 km NW of the Vourvourou village.

Altitude above sea level (m): 0

Area (ha): 30

Length (km): -

Wetland Type: Lagoon (J)* Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents, b) Dunes and sandy shores plants

Most significant present values: Fishing (1), Game support (1), Scientific (1), Recreational (1), Educational (1)

Significant present uses: Fishing (1), Recreation (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (2), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (2)

Present legal protection status: Game refuge

Most significant positive actions: Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works (1987)

KOUFOS LAGOON OR PORTO KOUFO LAGOON

Wetland Code: 127080000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°56'15" Latitude: 39°58'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: At the SE part of the Porto Koufo Gulf.

Altitude above sea level (m): 0

Area (ha): 10

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values: Fishing (3), Fodder (3), Game support (2), Scientific (1), Recreational (2), Educational (1)

Significant present uses: Fishing (3), Grazing (3), Recreation (1), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works (1987)

TORONI MARSH

Wetland Code: 127081000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°55'04" Latitude: 39°59'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 2 km S of the Toroni village.

Altitude above sea level (m): 0

Area (ha): 15

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents

Most significant present values: Fodder (3), Game support (2), Scientific (1), Recreational (1), Educational (1)

Significant present uses: Grazing (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (2), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (1), Land filling (1), Establishment of new housing facilities or expansion of old ones (2), Establishment or expansion of cultivated fields (1), Establishment or expansion of livestock facilities (2)

Present legal protection status: Game refuge

Most significant positive actions:

Principal bibliography used:

TRIPOTAMOS ESTUARY

Wetland Code: 127082000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°47'42" Latitude: 40°06'28"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 4 km N of the Neos Marmaras village.

Altitude above sea level (m): 0

Area (ha): 50

Length (km): -

Wetland Type: Estuary (F)*, Coastal permanently flooded saline-brackish water marsh (H),
Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents, b) Scrubs and shrubs: *Tamarix sp.*, c) Trees: *Platanus orientalis*,
Salix sp., *Alnus glutinosa*

Fauna: Birds: *Himantopus himantopus* (V, M)

Most significant present values: Game support (2), Logging (2), Scientific (1), Recreational
(3), Educational (1)

Significant present uses: Wood supply (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (1), Land filling (2), Establishment of new
housing facilities or expansion of old ones (3), Establishment or expansion of cultivated
fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge

Most significant positive actions: Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works
(1987)

TRISTINIKA MARSH

Wetland Code: 127083000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°53'06" Latitude: 40°00'38"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 6 km N of the Toroni village.

Altitude above sea level (m): 0

Area (ha): 35

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents, b) Trees: *Platanus orientalis*, c) Dunes and sandy shores plants

Most significant present values: Fodder (1), Game support (3), Scientific (1), Educational (2)

Significant present uses: Grazing (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (3)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge

Most significant positive actions: Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works (1987)

CHAVRIAS RIVER

Wetland Code: 127084000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: Rises in the Cholomontas mountain, flows S and discharges into the Kassandra Gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1000

Area (ha): -

Length (km): 50

Wetland Type: Intermittent river (N)*

Biotic characteristics:

Flora: a) Emergents, b) Trees: *Platanus orientalis*, *Alnus glutinosa*, *Salix sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Fodder (3), Game support (2), Scientific (2), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Drinking water supply (2), Irrigation water supply (3), Grazing (3), Hunting (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (1), Agricultural point source pollution (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Diversion of water courses (2), Overpumping of ground water (3), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (3), Illegal or non-sustainable wood cutting (2)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions: Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works (1987)

CHAVRIAS ESTUARY

Wetland Code: 127085000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°32'00" Latitude: 40°15'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 2 km SW of the Vatopedi village.

Altitude above sea level (m): 0

Area (ha): 200

Length (km): -

Wetland Type: Estuary (F)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *Halocnemum strobilaceum*, *Halimione portulacoides*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Trees: *Salix sp.*, *Alnus glutinosa*, d) Dunes and sandy shores plants

Fauna: Birds: *Tadorna tadorna* (V, W), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M)

Most significant present values: Fishing (1), Fodder (3), Game support (3), Scientific (2), Recreational (3), Educational (2)

Significant present uses: Fishing (1), Grazing (3), Hunting (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (2), Agricultural point source pollution (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Diversion of water courses (2), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of livestock facilities (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works (1987)

AGIOS MAMAS MARSH OR AGIOS MAMANTAS MARSH

Wetland Code: 127086000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°20'00" Latitude: 40°14'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 1.5 km S of the Agios Mamas village.

Altitude above sea level (m): 0

Area (ha): 350

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum* sp., *Salicornia europaea*, *Halimione portulacoides*, *Salsola soda*, *Suaeda maritima*, *Aeluropus litoralis*, *Juncus acutus*, *Limonium gmelinii*, *Trifolium* sp., *Phragmites australis*, *Typha angustifolia*, b) Scrubs and shrubs: *Tamarix hampeana*, c) Dunes and sandy shores plants: *Salsola kali*, *Xanthium strumarium*, *Euphorbia peplis*, *Cakile maritima*, *Atriplex tatarica*, *Ammophila arenaria*, *Elymus farctus*, *Eryngium maritimum*, *Pancreatium maritimum*, *Medicago marina*

Fauna: Birds: *Tadorna tadorna* (V, W), *Himantopus himantopus* (V, N, M), *Recurvirostra avosetta* (V, N, M), *Burhinus oedicnemus* (V, M), *Glareola pratincola* (V, M), *Larus melanocephalus* (V, M), *Chlidonias niger* (V, M)

Most significant present values: Fodder (3), Game support (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Grazing (3), Hunting (3), Recreation (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Overpumping of ground water (2), Establishment or expansion of livestock facilities (2), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB), Land planning studies, Ecological studies

Principal bibliography used: Babalonas and Papastergiadou (1992), Grimmet and Jones (1989), Joensen and Jerrentrup (1988), Kilikidis et al. (1992b)

STAVRONIKITAS MARSHES OR NEA FOKAIA MARSHES

Wetland Code: 127087000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°19'00" Latitude: 40°06'00"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 5 km W of the Nea Fokaia village.

Altitude above sea level (m): 0

Area (ha): 300

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *Suaeda maritima*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Fauna: Birds: *Tadorna tadorna* (V, W), *Himantopus himantopus* (V, M), *Burhinus oedienemus* (V, M), *Larus melanocephalus* (V, M)

Most significant present values: Drinking water (1), Irrigation water (2), Fodder (1), Game support (1), Scientific (1), Recreational (3), Educational (1)

Significant present uses: Drinking water supply (2), Irrigation water supply (2), Grazing (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Sewage from tourist facilities (3), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Land filling (3), Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (3), Dams or other installations for retention and storage of water (3), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Ecological studies

Principal bibliography used: Ministry of Environment, Physical Planning and Public Works (1987)

MOIRA MARSH OR CHRYSI AMMOUDIA MARSH

Wetland Code: 127088000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°04'31" Latitude: 40°19'13"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 2 km NW of the Nea Kallikrateia village.

Altitude above sea level (m): 0

Area (ha): 100

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants

Most significant present values: Game support (1), Scientific (2), Recreational (3), Educational (2)

Significant present uses: Hunting (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

SOZOPOLI RIVER ESTUARY

Wetland Code: 127089000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°08'48" Latitude: 40°17'47"

Administrative Region: Kentriki Makedonia (GR120)

Prefecture(s): Chalkidiki (GR127)

Location: 3 km NW of the Sozopolis Settlement.

Altitude above sea level (m): 0

Area (ha): 14

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents, b) Trees: *Salix sp.*, c) Dunes and sandy shores plants

Most significant present values: Fodder (1), Game support (2), Scientific (1), Recreational (2), Educational (1)

Significant present uses: Grazing (1), Hunting (2), Recreation (1), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Establishment of new housing facilities or expansion of old ones (2), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

SKOPOS RESERVOIR

Wetland Code: 134090000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°37'05" Latitude: 40°53'00"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: 1 km W of the Skopos village.

Altitude above sea level (m): 740

Area (ha): 180

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Most significant present values: Irrigation water (3), Fishing (1), Recreational (1)

Significant present uses: Irrigation water supply (3)

Factors changing the wetland's ecological character:

Pollution: Industrial solid wastes (1)

Other anthropogenic activities: Overpumping of ground water (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

VEVI RESERVOIR

Wetland Code: 134091000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°39'22" Latitude: 40°43'49"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: 3 km W of the Vevi village.

Altitude above sea level (m): 720

Area (ha): 180

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Most significant present values: Irrigation water (3), Fishing (1), Recreational (1)

Significant present uses: Irrigation water supply (3), Fishing (1)

Factors changing the wetland's ecological character:

Pollution: Industrial solid wastes (1)

Other anthropogenic activities: Overpumping of ground water (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

GEROPOTAMOS RIVER OR PAPADIA STREAM OR PALIOREMA STREAM

Wetland Code: 134092000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: Rises in the Voras mountain, flows W and meets the Sakoulevas river.

Altitude above sea level (m): *Min.:* 580 *Max.:* 1300

Area (ha): -

Length (km): 25

Wetland Type: Permanent river (M)*

Biotic characteristics:

Fauna: Mammals: *Canis lupus* (V), *C. aureus* (V)

Most significant present values: Irrigation water (2), Fodder (2), Game support (2), Sand extraction potential (1), Cultural (2), Recreational (1), Educational (1)

Significant present uses: Irrigation water supply (2), Grazing (2), Hunting (2), Sand extraction (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (1), Industrial solid wastes (1), Agricultural point source pollution (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (1), Land filling (2), Diversion of water courses (2), Overpumping of ground water (2), Irrigation schemes (3), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions:

Principal bibliography used:

AKRITAS RIVER

Wetland Code: 134093000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: Rises in the Varnou mountain, flows E and meets the Sakoulevas river.

Altitude above sea level (m): *Min.:* 560 *Max.:* 1000

Area (ha): -

Length (km): 20

Wetland Type: Permanent river (M)*

Biotic characteristics:

Fauna: a) Fish: *Salmo trutta macedonicus* (+), b) Mammals: *Canis lupus* (V), *Canis aureus* (V)

Most significant present values: Irrigation water (1), Fodder (1), Game support (3), Scientific (1), Cultural (2), Recreational (3), Educational (1)

Significant present uses: Irrigation water supply (1), Grazing (1), Hunting (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Diversion of water courses (1), Establishment of new housing facilities or expansion of old ones (1), Irrigation schemes (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge (part of the wetland), Prohibition of fishing

Most significant positive actions:

Principal bibliography used: Economidis P. (1991)

TETRAPOTAMOS RIVER

Wetland Code: 134094000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: Rises in the Vernon mountain, flows N, NE and meets the Sakoulevas river.

Altitude above sea level (m): *Min.:* 590 *Max.:* 1900

Area (ha): -

Length (km): 20

Wetland Type: Permanent river (M)*

Biotic characteristics:

Fauna: a) Fish: *Salmo trutta* (R/V/E), b) Mammals: *Canis lupus* (V), *Canis aureus* (V)

Most significant present values: Drinking water (3), Irrigation water (3), Fodder (1), Game support (3), Scientific (2), Cultural (2), Recreational (3), Educational (1)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Grazing (2), Hunting (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (1), Overpumping of ground water (3), Dams or other installations for retention and storage of water (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions:

Principal bibliography used:

PETRON LAKE

Wetland Code: 134095000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°42'00" Latitude: 40°44'00"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: 1 km NW of the Amyntaio town.

Altitude above sea level (m): 560

Area (ha): 800

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Chara hispida*, *Urticularia vulgaris*, *Polygonum amphibium*, *Lemna minor*, *Najas marina*, *Potamogeton sp.*, b) Emergents: *Ranunculus sp.*, *Phragmites australis*, *Holoschoenus vulgaris*, c) Trees: *Salix fragilis*

Fauna: Birds: *Pelecanus onocrotalus* (E, M), *Pelecanus crispus* (E, W), *Aythya nyroca* (V, M, N), *Neophron percnopterus* (V, M), *Buteo rufinus* (R, M), *Circus pygargus* (E, M)

Most significant present values: Irrigation water (1), Fishing (1), Fodder (2), Game support (1), Scientific (2), Cultural (3), Recreational (2), Educational (1)

Significant present uses: Irrigation water supply (1), Fishing (1), Grazing (1), Hunting (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (1), Industrial wastewater (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (1), Establishment or expansion of cultivated fields (1), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands

catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Establishment of wastewater treatment facilities, Ecological studies, Public awareness programs

Principal bibliography used: Papastergiadou (1990)

CHIMADITIDA LAKE OR ANARGYRON LAKE

Wetland Code: 134096000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°34'05" Latitude: 40°35'45"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: 0.5 km W, SW of the Anargyroi village.

Altitude above sea level (m): 593

Area (ha): 1084.4

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Ranunculus sp.*, *Lemna minor*, *Hydrocharis morsus-ranae*, b) Emergents: *Rumex sp.*, *Trifolium campestre*, *Ranunculus sardous*, *Juncus sp.*, *Phragmites australis*, *Typha sp.*, *Scirpus lacustris*, *S. maritimus*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus crispus* (E, W), *P. onocrotalus* (E, M), *Ardea purpurea* (V, M), *Anser anser* (E, W), *Aythya nyroca* (V, W), *Circus aeruginosus* (V), *C. pygargus* (E, M), *Buteo rufinus* (R), *Aquila pomarina* (V), *A. chrysaetos* (V), *Falco biarmicus* (V), *Himantopus himantopus* (V, M), *Chlidonias hybridus* (V, M)

Most significant present values: Irrigation water (2), Fishing (1), Fodder (1), Game support (3), Scientific (3), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (1), Fishing (2), Grazing (1), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (3), Dams or other installations for retention and storage of water (2), Establishment or expansion of cultivated fields (1), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992g)

ZAZARI LAKE OR LIMNOCHORIOU LAKE

Wetland Code: 134097000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°32'00" Latitude: 40°37'00"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: 0.2 km W of the Limnochori village.

Altitude above sea level (m): 602

Area (ha): 200

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*. Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Vallisneria sp.*, *Potamogeton pectinatus*, b) Emergents: *Carex sp.*, *Rumex maritimus*, *Ranunculus sp.*, *Phragmites australis*, *Typha sp.*, *Scirpus lacustris*

Fauna: Birds: *Pelecanus onocrotalus* (E, M), *P. crispus* (E), *Ardea purpurea* (V, M), *Circus aeruginosus* (V, M), *Aquila chrysaetos* (V), *Falco naumanni* (V, M), *Larus melanocephalus* (V, M), *Chlidonias niger* (V, M)

Most significant present values: Irrigation water (3), Fishing (2), Fodder (2), Game support (2), Scientific (1), Cultural (2), Recreational (3), Educational (1)

Significant present uses: Irrigation water supply (2), Fishing (1), Grazing (2), Recreation (1)

Factors changing the wetland's ecological character:

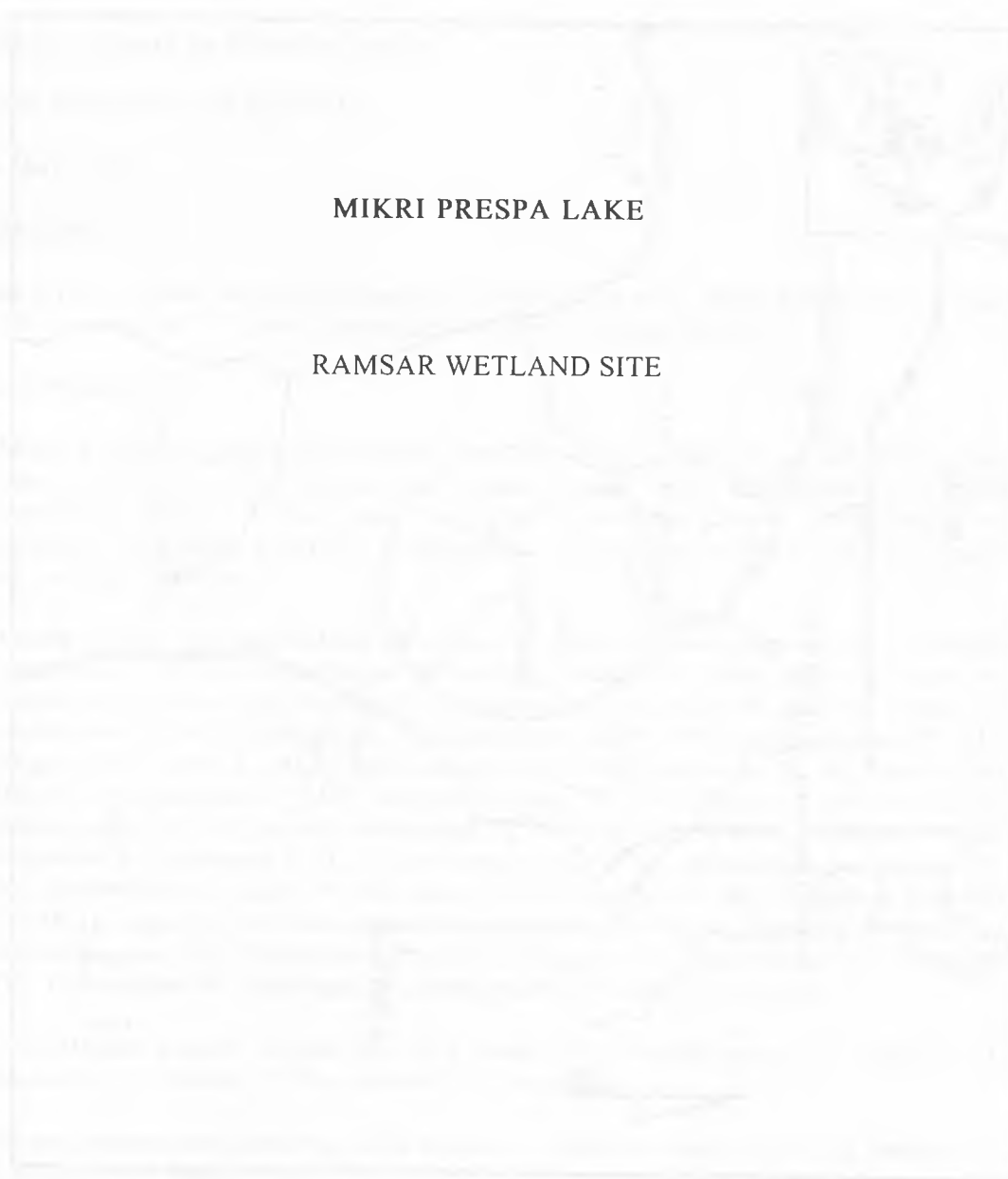
Pollution: Municipal wastewater (2), Municipal solid wastes (1), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

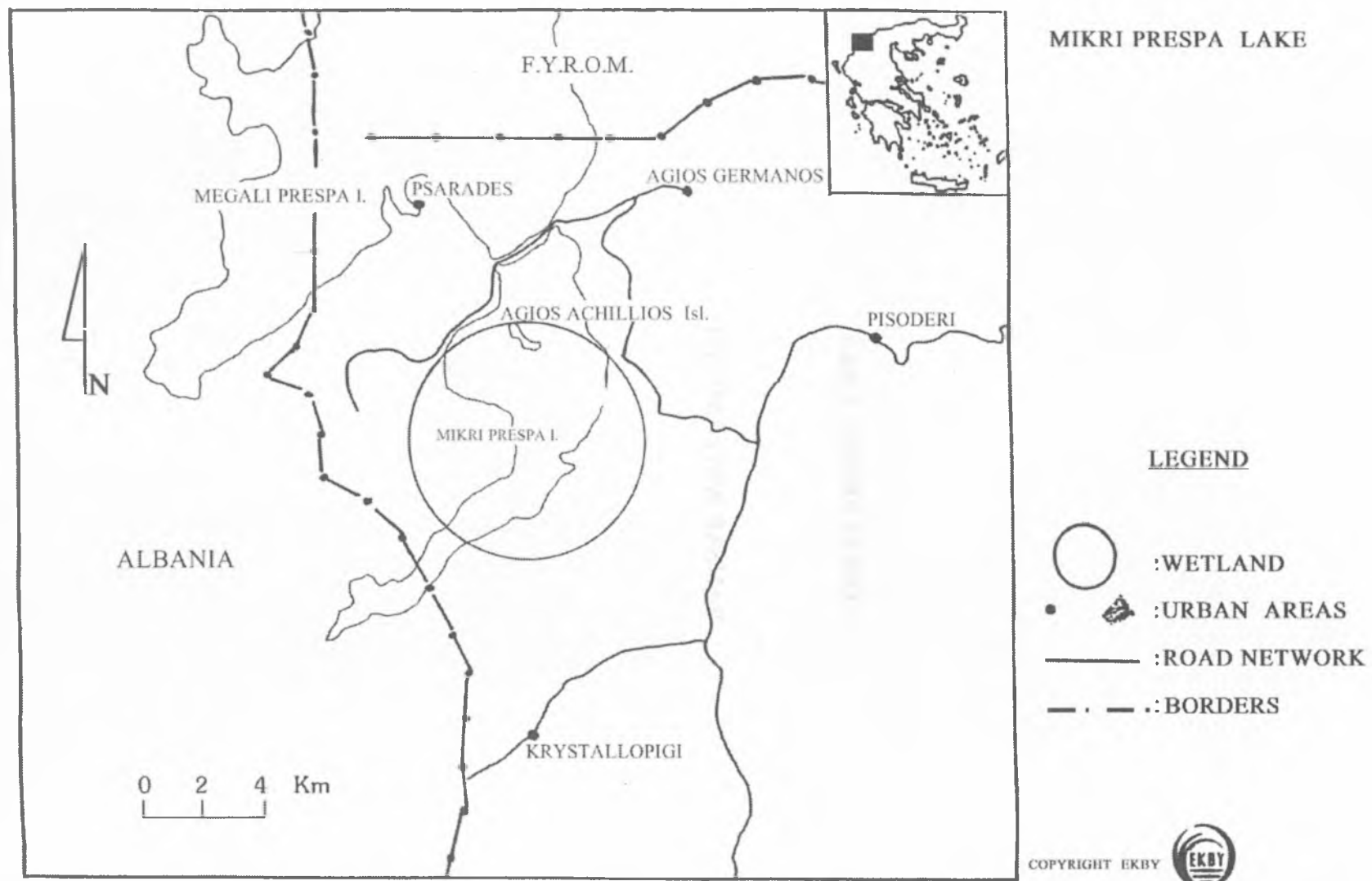
Other anthropogenic activities: Dams or other installations for retention and storage of water (2), Irrigation schemes (1), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992g)





MIKRI PRESPA LAKE OR VRYGIIDA LAKE

Wetland Code: 134098000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°05'32" Latitude: 40°45'36"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: 0.1 km of the Mikrolimni village.

Altitude above sea level (m): 853

Area (ha): 4800

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ceratophyllum* sp., *Myriophyllum* sp., *Lemna minor*, *Trapa natans*, *Nymphaea alba*, *Nymphoides peltata*, *Nuphar lutea*, *Potamogeton* sp., *Najas marina*, *Hydrocharis morsus-ranae*, *Polygonum amphibium*, *Salvinia natans*, *Urticularia minor*, b) Emergents: *Carex* sp., *Trifolium* sp., *Phragmites australis*, *Typha* sp., *Scirpus* sp., c) Trees: *Salix* sp.

Fauna: a) Fish: *Rutilus ohridanus prespensis* (+), *Chondrostoma prespensis* (+, R), *Barbus prespensis* (+, E/V), *Chalcalburnus belvica* (+), *Alburnoides bipunctatus ohridanus* (+), *Cobitis meridionalis* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W, N), *Pelecanus onocrotalus* (E, N), *P. crispus* (E, N), *Egretta alba* (E, N, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, N), *Anser anser* (E, N), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Haliaeetus albicilla* (E, M), *Buteo rufinus* (R, M), *Aquila chrysaetos* (V), *A. heliaca* (E, W), *A. pomarina* (V, M), *Neophron percnopterus* (V, M), *Circus aeruginosus* (V, N), *Himantopus himantopus* (V, M), *Recurvirostra avosetta* (V, M), *Larus melanocephalus* (V, M), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Acrocephalus melanopogon* (R, N), c) Mammals: *Rhinolophus ferrumequinum* (V), *Pipistrellus nathusii* (E), *Glis glis* (V), *Canis lupus* (V), *C. aureus* (V), *Ursus arctos* (E), *Lutra lutra* (V), *Meles meles* (V), *Felix silvestris* (E)

Most significant present values: Drinking water (2), Irrigation water (3), Fishing (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (3), Recreation (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Sewage from tourist facilities (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Irrigation schemes (3), Establishment or expansion of cultivated fields (1), Overfishing (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention, Special Protection Area (79/409/EEC), National Park, Game refuge, Prohibition of land clearing, Prohibition of excavations-drilling, Prohibition of new pumping installations, Prohibition of waste disposal

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Babalonas and Papastergiadou (1993), Catsadorakis (1986), Catsadorakis and Kollaros (1986), Economidis P. (1991), Grimmet and Jones (1989), Hatzilakou (1992), Papastergiadou (1990), Pyrovetsi et al. (1984)

MEGALI PRESPA LAKE

Wetland Code: 134099000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°01'04" Latitude: 40°51'08"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134)

Location: At the NW part of the country, at the Greek - Albanian - FYROM borders, next to the Psarades village.

Altitude above sea level (m): 849

Area (ha): 4000 (within Greece)

Length (km):

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ceratophyllum sp.*, *Hydrocharis morsus-ranae*, *Spirodella polyrrhiza*, *Vallisneria spiralis*, *Trapa natans*, *Potamogeton sp.*, *Polygonum amphibium*, *Ranunculus sp.*, b) Emergents: *Phragmites australis*, *Typha sp.*

Fauna: a) Fish: *Rutilus ohridanus prespensis* (+), *Chondrostoma prespensis* (+, R), *Barbus prespensis* (+, E/V), *Chalcalburnus belvica* (+), *Alburnoides bipunctatus ohridanus* (+), *Cobitis meridionalis* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E), *P. crispus* (E), *Egretta alba* (E, W), *Tadorna tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Haliaeetus albicilla* (E), *Larus melanocephalus* (V, M), c) Mammals: *Rhinolophus ferrumequinum* (V), *Pipistrellus nathusii* (E), *Glis glis* (V), *Canis lupus* (V), *C. aureus* (V), *Ursus arctos* (E), *Lutra lutra* (V), *Meles meles* (V), *Felis silvestris* (E)

Most significant present values: Fishing (3), Game support (1), Scientific (3), Cultural (3), Recreational (3), Educational (2)

Significant present uses: Fishing (2), Hunting (1), Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (1), Illegal or non-sustainable hunting (2)

Present legal protection status: National Park

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB), Ecological studies, Public awareness programs

Principal bibliography used: Babalonas and Papastergiadou (1993), Catsadorakis (1986), Catsadorakis and Kollaros (1986), Economidis P. (1991), Grimmet and Jones (1989), Papastergiadou (1990)

LADOPOTAMOS RIVER OR PISODERI STREAM

Wetland Code: 130100000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Florina (GR134), Kastoria (GR132)

Location: Rises in the Triklario mountain of the N. Pindos mountain range, flows S and meets the Aliakmonas river.

Altitude above sea level (m): *Min.:* 800 *Max.:* 1750

Area (ha): -

Length (km): 30

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Salix sp.*, *Alnus glutinosa*

Fauna: Mammals: *Canis lupus* (V), *Canis aureus* (V), *Capreolus capreolus* (V)

Most significant present values: Irrigation water (3), Game support (2), Scientific (2), Cultural (3), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Hunting (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Land planning studies

Principal bibliography used:

ALIAKMONAS RIVER

Wetland Code: 100101000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Makedonia (GR130), Kentriki Makedonia (GR120)

Prefecture(s): Kastoria (GR132), Kozani (GR133), Grevena (GR131), Imathia (GR121), Pieria (GR125)

Location: Rises in the Grammos mountain, flows through the Prefectures of Kastoria, Kozani, Grevena and Imathia and discharges into the Thermaikos Gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1800

Area (ha): -

Length (km): 320

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Salix sp.*, *Populus sp.*, *Platanus orientalis*, *Alnus glutinosa*

Fauna: Fish: *Salmo trutta macedonicus* (+), *Rutilus macedonicus* (+), *Leuciscus cephalus vardarensis* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio balcanicus* (+), *Gobio kessleri banarencui* (+, V/R), *Gobio uranoscopus elimeius* (+, V/R), *Barbus barbus macedonicus* (+), *Alburnoides bipunctatus thessalicus* (+), *Vimba melanops* (+, R/E), *Cobitis vardarensis* (+)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Fodder (2), Game support (3), Hydroelectric power potential (3), Sand extraction potential (2), Scientific (2), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (1), Aquaculture (1), Grazing (2), Hunting (2), Hydroelectricity production (3), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (1), Agricultural point source pollution (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (1), Establishment of new industrial facilities or expansion of old ones (2), Dams or other installations for retention and storage of water (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Game refuge (part of the wetland), Prohibition of waste disposal

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Aliakmonas Gorge, Ecological studies, Public awareness programs

Principal bibliography used: Economidis P. (1991), Fytianos et al. (1986), Samanidou and Fytianos (1987)

KASTORIAS LAKE OR ORESTIADA LAKE

Wetland Code: 132102000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°18'19" Latitude: 40°31'25"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Kastoria (GR132)

Location: In contact with the E part of the Kastoria city.

Altitude above sea level (m): 620

Area (ha): 2800

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Nymphaea lutea*, *Ceratophyllum* sp., *Hydrocharis morsus-ranae*, *Potamogeton* sp., *Spirodella polyrrhiza*, *Vallisneria spiralis*, *Polygonum amphibium*, *Myriophyllum spicatum*, *Ranunculus trichophyllus*, *Lemna minor*, *Trapa natans*, *Najas marina*, b) Emergents: *Rumex* sp., *Ranunculus* sp., *Carex* sp., *Phragmites australis*, *Scirpus lacustris*, c) Trees: *Salix* sp., *Populus* sp., *Platanus orientalis*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E), *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Aythya nyroca* (V, W), *Mergus merganser* (E, W), *Circus aeruginosus* (V, M), *Chlidonias hybridus* (V, M)

Most significant present values: Irrigation water (2), Fishing (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (2), Fishing (3), Recreation (3), Tourism (2), Sports (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (1), Establishment of new industrial facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Establishment of housing control zones (ZOE), Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Establishment of wastewater treatment facilities, Ecological studies, Public awareness programs

Principal bibliography used: Fytianos et al. (1986), Grimmet and Jones (1989), Papastergiadou (1990)

POLYFYTOU RESERVOIR

Wetland Code: 133103000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°55'02" Latitude: 40°12'04"

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Kozani (GR133)

Location: 3 km N, NW of the Servia village.

Altitude above sea level (m): 300

Area (ha): 7300

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Fauna: a) Fish: *Salmo trutta macedonicus* (+), *Rutilus macedonicus* (+), *Leuciscus cephalus vardarensis* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio balcanicus* (+), *Gobio kessleri banarescui* (+, V/R), *Gobio uranoscopus elimeius* (+, V/R), *Barbus barbus macedonicus* (+), *Alburnoides bipunctatus thessalicus* (+), *Vimba melanops* (+, R/E), *Cobitis vardarensis* (+), b) Birds: *Tadorna tadorna* (V, W)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (2), Hydroelectric power potential (3), Scientific (2), Recreational (1), Educational (1)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (2), Hydroelectricity production (3), Recreation (1), Sports (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (2), Industrial solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Public awareness programs

Principal bibliography used:

GREVENITIS RIVER

Wetland Code: 131104000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Grevena (GR131)

Location: Rises in the area of the Kalirachi and Megaro villages at the N. Pindos mountain range, flows E and meets the Aliakmonas river.

Altitude above sea level (m): *Min.:* 450 *Max.:* 700

Area (ha): -

Length (km): 32

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Populus sp.*, *Alnus glutinosa*, *Salix sp.*, *Platanus orientalis*, *Acer sp.*

Most significant present values: Irrigation water (2), Sand extraction potential (2), Scientific (1), Recreational (1)

Significant present uses: Irrigation water supply (2), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Diversion of water courses (2), Overpumping of ground water (2), Illegal or non-sustainable hunting (1)

Present legal protection status: Game refuge (part of the wetland)

Most significant positive actions:

Principal bibliography used:

VENETIKOS RIVER

Wetland Code: 131105000

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Dytiki Makedonia (GR130)

Prefecture(s): Grevena (GR131)

Location: Rises in the area of Mikrolivado at the N. Pindos mountain range, flows E and meets the Aliakmonas river.

Altitude above sea level (m): *Min.:* 412 *Max.:* 760

Area (ha): -

Length (km): 46

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Alnus glutinosa*, *Salix sp.*, *Platanus orientalis*, *Acer sp.*, *Fraxinus sp.*, *Aesculus hippocastanum*

Fauna: a) Fish: *Salmo trutta macedonicus* (+), b) Mammals: *Lutra lutra* (V)

Most significant present values: Irrigation water (2), Fodder (2), Game support (2), Sand extraction potential (2), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Grazing (1), Hunting (1), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (1), Irrigation schemes (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Economidis P. (1991)

TAVROPOU RESERVOIR

Wetland Code: 140106000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°45'00" Latitude: 39°18'00"

Administrative Region: Thessalia (GR140), Sterea Ellada (GR240)

Prefecture(s): Karditsa (GR141), Evrytania (GR243)

Location: 0.5 km W of the Neochori village.

Altitude above sea level (m): 780

Area (ha): 2500

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Fauna: a) Fish: *Salmo trutta* (R/V/E), b) Birds: *Neophron percnopterus* (V), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis lupus* (V), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Capreolus capreolus* (V)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (3), Hydroelectric power potential (3), Scientific (2), Recreational (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (3), Hydroelectricity production (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Overpumping of ground water (2)

Present legal protection status: Regulation on use of farming and fishing equipment, Prohibition of fishing (during reproduction period)

Most significant positive actions:

Principal bibliography used: Tsekos et al. (1992)

KALENTZIS RIVER OR KARDITSIOTIKOS RIVER
--

Wetland Code: 141108000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Thessalia (GR140)

Prefecture(s): Karditsa (GR141)

Location: Rises in the N cliffs of the Tymfristos mountain, flows N, NE and meets the Pinios river.

Altitude above sea level (m): *Min.:* 40 *Max.:* 450

Area (ha): -

Length (km): 55

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Typha sp.*, *Arundo donax*, b) Trees: *Salix sp.*

Fauna: Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Game support (3), Recreational (2)

Significant present uses: Irrigation water supply (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

SOFADITIS RIVER

Wetland Code: 141109000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Thessalia (GR140)

Prefecture(s): Karditsa (GR141)

Location: Rises in N cliffs of the Tymfristos mountain and the former Xyniada lake, flows N, NE and meets the Pinios river.

Altitude above sea level (m): *Min.:* 30 *Max.:* 550

Area (ha): -

Length (km): 95

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Typha sp.*, *Arundo donax*, b) Trees: *Salix sp.*

Fauna: Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Game support (1), Recreational (2)

Significant present uses: Irrigation water supply (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Irrigation schemes (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

FARSALITIS RIVER

Wetland Code: 140110000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Thessalia (GR140), Sterea Ellada (GR240)

Prefecture(s): Karditsa (GR141), Fthiotida (GR244)

Location: Rises in the N cliffs of the Tymfristos mountain, flows N, NW and meets the Sofaditis river.

Altitude above sea level (m): *Min.:* 40 *Max.:* 600

Area (ha): -

Length (km): 110

Wetland Type: Permanent river (M)*

Biotic characteristics:

Fauna: Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Game support (2), Sand extraction potential (1), Recreational (2)

Significant present uses: Irrigation water supply (3), Hunting (1), Sand extraction (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (1), Overpumping of ground water (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PINIOS RIVER

Wetland Code: 140116000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Thessalia (GR140)

Prefecture(s): Larisa (GR142), Trikala (GR144)

Location: Rises in the Pindos mountain range, flows through the Prefectures of Karditsa, Trikala and Larissa and discharges into the Aegean Sea at the area of Stomio - Kranea village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 600

Area (ha): -

Length (km): 140

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Typha sp.*, *Arundo donax*, b) Trees: *Salix sp.*, *Populus sp.*, *Platanus orientalis*, *Alnus glutinosa*, *Fraxinus sp.*, *Ulmus minor*

Fauna: Fish: *Leuciscus cephalus vardarensis* (+), *Chondrostoma vardarensis* (+, V), *Gobio gobio balcanicus* (+), *G. kessleri banarescui* (+, V/R), *G. uranoscopus elimeius* (+, V/R), *Barbus barbus thessalus* (+), *B. albanicus* (+), *Alburnus alburnus thessalicus* (+, V), *Alburnoides bipunctatus thessalicus* (+), *Vimba melanops* (+, R/E), *Cobitis vardarensis* (+), *Sabanejewia aurata balcanica* (+, V), *Knipowitschia thessala* (+, V/E)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (2), Fodder (1), Sand extraction potential (1), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (3), Grazing (1), Sand extraction (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (2), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Non-sustainable sand extraction (1), Overpumping of ground water (3), Irrigation schemes (2)

Present legal protection status: Special Protection Area (79/409/EEC) for Tempi Valley,

Aesthetic forest (Tempi Valley), Prohibition of new pumping installations

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Tempi Valley and Kalamaki Gorge, Land planning studies

Principal bibliography used: Economidis P. (1991)

PINIOS DELTA

Wetland Code: 142117000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°43'15" Latitude: 39°53'15"

Administrative Region: Thessalia (GR140)

Prefecture(s): Larisa (GR142)

Location: 1 km N, NW of the Stomio village.

Altitude above sea level (m): 0

Area (ha): 2600

Length (km): -

Wetland Type: Coastal delta (F)*, Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Coastal permanently flooded freshwater marsh (S), Coastal periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Ceratophyllum submersum*, *Ranunculus trichophyllus*, b) Emergents: *Arthrocnemum fruticosum*, *Suaeda maritima*, *Halocnemum strobilaceum*, *Salicornia europaea*, *Halimione portulacoides*, *Puccinellia distans*, *Aeluropus litoralis*, *Aster tripolium*, *Juncus sp.*, *Carex sp.*, *Plantago major*, *Lotus uliginosus*, *Phragmites australis*, *Typha sp.*, *Scirpus maritimus*, b) Scrubs and shrubs: *Tamarix tatrandra*, *T. parviflora*, *Salix sp.*, *Vitex agnus-castus*, c) Trees: *Platanus orientalis*, *Ulmus minor*, *Fraxinus angustifolia*, *Salix sp.*, *Populus alba*, *Alnus glutinosa*, d) Dunes and sandy shores plants: *Cakile maritima*, *Salsola kali*, *Xanthium sp.*, *Suaeda maritima*, *Euphorbia sp.*, *Artemisia campestris*, *Xanthium spinosum*, *Polygonum maritimum*, *Atriplex hastata*, *Ammophila arenaria*, *Elymus farctus*, *Medicago marina*, *Eryngium maritimum*

Fauna: Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Tadorna tadorna* (V, W), *Milvus migrans* (E, M), *Circus aeruginosus* (V, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Hieraaetus pennatus* (V, M), *Porzana parva* (R, M), *Himantopus himantopus* (V, N), *Recurvirostra avosetta* (V, M), *Glareola pratincola* (V, N), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Turdus torquatus* (R, W)

Most significant present values: Drinking water (2), Irrigation water (3), Fishing (1), Fodder (3), Game support (3), Logging (3), Sand extraction potential (1), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (1), Grazing (3), Wood supply (1), Sand extraction (1), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (2), Non-sustainable sand extraction (1), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3), Establishment or expansion of livestock facilities (3), Illegal or non-sustainable hunting (2), Illegal or non-sustainable wood cutting (2)

Present legal protection status: Game refuge, Prohibition of fishing (during reproduction period), Prohibition of excavations-drilling

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies

Principal bibliography used: Koroni and Adamogiannis (1993)

MATI TYRNAVOU RESERVOIR

Wetland Code: 142118000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°18'55" Latitude: 39°47'29"

Administrative Region: Thessalia (GR140)

Prefecture(s): Larisa (GR142)

Location: 2.5 km SW of the Argyropoulou village (Tyrnavos).

Altitude above sea level (m): 75

Area (ha): 35

Length (km): -

Wetland Type: Reservoir (6)*, Spring (Y)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna sp.*, *Ceratophyllum sp.*, *Myriophyllum sp.*, b) Emergents: *Phragmites australis*, *Typha sp.*, c) Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*

Fauna: a) Fish: *Barbus barbus thessalus* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, N), *Falco naumanni* (V, M), *Columba oenas* (R, M), *Coracias garrulus* (V, M)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Game support (1), Recreational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Overpumping of ground water (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ELASSONITIKOS RIVER

Wetland Code: 142119000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Thessalia (GR140)

Prefecture(s): Larisa (GR142)

Location: Rises in the SW cliffs of the Olympos mountain, flows W, SW and meets the Titarisios river.

Altitude above sea level (m): *Min.:* 120 *Max.:* 350

Area (ha): -

Length (km): 35

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*

Most significant present values: Irrigation water (1), Fishing (1), Game support (1), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (1), Fishing (1), Hunting (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1)

Other anthropogenic activities:

Present legal protection status: Prohibition of fishing (during reproduction period)

Most significant positive actions:

Principal bibliography used:

TITARISIOS RIVER

Wetland Code: 142120000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Thessalia (GR140)

Prefecture(s): Larisa (GR142)

Location: Rises in the W cliffs of the Olympos mountain, flows W, WS and meets the Pinios river.

Altitude above sea level (m): *Min.:* 70 *Max.:* 650

Area (ha): -

Length (km): 70

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*

Most significant present values: Irrigation water (3), Recreational (2)

Significant present uses: Irrigation water supply (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (1)

Other anthropogenic activities: Diversion of water courses (3), Overpumping of ground water (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

FORMER LAKE KARLA RESERVOIR OR KARLA RESERVOIR

Wetland Code: 143121000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°45'00" Latitude: 39°30'00"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 4 km NW of the Stefanovikio village.

Altitude above sea level (m): 45

Area (ha): 400

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: Emergents: *Juncus sp.*, *Phragmites australis*, *Typha sp.*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Anser anser* (E, W), *Tadorna tadorna* (V, W), *T. ferruginea* (E, W), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, N), *Falco naumanni* (V, N), *Recurvirostra avosetta* (V, M), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M), *Coracias garrulus* (V, M)

Most significant present values: Irrigation water (3), Game support (2), Scientific (3), Cultural (2), Recreational (2), Educational (3)

Significant present uses: Irrigation water supply (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Studies for the restoration-rehabilitation of the wetland, Ecological studies, Public awareness programs

Principal bibliography used: Zalidis et al. (1995a)

LICHOURA MARSH

Wetland Code: 143122000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°57'42" Latitude: 39°00'38"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 0.2 km SW of the Pteleo village.

Altitude above sea level (m): 2

Area (ha): 36

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Most significant present values: Game support (2), Recreational (2)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment or expansion of cultivated fields (1),
Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

TSATALI LAKE

Wetland Code: 143123000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°43'29" Latitude: 39°06'34"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 4 km SW of the Kofoi village.

Altitude above sea level (m): 1100

Area (ha): 80

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Most significant present values: Fodder (2), Game support (2), Scientific (2), Recreational (3), Educational (2)

Significant present uses: Grazing (1), Hunting (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ZIRELIA LAKE

Wetland Code: 143124000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°45'24" Latitude: 39°09'08"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 5 km SW of the Almyros town.

Altitude above sea level (m): 140

Area (ha): 2

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values: Irrigation water (2), Fodder (2), Game support (2), Sand extraction potential (2), Cultural (2)

Significant present uses: Irrigation water supply (2), Grazing (2), Hunting (2), Sand extraction (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Overpumping of ground water (2), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

SOURPI BAY MARSH OR LIVARI MARSH

Wetland Code: 143125000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°56'40" Latitude: 39°06'23"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 4 km SW of the Amaliada village.

Altitude above sea level (m): 2

Area (ha): 150

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Most significant present values: Game support (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Industrial solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used:

CHOLOREMA ESTUARY

Wetland Code: 143126000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°49'34" Latitude: 39°11'57"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 6 km S of the Nea Anchialos village.

Altitude above sea level (m): 1

Area (ha): 15

Length (km): -

Wetland Type: Estuary (F)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Juncus* sp., *Phragmites australis*, b) Scrubs and shrubs: *Tamarix* sp.

Most significant present values: Game support (2)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment or expansion of cultivated fields (3),
Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LACHANOREMA ESTUARY

Wetland Code: 143127000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°49'12" Latitude: 39°15'15"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 2, 5 S of the Nea Anchialos village.

Altitude above sea level (m): 1

Area (ha): 0.6

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*, b) Trees: *Salix sp.*

Most significant present values: Game support (2)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

TSALAPATAS MARSH

Wetland Code: 143128000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°52'54" Latitude: 39°20'49"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 3 km E of the Diminio village.

Altitude above sea level (m): 1

Area (ha): 0.4

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Juncus* sp., *Phragmites australis*

Most significant present values: Game support (1), Recreational (1)

Significant present uses: Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

BOURMPOULITHRA LAGOON

Wetland Code: 143129000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°55'37" Latitude: 39°20'52"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 2 km W of the Volos city.

Altitude above sea level (m): 0

Area (ha): 30

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*

Most significant present values: Fishing (1), Game support (2), Cultural (1), Recreational (2)

Significant present uses: Fishing (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (3)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions:

Principal bibliography used:

KATO LECHONIA MARSH

Wetland Code: 143130000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°02'10" Latitude: 39°19'33"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 2, 5 km SW of the Kato Lechonia village.

Altitude above sea level (m): 1

Area (ha): 4

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Trees: *Platanus orientalis*, *Ulmus sp.*

Most significant present values: Game support (2), Recreational (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ZERVOCHIA MARSH

Wetland Code: 143131000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°08'51" Latitude: 39°17'57"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 1 km SE of the Milies village.

Altitude above sea level (m): 0

Area (ha): 0.8

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Trees: *Platanus orientalis*, *Ulmus sp.*

Most significant present values: Game support (2), Recreational (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

POTOKI MARSH

Wetland Code: 143132000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°07'13" Latitude: 39°18'49"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 0.6 km SW of the Koroni village.

Altitude above sea level (m): 0

Area (ha): 0.2

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Trees: *Platanus orientalis*, *Ulmus sp.*

Most significant present values: Game support (2), Recreational (1)

Significant present uses: Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LOUTSIA LAKE

Wetland Code: 143133000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°37'05" Latitude: 39°05'02"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 3 km NW of the Kokkina village.

Altitude above sea level (m): 230

Area (ha): 15

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Most significant present values: Irrigation water (3), Game support (3), Cultural (3),
Recreational (2)

Significant present uses: Irrigation water supply (3), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Overpumping of ground water (3),
Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

VROMOLIMNOS LAGOON OR VROMOLIMNOS & ARGYROLIMNOS LAGOON

Wetland Code: 143134000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°27'46" Latitude: 39°08'20"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 5 km SW of the Skiathos town.

Altitude above sea level (m): 0

Area (ha): 0.5

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ruppia sp.*, b) Emergents: *Salicornia fruticosa*, *Carex vulpina*, *Narcissus tazetta*, *Ranunculus velutinus*, *Phragmites australis*, c) Scrubs and shrubs: *Tamarix sp.*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Statice sinuata*, *Cakile maritima*

Most significant present values: Game support (2), Scientific (2), Recreational (2)

Significant present uses: Hunting (3), Recreation (2), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (2)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Economidou (1969)

AGIOS GEORGIOS LAGOON

Wetland Code: 143135000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°29'34" Latitude: 39°10'02"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 2 km NE of the Skiathos town.

Altitude above sea level (m): 0

Area (ha): 3

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ruppia* sp., b) Emergents: *Salicornia fruticosa*, *Carex vulpina*, *Narcissus tazetta*, *Ranunculus velutinus*, *Phragmites australis*, c) Scrubs and shrubs: *Tamarix* sp., d) Dunes and sandy shores plants: *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Statice sinuata*, *Cakile maritima*

Most significant present values: Game support (3), Recreational (2)

Significant present uses: Hunting (2), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2)

Other anthropogenic activities: Land filling (3), Construction or expansion of airport (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Economidou (1969)

KOUKOUNARIES LAGOON

Wetland Code: 143136000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°24'25" Latitude: 39°09'30"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 14 km W of the Skiathos town.

Altitude above sea level (m): 0

Area (ha): 35

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H),
Coastal periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ruppia sp.*, b) Emergents: *Salicornia fruticosa*, *Carex vulpina*, *Narcissus tazetta*, *Inula viscosa*, *Ranunculus velutinus*, *Phragmites australis*, c) Scrubs and shrubs: *Tamarix sp.*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Agropyrum junceum*, *Eryngium maritimum*, *Statice sinuata*, *Cakile maritima*

Most significant present values: Fodder (2), Game support (1), Scientific (2), Recreational (3)

Significant present uses: Grazing (1), Hunting (1), Recreation (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Sewage from tourist facilities (1)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (1)

Present legal protection status: Mediterranean Specially Protected Area (Barcelona Convention)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used: Economidou (1969)

MILIES MARSH

Wetland Code: 143137000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°40'22" Latitude: 39°06'53"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 2 km SE of the Neo Klima village of Skopelos.

Altitude above sea level (m): 0

Area (ha): 0.3

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Most significant present values:

Significant present uses:

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LOUTSA MARSH

Wetland Code: 143138000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°40'41" Latitude: 39°05'23"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 6 km SW of the Skopelos town.

Altitude above sea level (m): 70

Area (ha): 1.4

Length (km): -

Wetland Type: Coastal periodically flooded freshwater marsh (T)*

Biotic characteristics:

Most significant present values: Game support (2), Recreational (3)

Significant present uses: Hunting (3), Recreation (1), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

AGIOS DIMITRIOS MARSH

Wetland Code: 143139000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°56'21" Latitude: 39°12'45"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: 11 km NW of the Patitiri village of Alonnisos.

Altitude above sea level (m): 0

Area (ha): 0.4

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Juncus sp.*

Most significant present values: Game support (2), Recreational (3)

Significant present uses: Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions:

Principal bibliography used:

PALIOFANARO MARSH

Wetland Code: 143140000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°58'58" Latitude: 39°13'42"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: At the N part of Peristera Island (N. Sporades).

Altitude above sea level (m): 0

Area (ha): 0.1

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Fodder (1), Game support (1), Recreational (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status: Part of Vories Sporades National Marine Park,
Mediterranean Specially Protected Area (Barcelona Convention)

Most significant positive actions:

Principal bibliography used:

PLANITIS MARSH

Wetland Code: 143141000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°04'45" Latitude: 39°20'21"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: At the N part of Kira Panagia Island (N. Sporades) at the edge of the homonymous bay.

Altitude above sea level (m): 0

Area (ha): 0.1

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Game support (1), Recreational (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Part of Vories Sporades National Marine Park, Mediterranean Specially Protected Area (Barcelona Convention)

Most significant positive actions:

Principal bibliography used:

MANDRAKI MARSH

Wetland Code: 143142000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°10'43" Latitude: 39°30'16"

Administrative Region: Thessalia (GR140)

Prefecture(s): Magnisia (GR143)

Location: At the SW part of the Psathoura Island (N. Sporades).

Altitude above sea level (m): 0

Area (ha): 0.2

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Juncus sp.*

Most significant present values: Fodder (1), Game support (2), Recreational (1)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Part of Vories Sporades National Marine Park, Mediterranean Specially Protected Area (Barcelona Convention), Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used:

KALAMAS RIVER OR THYAMIS RIVER

Wetland Code: 210143000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212), Ioannina (GR213)

Location: Rises in the S cliffs of the Mitsikeli mountain, flows S, SW and discharges into the Ionean Sea, 2 km S of the Sagiada village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1300

Area (ha): -

Length (km): 60

Wetland Type: Permanent river (M)*, Spring (Y), Reservoir (6)

Biotic characteristics:

Flora: a) Emergents: *Typha sp.*, *Arthrocnemum sp.*, *Halocnemum strobilaceum*, *Suaeda maritima*, *Salicornia europaea*, *Polygonon maritimum*, *Limonium sp.*, *Juncus subulatus*, *Scirpus lacustris*, *Cyperus longus*, b) Trees: *Platanus orientalis*, *Salix alba*

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Pseudophoxinus stymphalicus thesproticus* (+), *Barbus albanicus* (+), *Barbus peloponnesius peloponnesius* (+), *Valencia letourneuxi* (+, E), b) Birds: *Gyps fulvus* (V), *Neophron percnopterus* (V), *Aquila chrysaetos* (V, P), *Falco naumanni* (V), c) Mammals: *Canis lupus* (V)

Most significant present values: Irrigation water (3), Fishing (2), Game support (3), Hydroelectric power potential (3), Sand extraction potential (2), Scientific (2), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (2), Aquaculture (3), Hunting (2), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (2), Industrial solid wastes (2), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Non-sustainable sand extraction (3), Land filling (3), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Irrigation schemes (2), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Kalamas Gorge, Land planning studies, Ecological studies

Principal bibliography used: Economidis P. (1991), Kilikidis et al. (1992h)

KALAMAS DELTA OR THYAMIS DELTA

Wetland Code: 211144000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°12'01" Latitude: 39°31'46"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 2 km S of the Sagiada village (new bed), 0.5 km E of the Kestrini village (old bed).

Altitude above sea level (m): 1

Area (ha): 1350

Length (km): -

Wetland Type: Coastal delta (F)*, Canal - Trench (9), Lagoon (J), Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Polygonum sp.*, *Ranunculus sp.*, b) Emergents: *Salicornia radicans*, *S. fruticosa*, *Juncus sp.*, *Phragmites australis*, *Typha latifolia*, *Arthrocnemum glaucum*, *Typha sp.*, *Scirpus lacustris*, *Cyperus longus*, *Erianthus ravennae*, c) Scrubs and shrubs: *Tamarix sp.*, d) Trees: *Platanus orientalis*, *Salix alba*, e) Dunes and sandy shores plants: *Xanthium sp.*, *Euphorbia paralias*, *Elymus sp.*, *Eryngium maritimum*, *Cakile maritima*, *Salsola kali*, *Verbascum pinnatifidum*

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Pseudophoxinus stymphalicus thesproticus* (+), *Barbus albanicus* (+), *Barbus peloponnesius peloponnesius* (+), *Valencia letourneuxi* (+, E), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus crispus* (E, W), *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Aquila pomarina* (V), *A. chrysaetos* (V, P), *Haliaeetus albicilla* (E, W), *Himantopus himantopus* (V, N), *Burhinus oedicephalus* (V, N), *Glareola pratincola* (V, N), *Larus genei* (E, W)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Game support (3), Logging (2), Sand extraction potential (2), Scientific (3), Cultural (1), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (3), Aquaculture (3), Grazing (3), Sand extraction (1), Recreation (1), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (2), Industrial solid wastes (2), Agricultural point source pollution (2), Non-point source

agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (1), Land filling (2), Diversion of water courses (1), Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (1), Irrigation schemes (3), Establishment or expansion of cultivated fields (3), Overfishing (2), Illegal or non-sustainable hunting (3), Illegal logging (2)

Present legal protection status: Establishment of housing control zones (ZOE), Prohibition of hunting, Prohibition of logging

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used: Economidou et al. (1992), Grimmet and Jones (1989), Kilikidis et al. (1992h), Pergantis (1988)

MESOVOUNIOU LAKE

Wetland Code: 211145000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°38'14" Latitude: 39°32'54"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 1 km E of the Mesovounio village.

Altitude above sea level (m): 250

Area (ha): 6

Length (km): -

Wetland Type: Inland periodically flooded freshwater lake (P)*

Biotic characteristics:

Most significant present values: Game support (1), Recreational (1)

Significant present uses: Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LIMNOPOULA LAKE OR LIMNOULA LAKE

Wetland Code: 211146000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°29'06" Latitude: 39°27'26"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 0.7 km SW of the Krystallopigi and Kefalovryso villages.

Altitude above sea level (m): 180

Area (ha): 130.5

Length (km): -

Wetland Type: Inland periodically flooded freshwater lake (P)*

Biotic characteristics:

Fauna: Birds: *Aquila pomarina* (V), *Hieraaetus pennatus* (V)

Most significant present values: Fodder (2), Game support (2), Recreational (1)

Significant present uses: Grazing (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies

Principal bibliography used: Grimmet and Jones (1989)

PRONTANI LAKE

Wetland Code: 211147000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°26'24" Latitude: 39°26'04"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 1 km N, NW of the Ampelia village.

Altitude above sea level (m): 230

Area (ha): 25

Length (km): -

Wetland Type: Inland periodically flooded freshwater lake (P)*

Biotic characteristics:

Most significant present values: Fodder (1), Recreational (1)

Significant present uses: Grazing (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Land planning studies

Principal bibliography used: Grimmet and Jones (1989)

KANETA LAKE

Wetland Code: 211148000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°25'18" Latitude: 39°24'26"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 0.5 km NE of the Karterio village.

Altitude above sea level (m): 130

Area (ha): 1

Length (km): -

Wetland Type: Inland periodically flooded freshwater lake (P)*

Biotic characteristics:

Most significant present values: Fodder (2), Game support (1), Recreational (1)

Significant present uses: Grazing (2), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (3), Illegal or non-sustainable hunting (1)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Land planning studies

Principal bibliography used: Grimmet and Jones (1989)

KYRA PANAGIAS LAKE

Wetland Code: 211149000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°26'54" Latitude: 39°24'41"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 2.5 km NW of the Kyra Panagia village.

Altitude above sea level (m): 70

Area (ha): 10

Length (km): -

Wetland Type: Inland periodically flooded freshwater lake (P)*

Biotic characteristics:

Most significant present values: Fodder (2), Game support (2)

Significant present uses: Grazing (2)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (3), Land filling (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE), Prohibition of hunting

Most significant positive actions: Land planning studies

Principal bibliography used: Grimmet and Jones (1989)

PALAIOKASTROY LAKE

Wetland Code: 211150000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°24'29" Latitude: 39°22'22"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 0.7 km W of the Palaiokastroy village of Margariti.

Altitude above sea level (m): 100

Area (ha): 50

Length (km): -

Wetland Type: Inland periodically flooded freshwater lake (P)*, Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Fauna: Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M)

Most significant present values: Fodder (1), Game support (1), Recreational (1)

Significant present uses: Grazing (1), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (2)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Land planning studies

Principal bibliography used: Grimmet and Jones (1989)

KALODIKI LAKE OR VALTOS LAKE

Wetland Code: 211151000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°28'26" Latitude: 39°18'53"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Thesprotia (GR212)

Location: 0.1 km W, NW of the Morfio Village.

Altitude above sea level (m): 115

Area (ha): 300

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (P)*, Spring (Y), Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T), Peatland (U)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Nymphaea alba*, *Nuphar lutea*, *Hydrocharis morsus-ranae*, b) Emergents: *Phragmites australis*, *Typha latifolia*, *Typha angustifolia*, *Scirpus lacustris*, *Cyperus longus*, c) Trees: *Salix alba*

Fauna: Mammals: *Meles meles* (V)

Most significant present values: Irrigation water (2), Fodder (1), Game support (3), Scientific (1), Cultural (1), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (2), Grazing (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (1), Overpumping of ground water (2), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (1)

Present legal protection status: Special Protection Area (79/409/EEC), Establishment of housing control zones (ZOE), Prohibition of hunting

Most significant positive actions: Land planning studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Kolovos et al. (1992)

AOOS RIVER OR AIAS RIVER

Wetland Code: 213153000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Ioannina (GR213)

Location: Rises in the Mavrovouni mountain of N. Pindos range, flows N, NE and discharges into the Adriatic Sea (Albania).

Altitude above sea level (m): *Min.:* 400 *Max.:* 1300

Area (ha): -

Length (km): 80

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Fauna: Fish: *Salmo trutta* (R/V/E), *Pachychilon pictus* (+), *Rutilus ohridanus prespensis* (+), *Barbus peloponnesius rebeli* (+), *Alburnoides bipunctatus ohridanus* (+), *Leuciscus cephalus vardarensis* (+), *Orthrias pindus* (+, R)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Hydroelectric power potential (3), Sand extraction potential (3), Scientific (3), Cultural (1), Recreational (3), Educational (2)

Significant present uses: Irrigation water supply (3), Fishing (2), Aquaculture (3), Grazing (2), Hydroelectricity production (3), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (2), Agricultural point source pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Overpumping of ground water (2), Dams or other installations for retention and storage of water (3), Irrigation schemes (3), Overfishing (2), Illegal or non-sustainable hunting (2)

Present legal protection status: National Park (for the part of the wetland included in Vikos - Aios National Park), Prohibition of hunting (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands

catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for the part of the wetland included in Vikos - Aoos National Park

Principal bibliography used: Economidis P. (1991)

SARANTAPOROS RIVER

Wetland Code: 210154000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210), Dytiki Makedonia (GR130)

Prefecture(s): Ioannina (GR213), Kastoria (GR132)

Location: Rises in the Grammos mountain, flows SW and meets the Aoos river.

Altitude above sea level (m): Min.: 400 Max.: 1500

Area (ha): -

Length (km): 50

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Pachychilon pictus* (+), *Barbus peloponnesius rebeli* (+), *Alburnoides bipunctatus ohridanus* (+), *Leuciscus cephalus vardarensis* (+), *Orthrias pindus* (+, R), b) Mammals: *Lutra lutra* (V)

Most significant present values: Drinking water (3), Irrigation water (1), Game support (1), Sand extraction potential (1), Scientific (1), Cultural (3), Recreational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (1), Aquaculture (1), Hunting (1), Sand extraction (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Agricultural point source pollution (1)

Other anthropogenic activities: Non-sustainable sand extraction (1), Diversion of water courses (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

VOIDOMATIS RIVER OR VIKOS RIVER

Wetland Code: 213155000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Ioannina (GR213)

Location: Rises in the Tymfi mountain, flows N, NW and meets the Aaos river.

Altitude above sea level (m): Min.: 500 Max.: 1500

Area (ha): -

Length (km): 25

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix* sp.

Fauna: a) Fish: *Salmo trutta* (R/V/E), *Pachychilon pictus* (+), *Barbus peloponnesius rebeli* (+), *Alburnoides bipunctatus ohridanus* (+), *Leuciscus cephalus vardarensis* (+), *Orthrias pindus* (+, R), b) Mammals: *Lutra lutra* (V)

Most significant present values: Fodder (1), Scientific (3), Cultural (2), Recreational (3), Educational (3)

Significant present uses: Aquaculture (1), Grazing (1), Recreation (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (1), Agricultural point source pollution (1)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (1)

Present legal protection status: National Park (for the part of the wetland included in Vikos - Aaos National Park), Prohibition of fishing (during reproduction period)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for the part of the wetland included in Vikos - Aaos National Park, Public awareness programs

Principal bibliography used: Economidis P. (1991)

ACHERONTAS RIVER

Wetland Code: 210156000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Ioannina (GR213), Thesprotia (GR212), Preveza (GR214)

Location: Rises in the Tomaros mountain, flows S, SW, and discharges into the Ionean Sea.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1600

Area (ha): -

Length (km): 50

Wetland Type: Permanent river (M)*

Biotic characteristics:

Fauna: a) Fish: *Pseudophoxinus stymphalicus thesproticus* (+), *Valencia letourneuxi* (+, E), *Knipowitschia milleri* (+, V), b) Birds: *Neophron percnopterus* (V), *Aquila chrysaetos* (V, P), *Hieraaetus fasciatus* (V, P), *Gyps fulvus* (V)

Most significant present values: Irrigation water (3), Fishing (2), Fodder (3), Game support (3), Sand extraction potential (2), Scientific (3), Cultural (3), Recreational (1), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (2), Grazing (2), Hunting (3), Sand extraction (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (3), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Irrigation schemes (3), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Acherontas Gorge, Land planning studies

Principal bibliography used: Economidis P. (1991)

DRAKOLIMNES LAKES

Wetland Code: 213157000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°46'49" Latitude: 39°58'38"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Ioannina (GR213)

Location: 2 km NE of the Papigo village of Zagori, Ioannina.

Altitude above sea level (m): 2100

Area (ha): 1.5

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Fauna: a) Birds: *Aegypius monachus* (E), b) Mammals: *Ursus arctos* (E), *Felix silvestris* (E), *Capreolus capreolus* (V), *Rupicapra rupicapra* (R)

Most significant present values: Game support (2), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Recreation (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status: National Park (included in Vikos - Aoos National Park), Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used:

ZARAVINA LAKE OR POGONIOU LAKE

Wetland Code: 213158000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°31'00" Latitude: 39°54'00"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Ioannina (GR213)

Location: 2 km SW of the Limni village.

Altitude above sea level (m): 490

Area (ha): 31

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Fauna: Fish: *Paraphoxinus epiroticus* (+)

Most significant present values: Irrigation water (1), Fishing (1), Game support (1), Recreational (1)

Significant present uses: Irrigation water supply (1), Fishing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1)

Other anthropogenic activities: Land filling (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used:

IOANNINON LAKE OR PAMVOTIDA LAKE

Wetland Code: 213161000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°54'00" Latitude: 39°40'00"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Ioannina (GR213)

Location: At the edge of Ioannina city.

Altitude above sea level (m): 469

Area (ha): 2380

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*, Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Lemna gibba*, *Polygonum amphibium*, *Myriophyllum spicatum*, *Ceratophyllum sp.*, *Azolla filiculoides*, *Potamogeton perfoliatus*, *Spirodella polyrrhiza*, *Ranunculus sp.*, b) Emergents: *Phragmites australis*, *Arundo sp.*, *Alisma sp.*, *Typha sp.*, *Scirpus lacustris*, c) Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*

Fauna: a) Fish: *Rutilus ylikiensis* (+), *Paraphoxinus epiroticus epiroticus* (+), *Barbus albanicus* (+), *Silurus aristotelis* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E), *P. crispus* (E), *Egretta alba* (E, W), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R), *Anser anser* (E, W), *Tadorna tadorna* (V, W), *Aythya nyroca* (V, W), *Oxyura leucocephala* (E, W), *Recurvirostra avosetta* (V, M), *Larus melanocephalus* (V, M), *L. genei* (E, W)

Most significant present values: Irrigation water (3), Fishing (3), Game support (1), Scientific (2), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (3), Hunting (1), Recreation (3), Tourism (2), Sports (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (3), Industrial solid wastes (3), Sewage from tourist facilities (2), Agricultural point source pollution (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (2), Land filling (3), Establishment of new

housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Overpumping of ground water (3), Irrigation schemes (3), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Natural Beauty Landscape

Most significant positive actions: Land planning studies, Establishment of wastewater treatment facilities, Ecological studies, Public awareness programs

Principal bibliography used: Economidis P. (1991), Kasioumi (1994)

LOUROS RIVER

Wetland Code: 210162000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Preveza (GR214), Ioannina (GR213)

Location: Rises in the Tomaros mountain, flows S, discharges into the Amvrakikos Gulf, 1 km E of the Nea Kerasounta village, Prefecture of Preveza.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1400

Area (ha): -

Length (km): 73

Wetland Type: Permanent river (M)*

Biotic characteristics:

Fauna: Fish: *Barbus peloponnesius peloponnesius* (+), *Cobitis hellenica arahthosensis* (+), *Economidichthys pygmaeus* (+)

Most significant present values: Drinking water (3), Irrigation water (3), Hydroelectric power potential (3), Sand extraction potential (2), Scientific (2), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Drinking water supply (2), Irrigation water supply (3), Aquaculture (2), Hydroelectricity production (3), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (2), Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (3), Overpumping of ground water (3), Dams or other installations for retention and storage of water (2), Irrigation schemes (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used: Economidis P. (1991)

ZIROU LAKE

Wetland Code: 214163000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°50'41" Latitude: 39°14'39"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Preveza (GR214)

Location: 5 km E of the Filippiada village.

Altitude above sea level (m): 60

Area (ha): 125

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Scirpus* sp., *Arundo donax*

Fauna: a) Fish: *Barbus albanicus* (+), b) Mammals: *Pipistrellus pipistrellus* (E), *Dryomys nitedula* (R), *Meles meles* (V), *Lutra lutra* (V), *Felix silvestris* (E)

Most significant present values: Irrigation water (1), Scientific (2), Recreational (3), Educational (2)

Significant present uses: Irrigation water supply (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Public awareness programs

Principal bibliography used:

ARACHTHOS RIVER

Wetland Code: 210167000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Arta (GR211), Ioannina (GR213)

Location: Rises in the N. Pindos mountain range (Prefecture of Ioannina), flows S and discharges into the Amvrakikos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 800

Area (ha): -

Length (km): 106

Wetland Type: Permanent river (M)*

Biotic characteristics:

Most significant present values: Irrigation water (3), Fodder (1), Hydroelectric power potential (3), Sand extraction potential (1), Scientific (1), Cultural (2), Recreational (2)

Significant present uses: Irrigation water supply (3), Grazing (1), Hydroelectricity production (3), Sand extraction (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (2), Agricultural point source pollution (2)

Other anthropogenic activities: Dams or other installations for retention and storage of water (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

VOUVOS RIVER

Wetland Code: 210169000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Ipeiros (GR210)

Prefecture(s): Arta (GR211), Preveza (GR214)

Location: Rises in the Valtos mountain of the Arta Prefecture, flows W, SW and discharges into the Koprana Bay of the Amvrakikos gulf, 1 km S of the Agios Nikolaos village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 900

Area (ha): -

Length (km): 22

Wetland Type: Permanent river (M)*

Biotic characteristics:

Most significant present values: Irrigation water (2), Recreational (1)

Significant present uses: Irrigation water supply (1)

Factors changing the wetland's ecological character:

Pollution: Point source pollution (2)

Other anthropogenic activities:

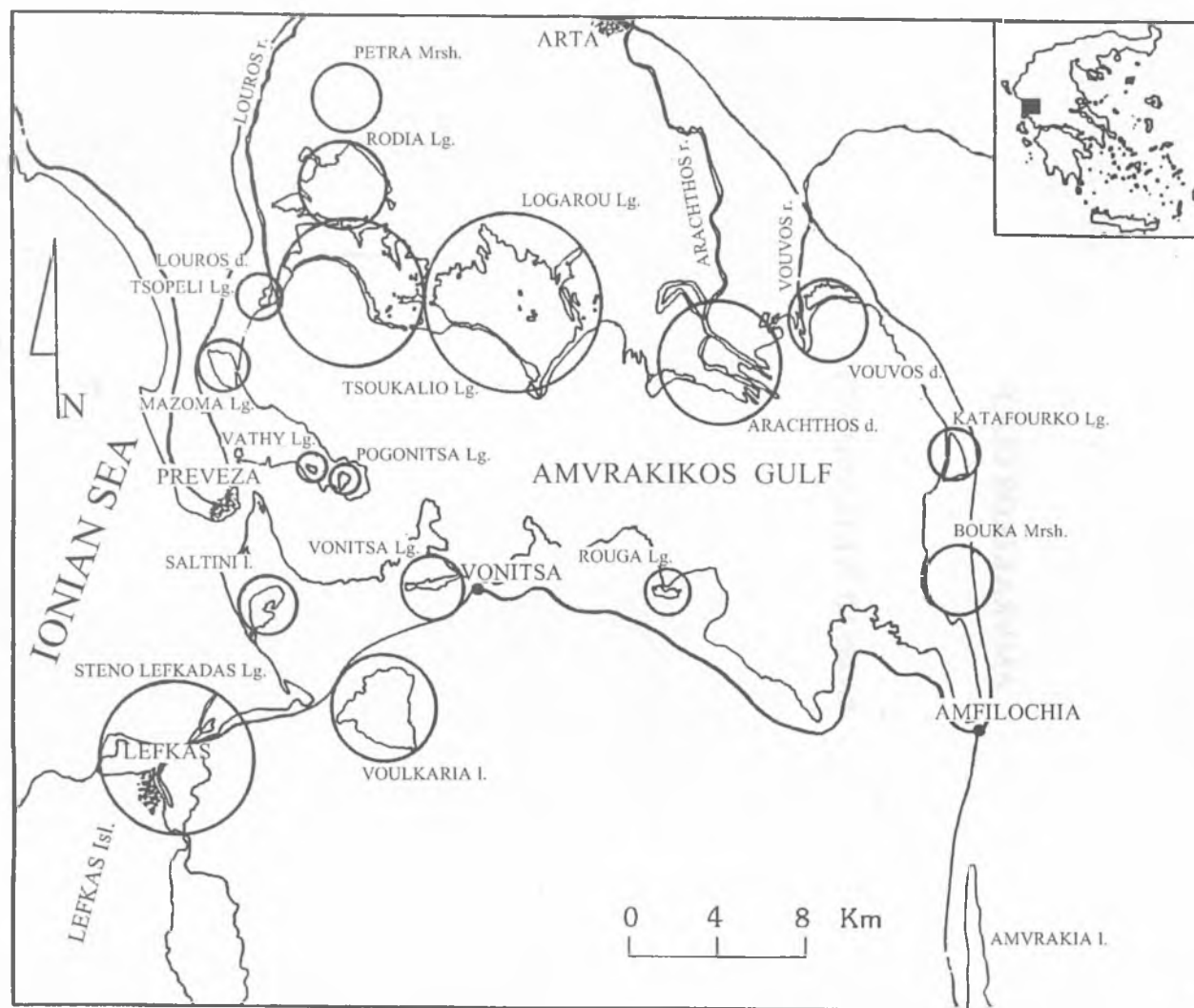
Present legal protection status:

Most significant positive actions:

Principal bibliography used:



AMVRAKIKOS GULF



LEGEND

-  : WETLAND
-   : URBAN AREAS
-  : ROAD NETWORK

COPYRIGHT EKBY



VATHY LAGOON

Wetland Code: 214170000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°48'44" Latitude: 38°58'02"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Preveza (GR214)

Location: 2 km NE of the Preveza city.

Altitude above sea level (m): 0

Area (ha): 28

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Typha angustifolia*

Most significant present values: Fishing (1), Game support (1), Recreational (2)

Significant present uses: Fishing (2), Hunting (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Sewage from tourist facilities (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Ministerial Decision for the delineation of protected areas, Mediterranean Specially Protected Area (Barcelona Convention)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Varela et al. (1986)

POGONITSA LAGOON

Wetland Code: 214171000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°50'13" Latitude: 38°57'26"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Preveza (GR214)

Location: 1 km S of the Agioi Apostoloi village.

Altitude above sea level (m): 0

Area (ha): 45

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Typha angustifolia*

Most significant present values: Fishing (2), Game support (1), Cultural (1), Recreational (2), Educational (1)

Significant present uses: Fishing (1), Aquaculture (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Construction or expansion of road network (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Ministerial Decision for the delineation of protected areas, Mediterranean Specially Protected Area (Barcelona Convention)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Varela et al. (1986)

MAZOMA LAGOON

Wetland Code: 214172000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°45'52" Latitude: 39°00'00"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Preveza (GR214)

Location: 5 km N of the Preveza city.

Altitude above sea level (m): 0

Area (ha): 140

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Carex sp.*, *Trifolium sp.*, *Phragmites australis*, *Typha sp.*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V)

Most significant present values: Fishing (3), Game support (1), Recreational (1)

Significant present uses: Fishing (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Varela et al. (1986)

PETRA MARSH

Wetland Code: 214173000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°49'45" Latitude: 39°10'14"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Preveza (GR214)

Location: 2 km S of the Petra village.

Altitude above sea level (m): 0

Area (ha): 40

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ranunculus sp.*, b) Emergents: *Typha sp.*

Fauna: Birds: *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M), *Circus aeruginosus* (V, M)

Most significant present values: Game support (1), Recreational (1), Educational (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Agricultural point source pollution (2)

Other anthropogenic activities: Drainage (1), Land filling (1), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Varela et al. (1986)

LOUROS DELTA (Wetland Complex)

Wetland Code: 210174600

Part(s) of the wetland complex: Tsopeli Lagoon, Rodia Lagoon, Tsoukalio Lagoon, Logarou Lagoon

Geographical Coordinates: Longitude: 20°52'54" Latitude: 39°04'54"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Arta (GR211), Preveza (GR214)

Location: 1 km SE of the Louros village.

Altitude above sea level (m): 0

Area (ha): 15000

Length (km): -

Wetland Type: Coastal delta (F)*, Lagoon (J), Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Zostera sp.*, *Potamogeton natans*, *Spirodella polyrrhiza*, *Lemna gibba*, *Hydrocharis morsus-ranae*, *Ruppia sp.*, *Ranunculus sp.*, b) Emergents: *Arthrocnemum sp.*, *Phragmites australis*, *Typha angustifolia*, *Scirpus maritimus*, *Butomus sp.*, *Alisma sp.* c) Trees: *Fraxinus angustifolia*, *Salix alba*, *Populus sp.*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, N), *Egretta alba* (E, W), *Ardea purpurea* (V, M, N), *Plegadis falcinellus* (E, M, N), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Tadorna tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Haliaeetus albicilla* (E, N, W), *Circus aeruginosus* (V, N, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco biarmicus* (V, P), *Porzana parva* (R, M), *Himantopus himantopus* (V, M, N), *Recurvirostra avosetta* (V, W), *Burhinus oedienemus* (V, M, N), *Glareola pratincola* (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, W), *Coracias garrulus* (V, M), *Acrocephalus melanopogon* (R, W), *Ficedula semitorquata* (R, M), c) Mammals: *Dryomys nitedula* (R), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Fishing (3), Aquaculture (3), Grazing (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (3), Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (1), Land filling (1), Establishment of new housing facilities or expansion of old ones (1), Overpumping of ground water (3), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Establishment of housing control zones (ZOE), Ministerial Decision for the delineation of protected areas, Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Fishing studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Pergantis (1988), Varela et al. (1986)

ARACHTHOS DELTA

Wetland Code: 211179000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°59'15" Latitude: 39°02'34"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Arta (GR211)

Location: 1 km SE of the Komeno village.

Altitude above sea level (m): 0

Area (ha): 8000

Length (km): -

Wetland Type: Coastal delta (F)*, Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Coastal permanently flooded freshwater marsh (S), Coastal periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Zostera sp.*, *Ruppia sp.*, *Ranunculus sp.*, b) Emergents: *Arthrocnemum sp.*, *Salicornia europaea*, *Suaeda maritima*, *Polygonon monspeliensis*, *Limonium vulgare*, *Juncus maritimus*, *Halocnemum strobilaceum*, *Phragmites australis*, *Typha sp.* c) Scrubs and shrubs: *Tamarix parviflora*, *Vitex agnus-castus*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M, N), *Plegadis falcinellus* (E, M, N), *Platalea leucorodia* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Tadorna tadorna* (V, W), *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Haliaeetus albicilla* (E, N, W), *Circus aeruginosus* (V, N, M), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. chrysaetos* (V), *Hieraaetus pennatus* (V, M), *Falco biarmicus* (V, P), *Porzana parva* (R, M), *Himantopus himantopus* (V, M, N), *Recurvirostra avosetta* (V, W), *Burhinus oedicephalus* (V, M, N), *Glareola pratincola* (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Columba oenas* (R, W), *Coracias garrulus* (V, M), *Acrocephalus melanopogon* (R, W), *Ficedula semitorquata* (R, M), c) Mammals: *Dryomys nitedula* (R), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Fishing (3), Fodder (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (3), Grazing (2), Recreation (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (3), Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (1), Land filling (1), Establishment of new housing facilities or expansion of old ones (1), Overpumping of ground water (3), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas, Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Pergantis (1988), Varela et al. (1986)

VOUVOS DELTA

Wetland Code: 210180000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°05'19" Latitude: 39°03'04"

Administrative Region: Ipeiros (GR210)

Prefecture(s): Arta (GR211), Preveza (GR214)

Location: 3 km SE of the Sykies village, Prefecture of Arta.

Altitude above sea level (m): 0

Area (ha): 400

Length (km): -

Wetland Type: Coastal delta (F)*, Lagoon (J), Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Most significant present values: Fishing (1), Game support (2), Recreational (1)

Significant present uses: Fishing (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Industrial wastewater (1)

Other anthropogenic activities:

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas, Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Pergantis (1988), Varela et al. (1986)

KATAFOURKO LAGOON OR ANOIXIATIKO LAGOON

Wetland Code: 231181000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°10'39" Latitude: 38°58'57"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 0.2 km S of the Katafourko village.

Altitude above sea level (m): 0

Area (ha): 300

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Fauna: a) Reptiles: *Algyroides moreoticus* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, N), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias niger* (V, M), *Acrocephalus melanopogon* (R, W), c) Mammals: *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Fishing (2), Fodder (2), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Fishing (2), Grazing (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Industrial wastewater (1), Agricultural point source pollution (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas, Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Varela et al. (1986)

BOUKA MARSH OR PALIAVLI MARSH

Wetland Code: 231182000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°11'17" Latitude: 38°55'14"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 3 km N of the Amfilochia town.

Altitude above sea level (m): 0

Area (ha): 100

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, b) Scrubs and shrubs: *Tamarix sp.*

Fauna: a) Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), b) Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V)

Most significant present values: Fodder (3), Game support (1), Scientific (2), Recreational (1), Educational (3)

Significant present uses: Grazing (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (1), Land filling (1), Establishment of new housing facilities or expansion of old ones (1)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Varela et al. (1986)

VONITSA LAGOON

Wetland Code: 231183000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°53'15" Latitude: 38°55'24"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitoloakarnania (GR231)

Location: 0.2 km W of the Vonitsa town.

Altitude above sea level (m): 0

Area (ha): 50

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Fauna: Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Circus aeruginosus* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Fishing (3), Game support (1), Scientific (1), Recreational (1)

Significant present uses: Fishing (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Establishment of wastewater treatment facilities

Principal bibliography used: Pergantis (1988), Varela et al. (1986)

SALTINI LAKE

Wetland Code: 231184000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°46'57" Latitude: 38°56'44"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 4 km S of the Preveza city.

Altitude above sea level (m): 0

Area (ha): 275

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water lake (Q)*

Biotic characteristics:

Fauna: a) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Phoenicopiterus ruber* (R, W), *Circus aeruginosus* (V, M, W), *Himantopus himantopus* (V, M), *Glareola pratincola* (V, M, N), *Larus melanocephalus* (V, M), *Larus genei* (E, W), *Chlidonias niger* (V, M), b) Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V)

Most significant present values: Fodder (1), Game support (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Grazing (2), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies

Principal bibliography used: Pergantis (1988), Varela et al. (1986)

VOULKARIA LAKE

Wetland Code: 231185000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°50'51" Latitude: 38°51'27"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 1 km E of the Agios Nikolaos village.

Altitude above sea level (m): 5

Area (ha): 1000

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Najas marina*, *Potamogeton sp.*, b) Emergents: *Phragmites australis*, c) Scrubs and shrubs: *Tamarix sp.*

Fauna: a) Fish: *Barbus albanicus* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, N, M), *C. pygargus* (E, M), *Chlidonias niger* (V, M), *Acrocephalus melanopogon* (R, W), *Ficedula semitorquata* (R, M), c) Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Irrigation water (1), Fishing (1), Fodder (3), Game support (3), Scientific (2), Recreational (2), Educational (1)

Significant present uses: Irrigation water supply (1), Fishing (1), Grazing (2), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Irrigation schemes (2), Establishment or expansion of cultivated fields (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands

catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Kalofotias and Papadopoulou (1992b), Varela et al. (1986)

STENO LEFKADAS LAGOON OR GYRA LEFKADAS LAGOON

Wetland Code: 224186000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°43'20" Latitude: 38°49'46"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Lefkada (GR224)

Location: 0.2 km NE of the Lefkada town.

Altitude above sea level (m): 0

Area (ha): 750

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax aristotelis* (V, P), *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, W), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias niger* (V, M)

Most significant present values: Fishing (3), Game support (3), Scientific (2), Recreational (3), Educational (2)

Significant present uses: Fishing (3), Hunting (2), Recreation (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Sewage from tourist facilities (2)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with other wetlands of AMVRAKIKOS GULF), Special Protection Area (79/409/EEC), Mediterranean Specially Protected Area (Barcelona Convention), Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies

Principal bibliography used: Pergantis (1988), Varela et al. (1986)

VARVARA LAGOONS OR AVLAKI & AGIOS STEFANOS LAGOONS

Wetland Code: 223191000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 19°56'26" Latitude: 39°46'16"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kerkyra (GR223)

Location: 1 km N of the Agios Stefanos village, Varvara Peninsula.

Altitude above sea level (m): 0

Area (ha): 2

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Fauna: Mammals: *Lutra lutra* (V)

Most significant present values: Game support (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Hunting (3), Recreation (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Sewage from tourist facilities (1)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (1), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

ANTINIOTI LAGOON OR ACHARAVI LAGOON

Wetland Code: 223192000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 19°52'12" Latitude: 39°48'33"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kerkyra (GR223)

Location:

Altitude above sea level (m): 0

Area (ha): 100

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants: *Pancratium maritimum*

Fauna: a) Birds: *Ardea purpurea* (V, M), *Circus aeruginosus* (V, M), *Chlidonias niger* (V, M), b) Mammals: *Lutra lutra* (V)

Most significant present values: Fodder (1), Game support (3), Scientific (3)

Significant present uses: Grazing (1), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Industrial wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Establishment of new housing facilities or expansion of old ones (1), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used:

SKOTINI LAKE

Wetland Code: 223193000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 19°50'27" Latitude: 39°39'41"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kerkyra (GR223)

Location: 1 km NW of the Danilia Settlement of Kerkyra.

Altitude above sea level (m): 40

Area (ha): 2

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, *Salix sp.*

Most significant present values: Game support (2), Scientific (2), Recreational (2)

Significant present uses: Hunting (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

CHALKIOPOULOU LAGOON

Wetland Code: 223194000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 19°55'36" Latitude: 39°36'53"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kerkyra (GR223)

Location: 3 km SW of the Kerkyra town.

Altitude above sea level (m): 0

Area (ha): 380

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Salicornia sp.*, *Juncus sp.*, *Phragmites australis*, *Arundo donax*, b) Scrubs and shrubs: *Tamarix sp.*, *Salix sp.*

Fauna: Birds: *Phalacrocorax pygmaeus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, M)

Most significant present values: Fishing (2), Scientific (3), Recreational (2), Educational (3)

Significant present uses: Fishing (3), Recreation (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (2), Industrial solid wastes (3), Sewage from tourist facilities (3)

Other anthropogenic activities: Land filling (3), Construction or expansion of airport (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (2), Irrigation schemes (3), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge

Most significant positive actions: Ecological studies, Public awareness programs

Principal bibliography used: Gremillet and Walmsley (1992)

KORISSION LAGOON

Wetland Code: 223195000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 19°55'22" Latitude: 39°27'13"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kerkyra (GR223)

Location: 4 km E of the Argyrades village.

Altitude above sea level (m): 2

Area (ha): 500

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Emergents: b) Dunes and sandy shores plants: *Ammophila sp.*, *Eryngium maritimum*

Fauna: a) Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, M), *Recurvirostra avosetta* (V, W), *Himantopus himantopus* (V, M), *Glareola pratincola* (V, M), *Gelochelidon nilotica* (E, M, N), b) Mammals: *Lutra lutra* (V)

Most significant present values: Fishing (3), Game support (3), Scientific (3), Recreational (2)

Significant present uses: Fishing (3), Aquaculture (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Sewage from tourist facilities (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (3), Overfishing (2)

Present legal protection status: Prohibition of hunting, Prohibition of waste disposal

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies, Public awareness programs

Principal bibliography used:

ALYKI LEFKIMIS LAGOON

Wetland Code: 223196000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°05'18" Latitude: 39°26'23"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kerkyra (GR223)

Location: 2 km N of the Lefkimi village.

Altitude above sea level (m): 0

Area (ha): 130

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5)

Biotic characteristics:

Flora: Emergents: *Salicornia sp.*

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Glareola pratincola* (V, M)

Most significant present values: Game support (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Hunting (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies, Public awareness programs

Principal bibliography used:

KAMPOS KARYAS MARSH

Wetland Code: 224197000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°39'59" Latitude: 38°44'51"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Lefkada (GR224)

Location: 1 km E of the Karya village.

Altitude above sea level (m): 300

Area (ha): 45

Length (km): -

Wetland Type: Inland periodically flooded freshwater marsh (T)*

Biotic characteristics:

Most significant present values: Fodder (1), Game support (1)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Drainage (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ALYKI ALEXANDROU LAGOON

Wetland Code: 224198000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°44'07" Latitude: 38°47'41"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Lefkada (GR224)

Location: 4 km SE of the Lefkada town.

Altitude above sea level (m): 0

Area (ha): 55

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5)

Biotic characteristics:

Most significant present values: Game support (2)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

VLYCHOS LAGOON

Wetland Code: 224199000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°42'50" Latitude: 38°40'54"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Lefkada (GR224)

Location: 0.2 km N of the Vlychos village.

Altitude above sea level (m): 0

Area (ha): 20

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Most significant present values: Fishing (2), Fodder (1)

Significant present uses: Fishing (1), Grazing (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1)

Other anthropogenic activities: Land filling (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

MARANTOCHORI LAKE

Wetland Code: 224200000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°39'50" Latitude: 38°36'57"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Lefkada (GR224)

Location: 2.5 km NW of the Marantochori village.

Altitude above sea level (m): 200

Area (ha): 0.4

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values: Irrigation water (1), Game support (1)

Significant present uses: Irrigation water supply (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KOUTAVOS LAGOON

Wetland Code: 222205000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°31'36" Latitude: 38°11'03"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Kefallinia (GR222)

Location: 0.5 km SW of the Argostoli town of Kefallinia, at the edge of the Argostoli gulf.

Altitude above sea level (m): 0

Area (ha): 150

Length (km): -

Wetland Type: Lagoon (J)*, Spring (Y)

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Scirpus sp.*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Plegadis falcinellus* (E, M), c) Mammals: *Monachus monachus* (E)

Most significant present values: Educational (3)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Industrial wastewater (2), Non-point source agricultural pollution (2)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions: Public awareness programs

Principal bibliography used: Vasala (1987)

KERIOU LAGOON OR VALTOS LAGOON

Wetland Code: 221206000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°51'12" Latitude: 37°41'05"

Administrative Region: Ionia Nisia (GR220)

Prefecture(s): Zakynthos (GR221)

Location: 6 km NE of the Keri Settlement.

Altitude above sea level (m): 0

Area (ha): 27.5

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H),
Spring (Y)

Biotic characteristics:

Flora: Emergents: *Halocnemum sp.*, *Halimione sp.*, *Phragmites australis*, *Scirpus sp.*

Most significant present values: Fodder (2), Game support (2), Recreational (2)

Significant present uses: Grazing (1), Hunting (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (2), Non-point source agricultural pollution (1)

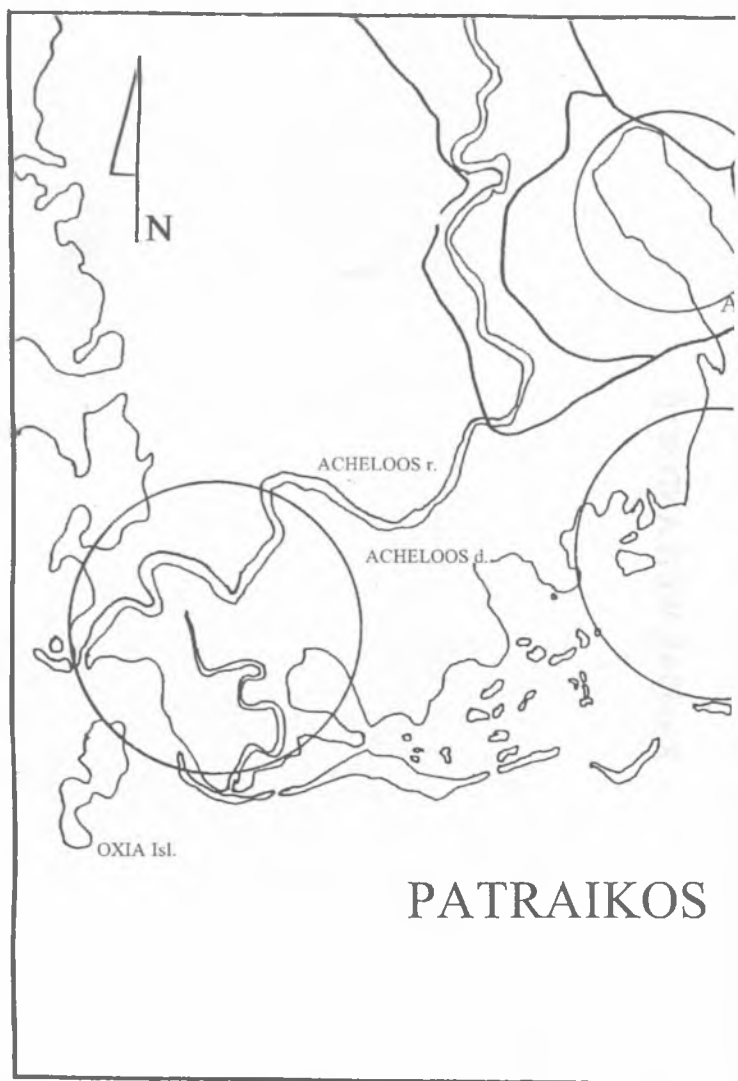
Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:







ACHELOOS DELTA
AITOLIKO LAGOON
MESOLONGI LAGOON
KLISOVA LAGOON
EVINOS ESTUARY

LEGEND

-  :WETLAND
-  :URBAN AREAS
-  :ROAD NETWORK

COPYRIGHT EKBY



ACHELOOS DELTA

Wetland Code: 231207000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°09'45" Latitude: 38°22'01"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 4 km SW of the Katochi village.

Altitude above sea level (m): 0, 5

Area (ha): 6650

Length (km): -

Wetland Type: Coastal delta (F)*, Lagoon (J), Coastal permanently flooded saline-brackish water marsh (H), Inland permanently flooded saline-brackish water marsh (Q), Inland permanently flooded freshwater marsh (S)

Biotic characteristics:

Flora: a) Emergents: *Salicornia* sp., *Arthrocnemum* sp., *Halocnemum* sp., *Phragmites australis*, *Typha latifolia*, b) Trees: *Salix* sp., *Populus* sp., *Ulmus* sp., c) Dunes and sandy shores plants: *Agropyrum* sp., *Ammophila* sp., *Cakile maritima*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax aristotelis* (V, P), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M, W), *Phoenicopterus ruber* (R, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, N, W), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, N), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. heliaca* (E), *A. chrysaetos* (V, P), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, P), *Falco naumanni* (V, M, N), *Himantopus himantopus* (V, M, N), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, M, N), *Glareola pratincola* (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Drinking water (1), Irrigation water (3), Fishing (3), Fodder (2), Game support (2), Logging (2), Sand extraction potential (1), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (2), Aquaculture (2), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (3), Sewage from tourist facilities (1), Agricultural point source pollution (1), Industrial wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (1), Land filling (2), Construction or expansion of road network (1), Establishment of new housing facilities or expansion of old ones (3), Establishment of new industrial facilities or expansion of old ones (1), Irrigation schemes (2), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (1), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with AITOLIKO LAGOON, MESOLONGI LAGOON, KLISOVA LAGOON, and EVINOS ESTUARY), Ministerial Decision for the delineation of protected areas, Establishment of housing control zones (ZOE), Game refuge, Prohibition of grazing, Prohibition of logging, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Pergantis (1988), Vasilakis and Bousbouras (1991)

AITOLIKO LAGOON

Wetland Code: 231208000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°20'37" Latitude: 38°28'27"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: N - NW of the Aitoliko town.

Altitude above sea level (m): 0

Area (ha): 2600

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Ranunculus sp.*, *Zostera sp.*, *Ruppia sp.*,
b) Emergents: *Salicornia sp.*, *Arthrocnemum sp.*, *Halocnemum sp.*, *Phragmites australis*,
Typha sp., c) Trees: *Salix sp.*, *Populus sp.*, *Ulmus sp.*, d) Dunes and sandy shores plants:
Agropyrum sp., *Ammophila sp.*, *Cakile maritima*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M, N), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M, W), *Phoenicopiterus ruber* (R, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W, N), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, N, W), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. heliaca* (E), *A. chrysaetos* (V, P), *Hieraetus pennatus* (V, M), *H. fasciatus* (V, P), *Falco naumanni* (V, M, N), *Himantopus himantopus* (V, M, N), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, M, N), *Glareola pratincola* (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M, W), *L. genei* (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Fishing (3), Fodder (2), Game support (2), Logging (1), Salt production potential (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (3), Salt production (3), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater

(1), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of new industrial facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (1), Irrigation schemes (2), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (1), Overfishing (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with ACHELOOS DELTA, MESOLONGI LAGOON, KLISOVA LAGOON, and EVINOS ESTUARY), Special Protection Area (79/409/EEC), Ministerial Decision for the delineation of protected areas, Establishment of housing control zones (ZOE), Health regulations, Game refuge, Prohibition of grazing, Prohibition of logging, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Daniilidis (1991), Grimmet and Jones (1989)

MESOLONGI LAGOON

Wetland Code: 231209000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°22'07" Latitude: 38°25'50"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: W of the Mesolongi city.

Altitude above sea level (m): 0

Area (ha): 10000

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton* sp., *Ranunculus* sp., *Zostera* sp., *Ruppia* sp., b) Emergents: *Salicornia* sp., *Arthrocnemum* sp., *Halocnemum* sp., *Phragmites australis*, *Typha latifolia*, c) Dunes and sandy shores plants: *Agropyrum* sp., *Ammophila* sp., *Cakile maritima*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M, N), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M, W), *Phoenicopterus ruber* (R, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W, N), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, N, W), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. heliaca* (E), *A. chrysaetos* (V, P), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, P), *Falco naumanni* (V, M, N), *Himantopus himantopus* (V, M, N), *Recurvirostra avosetta* (V, N, W), *Burhinus oedipnemos* (V, M, N), *Glareola pratincola* (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M, W), *L. genei* (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Fishing (3), Fodder (2), Game support (2), Salt production potential (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (3), Salt production (3), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater

(1), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of new industrial facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (1), Irrigation schemes (2), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (1), Overfishing (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with ACHELOOS DELTA, AITOLIKO LAGOON, KLISOVA LAGOON, and EVINOS ESTUARY), Special Protection Area (79/409/EEC), Ministerial Decision for the delineation of protected areas, Establishment of housing control zones (ZOE), Health regulations, Game refuge, Prohibition of grazing, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Daniilidis (1991), Daniilidis et al. (1986), Grimmet and Jones (1989), Pergantis (1988)

KLISOVA LAGOON

Wetland Code: 231210000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°09'22" Latitude: 38°20'28"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: SE of the Mesolongi city.

Altitude above sea level (m): 1

Area (ha): 3000

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Ranunculus sp.*, *Zostera sp.*, *Ruppia sp.*,
b) Emergents: *Scirpus maritimus*, *Salicornia sp.*, *Arthrocnemum sp.*, *Halocnemum sp.*,
Phragmites australis, *Typha latifolia*, c) Dunes and sandy shores plants: *Agropyrum sp.*,
Ammophila sp., *Cakile maritima*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W),
Ardea purpurea (V, M, N), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M, W),
Phoenicopiterus ruber (R, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W, N), *Aythya nyroca* (V, W),
Milvus migrans (E, M), *Haliaeetus albicilla* (E, W), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, N, W),
C. pygargus (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. heliaca* (E),
A. chrysaetos (V, P), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, P), *Falco naumanni* (V, M, N),
Himantopus himantopus (V, M, N), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, M, N),
Glareola pratincola (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M, W),
L. genei (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Fishing (3), Fodder (2), Game support (2), Salt production potential (3), Scientific (3), Cultural (3), Recreational (2), Educational (3)

Significant present uses: Fishing (3), Aquaculture (3), Salt production (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater

(3), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (2), Establishment of new industrial facilities or expansion of old ones (2), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (1), Overfishing (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with ACHELOOS DELTA, AITOLIKO LAGOON, MESOLONGI LAGOON, and EVINOS ESTUARY), Special Protection Area (79/409/EEC), Ministerial Decision for the delineation of protected areas, Establishment of housing control zones (ZOE), Health regulations, Game refuge, Prohibition of grazing, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Daniilidis (1991)

EVINOS ESTUARY

Wetland Code: 231211000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°31'35" Latitude: 38°18'46"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 5 km S of the Evinochori village.

Altitude above sea level (m):

Area (ha): 250

Length (km): -

Wetland Type: Estuary (F)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Ranunculus sp.*, *Zostera sp.*, *Ruppia sp.*, b) Emergents: *Salicornia sp.*, *Arthrocnemum sp.*, *Halocnemum sp.*, *Phragmites australis*, *Typha latifolia*, c) Trees: *Salix sp.*, *Populus sp.*, *Ulmus sp.*, d) Dunes and sandy shores plants: *Agropyrum sp.*, *Ammophila sp.*, *Cakile maritima*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Phalacrocorax aristotelis* (V), *P. pygmaeus* (E, W), *Pelecanus onocrotalus* (E, M), *P. crispus* (E, W), *Egretta alba* (E, W), *Ardea purpurea* (V, M, N), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Platalea leucorodia* (E, M, W), *Phoenicopiterus ruber* (R, W), *Tadorna ferruginea* (E, W), *T. tadorna* (V, W, N), *Aythya nyroca* (V, W), *Milvus migrans* (E, M), *Haliaeetus albicilla* (E, W), *Gyps fulvus* (V), *Aegypius monachus* (E), *Circus aeruginosus* (V, N, W), *C. pygargus* (E, M), *Buteo rufinus* (R, M), *Aquila pomarina* (V, M), *A. clanga* (E, W), *A. heliaca* (E), *A. chrysaetos* (V, P), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, P), *Falco naumanni* (V, M, N), *Himantopus himantopus* (V, M, N), *Recurvirostra avosetta* (V, N, W), *Burhinus oedicephalus* (V, M, N), *Glareola pratincola* (V, M, N), *Numenius tenuirostris* (E, M), *Larus melanocephalus* (V, M, W), *L. genei* (E, W), *Gelochelidon nilotica* (E, M, N), *Chlidonias hybridus* (V, M), *C. niger* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Irrigation water (3), Fishing (1), Fodder (2), Game support (2), Scientific (2), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Fishing (1), Aquaculture (1), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Industrial wastewater

(1), Industrial solid wastes (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Construction or expansion of road network (1), Establishment of new housing facilities or expansion of old ones (1), Overpumping of ground water (2), Irrigation schemes (2), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with ACHELOOS DELTA, AITOLIKO LAGOON, MESOLONGI LAGOON, and KLISOVA LAGOON), Special Protection Area (79/409/EEC), Ministerial Decision for the delineation of protected areas, Establishment of housing control zones (ZOE), Game refuge, Prohibition of grazing, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies

Principal bibliography used: Daniilidis (1991), Grimmet and Jones (1989), Pergantis (1988)

ACHELOOS RIVER OR ASPROPOTAMOS RIVER

Wetland Code: 230212000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230), Ipeiros (GR210), Thessalia (GR140)

Prefecture(s): Aitolokarnania (GR231), Arta (GR211), Karditsa (GR141), Trikala (GR144)

Location: Rises in the S. Pindos mountain range, flows S and SW and discharges into the Ionian Sea.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1700

Area (ha): -

Length (km): 213

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, b) Emergents: *Phragmites australis*, *Typha domingensis*, *Alisma plantago-aquatica*, *Veronica anagalis-aquatica*, c) Trees: *Platanus orientalis*

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Fodder (2), Game support (1), Hydroelectric power potential (3), Sand extraction potential (2), Scientific (2), Cultural (3), Recreational (2), Educational (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (1), Grazing (2), Hunting (1), Hydroelectricity production (3), Sand extraction (2), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (2), Diversion of water courses (2), Construction or expansion of road network (2), Dams or other installations for retention and storage of water (3), Irrigation schemes (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands

catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Acheloos Valley, Studies on geology-hydrogeology-geophysics, Ecological studies, Public awareness programs

Principal bibliography used: Vasilakis and Bousbouras (1991)

EVINOS RIVER OR FIDARIS RIVER

Wetland Code: 231213000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitoloakarnania (GR231)

Location: Rises in the Vardousia mountain, flows SW and discharges into the Patraikos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 1400

Area (ha): -

Length (km): 92

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Zostera sp.*, b) Emergents: *Phragmites australis*, c) Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*, *Ulmus sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Fodder (1), Game support (1), Sand extraction potential (2), Scientific (2), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (1), Grazing (1), Hunting (2), Sand extraction (2), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (3), Industrial wastewater (1), Agricultural point source pollution (1)

Other anthropogenic activities: Non-sustainable sand extraction (2), Land filling (1), Dams or other installations for retention and storage of water (3), Irrigation schemes (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Vasilakis and Bousbouras (1992)

AMVRAKIA LAKE

Wetland Code: 231214000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°11'39" Latitude: 38°45'04"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 4 km S of the Stamos village.

Altitude above sea level (m): 16

Area (ha): 1450

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: Aquatic bed plants: *Najas marina*, *Myriophyllum spicatum*, *Potamogeton nodosum*

Fauna: a) Fish: *Phoxinellus pleurobipunctatus* (+), *Economidichthys trichonis* (+), b) Birds: *Anser anser* (E, W), *Aquila chrysaetos* (V), *Hieraaetus fasciatus* (V), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Game support (2), Scientific (2), Recreational (1), Educational (1)

Significant present uses: Irrigation water supply (3), Fishing (3), Grazing (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (2), Land filling (2), Overpumping of ground water (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (1)

Present legal protection status: Prohibition of new pumping installations

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Studies on geology-hydrogeology-geophysics, Ecological studies, Public awareness programs

Principal bibliography used: Economidis P. (1991), Spartinou (1992)

STRATOS RESERVOIR

Wetland Code: 231215000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°22'53" Latitude: 38°46'28"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolioakarnania (GR231)

Location: 1 km E of the Stratos village.

Altitude above sea level (m): 45

Area (ha): 1100

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Platanus orientalis*, *Salix sp.*

Fauna: a) Fish: *Scardinius acarnanicus* (+), *Phoxinellus pleurobipunctatus* (+), *Tropidophoxinellus hellenicus* (+), *Silurus aristotelis* (+), *Economidichthys pygmaeus* (+), *E. trichonis* (+), b) Birds: *Phalacrocorax pygmaeus* (E, W), *Egretta alba* (E, W), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felix silvestris* (E)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Fodder (1), Game support (2), Hydroelectric power potential (3), Scientific (3), Recreational (2), Educational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (1), Grazing (1), Hydroelectricity production (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Irrigation schemes (1), Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Public awareness programs

Principal bibliography used:

OZEROS LAKE

Wetland Code: 231216000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°13'46" Latitude: 38°40'09"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 2 km S of the Kouvaras village.

Altitude above sea level (m): 23

Area (ha): 1100

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Najas marina*, *Ceratophyllum demersum*, *Myriophyllum spicatum*, b) Emergents: *Phragmites australis*, *Typha domingensis*, *Alisma plantago-aquatica*, c) Trees: *Platanus orientalis*, *Salix sp.*

Fauna: a) Fish: *Phoxinellus pleurobipunctatus* (+), *Tropidophoxinellus hellenicus* (+), *Economidichthys pygmaeus* (+), *E. trichonis* (+), b) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V) *Felix silvestris* (E)

Most significant present values: Irrigation water (2), Fishing (3), Game support (1), Scientific (2), Recreational (1), Educational (1)

Significant present uses: Irrigation water supply (1), Fishing (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Industrial solid wastes (1), Agricultural point source pollution (2), Industrial wastewater (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Overpumping of ground water (2), Irrigation schemes (1), Overfishing (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used: Economidis P. (1991)

TRICHONIDA LAKE

Wetland Code: 231217000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°33'40" Latitude: 38°35'20"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: N of the Trichonio village.

Altitude above sea level (m): 15

Area (ha): 9700

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Potamogeton sp.*, *Najas sp.*, *Nymphaea alba*, *Veronica anagalis-aquatica*, *Vallisneria spiralis*, b) Emergents: *Phragmites australis*, *Typha domingensis*, *Alisma plantago-aquatica*, c) Trees: *Platanus orientalis*, *Salix alba*

Fauna: a) Fish: *Phoxinellus pleurobipunctatus* (+), *Tropidophoxinellus hellenicus* (+), *Silurus aristotelis* (+), *Economidichthys pygmaeus* (+), *Economidichthys trichonis* (+), b) Birds: *Egretta alba* (E, W), *Circus aeruginosus* (V, M), *Aquila chrysaetos* (V), *Hieraaetus fasciatus* (V), *Falco naumanni* (V, M), *Acrocephalus melanopogon* (R, W), *Ficedula semitorquata* (R, M). c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felix silvestris* (E), *Capreolus capreolus* (V)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (3), Fodder (1), Game support (3), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (3), Aquaculture (1), Grazing (1), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (2), Industrial solid wastes (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (1), Establishment of new housing facilities or expansion of old ones (1), Overfishing (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies, Public awareness programs

Principal bibliography used: Economidis P. (1991), Tafas (1991)

LYSIMACHIA LAKE

Wetland Code: 231218000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°22'11" Latitude: 38°35'28"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 0.5 km S of the Lefka village.

Altitude above sea level (m): 14

Area (ha): 1300

Length (km): -

Wetland Type: Inland lowland freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Myriophyllum spicatum*, *Potamogeton sp.*, *Nymphaea alba*,
b) Emergents: *Phragmites australis*, *Typha domingensis*, *Scirpus lacustris*, *Alisma plantago-aquatica*, *Mentha aquatica*, c) Trees: *Platanus orientalis*, *Populus alba*, *Salix sp.*

Fauna: a) Fish: *Phoxinellus pleurobipunctatus* (+), *Tropidophoxinellus hellenicus* (+), *Silurus aristotelis* (+), *Economidichthys pygmaeus* (+), *Economidichthys trichonis* (+),
b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, M, W), *Falco naumanni* (V, M), *Chlidonias niger* (V, M), *Acrocephalus melanopogon* (R, W), *Ficedula semitorquata* (R, M), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felix silvestris* (E), *Capreolus capreolus* (V)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (3), Game support (3), Scientific (3), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Fishing (3), Grazing (3), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (1), Industrial wastewater (2), Industrial solid wastes (1), Agricultural point source pollution (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Overpumping of ground water (3), Establishment or expansion of cultivated fields (3), Overfishing (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies, Establishment of wastewater treatment facilities

Principal bibliography used: Economidis P. (1991)

ROUGA LAKE

Wetland Code: 231219000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 20°58'49" Latitude: 38°56'26"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitoloakarnania (GR231)

Location: 3 km E of the Paliampela village.

Altitude above sea level (m): 0, 5

Area (ha): 25

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Most significant present values: Fishing (1), Scientific (1), Recreational (2), Educational (1)

Significant present uses: Fishing (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LOUTRAKI MARSH

Wetland Code: 231220000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°06'10" Latitude: 38°51'17"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Aitolokarnania (GR231)

Location: 3 km SE of the Loutraki village.

Altitude above sea level (m): 100

Area (ha): 80

Length (km): -

Wetland Type: Inland permanently flooded freshwater marsh (S)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Fauna: Birds: *Ardea purpurea* (V, M), *Circus aeruginosus* (V, W), *Aquila chrysaetos* (V), *Hieraaetus fasciatus* (V), *Acrocephalus melanopogon* (R, W)

Most significant present values: Irrigation water (1), Game support (1), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (1), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (1), Overpumping of ground water (2), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

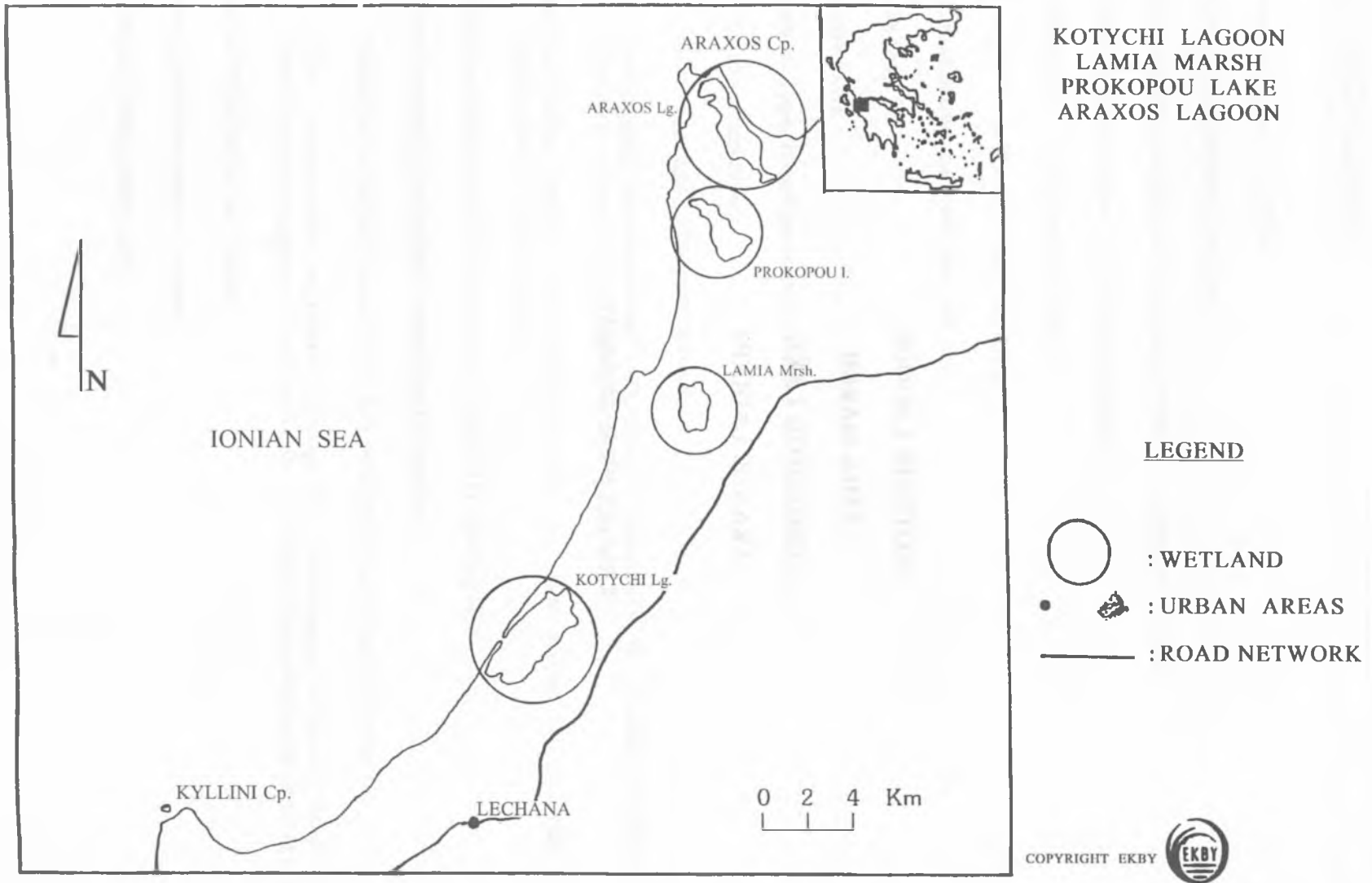
KOTYCHI LAGOON

LAMIA MARSH

PROKOPOU LAKE

ARAXOS LAGOON

RAMSAR WETLAND SITE



KOTYCHI LAGOON OR NEVYTHOS LAGOON

Wetland Code: 233221000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°18'37" Latitude: 38°00'27"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233)

Location: 2 km NW of the Kourtesio village.

Altitude above sea level (m): 0

Area (ha): 700

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Salicornia sp.*, *Arthrocnemum fruticosum*, *Halocnemum sp.*, *Juncus sp.*, *Phragmites australis*, *Scirpus maritimus*, b) Dunes and sandy shores plants: *Ammophila sp.*, *Medicago marina*, *Pancratium maritimum*, *Euphorbia paralias*

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Phoenicopterus ruber* (R, W), *Anser anser* (E, W), *Netta rufina* (R, W), *Circus aeruginosus* (V, N, M), *Himantopus himantopus* (V, M, N), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias niger* (V, M), *Acrocephalus melanopogon* (R, W), c) Mammals: *Pipistrellus pipistrellus* (E), *Meles meles* (V)

Most significant present values: Fishing (2), Fodder (1), Scientific (2), Cultural (2), Recreational (3), Educational (3)

Significant present uses: Fishing (2), Aquaculture (2), Grazing (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Industrial wastewater (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with LAMIA MARSH, PROKOPOU LAKE, and ARAXOS LAGOON), Special Protection Area (79/409/EEC), Ministerial Decision for the delineation of protected areas, Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Korovetsi et al. (1986), Papamichos (1986), Pergantis (1988)

LAMIA MARSH

Wetland Code: 232222000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°22'00" Latitude: 38°05'00"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: 0.5 km NW of the Vouprasio village.

Altitude above sea level (m): 0, 5

Area (ha): 400

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *Salicornia procubens*, *Arthrocnemum macrostachyum*, *Limonium* sp., *Juncus acutus*, *Hordeum maritimum*, *Puccinellia festuciformis*, *Plantago crassifolia*, *Inula crithmoides*, *Phragmites australis*, *Scirpus maritimus*, b) Scrubs and shrubs: *Tamarix hampeana*, *Vitex agnus-castus*, *Myrtus communis*, c) Trees: *Fraxinus angustifolia*, *Ulmus minor*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Medicago marina*, *Pancratium maritimum*, *Euphorbia paralias*

Fauna: a) Reptiles: *Caretta caretta* (E), *Algyroides moreoticus* (+), *Podarcis peloponnesiaca* (+), b) Birds: *Circus aeruginosus* (V, N, M), *Coracias garrulus* (V, M), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Fodder (1), Game support (2), Scientific (2), Recreational (1), Educational (2)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Agricultural point source pollution (2)

Other anthropogenic activities: Land filling (1), Construction or expansion of road network (2), Irrigation schemes (1), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with KOTYCHI LAGOON, PROKOPOU LAKE, and ARAXOS LAGOON)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Georgiadis et al. (1990), Grimmet and Jones (1989), Papamichos (1986), Pergantis (1988)

PROKOPOU LAKE

Wetland Code: 232223000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°24'21" Latitude: 38°07'22"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: 2 km NW of the Metochi village.

Altitude above sea level (m): 0

Area (ha): 1750

Length (km): -

Wetland Type: Coastal permanently flooded freshwater lake (K)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Salicornia europaea*, *Salicornia procubens*, *Arthrocnemum macrostachyum*, *Limonium* sp., *Juncus acutus*, *Hordeum maritimum*, *Puccinellia festuciformis*, *Plantago crassifolia*, *Inula crithmoides*, *Phragmites australis*, *Scirpus maritimus*, b) Scrubs and shrubs: *Tamarix hampeana*, *Vitex agnus-castus*, *Myrtus communis*, c) Trees: *Fraxinus angustifolia*, *Ulmus minor*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Medicago marina*, *Pancratium maritimum*, *Euphorbia paralias*

Fauna: a) Reptiles: *Caretta caretta* (E), *Algyroides moreoticus* (+), *Podarcis peloponnesiaca* (+), b) Birds: *Phoenicopiterus ruber* (R, W), *Circus aeruginosus* (V, N, M), *Larus melanocephalus* (V, M), *Coracias garrulus* (V, M), *Ficedula semitorquata* (R, M), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Fishing (1), Fodder (3), Game support (2), Logging (2), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (1), Grazing (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of livestock facilities (3), Illegal or non-sustainable hunting (3), Illegal logging (2)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with KOTYCHI LAGOON, LAMIA MARSH, and ARAXOS LAGOON), Prohibition of hunting, Prohibition of logging, Prohibition of land clearing

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies, Public awareness programs

Principal bibliography used: Georgiadis et al. (1990), Grimmet and Jones (1989), Papamichos (1986), Pergantis (1988)

ARAXOS LAGOON OR PAPP LAGOON OR KALOGRIA LAGOON

Wetland Code: 232224000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°24'00" Latitude: 38°12'00"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: 0.5 km NW of the Araxos village.

Altitude above sea level (m): 0

Area (ha): 300

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Fauna: a) Reptiles: *Algyroides moreoticus* (+), b) Birds: *Hydrobates pelagicus* (R, M), *Egretta alba* (E, W), *Circus aeruginosus* (V, M, W), *Larus genei* (E, W), c) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Fishing (1), Game support (2), Scientific (2), Cultural (1), Recreational (2), Educational (2)

Significant present uses: Fishing (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (1), Illegal or non-sustainable hunting (3)

Present legal protection status: Wetland of international importance in accordance with the Ramsar Convention (registered jointly with KOTYCHI LAGOON, LAMIA MARSH, and PROKOPOU LAKE), Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Delineation and management studies, Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Korovetsi et al. (1986), Pergantis (1988)

VOURAIKOS RIVER

Wetland Code: 232225000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: Rises in the Erymanthos mountain, flows N, NE and discharges into the Korinthiakos gulf, 1 km W of the Kalavryta village.

Altitude above sea level (m): *Min.:* 0 *Max.:* 900

Area (ha): -

Length (km): 50

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Irrigation water (2), Fishing (1), Game support (2), Recreational (3), Educational (2)

Significant present uses: Irrigation water supply (3), Fishing (1), Hunting (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Industrial wastewater (2)

Other anthropogenic activities: Land filling (1), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Vouraikos Gorge

Principal bibliography used:

SELINOUNTAS RIVER

Wetland Code: 232226000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: Rises in the Erymanthos mountain, flows N, NE and discharges into the Korinthiakos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 900

Area (ha): -

Length (km): 55

Wetland Type: Intermittent river (N)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Irrigation water (3), Fodder (1), Game support (1), Recreational (1)

Significant present uses: Irrigation water supply (3), Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Industrial wastewater (1)

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Selinountas Gorge

Principal bibliography used:

AIGIO LAGOON

Wetland Code: 232227000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°06'25" Latitude: 38°15'29"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: 2 km NE of the Aigio town.

Altitude above sea level (m): 0, 3

Area (ha): 25

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum fruticosum*, *Juncus acutus*, *Phragmites australis*, *Scirpus maritimus*, b) Dunes and sandy shores plants: *Agropyrum junceum*

Fauna: a) Reptiles: *Podarcis peloponnesiaca* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Circus aeruginosus* (V, M, W), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M), *L. genei* (E, W), *Chlidonias hybridus* (V, M), *C. niger* (V, M), c) Mammals: *Pipistrellus pipistrellus* (E)

Most significant present values: Game support (3), Scientific (2), Recreational (2), Educational (3)

Significant present uses: Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (3), Industrial wastewater (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status: Establishment of housing control zones (ZOE), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989)

GLAFKOS RIVER

Wetland Code: 232228000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: Rises in the Panachaikon mountain, flows NW and discharges into the Patraikos gulf, 2 km SW of the Patra city.

Altitude above sea level (m): *Min.:* 0 *Max.:* 900

Area (ha): -

Length (km): 25

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Hydroelectric power potential (3), Sand extraction potential (1), Recreational (3)

Significant present uses: Drinking water supply (2), Irrigation water supply (3), Hydroelectricity production (3), Sand extraction (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Industrial wastewater (1)

Other anthropogenic activities: Non-sustainable sand extraction (1), Diversion of water courses (2), Overpumping of ground water (2), Irrigation schemes (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PIROS RIVER

Wetland Code: 232229000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: Rises in the Erymanthos mountain, flows W, NW and discharges into the Patraikos gulf.

Altitude above sea level (m): Min.: 0 Max.: 700

Area (ha): -

Length (km): 60

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Salix sp.*

Most significant present values: Irrigation water (3), Fodder (2), Game support (1), Sand extraction potential (2), Recreational (1)

Significant present uses: Irrigation water supply (3), Grazing (2), Hunting (1), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (2)

Other anthropogenic activities: Non-sustainable sand extraction (3), Diversion of water courses (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Land planning studies

Principal bibliography used:

PIROS ESTUARY

Wetland Code: 232230000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°35'21" Latitude: 38°09'14"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: 1.5 km NE of the Kato Achaia town.

Altitude above sea level (m): 0

Area (ha): 27.5

Length (km): -

Wetland Type: Estuary (F)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Arundo plinii*, b) Scrubs and shrubs: *Tamarix sp.*

Most significant present values: Game support (1), Recreational (1)

Significant present uses: Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (1)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Land planning studies

Principal bibliography used:

AGYIA MARSH

Wetland Code: 232231000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°45'32" Latitude: 38°16'52"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Achaia (GR232)

Location: 3 km NE of the Patra city.

Altitude above sea level (m): 0

Area (ha): 4.5

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites* sp., *Arundo* sp., *Typha* sp., b) Scrubs and shrubs: *Tamarix* sp.

Fauna: a) Birds: *Circus aeruginosus* (V, M), b) Mammals: *Pipistrellus kuhli* (V), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Game support (2), Recreational (2)

Significant present uses: Hunting (1), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Public awareness programs

Principal bibliography used:

KAIAFA LAKE

Wetland Code: 233233000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°37'30" Latitude: 37°30'58"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233)

Location: 0.2 km N of the Kaiafa village.

Altitude above sea level (m): 0

Area (ha): 70

Length (km): -

Wetland Type: Coastal freshwater lake (K)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ruppia maritima*, b) Emergents: *Phragmites australis*, *Typha sp.*, *Sparganium sp.*, c) Dunes and sandy shores plants: *Agropyrum junceum*, *Ammophila arenaria*, *Pancreatium maritimum*

Fauna: a) Reptiles: *Caretta caretta* (E), *Algyroides moreoticus* (+), *Podarcis peloponnesiaca* (+), b) Birds: *Circus aeruginosus* (V, M), c) Mammals: *Pipistrellus kuhli* (V), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Fishing (2), Game support (3), Scientific (2), Cultural (3), Recreational (3), Educational (1)

Significant present uses: Fishing (2), Aquaculture (1), Hunting (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Sewage from tourist facilities (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (1), Land filling (3), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used:

NOTIODYTIKI AGOULINITSA MARSH

Wetland Code: 233234000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°33'19" Latitude: 37°34'21"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233)

Location: 1 km SW of the Agridio village.

Altitude above sea level (m): 0

Area (ha): 50

Length (km): -

Wetland Type: Coastal permanently flooded freshwater marsh (S)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Typha sp.*

Most significant present values: Game support (2), Scientific (1), Recreational (1), Educational (2)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Drainage (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

NEDAS RIVER

Wetland Code: 200235000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230), Peloponnisos (GR250)

Prefecture(s): Ileia (GR233), Messinia (GR255)

Location: Rises in the Lykaion mountain, flows W and discharges into the Kyparissiakos gulf (Ionean Sea).

Altitude above sea level (m): *Min.:* 0 *Max.:* 700

Area (ha): -

Length (km): 30

Wetland Type: Intermittent river (N)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*

Fauna: Mammals: *Meles meles* (V)

Most significant present values: Irrigation water (2), Game support (2), Recreational (1)

Significant present uses: Irrigation water supply (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1)

Other anthropogenic activities: Dams or other installations for retention and storage of water (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

NEDAS ESTUARY

Wetland Code: 200236000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°42'10" Latitude: 37°23'23"

Administrative Region: Dytiki Ellada (GR230), Peloponnisos (GR250)

Prefecture(s): Ileia (GR233), Messinia (GR255)

Location: 1 km W of the Elaia village, Prefecture of Messinia.

Altitude above sea level (m): 0

Area (ha): 4.5

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Trees: *Salix sp.*

Most significant present values: Fodder (1), Game support (1), Recreational (1)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (1)

Other anthropogenic activities: Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ALFIOS RIVER

Wetland Code: 200237000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230), Peloponnisos (GR250)

Prefecture(s): Ileia (GR233), Arkadia (GR252)

Location: Rises in the Mainalon mountain, flows W, NW and discharges into the Kyparissiakos gulf (Ionean Sea).

Altitude above sea level (m): *Min.:* 0 *Max.:* 800

Area (ha): -

Length (km): 120

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Scrubs and shrubs: *Vitex agnus-castus*, *Nerium oleander*, b) Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Irrigation water (3), Game support (2), Sand extraction potential (2), Scientific (2), Cultural (3), Recreational (2)

Significant present uses: Irrigation water supply (3), Hunting (3), Sand extraction (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2)

Other anthropogenic activities: Non-sustainable sand extraction (3), Dams or other installations for retention and storage of water (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

ALFIOS ESTUARY

Wetland Code: 233238000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°28'05" Latitude: 37°37'09"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233)

Location: 1 km S of the Mouzeli village.

Altitude above sea level (m): 0

Area (ha): 65

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Phragmites australis*, *Typha sp.*, b) Trees: *Fraxinus angustifolia*, c) Dunes and sandy shores plants: *Ammophila sp.*, *Agropyrum junceum*

Most significant present values: Irrigation water (3), Fishing (1), Fodder (1), Game support (2), Scientific (3), Cultural (1), Recreational (1)

Significant present uses: Irrigation water supply (3), Fishing (1), Grazing (1), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (2), Industrial solid wastes (1), Agricultural point source pollution (1)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE)

Most significant positive actions: Land planning studies, Ecological studies

Principal bibliography used: Pergantis (1988)

ERYMANTHOS RIVER

Wetland Code: 230239000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233), Achaia (GR232)

Location: Rises in the Erymanthos mountain, flows S, meets the Alfios river, 1 km E of the Achladini village, Prefecture of Ileia.

Altitude above sea level (m): *Min.:* 80 *Max.:* 750

Area (ha): -

Length (km): 85

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Irrigation water (2), Fishing (1), Fodder (1), Game support (2), Recreational (1)

Significant present uses: Irrigation water supply (1), Fishing (1), Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Agricultural point source pollution (2)

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PINIOS RIVER**Wetland Code:** 233240000**Part(s) of the wetland complex:** -**Geographical Coordinates:** -**Administrative Region:** Dytiki Ellada (GR230)**Prefecture(s):** Ileia (GR233)**Location:** Rises in the Erymanthos mountain, flows W and discharges into the Ionean Sea, 0.4 km N of the Akropotamia village.**Altitude above sea level (m):** Min.: 0 Max.: 1000**Area (ha):** -**Length (km):** 65**Wetland Type:** Permanent river (M)***Biotic characteristics:****Flora:** Trees: *Salix sp.*, *Platanus orientalis*, *Ulmus sp.***Fauna:** a) Fish: *Tropidophoxinellus hellenicus* (+), b) Reptiles: *Podarcis peloponnesiaca* (+), c) Birds: *Hieraaetus pennatus* (V, M), *Himantopus himantopus* (V, M), *Ficedula semitorquata* (R, M), d) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V)**Most significant present values:** Irrigation water (3), Fodder (1), Game support (1), Logging (2), Hydroelectric power potential (2), Sand extraction potential (2), Scientific (2), Cultural (1), Recreational (2)**Significant present uses:** Irrigation water supply (3), Grazing (1), Hunting (1), Hydroelectricity production (2), Sand extraction (2)**Factors changing the wetland's ecological character:****Pollution:** Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (2), Industrial solid wastes (1), Agricultural point source pollution (2), Non-point source agricultural pollution (3)**Other anthropogenic activities:** Non-sustainable sand extraction (2), Establishment of new housing facilities or expansion of old ones (1), Overpumping of ground water (2), Dams or other installations for retention and storage of water (3), Irrigation schemes (3), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Economidis P. (1991)

PINIOS ESTUARY

Wetland Code: 233241000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°14'45" Latitude: 37°49'04"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233)

Location: 0.4 km W of the Akropotamia village.

Altitude above sea level (m): 0

Area (ha): 40

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Typha sp.*, b) Trees: *Salix alba*

Most significant present values: Fodder (1), Game support (1), Recreational (1)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Industrial wastewater (3), Agricultural point source pollution (3)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PINIOS RESERVOIR

Wetland Code: 233242000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°29'50" Latitude: 37°54'25"

Administrative Region: Dytiki Ellada (GR230)

Prefecture(s): Ileia (GR233)

Location: 0.3 km N of the Avgi village.

Altitude above sea level (m): 100

Area (ha): 1950

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Typha sp.*, b) Scrubs and shrubs: *Vitex agnus-castus*

Fauna: a) Fish: *Tropidophoxinellus hellenicus* (+), b) Reptiles: *Podarcis peloponnesiaca* (+), c) Birds: *Tadorna tadorna* (V, N), *Hieraaetus pennatus* (V, M), *Himantopus himantopus* (V, M), *Ficedula semitorquata* (R, M), d) Mammals: *Pipistrellus pipistrellus* (E), *Canis aureus* (V), *Meles meles* (V)

Most significant present values: Irrigation water (3), Fishing (1), Game support (2), Recreational (2)

Significant present uses: Irrigation water supply (3), Fishing (1), Hunting (2), Sports (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial solid wastes (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Overpumping of ground water (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

KREMASTON RESERVOIR

Wetland Code: 200243000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°32'10" Latitude: 38°54'32"

Administrative Region: Sterea Ellada (GR240), Dytiki Ellada (GR230)

Prefecture(s): Evrytania (GR243), Aitoloakarnania (GR231)

Location: Between the Episkopi village of the Prefecture of Evrytania and the Kremasta, Sykia, and Charavgi villages of the Prefecture of Aitoloakarnania.

Altitude above sea level (m): 282

Area (ha): 8700

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Fauna: a) Birds: *Aquila chrysaetos* (V, P), *Neophron percnopterus* (V, M), *Gyps fulvus* (V, P), b) Mammals: *Pipistrellus pipistrellus* (E), *Canis lupus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felis silvestris* (E)

Most significant present values: Irrigation water (1), Fishing (1), Hydroelectric power potential (3), Recreational (1)

Significant present uses: Irrigation water supply (1), Fishing (1), Hydroelectricity production (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

AGRAFIOTIS RIVER

Wetland Code: 243244000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evrytania (GR243)

Location: Rises in the S. Pindos mountain range, flows S and discharges into the Kremaston Reservoir, 1 km E of the Epiniana village.

Altitude above sea level (m): *Min.:* 315 *Max.:* 850

Area (ha): -

Length (km): 30

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Fauna: a) Birds: *Aquila chrysaetos* (V, P), *Neophron percnopterus* (V, M), *Gyps fulvus* (V, P), b) Mammals: *Pipistrellus pipistrellus* (E), *Canis lupus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felis silvestris* (E)

Most significant present values: Irrigation water (1), Fishing (2), Hydroelectric power potential (3), Recreational (1)

Significant present uses: Irrigation water supply (1), Hydroelectricity production (3), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2)

Other anthropogenic activities: Dams or other installations for retention and storage of water (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

TAVROPOS RIVER OR MEGDOVAS RIVER

Wetland Code: 240245000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240), Thessalia (GR140)

Prefecture(s): Evrytania (GR243), Karditsa (GR141)

Location: Rises in the S. Pindos mountain range, flows S, SW and discharges into the Kremaston Reservoir.

Altitude above sea level (m): *Min.:* 300 *Max.:* 600

Area (ha): -

Length (km): 45

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Fauna: a) Birds: *Aquila chrysaetos* (V, P), *Neophron percnopterus* (V, M), *Gyps fulvus* (V, P), b) Mammals: *Pipistrellus pipistrellus* (E), *Canis lupus* (V), *Meles meles* (V), *Lutra lutra* (V), *Felis silvestris* (E)

Most significant present values: Drinking water (3), Irrigation water (3), Fodder (1), Hydroelectric power potential (3), Recreational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Grazing (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1)

Other anthropogenic activities: Dams or other installations for retention and storage of water (3), Irrigation schemes (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

SOUVALA LAGOON OR SVALA LAGOON

Wetland Code: 244246000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°50'21" Latitude: 38°54'06"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 1 km S of the Paralia village, Pelasgia district.

Altitude above sea level (m): 0

Area (ha): 7

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Salicornia* sp., *Arthrocnemum* sp., *Phragmites australis*

Most significant present values: Game support (2), Recreational (1), Educational (2)

Significant present uses: Aquaculture (2), Hunting (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Public awareness programs

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

ALMYROPOTAMOS ESTUARY

Wetland Code: 244247000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°49'33" Latitude: 38°53'36"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 0.5 km W of the Achladio village.

Altitude above sea level (m): 0

Area (ha): 4.5

Length (km): -

Wetland Type: Estuary (F)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Salicornia sp.*, *Arthrocnemum sp.*, *Phragmites australis*

Most significant present values: Fishing (1), Game support (1), Recreational (3), Educational (2)

Significant present uses: Fishing (1), Aquaculture (2), Hunting (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Industrial solid wastes (1), Agricultural point source pollution (1)

Other anthropogenic activities: Construction or expansion of road network (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

AGIA PARASKEVI SPRINGS

Wetland Code: 244248000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°28'32" Latitude: 38°52'13"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 0.2 km W of the Katanti Settlement.

Altitude above sea level (m): 0

Area (ha): 2.5

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Typha sp.*

Fauna: Fish: *Pungitius hellenicus* (+, E)

Most significant present values: Drinking water (3), Scientific (3), Cultural (1), Recreational (2), Educational (3)

Significant present uses: Drinking water supply (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (3), Industrial solid wastes (2), Agricultural point source pollution (1)

Other anthropogenic activities: Overpumping of ground water (3)

Present legal protection status:

Most significant positive actions: Ecological studies, Public awareness programs

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

SPERCHIOS DELTA

Wetland Code: 244249000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°33'45" Latitude: 38°51'15"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 4 km E of the Anthili village.

Altitude above sea level (m): 0

Area (ha): 3030

Length (km): -

Wetland Type: Coastal delta (F)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Polygonum sp.*, *Ranunculus sp.*, *Vallisneria sp.* b) Emergents: *Arthrocnemum glaucum*, *Salicornia fruticosa*, *Juncus sp.*, *Phragmites australis*, c) Scrubs and shrubs: *Tamarix sp.*, *Vitex agnus-castus*, d) Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*

Fauna: a) Fish: *Barbus cyclolepis sperchensis* (+), *Alburnoides bipunctatus thessalicus* (+), b) Birds: *Egretta alba* (E, W), *Tadorna tadorna* (V), *Circus aeruginosus* (V, M), *Recurvirostra avosetta* (V, W), *Larus genei* (E)

Most significant present values: Irrigation water (3), Fishing (2), Fodder (2), Game support (2), Scientific (3), Cultural (3), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Fishing (2), Grazing (2), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Industrial wastewater (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Diversion of water courses (3), Overpumping of ground water (3), Irrigation schemes (3), Establishment or expansion of cultivated fields (3), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge (part of the wetland), Prohibition of grazing (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Establishment of wastewater treatment facilities, Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Kalofotias and Papadopoulou (1992a), Kilikidis et al. (1992a)

SKARFIA MARSH

Wetland Code: 244250000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°42'03" Latitude: 38°50'34"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 2.5 km N of the Skarfia village.

Altitude above sea level (m): 0

Area (ha): 90

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Arthrocnemum fruticosum*

Most significant present values: Game support (3), Recreational (2), Educational (2)

Significant present uses: Aquaculture (1), Hunting (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (1), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

VROMOLIMNI LAGOON OR ASPRONERI KAMMENON VOURLON LAGOON
--

Wetland Code: 244251000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°49'37" Latitude: 38°12'00"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 1.2 km E of the Kammena Vourla village.

Altitude above sea level (m): 0

Area (ha): 4.5

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values: Scientific (1), Recreational (3), Educational (1)

Significant present uses: Hunting (1), Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

SPERCHIOS RIVER

Wetland Code: 244253000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: Rises in Tymfristos mountain, flows E and discharges into the Maliakos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 2327

Area (ha): -

Length (km): 83

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*

Fauna: Fish: *Barbus cyclolepis sperchensis* (+), *Alburnoides bipunctatus thessalicus* (+)

Most significant present values: Irrigation water (3), Game support (2), Scientific (2), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Dams or other installations for retention and storage of water (2), Irrigation schemes (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used: Economidis P. (1991), Kalofotias and Papadopoulou (1992a)

ATALANTI LAGOON OR POTOKI LAGOON OR VOURLIA LAGOON

Wetland Code: 244254000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°04'45" Latitude: 38°39'17"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fthiotida (GR244)

Location: 1 km E of the Kyparissi village.

Altitude above sea level (m): 0

Area (ha): 450

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Arthrocnemum fruticosum*, *Juncus sp.*, *Phragmites australis*

Most significant present values: Fishing (3), Game support (2), Scientific (2), Recreational (2), Educational (3)

Significant present uses: Fishing (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (2), Sewage from tourist facilities (2)

Other anthropogenic activities: Land filling (2), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Game refuge, Prohibition of fishing (during reproduction period)

Most significant positive actions: Ecological studies

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

GOUVES - SKEPETARI MARSH OR GOUVES - SKEPETARA MARSH

Wetland Code: 245255000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°00'00" Latitude: 38°24'00"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fokida (GR245)

Location: 1.2 km W of the Monastiraki village.

Altitude above sea level (m): 0

Area (ha): 100

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Most significant present values: Fodder (1), Game support (2), Recreational (1)

Significant present uses: Grazing (1), Hunting (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (1)

Other anthropogenic activities: Land filling (2), Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

MORNOS RIVER

Wetland Code: 200256000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240), Dytiki Ellada (GR230)

Prefecture(s): Fokida (GR245), Aitolokarnania (GR231)

Location: Rises in Giona mountain, flows SW and discharges into the Korinthiakos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 700

Area (ha): -

Length (km): 60

Wetland Type: Permanent river (M)*

Biotic characteristics:

Most significant present values: Drinking water (3), Irrigation water (1), Fishing (1), Fodder (1), Game support (1), Hydroelectric power potential (3), Sand extraction potential (2), Recreational (1), Educational (1)

Significant present uses: Drinking water supply (3), Irrigation water supply (1), Fishing (1), Grazing (1), Hunting (1), Hydroelectricity production (3), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Non-sustainable sand extraction (2), Diversion of water courses (2), Overpumping of ground water (3), Dams or other installations for retention and storage of water (3), Irrigation schemes (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

MORNOS ESTUARY

Wetland Code: 245258000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°51'57" Latitude: 38°23'06"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Fokida (GR245)

Location: 0.6 km SW of the Kalamata village.

Altitude above sea level (m): 0

Area (ha): 77.5

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Most significant present values: Irrigation water (1), Fishing (1), Fodder (1), Recreational (1), Educational (3)

Significant present uses: Irrigation water supply (1), Fishing (1), Grazing (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1), Agricultural point source pollution (1)

Other anthropogenic activities: Dams or other installations for retention and storage of water (2), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KIFISOS RIVER

Wetland Code: 240259000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Voiotia (GR241), Fthiotida (GR244), Fokida (GR245)

Location: Rises in the Giona mountain (Prefecture of Fokida), flows through the Prefectures of Fthiotida and Voiotia and through the settled riverbed discharges into the Yliki Lake.

Altitude above sea level (m): *Min.:* 80 *Max.:* 900

Area (ha): -

Length (km): 100

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Typha sp.*, b) Trees: *Platanus orientalis*

Most significant present values: Drinking water (3), Irrigation water (3), Educational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Diversion of water courses (2), Overpumping of ground water (2), Irrigation schemes (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

ASOPOS RIVER

Wetland Code: 240260000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240), Attiki (GR300)

Prefecture(s): Voiotia (GR241), Attiki (GR300)

Location: Rises in the Kitheronas mountain and discharges into the S Evvoikos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 700

Area (ha): -

Length (km): 60

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Ulmus minor*

Most significant present values: Irrigation water (2)

Significant present uses: Irrigation water supply (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (3), Non-point source agricultural pollution (3)

Other anthropogenic activities: Establishment of new industrial facilities or expansion of old ones (3)

Present legal protection status: Regulation on waste disposal

Most significant positive actions: Land planning studies

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

MAVRONERI SPRINGS

Wetland Code: 241261000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°48'49" Latitude: 38°31'38"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Voiotia (GR241)

Location: NE of the Mavroneri village.

Altitude above sea level (m): 100

Area (ha): 7.5

Length (km): -

Wetland Type: Spring (Y)*, Permanent river (M)

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*, *Ulmus sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Game support (2), Recreational (1), Educational (1)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Hunting (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Overpumping of ground water (3), Irrigation schemes (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KRYA LIVADIA SPRINGS

Wetland Code: 241262000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°49'11" Latitude: 38°25'20"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Voiotia (GR241)

Location: Within the Livadia town.

Altitude above sea level (m): 200

Area (ha): 5

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Recreational (3), Educational (2)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (2), Industrial solid wastes (2), Agricultural point source pollution (1)

Other anthropogenic activities: Land filling (1), Overpumping of ground water (3), Irrigation schemes (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

YLIKI LAKE

Wetland Code: 241263000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°16'52" Latitude: 38°24'41"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Voiotia (GR241)

Location: 3 km S of the Yliki village.

Altitude above sea level (m): 80

Area (ha): 1200

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Most significant present values: Drinking water (3)

Significant present uses: Drinking water supply (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Overpumping of ground water (2)

Present legal protection status: Health regulations

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

CHARITON SPRINGS

Wetland Code: 241264000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°58'27" Latitude: 38°31'27"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Voiotia (GR241)

Location: 1.2 km W of the Orchomenos town.

Altitude above sea level (m): 100

Area (ha): 15

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Populus sp.*, *Ulmus sp.*

Most significant present values: Irrigation water (2), Cultural (2), Educational (2)

Significant present uses: Irrigation water supply (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Overpumping of ground water (3), Irrigation schemes (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PARALIMNI LAKE

Wetland Code: 240267000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°21'41" Latitude: 38°27'49"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Voiotia (GR241), Evvoia (GR242)

Location: 3 km N, NW of the Mouriki and Platanakia villages.

Altitude above sea level (m): 80

Area (ha): 400

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (2), Game support (3), Recreational (1)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (2), Hunting (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Overpumping of ground water (3), Irrigation schemes (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Health regulations

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

LIVARI LAGOON OR MIKRO & MEGALO LIVARI LAGOON

Wetland Code: 242268000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°09'12" Latitude: 39°00'33"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: 6 km N, NW of the Istiaia town.

Altitude above sea level (m): 0

Area (ha): 100

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Salicornia* sp., *Phragmites australis*

Fauna: Birds: *Phalacrocorax aristotelis* (V), *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Anser anser* (E, W), *Netta rufina* (R, W), *Himantopus himantopus* (V, M), *Larus melanocephalus* (V, M), *L. genei* (E, M)

Most significant present values: Fishing (3), Fodder (2), Game support (2), Recreational (2), Educational (3)

Significant present uses: Aquaculture (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE), Prohibition of fishing, Prohibition of grazing, Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Grimmet and Jones (1989), Kalofotias and Papadopoulou (1992b)

NILEAS RIVER

Wetland Code: 242269000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: Rises in the Xiro mountain and meets the Kireas river E of the Kirinthos village. Both rivers together form the Voudoros river which discharges into the Peleki Bay at the Krya Vrysi.

Altitude above sea level (m): *Min.:* 20 *Max.:* 600

Area (ha): -

Length (km): 25

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*

Fauna: Mammals: *Lutra lutra* (V)

Most significant present values: Drinking water (1), Irrigation water (3), Fishing (3), Educational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Industrial wastewater (1), Industrial solid wastes (1)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

KIREAS RIVER

Wetland Code: 242270000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: Rises in the SE cliffs of the Kondilio mountain, 9 km S of the Prokopio village and meets the Nileas river E of the Kirinthos forming together the Voudoros river which discharges into the Peleki Bay at the Krya Vrysi.

Altitude above sea level (m): *Min.:* 20 *Max.:* 500

Area (ha): -

Length (km): 15

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*, *Populus nigra*

Fauna: a) Birds: *Aquila chrysaetos* (V, P), b) Mammals: *Meles meles* (V), *Lutra lutra* (V)

Most significant present values: Game support (3), Scientific (2), Recreational (3), Educational (3)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (2)

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions: Ecological studies, Studies for the restoration-rehabilitation of the wetland

Principal bibliography used: 25, Kalofotias and Papadopoulou (1992b)

VOUDOROS ESTUARY

Wetland Code: 242271000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°27'54" Latitude: 38°50'40"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: 4 km N of the Mantoudi village.

Altitude above sea level (m): 0

Area (ha): 30

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum fruticosum*, *Phragmites australis*, b) Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Game support (2), Cultural (2), Educational (3)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

PSACHNA MARSH OR LIVADI MARSH OR KOLOVRECHTIS MARSH
--

Wetland Code: 242274000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°37'18" Latitude: 38°34'15"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: At the boundaries of the town of Psachna, and the Kastella and Nea Artaki villages.

Altitude above sea level (m): 0

Area (ha): 80

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents

Most significant present values: Game support (2), Educational (2)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Industrial wastewater (1), Industrial solid wastes (1), Agricultural point source pollution (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3)

Present legal protection status: Establishment of housing control zones (ZOE), Prohibition of hunting, Prohibition of land clearing

Most significant positive actions:

Principal bibliography used: Kalofotias and Papadopoulou (1992b)

KALAMI MARSH

Wetland Code: 242277000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°00'36" Latitude: 38°24'44"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: 5 km W of the Aliveri town.

Altitude above sea level (m): 5

Area (ha): 0.8

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Fauna: Birds: *Plegadis falcinellus* (E, M), *Aythya nyroca* (V, W)

Most significant present values: Recreational (3), Educational (2)

Significant present uses: Tourism (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (2), Establishment of new tourist facilities or expansion of old ones (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ALIVERI MINE RESERVOIR

Wetland Code: 242278000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°03'40" Latitude: 38°24'44"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: 10 km NE of the Aliveri town.

Altitude above sea level (m): 70

Area (ha): 5

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Fauna: Birds: *Egretta alba* (E, W), *Aythya nyroca* (V, W)

Most significant present values: Game support (2)

Significant present uses: Hunting (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

DYSTOU LAKE OR DYSTOS LAKE

Wetland Code: 242279000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°08'24" Latitude: 38°21'41"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: 7 km SE of the Aliveri town.

Altitude above sea level (m): 16

Area (ha): 475

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Typha sp.*

Fauna: Birds: *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, M), *C. pygargus* (E, M)

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (1), Game support (2), Educational (3)

Significant present uses: Drinking water supply (2), Irrigation water supply (3)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Overpumping of ground water (2), Irrigation schemes (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE), Prohibition of fishing, Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Kalofotias and Papadopoulou (1992b), Ministry of Presidency (1984)

ALIVERI MARSH

Wetland Code: 242280000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°04'17" Latitude: 38°23'25"

Administrative Region: Sterea Ellada (GR240)

Prefecture(s): Evvoia (GR242)

Location: 2 km SW of the Aliveri town.

Altitude above sea level (m): 5

Area (ha): 1.8

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M)

Most significant present values:

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2)

Other anthropogenic activities: Drainage (2), Establishment of new housing facilities or expansion of old ones (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ROUMANI MARSH

Wetland Code: 251287000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°44'26" Latitude: 37°34'51"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: At the boundaries of the Nea Kios village, at the edge of the Argolikos gulf.

Altitude above sea level (m): 0

Area (ha): 750

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Coastal permanently flooded freshwater marsh (K), Intermittent river (N), Canal - Trench (9)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Zostera nana*, b) Emergents: *Arthrocnemum fruticosum*, *Suaeda sp.*, *Juncus acutus*, *Phragmites australis*, *Typha latifolia*, *Arundo donax*, c) Trees: *Platanus orientalis*, *Populus sp.*, *Salix sp.*

Fauna: Birds: *Netta rufina* (R, W), *Aythya nyroca* (V, W), *Aquila chrysaetos* (V), *Larus genei* (E)

Most significant present values: Irrigation water (1), Fodder (3), Game support (2), Logging (1), Sand extraction potential (1), Cultural (3), Recreational (2), Educational (1)

Significant present uses: Irrigation water supply (1), Wood supply (1), Sand extraction (2), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (2), Industrial solid wastes (2), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Drainage (3), Non-sustainable sand extraction (2), Diversion of water courses (2), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (2), Illegal or non-sustainable hunting (3)

ANATOLIKA DREPANOU LAGOON

Wetland Code: 251289000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°55'18" Latitude: 37°32'41"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: At the E boundaries of the Drepani village.

Altitude above sea level (m): 10

Area (ha): 17.5

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Most significant present values: Fishing (2), Game support (3)

Significant present uses: Fishing (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Agricultural point source pollution (2)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

GITZIRONA MARSH

Wetland Code: 251290000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°12'54" Latitude: 37°18'51"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 3 km E of the Portocheli Settlement.

Altitude above sea level (m): 0

Area (ha): 32.5

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values:

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Agricultural point source pollution (2)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

GEORGIOPOULOU MARSH

Wetland Code: 251291000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°12'26" Latitude: 37°19'47"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 4 km E of the Portocheli Settlement.

Altitude above sea level (m): 0

Area (ha): 30

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*

Fauna: Reptiles: *Caretta caretta (E)*

Most significant present values: Educational (2)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Agricultural point source pollution (1)

Other anthropogenic activities: Drainage (2), Land filling (3), Establishment of new housing facilities or expansion of old ones (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KOILADA MARSH

Wetland Code: 25292000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°09'00" Latitude: 37°24'39"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 3 km E of the Koilada village.

Altitude above sea level (m): 0

Area (ha): 6

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Fauna: Mammals: *Monachus monachus* (E)

Most significant present values: Cultural (3), Educational (3)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2)

Other anthropogenic activities: Establishment or expansion of cultivated fields (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KAPARI BAY LAGOON

Wetland Code: 251293000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°15'21" Latitude: 37°23'12"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 3 km S of the Ermioni village.

Altitude above sea level (m): 0

Area (ha): 60

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Most significant present values: Fodder (1), Game support (1), Recreational (2)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Agricultural point source pollution (1)

Other anthropogenic activities: Land filling (1), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

THERMISIA LAGOON

Wetland Code: 251294000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°20'00" Latitude: 37°25'00"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 2 km SW of the Thermisia village.

Altitude above sea level (m): 0

Area (ha): 110

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Salicornia* sp., *Arundo donax*

Most significant present values: Fishing (2), Game support (2)

Significant present uses: Aquaculture (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (2), Illegal or non-sustainable hunting (1),
 Intensive sports facilities (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PIGADIA AND PLEPI MARSHES

Wetland Code: 251295000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°21'05" Latitude: 37°25'19"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 4 km E of the Thermisia village.

Altitude above sea level (m): 1

Area (ha): 22.5

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Salicornia* sp., *Arundo donax*

Most significant present values: Fodder (1), Game support (1)

Significant present uses: Grazing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Agricultural point source pollution (1)

Other anthropogenic activities: Land filling (1), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

SACHTOURI LAKE

Wetland Code: 251296000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°25'25" Latitude: 37°24'36"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 7 km E of the Thermisia village.

Altitude above sea level (m): 10

Area (ha): 75

Length (km): -

Wetland Type: Coastal permanently flooded freshwater lake (K)*

Biotic characteristics:

Most significant present values: Game support (1)

Significant present uses: Aquaculture (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (1)

Other anthropogenic activities: Land filling (1), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LAKKA AGNOUNTOS LAKE

Wetland Code: 251297000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°09'01" Latitude: 37°42'39"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Argolida (GR251)

Location: 4 km N of the Nea Epidavros village.

Altitude above sea level (m): 126

Area (ha): 45

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Most significant present values: Game support (3)

Significant present uses: Hunting (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Establishment or expansion of cultivated fields (2),
Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LADONAS RIVER

Wetland Code: 200298000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Peloponnisos (GR250), Dytiki Ellada (GR230)

Prefecture(s): Arkadia (GR252), Achaia (GR232)

Location: Rises in the area of the Lykouria village, at the boundaries of the Prefectures of Achaia and Arkadia, flows SW and meets the Alfios river.

Altitude above sea level (m): *Min.:* 200 *Max.:* 500

Area (ha): -

Length (km): 60

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Drinking water (3), Irrigation water (3), Fishing (2), Game support (1), Hydroelectric power potential (3), Recreational (1)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (2), Hunting (1), Hydroelectricity production (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities: Land filling (2), Diversion of water courses (1), Dams or other installations for retention and storage of water (2), Illegal or non-sustainable hunting (1)

Present legal protection status: Prohibition of hunting (part of the wetland), Prohibition of grazing (part of the wetland)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used:

LADONAS RESERVOIR

Wetland Code: 252299000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°01'33" Latitude: 37°45'56"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Arkadia (GR252)

Location: 0.5 km of the Mouria settlement.

Altitude above sea level (m): 460

Area (ha): 145

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Drinking water (1), Irrigation water (3), Fishing (3), Game support (2), Hydroelectric power potential (3), Recreational (2)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Fishing (3), Hunting (2), Hydroelectricity production (3), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1), Industrial solid wastes (1)

Other anthropogenic activities: Land filling (2), Illegal or non-sustainable hunting (1)

Present legal protection status: Prohibition of grazing

Most significant positive actions:

Principal bibliography used:

FORMER LAKE TAKA MARSHES

Wetland Code: 252300000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°22'59" Latitude: 37°27'08"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Arkadia (GR252)

Location: 0.5 km SW of the Vouno Mantinias village.

Altitude above sea level (m): 640

Area (ha): 265

Length (km): -

Wetland Type: Inland permanently flooded freshwater marsh (S)*

Biotic characteristics:

Most significant present values: Educational (2)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Studies for the restoration-rehabilitation of the wetland

Principal bibliography used:

MOUSTOS LAGOON OR MOUSTOU LAGOON

Wetland Code: 252301000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 22°46'16" Latitude: 37°23'07"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Arkadia (GR252)

Location: 3 km S of the Astros town.

Altitude above sea level (m): 1

Area (ha): 150

Length (km): -

Wetland Type: Lagoon (J)*, Inland permanently flooded saline-brackish water marsh (Q), Spring (Y)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ruppia maritima*, b) Emergents: *Arthrocnemum fruticosum*, *Aster tripolium*, *Phragmites australis*, c) Scrubs and shrubs: *Tamarix sp.*, d) Dunes and sandy shores plants: *Agropyrum junceum*, *Eryngium maritimum*, *Medicago marina*, *Sporolobus pungens*

Fauna: Birds: *Ardea purpurea* (V, M)

Most significant present values: Game support (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Aquaculture (2)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used:

EVROTAS RIVER

Wetland Code: 250304000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Lakonia (GR254), Arkadia (GR252)

Location: Flows through the Lakedaimonos valey from N to S and discharges into the Lakonikos gulf.

Altitude above sea level (m): *Min.:* 0 *Max.:* 500

Area (ha): -

Length (km): 90

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Arundo donax*, b) Trees: *Platanus orientalis*, *Salix sp.*

Most significant present values: Irrigation water (3), Game support (1), Logging (2), Sand extraction potential (2), Cultural (3), Recreational (3)

Significant present uses: Irrigation water supply (3), Hunting (1), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Non-sustainable sand extraction (2), Diversion of water courses (3), Overpumping of ground water (3), Dams or other installations for retention and storage of water (1), Irrigation schemes (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Prohibition of logging, Prohibition of land clearing

Most significant positive actions:

Principal bibliography used:

EVROTAS DELTA (Wetland Complex)
--

Wetland Code: 254305700

Part(s) of the wetland complex: Asteriou Lake, Vivari Lagoon

Geographical Coordinates: Longitude: 22°43'00" Latitude: 36°49'00"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Lakonia (GR254)

Location: 15 km W of the Molaoi village at the edge of the Lakonikos gulf.

Altitude above sea level (m): 1

Area (ha): 1800

Length (km): -

Wetland Type: Coastal delta (F)*, Coastal permanently flooded saline-brackish water marsh (H), Inland permanently flooded saline-brackish water marsh (Q), Inland periodically flooded saline-brackish water marsh (R), Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T), Lagoon (J)

Biotic characteristics:

Flora: a) Aquatic bed plants, b) Emergents: *Phragmites australis*, *Arundo donax*, *Nasturtium sp.*, c) Scrubs and shrubs: *Tamarix sp.*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Agropyrum junceum*

Fauna: a) Fish: *Tropidophoxinellus hellenicus* (+), *Leuciscus keadicus* (+), b) Reptiles: *Caretta caretta* (E), *Algyroides moreoticus* (+), *Podarcis peloponnesiaca* (+), c) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, M), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, M), *Chlidonias niger* (V, M), *Coracias garrulus* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Irrigation water (3), Fishing (3), Fodder (2), Game support (3), Scientific (2), Recreational (3)

Significant present uses: Irrigation water supply (3), Fishing (2), Grazing (3), Hunting (3), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (2), Sewage from tourist facilities (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Land filling (3), Diversion of water courses (2), Establishment of new housing facilities or expansion of old ones (2),

Establishment of new tourist facilities or expansion of old ones (1), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Grimmet and Jones (1989)

ASTERIOU LAKE (Part of Evrotas Delta Complex)
--

Wetland Code: 254306710

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Lakonia (GR254)

Location: 1 km S - SW of the Asterio village.

Altitude above sea level (m): 1

Area (ha): 200

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Inland permanently flooded saline-brackish water marsh (Q), Inland periodically flooded saline-brackish water marsh (R), Inland permanently flooded freshwater marsh (S), Inland periodically flooded freshwater marsh (T)

Biotic characteristics:

Flora: a) Aquatic bed plants: b) Emergents: *Phragmites australis*, *Arundo donax*, *Nasturtium* sp., c) Scrubs and shrubs: *Tamarix* sp., d) Dunes and sandy shores plants: *Ammophila arenaria*, *Agropyrum junceum*

Fauna: a) Reptiles: *Caretta caretta* (E), *Algyroides moreoticus* (+), *Podarcis peloponnesiaca* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, M), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, M), *Chlidonias niger* (V, M), *Coracias garrulus* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Game support (1)

Significant present uses: Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Industrial wastewater (2)

Other anthropogenic activities: Drainage (3), Land filling (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used:

VIVARI LAGOON OR KOUTSAMPOS LINOVRACHIA LAGOON (Part of Evrotas Delta Complex)
--

Wetland Code: 254307720

Part(s) of the wetland complex: -

Geographical Coordinates:

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Lakonia (GR254)

Location: 1 km S of the Asterio village.

Altitude above sea level (m): 0

Area (ha): 10

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Arundo donax*, *Nasturtium sp.*, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants: *Ammophila arenaria*, *Agropyrum junceum*

Fauna: a) Reptiles: *Caretta caretta* (E), *Algyroides moreoticus* (+), *Podarcis peloponnesiaca* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Circus aeruginosus* (V, M), *Hieraaetus pennatus* (V, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, M), *Chlidonias niger* (V, M), *Coracias garrulus* (V, M), *Acrocephalus melanopogon* (R, W)

Most significant present values: Fishing (1), Game support (1)

Significant present uses: Fishing (1), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Industrial wastewater (2)

Other anthropogenic activities: Land filling (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used:

STRONGYLI LAGOON

Wetland Code: 254308000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°00'00" Latitude: 36°31'51"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Lakonia (GR254)

Location: 1.5 km SE of the Agios Georgios village.

Altitude above sea level (m): 0

Area (ha): 42.5

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Emergents: *Arthrocnemum fruticosum*, b) Dunes and sandy shores plants: *Ammophila arenaria*, *A. arudinacea*, *Euphorbia paralias*

Most significant present values: Fishing (1), Game support (2), Scientific (2), Recreational (3), Educational (3)

Significant present uses: Fishing (1), Recreation (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Fishing studies, Ecological studies

Principal bibliography used:

GIALOVA LAGOON OR DIVARI LAGOON

Wetland Code: 255313000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 21°40'30" Latitude: 36°58'07"

Administrative Region: Peloponnisos (GR250)

Prefecture(s): Messinia (GR255)

Location: 1 km N of the Pylos village.

Altitude above sea level (m): 0

Area (ha): 50

Length (km): -

Wetland Type: Lagoon (J)*, Coastal permanently flooded saline-brackish water marsh (H),
Inland permanently flooded saline-brackish water marsh (Q)

Biotic characteristics:

Fauna: a) Reptiles: *Caretta caretta* (E), *Podarcis peloponnesiaca* (+), b) Birds:
Phoenicopiterus ruber (R, W), *Tadorna tadorna* (V, W), *Circus aeruginosus* (V, M, W),
Larus melanocephalus (V, M), *Coracias garrulus* (V, M)

Most significant present values: Game support (3), Scientific (2), Cultural (2), Recreational (2), Educational (3)

Significant present uses: Aquaculture (2), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities: Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used: Grimmet and Jones (1989)

MARATHONAS RESERVOIR

Wetland Code: 300319000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°53'51" Latitude: 38°10'22"

Administrative Region: Attiki (GR300)

Prefecture(s): Attiki (GR300)

Location: 0.5 km S, SW of the Kalentzi settlement.

Altitude above sea level (m): 250

Area (ha): 340

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values: Drinking water (3), Scientific (2), Cultural (2), Recreational (2), Educational (2)

Significant present uses: Drinking water supply (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities:

Present legal protection status: Health regulations

Most significant positive actions:

Principal bibliography used:

VALARIO LAGOON

Wetland Code: 300320000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°20'00" Latitude: 37°32'00"

Administrative Region: Attiki (GR300)

Prefecture(s): Attiki (GR300)

Location: 1 km SW of the Taktikoupoli village, district of Troizinia, S of the Epidavros gulf.

Altitude above sea level (m): 0

Area (ha): 83

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values:

Significant present uses:

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (2), Establishment or expansion of cultivated fields (2)

Present legal protection status:

Most significant positive actions: Fishing studies

Principal bibliography used:

ALYKI LIMNOU LAGOON

Wetland Code: 411321000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°23'47" Latitude: 39°57'22"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 3 km NE of the Kontopoulia village of Limnos island.

Altitude above sea level (m): 0

Area (ha): 600

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5)

Biotic characteristics:

Flora: a) Emergents: *Salicornia* sp., *Arthrocnemum glaucum*, *Juncus maritimus*, *J. acutus*,
b) Scrubs and shrubs: *Tamarix* sp., c) Dunes and sandy shores plants: *Ammophila arenaria*, *Eryngium maritimum*

Fauna: Birds: *Phoenicopiterus ruber* (R, W), *Tadorna ferruginea* (E, W), *Buteo rufinus* (R, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, M), *Recurvirostra avosetta* (V, N), *Burhinus oedipnemos* (V, M)

Most significant present values: Game support (3), Salt production potential (3), Recreational (2), Educational (2)

Significant present uses: Hunting (3), Salt production (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities: Land filling (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992e)

CHORTAROLIMNI MARSH OR CHORTATOS MARSH

Wetland Code: 411322000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°21'39" Latitude: 39°53'54"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 1.5 km S of the Kalliopi village of Limnos island.

Altitude above sea level (m): 2

Area (ha): 250

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: a) Emergents: *Juncus acutus*, *Salicornia sp.*, *Arthrocnemum sp.*, b) Dunes and sandy shores plants: *Ammophila arenaria*, *Pancratium maritimum*

Fauna: Birds: *Phoenicopiterus ruber* (R, W)

Most significant present values: Fodder (1), Game support (3), Recreational (2)

Significant present uses: Grazing (2), Hunting (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Land filling (2), Construction or expansion of road network (2), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992e)

KONTIA RESERVOIR

Wetland Code: 411323000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°11'18" Latitude: 39°53'21"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 3 km N of the Kontias village of Limnos island.

Altitude above sea level (m): 100

Area (ha): 200

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Most significant present values: Irrigation water (3), Game support (1), Recreational (2)

Significant present uses: Irrigation water supply (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2)

Other anthropogenic activities: Overpumping of ground water (2), Irrigation schemes (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ALYKI KALLONIS LAGOON

Wetland Code: 411324000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°17'51" Latitude: 39°12'44"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 2, 5 km S of the Agia Paraskevi settlement of Lesvos island.

Altitude above sea level (m): 0

Area (ha): 350

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5)

Biotic characteristics:

Flora: Emergents: *Juncus acutus*, *Phragmites australis*, *Salicornia sp.*, *Arthrocnemum sp.*, *Typha sp.*, *Ranunculus sp.*

Fauna: Birds: *Egretta alba* (E, W), *Ciconia nigra* (E, M), *Plegadis falcinellus* (E, M), *Phoenicopus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Irrigation water (3), Fodder (3), Salt production potential (3), Cultural (3), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Grazing (3), Salt production (3), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (1), Industrial solid wastes (1), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Construction or expansion of road network (2), Irrigation schemes (2), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (1)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands

catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used: Grimmet and Jones (1989), Kilikidis et al. (1992f)

ALYKI POLYCHNITOU LAGOON

Wetland Code: 411325000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°11'11" Latitude: 39°06'27"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 0.5 km of the Skala Polychnitou settlement of Lesvos island.

Altitude above sea level (m): 0

Area (ha): 150

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5), Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: Emergents: *Salicornia sp.*, *Arthrocnemum sp.*, *Juncus acutus*

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopterus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Fodder (2), Salt production potential (3), Scientific (2), Recreational (2), Educational (1)

Significant present uses: Grazing (1), Salt production (3), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (1), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (1)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used: Kilikidis et al. (1992f)

VOUVARIS ESTUARY

Wetland Code: 411326000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°17'46" Latitude: 39°09'20"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 1 km N, NE of the Achladeri village of Lesvos island.

Altitude above sea level (m): 0

Area (ha): 50

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: Emergents: *Salicornia* sp., *Arthrocnemum glaucum*

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Scientific (2), Recreational (2), Educational (2)

Significant present uses: Aquaculture (3)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (2), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (1), Diversion of water courses (1), Construction or expansion of road network (1)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Kilikidis et al. (1992f)

ALYKOUDI MARSH

Wetland Code: 411327000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°12'36" Latitude: 39°07'45"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 3 km NW of the Lisvorio village of Lesvos island.

Altitude above sea level (m): 0

Area (ha): 10

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopterus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Game support (1), Scientific (1), Recreational (1), Educational (1)

Significant present uses: Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (1), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Kilikidis et al. (1992f)

PARAKOILA LAGOON

Wetland Code: 411328000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°09'41" Latitude: 39°11'10"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 0.1 km N of the Skala Parakoilon settlement of Lesvos island.

Altitude above sea level (m): 0

Area (ha): 25

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: a) Emergents: *Salicornia* sp., *Agropyrum* sp., *Arthrocnemum* sp., *Phragmites australis*, b) Scrubs and shrubs: *Tamarix* sp.

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopiterus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Scientific (2), Recreational (2), Educational (2)

Significant present uses: Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (1), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes). Ecological studies

Principal bibliography used: Kilikidis et al. (1992f)

MESON LAGOON

Wetland Code: 411329000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°18'28" Latitude: 39°09'50"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 6 km SE of the Agia Paraskevi village towards the Achladeri village of Lesvos island.

Altitude above sea level (m): 0

Area (ha): 80

Length (km): -

Wetland Type: Lagoon (J)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton sp.*, *Ranunculus sp.*, *Vallisneria sp.*, b) Emergents: *Salicornia sp.*

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopiterus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Fodder (1), Game support (3), Scientific (2), Cultural (2), Recreational (3), Educational (2)

Significant present uses: Grazing (1), Hunting (3), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Non-point source agricultural pollution (1)

Other anthropogenic activities: Land filling (2), Construction or expansion of road network (3), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Kilikidis et al. (1992f)

ACHLADERI MARSH

Wetland Code: 411330000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°16'22" Latitude: 39°08'56"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 1 km N of the Achladeri village of Lesvos island.

Altitude above sea level (m): 1

Area (ha): 2

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Estuary (F)

Biotic characteristics:

Flora: Emergents: *Juncus* sp., *Phragmites australis*

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Fodder (2), Game support (1), Scientific (1), Recreational (2), Educational (1)

Significant present uses: Grazing (2), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Agricultural point source pollution (2), Industrial wastewater (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (2), Establishment or expansion of livestock facilities (2), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used: Kilikidis et al. (1992f)

KERAMIO MARSH

Wetland Code: 411331000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°11'50" Latitude: 39°12'26"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 0.1 km W of the Skala Kallonis settlement of Lesvos island.

Altitude above sea level (m): 2

Area (ha): 110

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Estuary (F)

Biotic characteristics:

Flora: Emergents: *Salicornia* sp., *Agropyrum* sp., *Arthrocnemum* sp.

Fauna: Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Phoenicopterus ruber* (R, W), *Tadorna ferruginea* (E, W), *Circus aeruginosus* (V, M), *Himantopus himantopus* (V, M), *Lanius nubicus* (R, M)

Most significant present values: Game support (2), Scientific (1), Recreational (1), Educational (1)

Significant present uses: Hunting (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Industrial solid wastes (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (1), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (2), Establishment or expansion of livestock facilities (1), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Kilikidis et al. (1992f)

DIPI LARSOS MARSH

Wetland Code: 411332000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°27'44" Latitude: 39°07'30"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 3 km SW of the Ippio village of Lesvos island.

Altitude above sea level (m): 1

Area (ha): 280

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Intermittent river (N)

Biotic characteristics:

Flora: a) Emergents: *Salicornia sp.*, *Phragmites australis*, *Typha sp.*, b) Trees: *Salix sp.*

Fauna: Birds: *Phalacrocorax aristotelis* (V), *Ardea purpurea* (V, M), *Egretta alba* (E, W), *Circus aeruginosus* (V, N)

Most significant present values: Irrigation water (3), Fodder (1), Game support (1), Scientific (3), Recreational (2), Educational (3)

Significant present uses: Irrigation water supply (3), Grazing (2), Hunting (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Land filling (2), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (1), Irrigation schemes (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Delineation and management studies, Land planning studies, Ecological studies

Principal bibliography used: Troubis (1992)

EVRIAKI MARSH

Wetland Code: 411333000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°29'21" Latitude: 39°03'18"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Lesvos (GR411)

Location: 1.5 km E of the Palaiokipos village of Lesvos island, at the coast road Pigadakia - Perama.

Altitude above sea level (m): 2

Area (ha): 3

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Juncus sp.*

Fauna: Birds: *Phalacrocorax aristotelis* (V), *Ardea purpurea* (V, M), *Egretta alba* (E, W), *Circus aeruginosus* (V, N)

Most significant present values: Game support (3), Scientific (1), Recreational (2), Educational (1)

Significant present uses: Hunting (3), Recreation (1), Tourism (1)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (3), Land filling (3), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used: Troubis (1992)

KOMI RIVER ESTUARY

Wetland Code: 413334000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°02'14" Latitude: 38°11'27"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Chios (GR413)

Location: 1 km SW of the Komi village of Chios island.

Altitude above sea level (m): 1

Area (ha): 25

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Most significant present values: Recreational (1)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KONTARI MARSH

Wetland Code: 413337000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°08'52" Latitude: 38°20'05"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Chios (GR413)

Location: 3 km S of Chios town.

Altitude above sea level (m): 1

Area (ha): 40

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Game support (2), Recreational (1)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (3), Land filling (3), Construction or expansion of airport (3), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LAGADAS MARSH

Wetland Code: 413338000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°07'48" Latitude: 38°29'33"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Chios (GR413)

Location: 0.1 km E of the Lagkada village of Chios island.

Altitude above sea level (m): 1

Area (ha): 65

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Spring (Y)

Biotic characteristics:

Flora: Emergents: *Phragmites australis*

Fauna: Mammals: *Lutra lutra* (V)

Most significant present values: Game support (2), Recreational (1)

Significant present uses: Hunting (2), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

LIMNOS & PARPANTA MARSHES

Wetland Code: 413339000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°08'20" Latitude: 38°32'33"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Chios (GR413)

Location: 1 km E, NE of the Kardamyla village of Chios island.

Altitude above sea level (m): 1

Area (ha): 50

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Fodder (1), Game support (3), Scientific (1), Recreational (1)

Significant present uses: Grazing (1), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (2), Industrial solid wastes (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (3), Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ALYKI PSILIS AMMOU LAGOON

Wetland Code: 412340000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 27°02'28" Latitude: 37°42'58"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Samos (GR412)

Location: 0.2 km W of the Psili Ammos settlement, at the Katsouni Cape of Samos island.

Altitude above sea level (m): 2

Area (ha): 130

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Flora: Emergents: *Juncus* sp., *Carex* sp.

Fauna: Birds: *Phoenicopterus ruber* (R, W), *Tadorna ferruginea* (E, W)

Most significant present values: Game support (3), Recreational (3)

Significant present uses: Hunting (3), Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Sewage from tourist facilities (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status: Prohibition of hunting

Most significant positive actions: Land planning studies, Public awareness programs

Principal bibliography used:

MESOKAMPOS MARSH

Wetland Code: 412341000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°58'47" Latitude: 37°42'39"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Samos (GR412)

Location: 2 km NW of the Pythagorio village of Samos island.

Altitude above sea level (m): 4

Area (ha): 160

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Fauna: Birds: *Pelecanus crispus* (E, W), *Phoenicopterus ruber* (R, M, W)

Most significant present values: Game support (3), Recreational (2)

Significant present uses: Hunting (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Drainage (2), Land filling (2), Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

GLYFADA MARSH

Wetland Code: 412342000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°53'21" Latitude: 37°00'28"

Administrative Region: Voreio Aigaio (GR410)

Prefecture(s): Samos (GR412)

Location: Between the Iraio and Pythagorio villages of Samos island.

Altitude above sea level (m): 3

Area (ha): 680

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Juncus* sp., *Phragmites australis*

Most significant present values: Irrigation water (1), Game support (3), Recreational (2)

Significant present uses: Irrigation water supply (2), Hunting (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1)

Other anthropogenic activities: Drainage (2), Land filling (2), Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes)

Principal bibliography used:

VITALI BAY MARSH

Wetland Code: 422343000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°49'18" Latitude: 37°57'00"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 2 km E of the Vitalio village of Andros island.

Altitude above sea level (m): 2

Area (ha): 15

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Recreational (1)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities: Drainage (2), Establishment of new housing facilities or expansion of old ones (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ATENI LAKE

Wetland Code: 422344000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°49'48" Latitude: 37°54'54"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 1 km E of the Ateni village of Andros island.

Altitude above sea level (m): 10

Area (ha): 25

Length (km): -

Wetland Type: Coastal permanently flooded freshwater lake (K)*

Biotic characteristics:

Most significant present values: Recreational (1), Irrigation water (3), Game support (1)

Significant present uses: Irrigation water supply (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (1)

Other anthropogenic activities: Drainage (2), Overpumping of ground water (2), Dams or other installations for retention and storage of water (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ACHLA BAY MARSH

Wetland Code: 422345000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°56'54" Latitude: 37°53'36"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 6 km NE of the Andros town.

Altitude above sea level (m): 0

Area (ha): 30

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Recreational (1), Game support (2)

Significant present uses: Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

PANORMOS TINOU MARSH

Wetland Code: 422346000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°03'35" Latitude: 37°39'03"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 0.1 km NE of the Panormos village of Tinos island.

Altitude above sea level (m): 0

Area (ha): 3

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Coastal permanently flooded freshwater lake (K)

Biotic characteristics:

Flora: a) Emergents: *Juncus acutus*, *Phragmites australis*, b) Scrubs and shrubs

Most significant present values: Recreational (3), Game support (3), Sand extraction potential (2)

Significant present uses: Recreation (3), Tourism (3), Hunting (3), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (2), Sewage from tourist facilities (2), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Non-sustainable sand extraction (3), Land filling (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

KOLYMPITHRA TINOU MARSH

Wetland Code: 422347000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°08'47" Latitude: 37°36'58"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 2 km NE of the Aetofolia village of Tinos island.

Altitude above sea level (m): 5

Area (ha): 10

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Coastal permanently flooded saline-brackish water lake (Q)

Biotic characteristics:

Flora: a) Emergents: *Juncus acutus*, *Phragmites australis*, *Typha sp.*, *Arundo donax*, b) Scrubs and shrubs: *Nerium oleander*, c) Dunes and sandy shores plants: *Otanthus maritimus*

Most significant present values: Game support (2), Recreational (3)

Significant present uses: Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Industrial wastewater (2), Sewage from tourist facilities (2), Agricultural point source pollution (1), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (3)

Present legal protection status: Game refuge

Most significant positive actions: Ecological studies

Principal bibliography used:

PORTO TINOS MARSHES OR AGIOS SOSTIS MARSHES OR AGIOS IOANNIS LAKE

Wetland Code: 422348000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°14'03" Latitude: 37°32'34"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 8 km SE, E of the Tinos town.

Altitude above sea level (m): 2

Area (ha): 300

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Coastal permanently flooded freshwater lake (K), Spring (Y)

Biotic characteristics:

Flora: a) Emergents: *Juncus acutus*, *Scirpus* sp., *Phragmites australis*, *Typha latifolia*, *Arundo donax*, b) Scrubs and shrubs: *Nerium oleander*, *Vitex agnus-castus*, c) Trees: *Platanus orientalis*, *Populus alba*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Pancratium maritimum*

Fauna: a) Birds: *Plegadis falcinellus* (E, M), *Anser anser* (E, W), *Aythya nyroca* (V, W), *Circus aeruginosus* (V, M), *Larus audouinii* (E), b) Mammals: *Canis aureus* (V), *Monachus monachus* (E), *Meles meles* (V)

Most significant present values: Cultural (2), Recreational (3), Drinking water (3), Irrigation water (3), Fishing (3), Fodder (1), Game support (3), Scientific (3)

Significant present uses: Drinking water supply (3), Irrigation water supply (3), Fishing (3), Grazing (1), Tourism (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (1), Sewage from tourist facilities (1), Agricultural point source pollution (1)

Other anthropogenic activities: Drainage (2), Land filling (2), Construction or expansion of road network (2), Establishment of new housing facilities or expansion of old ones (2), Establishment of new tourist facilities or expansion of old ones (2), Overpumping of ground water (2), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Land planning studies, Ecological studies, Public awareness programs

Principal bibliography used:

AGIOS FOKAS MARSH

Wetland Code: 422349000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°10'17" Latitude: 37°32'33"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 1 km SE of the Tinos town.

Altitude above sea level (m): 1

Area (ha): 4

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Coastal permanently flooded saline-brackish water lake (Q)

Biotic characteristics:

Flora: a) Emergents: *Juncus acutus*, *Phragmites australis*, b) Scrubs and shrubs: *Vitex agnus-castus*, *Nerium oleander*

Fauna: Birds: *Chlidonias niger* (V, M)

Most significant present values: Recreational (3), Game support (2)

Significant present uses: Recreation (3), Tourism (3), Hunting (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (1), Municipal solid wastes (2), Agricultural point source pollution (1)

Other anthropogenic activities: Drainage (2), Land filling (3), Construction or expansion of road network (2), Construction or expansion of airport (2), Establishment of new housing facilities or expansion of old ones (1), Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

PANORMOS MYKONOU LAGOON

Wetland Code: 422351000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°22'02" Latitude: 37°28'40"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 5 km NE of the Mykonos town.

Altitude above sea level (m): 0

Area (ha): 28

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Most significant present values: Scientific (1), Recreational (3), Game support (3)

Significant present uses: Recreation (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Industrial wastewater (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

KOLYMPITHRES PAROU MARSH

Wetland Code: 422353000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°12'23" Latitude: 37°07'38"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 1 km NW of the Naousa village of Paros island.

Altitude above sea level (m): 0

Area (ha): 3

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Recreational (2), Educational (2)

Significant present uses: Tourism (2)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

SANTA MARIA LAGOON

Wetland Code: 422354000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°16'25" Latitude: 37°07'24"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Kyklades (GR422)

Location: 2 km E of the Naousa village of Paros island.

Altitude above sea level (m): 0

Area (ha): 2

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Most significant present values: Recreational (3), Educational (2)

Significant present uses: Tourism (3)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

AGIA KIOURA MARSH OR PATHENIO MARSH
--

Wetland Code: 421359000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°48'13" Latitude: 37°11'08"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Dodekanisos (GR421)

Location: 1 km NE of the Partheni village of Leros island.

Altitude above sea level (m): 1

Area (ha): 8

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Most significant present values: Recreational (3), Game support (3)

Significant present uses: Recreation (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2)

Other anthropogenic activities: Drainage (2), Land filling (2), Construction or expansion of road network (2), Construction or expansion of airport (3), Establishment of new housing facilities or expansion of old ones (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

ALYKI TIGAKIOU LAGOON

Wetland Code: 421361000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 27°11'02" Latitude: 36°53'02"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Dodekanisos (GR421)

Location: 1 km W of the Tigakio village of Kos island.

Altitude above sea level (m): 0

Area (ha): 100

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5)

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, b) Scrubs and shrubs: *Tamarix sp.*, c) Dunes and sandy shores plants: *Pancratium sp.*

Fauna: a) Reptiles: *Caretta caretta* (E), *Chelonia mydas* (E), b) Birds: *Plegadis falcinellus* (E, M), *Phoenicopiterus ruber* (R, M, W)

Most significant present values: Scientific (3), Recreational (3), Educational (3), Salt production potential (1), Game support (3)

Significant present uses: Salt production (1), Recreation (3), Tourism (3), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (3), Sewage from tourist facilities (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (3), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE), Game refuge

Most significant positive actions:

Principal bibliography used:

PSALIDI MARSH

Wetland Code: 421362000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 27°20'40" Latitude: 36°52'32"

Administrative Region: Notio Aigaio (GR420)

Prefecture(s): Dodekanisos (GR421)

Location: 4 km SE of the Kos town.

Altitude above sea level (m): 0

Area (ha): 8

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Typha sp.*

Fauna: Birds: *Plegadis falcinellus* (E, M, W), *Phoenicopus ruber* (R, M)

Most significant present values: Scientific (2), Recreational (3), Educational (3), Game support (3)

Significant present uses: Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (2), Sewage from tourist facilities (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Construction or expansion of road network (3), Establishment of new tourist facilities or expansion of old ones (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Establishment of housing control zones (ZOE), Game refuge

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes)

Principal bibliography used:

TAVRONITIS ESTUARY

Wetland Code: 434374000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°49'48" Latitude: 35°32'18"

Administrative Region: Kriti (GR430)

Prefecture(s): Chania (GR434)

Location: 1 km N of the Tavronitis village.

Altitude above sea level (m): 1

Area (ha): 2

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: a) Emergents: *Arundo donax*, *Typha sp.*, b) Scrubs and shrubs: *Tamarix sp.*

Fauna: Birds: *Aythya nyroca* (V, W)

Most significant present values: Fodder (2), Game support (2), Sand extraction potential (2), Scientific (1), Cultural (1), Recreational (1)

Significant present uses: Grazing (2), Hunting (2), Sand extraction (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (1), Industrial solid wastes (1), Non-point source agricultural pollution (1)

Other anthropogenic activities: Non-sustainable sand extraction (1), Land filling (2), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3), Illegal or non-sustainable hunting (1)

Present legal protection status:

Most significant positive actions: Studies on geology-hydrogeology-geophysics

Principal bibliography used:

PLATANIAS ESTUARY OR KERITIS ESTUARY

Wetland Code: 434375000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°51'39" Latitude: 35°31'54"

Administrative Region: Kriti (GR430)

Prefecture(s): Chania (GR434)

Location: 12 km W of the Chania city.

Altitude above sea level (m): 0

Area (ha): 2

Length (km): -

Wetland Type: Estuary (F)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Phragmites australis*, *Arundo donax*, b) Dunes and sandy shores plants: *Pancratium maritimum*, *Elymus farctus*, *Eryngium maritimum*

Fauna: Birds: *Circus aeruginosus* (V)

Most significant present values: Game support (2), Scientific (1), Recreational (2), Educational (1)

Significant present uses: Hunting (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial wastewater (1), Sewage from tourist facilities (3), Agricultural point source pollution (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (3), Diversion of water courses (3), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (2), Establishment or expansion of cultivated fields (2), Establishment or expansion of livestock facilities (2), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Economidou (1990)

AGIA RESERVOIR

Wetland Code: 434376000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 23°55'00" Latitude: 35°29'00"

Administrative Region: Kriti (GR430)

Prefecture(s): Chania (GR434)

Location: 1 km SW of the Agia village.

Altitude above sea level (m): 80

Area (ha): 7

Length (km): -

Wetland Type: Reservoir (6)*

Biotic characteristics:

Flora: Emergents: *Typha domingensis*, *Scirpus maritimus*, *Schoenoplectus tabermontani*

Fauna: Birds: *Hieraaetus fasciatus* (V), *Circus aeruginosus* (V, M)

Most significant present values: Irrigation water (3), Game support (3), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Irrigation water supply (3), Hunting (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (1), Overpumping of ground water (3), Irrigation schemes (3), Establishment or expansion of cultivated fields (1), Establishment or expansion of livestock facilities (1)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Economidou (1990), Gradstein and Smittenberg (1992)

GEORGIROUPOLI MARSH

Wetland Code: 434380000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°16'26" Latitude: 35°21'50"

Administrative Region: Kriti (GR430)

Prefecture(s): Chania (GR434)

Location: 0.1 km W, SE of the Georgiroupoli village.

Altitude above sea level (m): 2

Area (ha): 300

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H), Coastal periodically flooded saline-brackish water marsh (H), Spring (Y)

Biotic characteristics:

Flora: a) Aquatic bed plants: *Lemna minor*, *Ruppia maritima*, b) Emergents: *Juncus maritimus*, *J. subulatus*, *J. heldreichianus*, *Scirpus maritimus*, *Arundo donax*, *Scirpus sp.*, *Atriplex hastata*, *Polygonon monspeliensis*, *Carex sp.*, *Schoenus nigricans*, *Centaureum pulhelum*, *Phragmites australis*, *Typha angustifolia*, c) Trees: *Ulmus minor*, d) Dunes and sandy shores plants: *Ammophila arenaria*, *Elymus farctus*, *Euphorbia paralias*, *Medicago marina*, *Pancratium maritimum*

Fauna: a) Reptiles: *Telescopus fallax pallidus* (+), b) Birds: *Egretta alba* (E, W), *Plegadis falcinellus* (E, M), *Aythya nyroca* (V, W), *Buteo rufinus* (R, M), *Circus aeruginosus* (V, M), *Larus audouinii* (E)

Most significant present values: Scientific (3), Recreational (3), Educational (3)

Significant present uses: Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Sewage from tourist facilities (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (3)

Present legal protection status: Ministerial Decision for the delineation of protected areas

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Economidou (1990), Grimmet and Jones (1989)

KOURNA LAKE

Wetland Code: 434382000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°18'10" Latitude: 35°19'54"

Administrative Region: Kriti (GR430)

Prefecture(s): Chania (GR434)

Location: 0.2 km W of the Mouri village.

Altitude above sea level (m): 60

Area (ha): 60

Length (km): -

Wetland Type: Inland permanently flooded freshwater lake (O)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Potamogeton pectinatus*, *Najas marina*, *Ranunculus sp.*, *Myriophyllum spicatum*, *Ceratophyllum demersum*, b) Emergents, c) Trees: *Ulmus minor*

Fauna: a) Reptiles: *Telescopus fallax pallidus* (+), b) Birds: *Egretta alba* (E), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Netta rufina* (R, W), *Aythya nyroca* (V, W), c) Mammals: *Spalax leucodon* (V)

Most significant present values: Irrigation water (3), Scientific (3), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3), Recreation (3), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (1), Sewage from tourist facilities (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Overpumping of ground water (3), Establishment or expansion of cultivated fields (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes), Ecological studies

Principal bibliography used: Catsadorakis (1985), Catsadorakis and Malakou (1991), Economidou (1990), Grimmet and Jones (1989), Kourmoulis (1979)

SISES MARSH

Wetland Code: 433385000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°53'06" Latitude: 35°23'52"

Administrative Region: Kriti (GR430)

Prefecture(s): Rethymni (GR433)

Location: 3 km N of the Sises village.

Altitude above sea level (m): 0

Area (ha): 3

Length (km): -

Wetland Type: Coastal periodically flooded saline-brackish water marsh (H)*

Biotic characteristics:

Flora: Emergents: *Juncus maritimus*, *Phragmites australis*, *Mentha pulegium*, *Ranunculus sp.*

Fauna: Birds: *Buteo rufinus* (R, M), *Gyps fulvus* (V), *Aquila chrysaetos* (V)

Most significant present values: Scientific (2), Recreational (2), Educational (2)

Significant present uses:

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Drainage (3), Establishment or expansion of cultivated fields (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used: Economidou (1990)

KOURTALIOTIS RIVER

Wetland Code: 433387000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kriti (GR430)

Prefecture(s): Rethymni (GR433)

Location: Rises in the district of the Kozares and Agios Vasilios villages and discharges into the Libyan Sea at the area of the Preveli lake.

Altitude above sea level (m): *Min.:* 0 *Max.:* 500

Area (ha): -

Length (km): 7

Wetland Type: Permanent river (M)*

Biotic characteristics:

Flora: Trees: *Platanus orientalis*, *Salix alba*

Fauna: Birds: *Aquila chrysaetos* (V, P), *Hieraaetus fasciatus* (V, P), *Gypaetus barbatus* (E, P), *Gyps fulvus* (V, N), *Falco naumanni* (V, M)

Most significant present values: Drinking water (1), Irrigation water (3), Fodder (3), Game support (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Drinking water supply (1), Irrigation water supply (3), Grazing (3), Hunting (3), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Industrial wastewater (3), Industrial solid wastes (3), Agricultural point source pollution (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Overpumping of ground water (3), Irrigation schemes (3), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (Important Bird Area ICBP-IWRB, CORINE Biotopes) for Kourtaliotis Gorge, Ecological studies

Principal bibliography used: Economidou (1990)

LIMNI PREVELI ESTUARY

Wetland Code: 433388000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°28'17" Latitude: 35°09'34"

Administrative Region: Kriti (GR430)

Prefecture(s): Rethymni (GR433)

Location: Estuary of the Kourtaliotis river at the Libyan Sea, 2 km SE of the Iera Moni of Preveli.

Altitude above sea level (m): 5

Area (ha): 70

Length (km): -

Wetland Type: Estuary (F)*, Coastal permanently flooded freshwater lake (K)

Biotic characteristics:

Flora: a) Emergents: *Juncus maritimus*, *Phragmites australis*, *Typha domingensis*, b) Trees: *Phoenix theophrastii*, c) Dunes and sandy shores plants: *Medicago marina*

Fauna: a) Reptiles: *Lacerta trilineata polylepidota* (+), b) Birds: *Aquila chrysaetos* (V), *Hieraaetus fasciatus* (V, P), *Gypaetus barbatus* (E, P), *Gyps fulvus* (V, P), *Falco naumanni* (V, M)

Most significant present values: Game support (3), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Hunting (3), Recreation (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (2), Sewage from tourist facilities (3), Non-point source agricultural pollution (2)

Other anthropogenic activities: Establishment of new tourist facilities or expansion of old ones (2), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used: Economidou (1990)

ALMYROS RESERVOIR

Wetland Code: 431389000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°02'32" Latitude: 35°19'32"

Administrative Region: Kriti (GR430)

Prefecture(s): Irakleio (GR431)

Location: 5 km W of the Irakleio city.

Altitude above sea level (m): 50

Area (ha): 0.5

Length (km): -

Wetland Type: Reservoir (6)*, Spring (Y)

Biotic characteristics:

Flora: Emergents: *Phragmites australis*, *Typha sp.*

Most significant present values: Hydroelectric power potential (2), Scientific (1), Cultural (1), Recreational (1)

Significant present uses: Hydroelectricity production (2), Recreation (1)

Factors changing the wetland's ecological character:

Pollution:

Other anthropogenic activities: Construction or expansion of road network (3), Dams or other installations for retention and storage of water (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Burdon and Papakis (1964), Kourmoulis (1979)

GIOFYROS ESTUARY

Wetland Code: 431391000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°08'03" Latitude: 35°20'01"

Administrative Region: Kriti (GR430)

Prefecture(s): Irakleio (GR431)

Location: 1 km W of the Irakleio city.

Altitude above sea level (m): 0

Area (ha): 1

Length (km): -

Wetland Type: Estuary (F)*

Biotic characteristics:

Flora: Emergents: *Juncus sp.*, *Arundo donax*

Most significant present values: Fodder (1), Sand extraction potential (1), Scientific (1), Recreational (2)

Significant present uses: Grazing (1), Sand extraction (1)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (3), Industrial solid wastes (1)

Other anthropogenic activities: Non-sustainable sand extraction (1), Land filling (3), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

APOSELEMIS ESTUARY

Wetland Code: 431395000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°22'29" Latitude: 35°19'38"

Administrative Region: Kriti (GR430)

Prefecture(s): Irakleio (GR431)

Location: 3 km NE of the Gouves village.

Altitude above sea level (m): 0

Area (ha): 10

Length (km): -

Wetland Type: Estuary (F)*, Coastal permanently flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Salicornia sp.*, *Arundo donax*, b) Scrubs and shrubs: *Tamarix sp.*

Most significant present values: Fodder (1), Game support (3), Sand extraction potential (2), Scientific (1), Recreational (2)

Significant present uses: Grazing (1), Hunting (3), Sand extraction (2), Tourism (2)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (3)

Other anthropogenic activities: Non-sustainable sand extraction (3), Land filling (3), Diversion of water courses (3), Construction or expansion of road network (3), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (1), Illegal or non-sustainable hunting (2)

Present legal protection status:

Most significant positive actions: Ecological studies

Principal bibliography used:

GEROPOTAMOS RIVER

Wetland Code: 431397000

Part(s) of the wetland complex: -

Geographical Coordinates: -

Administrative Region: Kriti (GR430)

Prefecture(s): Irakleio (GR431)

Location: Rises in the Daga and Oxy Kefati hights, at the district of the Megali Vrysi of Preveli and discharges into the Messara bay.

Altitude above sea level (m): *Min.:* 0 *Max.:* 700

Area (ha): -

Length (km): 45

Wetland Type: Intermittent river (N)*

Biotic characteristics:

Flora: a) Emergents: *Arundo donax*, *Phragmites australis*, *Typha domingensis*, b) Trees: *Salix alba*, *Platanus orientalis*, *Ulmus minor*

Fauna: a) Reptiles: *Telescopus fallax pallidus* (+), b) Birds: *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Buteo rufinus* (R, M), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V, P), *Falco naumanni* (V, M), *Acrocephalus melanopogon* (R, M)

Most significant present values: Irrigation water (3), Scientific (2), Recreational (3), Educational (3)

Significant present uses: Irrigation water supply (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (3), Industrial wastewater (2), Sewage from tourist facilities (3), Agricultural point source pollution (2), Non-point source agricultural pollution (3)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (2), Overpumping of ground water (3), Irrigation schemes (2)

Present legal protection status:

Most significant positive actions:

Principal bibliography used: Economidou (1990)

GEROPOTAMOS ESTUARY

Wetland Code: 431398000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 24°46'19" Latitude: 35°03'13"

Administrative Region: Kriti (GR430)

Prefecture(s): Irakleio (GR431)

Location: 0.5 km S of the Tympakio village.

Altitude above sea level (m): 2

Area (ha): 400

Length (km): -

Wetland Type: Estuary (F)*, Coastal periodically flooded saline-brackish water marsh (H)

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, *Carex hispida*, *Oxalis pres-carpae*, *Phragmites australis*, *Arundo plinii*, b) Scrubs and shrubs: *Tamarix parviflora*, c) Trees: *Salix alba*, *Ulmus minor*, *Platanus orientalis*, d) Dunes and sandy shores plants: *Elymus farctus*, *Pancratium maritimum*, *Lotus halophylus*, *Centaurea aegialophyla*

Fauna: a) Reptiles: *Telescopus fallax pallidus* (+), b) Birds: *Egretta alba* (E, W), *Ardea purpurea* (V, M), *Plegadis falcinellus* (E, M), *Buteo rufinus* (R, N), *Hieraaetus pennatus* (V, M), *H. fasciatus* (V), *Circus pygargus* (E, M), *Falco naumanni* (V, M), *Himantopus himantopus* (V, M), *Ficedula semitorquata* (R, M)

Most significant present values: Fodder (2), Game support (2), Scientific (2), Recreational (2), Educational (2)

Significant present uses: Grazing (2), Hunting (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2), Industrial wastewater (2), Agricultural point source pollution (2), Non-point source agricultural pollution (2)

Other anthropogenic activities: Land filling (2), Diversion of water courses (3), Establishment of new housing facilities or expansion of old ones (3), Establishment or expansion of cultivated fields (2), Illegal or non-sustainable hunting (3)

Present legal protection status: -

Most significant positive actions: Ecological studies

Principal bibliography used: Economidou (1990)

ALYKI ELOUNTAS LAGOON

Wetland Code: 432401000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°43'52" Latitude: 35°16'00"

Administrative Region: Kriti (GR430)

Prefecture(s): Lasithi (GR432)

Location: 0.5 km N, NE of the Elounta settlement.

Altitude above sea level (m): 0

Area (ha): 360

Length (km): -

Wetland Type: Lagoon (J)*, Salt pan (5)

Biotic characteristics:

Fauna: a) Reptiles: *Caretta caretta* (E), b) Birds: *Himantopus himantopus* (V, M), *Chlidonias niger* (V, M), *Larus audouinii* (E)

Most significant present values: Fishing (3), Game support (2), Salt production potential (2), Scientific (3), Cultural (3), Recreational (3), Educational (3)

Significant present uses: Fishing (3), Aquaculture (2), Hunting (1), Salt production (1), Recreation (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (3), Municipal solid wastes (2)

Other anthropogenic activities: Land filling (3), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3), Overfishing (3), Illegal or non-sustainable hunting (3)

Present legal protection status: Regulation on use of farming and fishing equipment

Most significant positive actions: Ecological studies, Public awareness programs

Principal bibliography used:

ALMYROU SPRINGS OR VOURKIA MARSH

Wetland Code: 432402000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 25°43'00" Latitude: 35°10'00"

Administrative Region: Kriti (GR430)

Prefecture(s): Lasithi (GR432)

Location: 2 km S of the Agios Nikolaos city.

Altitude above sea level (m): 2

Area (ha): 8

Length (km): -

Wetland Type: Spring (Y)*

Biotic characteristics:

Flora: a) Aquatic bed plants: *Ruppia maritima*, b) Emergents: *Juncus maritimus*, *Trifolium sp.*, *Phragmites australis*, *Scirpus sp.*, c) Dunes and sandy shores plants: *Elymus sp.*, *Cakile maritima*, *Salsola kali*, *Eryngium maritimum*

Fauna: Birds: *Circus aeruginosus* (V, M), *Falco naumanni* (V, M), *Larus audouinii* (E)

Most significant present values: Scientific (3), Cultural (2), Recreational (3), Educational (3)

Significant present uses: Recreation (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal wastewater (2), Municipal solid wastes (2), Sewage from tourist facilities (3)

Other anthropogenic activities: Land filling (2), Establishment of new housing facilities or expansion of old ones (3), Establishment of new tourist facilities or expansion of old ones (3)

Present legal protection status: Natural Beauty Landscape, Game refuge

Most significant positive actions: Ecological studies

Principal bibliography used: Burdon and Papakis (1964), Economidou (1990)

VAI MARSH OR FOINIKODASOS VAI MARSH

Wetland Code: 432405000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°15'41" Latitude: 35°16'06"

Administrative Region: Kriti (GR430)

Prefecture(s): Lasithi (GR432)

Location: 1 km E of the Vai village.

Altitude above sea level (m): 0

Area (ha): 1

Length (km): -

Wetland Type: Coastal permanently flooded saline-brackish water marsh (H)*, Spring (Y)

Biotic characteristics:

Flora: a) Emergents: *Juncus sp.*, b) Trees: *Phoenix theophrastii*

Fauna: Reptiles: *Chamaeleo chamaeleon* (R)

Most significant present values: Scientific (3), Cultural (2), Recreational (3), Educational (3)

Significant present uses: Recreation (3), Tourism (3)

Factors changing the wetland's ecological character:

Pollution: Municipal solid wastes (1)

Other anthropogenic activities:

Present legal protection status: Aesthetic forest, Mediterranean Specially Protected Area (Barcelona Convention)

Most significant positive actions: Reference in International-European biotopes/wetlands catalogues (CORINE Biotopes), Ecological studies

Principal bibliography used:

XIROKAMPOS ZIROU LAGOON

Wetland Code: 432406000

Part(s) of the wetland complex: -

Geographical Coordinates: Longitude: 26°14'37" Latitude: 35°03'28"

Administrative Region: Kriti (GR430)

Prefecture(s): Lasithi (GR432)

Location: 0.3 km S, SE of the Xirokampos village.

Altitude above sea level (m): 0

Area (ha): 13

Length (km): -

Wetland Type: Lagoon (J)*

Biotic characteristics:

Most significant present values: Fishing (1), Game support (1), Recreational (3), Educational (1)

Significant present uses: Fishing (1), Hunting (1), Recreation (3)

Factors changing the wetland's ecological character:

Pollution: Industrial wastewater (3)

Other anthropogenic activities: Land filling (1), Establishment of new housing facilities or expansion of old ones (3), Overfishing (2), Illegal or non-sustainable hunting (3)

Present legal protection status:

Most significant positive actions:

Principal bibliography used:

BIBLIOGRAPHY

BIBLIOGRAPHY

The following sources are not the only ones, that refer to wetland issues. They were chosen because they were used for the filling or checking of the Standard Data Forms.

- Anagnostopoulou, Maria. 1992. The relationship between the macro-invertebrate community and water quality and the applicability of biotic indices in the River Almopeos system, Greece. M. Sc. Dissertation, Manchester University. 133 p.
- Arianoutsou-Faragitaki, Margarita, C. Vlachos, I. Kapetanyannis, A. Kokkinakis, Stella Kokkini-Gouzgouni, E. Letsios, G. Balaskas, and B. Hallmann. 1986. Delineation study of the Ramsar wetlands: Lake Kerkini. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Athanasίου, Hrisoula. 1990. Wetland habitat loss in Thessaloniki plain, Greece. M. Sc. Dissertation, University College London. 45 p.
- Babalonas, D. 1979. Phytosociological study on the vegetation of the Evros Delta (Ainision Delta). Ph.D. thesis. Scientific Annals of the Faculty of Natural Sciences. Aristotle University of Thessaloniki. Annex No. 1. Thessaloniki. (In Greek).
- Babalonas, D. 1992. Mapping of the physiognomically detectable vegetation units in the wetlands of the Delta of Aliakmon, Loudias, Axios and Kitros Salt-works. Laboratory of Systematic Botany and Plant Geography, School of Biology, Aristotle University of Thessaloniki. Thessaloniki. (In Greek).
- Babalonas, D. and Eva Papastergiadou. 1988. Flora and vegetation in the wetland of rivers Axios Loudias and Aliakmonas. Laboratory of Systematic Botany and Plant Geography, School of Biology, Aristotle University of Thessaloniki. 46 p. (In Greek).
- Babalonas, D. and Eva Papastergiadou. 1989. The water fern *Salvinia natans* (L). ALL. in the Kerkini Lake (North Greece). Arch. Hydrobiol. 116: 487-498.
- Babalonas, D. and Eva Papastergiadou. 1990. Ein halophiles Gesellschaftsrelikt im griechischen Binnenland. Tuexenia 10: 115-121. Goettingen.
- Babalonas, D. and Eva Papastergiadou. 1992. Phytosociological-ecological study of Agios Mamas lagoon (Chalkidiki, Greece) and management proposals. Preliminary Report on 1992. Laboratory of Systematic Botany and Plant Geography, School of Biology, Aristotle University of Thessaloniki, and Greek Biotope/Wetland Centre. 73 p. (Gr, En su).
- Babalonas, D. and Eva Papastergiadou. 1993. Structure of the aquatic macrophytic vegetation in the lakes of Prespa. Greek Society of Biological Sciences. Proceedings of the 15th Panhellenic Congress 21-24 April 1993. pp. 25-27 (Gr, En su).
- Burdon, D.J. and N.J. Papakis 1964. Hydrogeological acknowledgement of the Almyros spring in Iraklio, Crete. I.G.E.Y. 9:123-147.
- Carp, E. 1980. A Directory of Western Palearctic Wetlands. UNEP, Nairobi, Kenya, and IUCN, Gland, Switzerland. 506 p.

- Catsadorakis, G. 1985. Preliminary ecological study of Lake Kournas. Duplicated report. Chania Forest Service. 16 p. (In Greek).
- Catsadorakis, G. 1986. Notes on the avifauna of the Lake Prespa National Park. *Biologia Gallo-hellenica* 12: 485-496.
- Catsadorakis, G. and D. Kollaros. 1986. Preliminary notes on the mammalian fauna of the Lake Prespa National Park (W. Macedonia, Greece). *Biologia Gallo-hellenica* 12: 507-517.
- Catsadorakis, G. and M. Malakou. 1991. The birds of Lake Kournas, Crete, Greece. *Kartierung mediterr. Brutvogel* 6: 13-17.
- Commission of European Communities (CEC). 1988. CORINE Biotopes: Greece. Jan. 1988. DG XI. 174 p.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. US Fish and Wildlife Service. Washington D.C. 131 p.
- Daniilidis, D., Lemonia Dionisopoulou, Anastasia Korovetsi, K. Makris, Fotini Bali, S. Baliotas, and F. Pergantis. 1986. Delineation study of the Ramsar wetlands: Mesolongi Lagoon. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Daniilidis, V.D. 1991. Systematic and ecological study of the cross-sections of the Lagoons of Mesolongi, Etoliko and Klisova. Ph.D. thesis. National and Kapodistrian University of Athens, School of Biology, Department of Ecology and Taxonomy, Lab. of Systematic Botany. Athens. 256 p.
- Dimitriou, B., B. Hallmann, G. Karetsos, Despoina Karra, K. Papanikolaou, S. Paraskevopoulos, and Eleni Tsoga. 1986. Delineation study of the Ramsar wetlands: Aliakmonas-Loudias-Axios Delta. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Dorikos, S. 1981. Basic wetlands of Greece. Ministry of Co-ordination. Service for Physical Planning and Environment. Athens. 400 p. (In Greek).
- Dounas, K., H. Jerrentrup, Vaso Karagiannidou-Iatropoulou, Evangelia Lyriti, Kontesa Economou, A. Poravos, and P. Christakopoulos. 1986. Delineation study of the Ramsar wetlands: Nestos Delta. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Drosos, E., H. Jerrentrup, M. Koulizakis, Evangelia Marinaki, G. Economidis, A. Savidis, and N. Stamatoukos. 1986. Delineation study of the Ramsar wetlands: Lake Mitrikou. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Economidis, G. 1991. Bionomic study of the benthic macrofauna of the lake Volvi. Ph.D. thesis. Scientific Annals of the Faculty of Sciences, School of Biology, Department of Zoology, Aristotle University of Thessaloniki. (In Greek).
- Economidis, P.S. 1991. Check list of freshwater fishes of Greece. Recent status of threats and protection. Hellenic Society for the Protection of Nature. Athens 46 p.
- Economidis, P.S. and V.P. Voyadjis 1985. Les poissons des systèmes d' Axios, Doirani et de Gallikos (Macèdoine, Grèce). *Biologia Gallo-hellenica* 10: 89-93.

- Economidou, Evangelia. 1969. Geobotany research of Skiathos island. Ph.D. thesis. Faculty of Natural Sciences, National and Kapodistrian University of Athens. Athens. (Gr, En su).
- Economidou, Evangelia. 1981. National programme for management of coastal areas. Coastal biotopes. Issue 1. Ministry of Co-ordination. Secretariat of National Council of Physical Planning and Environment. Athens. (In Greek).
- Economidou, Evangelia. 1990. Tracing and study of the wetlands and other important biotopes for the bird fauna of Crete. 2 Volumes. Ministry of Environment, Physical Planning and Public Works. University of Patras. (In Greek).
- Economidou, Evangelia., K. Vasilakis, D. Bousbouras, and R. Witte. 1993. Assessment of the ecological value of the Kalamas river delta and preliminary management proposals (Preliminary report on 1992). Greek Biotope /Wetland Centre and University of Patras, Department of Biology, Greece. 76 p. (Gr, En su).
- Federal Interagency Committee for Wetland Delineation. 1989. Federal manual for identifying and delineating jurisdictional wetlands. US Army Corps of Engineers, US Environ. Prot. Agency, US Fish and Wildlife Service, and USDA Soil Conservation Service, Washington D.C., Co-operative techn. pub. 76 p. plus appendices
- Feirabend, J.S., and J.M. Zelazny. 1987. Status report on our nation's wetlands. Nat. Wildlife Federation. Washington D.C. 47 p.
- Fytianos, K., V. Samanidou, and T. Agelidis. 1986. Comparative study of heavy metals pollution in various rivers and lakes of Northern Greece. *Ambio* 15: 42-44.
- Georgiadis, Th., Evangelia Economidou, and D. Christodoulakis. 1990. Flora and vegetation of the Strofilia Coastal Area (NW Peloponnisos - Greece). *Phyton* 30: 15-36.
- Gerakis, P.A., D. S. Veresoglou, and K. Kalbourtzi. 1988. Agricultural activities in the Axios Delta and assessment of their negative effects on the wetland. Laboratory of Ecology, Faculty of Agriculture, Aristotle University of Thessaloniki. (In Greek).
- Giannakopoulou, Trisevgeni. 1989. Structure-management of brackish ecosystems: the case of eutrophication of Lake Vistonis. Ph.D. thesis. Department of Civil Engineering, Democretos University of Thrace, Xanthi. (In Greek).
- Goutner, V. and S. Kazantzidis. 1992. Shorebird populations in the Evros Delta, Greece. *Bios* 1: 65-94.
- Goutner, V., S. Kazantzidis, and P. Latsoudis. 1992. Wetlands of the Gallikos river estuary, the Kalohori marsh, the Salt pans of Megalo Emvolo, and biotopes of the Epanomi area. Estimation of the ornithological importance and delineation proposal. Society for the study and protection of wetlands. Thessaloniki. 99 p. (In Greek).
- Gouvis, N., V. Goutner, S. Iosifidis, T. Kevrekidis, I. Mirotsos, D. Babalonas, and Panagiota-Thiresia Papastylianou. 1986. Delineation study of the Ramsar wetlands: Evros Delta. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Gradstein, S.R. and J. H. Smittenberg. 1992. Hydrophilous vegetation of western Crete. *Vegetatio* 35: 65-86.

- Gremillet, X. and J. Walmsley. 1992. "The Chalkiopoulos Lagoon", Corfu, Greece: a restoration proposal for a wetland of international importance. The Corfu Association for the Safeguard of the Chalkiopoulos Lagoon. Medmaravis, Corfu. 9 p. (In Greek).
- Grimmett, R.F.A. and T.A. Jones, (compilers). 1989. Important bird areas in Europe. International Council of Bird Preservation (ICBP), Technical Publication No 9. International Waterfowl and Wetland Research Bureau (IWRB). 888 p.
- Hallmann, B. 1982. Important bird areas in the European Community (Greece). EC/IWRB Report. 18 p.
- Hatzilakou, D. 1992. Study of the biology, reproduction and feeding ecology of the White Pelican *Pelecanus onocrotalus* L. at Lake Mikri Prespa. Ph.D. thesis. National and Kapodistrian University of Athens, School of Biology, Section of Ecology and Taxonomy. Athens. 199 p. (Gr, En su).
- Heliotis, F.D. 1988. An inventory and review of the wetland resources of Greece. Wetlands 8: 15-31.
- Jerrentrup, H. 1992. The fauna of Lake Vistonis and the Porto Lagos area. p. 363-373. In Gerakis P.A. (ed.). Conservation and management of Greek wetlands. Proceedings of a Greek Wetland Workshop held in Thessaloniki, Greece, 17-21 April, 1989. IUCN, Gland, Switzerland.
- Joensen, A.H. and H. Jerrentrup. 1988. The Agios Mamas Lagoon, Chalkidiki, Greece: an area of international importance for breeding waders. Natura Jutlandica 22: 185-188.
- Jones, T. (compiler). 1993. A Directory of wetlands of international importance: Part I Africa, Part II Asia and Oceania, Part III Europe. Ramsar Convention Bureau, Gland, Switzerland.
- Kalofotias, A. and Kleopatra Papadopoulou. 1992a. Wetland of Spercheios Delta (collection and evaluation of data). Region of Sterea Ellada, Directorate of Environment - Planning, Department of Environment. Lamia. (In Greek).
- Kalofotias, A. and Kleopatra Papadopoulou. 1992b. Wetlands of the Sterea Ellada Region (collection and evaluation of data). Region of Sterea Ellada, Directorate of Environment - Planning, Department of Environment. Lamia. (In Greek).
- Karandinos, M. (ed.) 1992. The red data book of threatened vertebrates of Greece. Hellenic Zoological Society, Athens. (Gr, En su).
- Kasioumi, Maria. 1994. Literature review for the lake Pamvotida (Ioanninon Lake). Faculty of Agriculture, Aristotle University of Thessaloniki. (In Greek).
- Kazantzidis, S. and Hrisoula Athanasiou. 1992. The wetlands of Axios, Loudias, Aliakmon, and Alyki Kitrous: Estimation of the ornithological importance, assessment of important bird areas, threats, proposals. Society for the Study and Protection of Wetlands. Thessaloniki. 57 p. (In Greek).
- Kilikidis, S., A. Kamarianos, G. Fotis, C. Batzios, X. Karamanlis, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992a. Sperchios Delta (Prefecture of Fthiotida): Assessment of its eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the

- conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kilikidis, S., A. Kamarianos, G. Fotis, C. Batzios, X. Karamanlis, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992b. Agios Mamas Marsh (Prefecture of Chalkidiki): Assessment of its eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kilikidis, S., A. Kamarianos, G. Fotis, C. Batzios, X. Karamanlis, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992c. Artzan Marsh (Prefecture of Kilkis): Assessment of its eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kilikidis, S., A. Kamarianos, G. Fotis, X. Karamanlis, C. Batzios, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992d. Lake Agras (Prefecture of Pella): Assessment of its eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kilikidis, S., A. Kamarianos, G. Fotis, X. Karamanlis, C. Batzios, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992e. Lake Alyki and Lake Chortarolimni (Limnos Island): Assessment of their eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kilikidis, S., G. Fotis, A. Kamarianos, C. Batzios, X. Karamanlis, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992f. Kalloni Gulf (Lesvos Island): Assessment of its eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kilikidis, S., G. Fotis, A. Kamarianos, C. Batzios, X. Karamanlis, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992g. Lake Zazari and Lake Chimaditida (Prefecture of Florina): Assessment of their eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).

- Kilikidis, S., G. Fotis, A. Kamarianos, X. Karamanlis, C. Batzios, T. Kousouris, M. Karteris, T. Akriotis, M. Voyadzis, Ourania Giannakou, I. Gytas, C. Kyrimis, L. Tsaras, and C. Brozos. 1992h. Kalamas Estuaries (Prefecture of Thesprotia): Assessment of their eligibility for inclusion in the Community network of Special Protection Areas, by implementing Article 4 of Directive 79/409/EEC on "the conservation of wild birds". Ministry of Environment, Physical Planning and Public Works, Directorate of Environmental Planning. (In Greek).
- Kizilou, Vasiliki 1989. Study on the physical planning and development of the greater area of the Nestos river, the Mitrikou and Vistonida Lakes and proposal for a land use plan. (A' part). Ministry of Environment, Physical Planning and Public Works. Athens. 304 p. (In Greek).
- Kolovos, G., I. Brousalis, and D. Papanikos. 1992. The peat soil of Kalodiki (District of Margariti, Prefecture of Thesprotia). Institute of Geological and Mining Exploitation. Preveza. 6 p. (In Greek).
- Konstantinidis, K. 1989. Land reclamation projects in Thessaloniki Plain. Geotechnical Chamber of Greece, Thessaloniki. 217 p. (In Greek).
- Koroni, Myrto, E. Adamogiannis and associates. 1993. Land use, ecological and management study of the Pinios Delta. Public Property Corporation, Thessaloniki. (In Greek).
- Korovetsi, Anastasia, Lemonia Koumpli-Sovantzi, N. Davloyiannis, D. Sotiropoulos, G. Havakis, and G. Handrinos. 1986. Delineation study of the Ramsar wetlands: Kotychi Lagoon. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Kourmoulis, N.E. 1979. Inventory of karstic springs in Greece. I. Crete. Institute of Geological and Mining Exploitation (IGME). Publications No. 28. 44 p.
- Kourteli, Hrisoula and A. Economou. 1992. Present status of Greek wetlands. p. 197-205. In Gerakis P.A. (ed.). Conservation and management of Greek wetlands. Proceedings of a Greek Wetland Workshop held in Thessaloniki, Greece, 17-21 April, 1989. IUCN, Gland, Switzerland.
- Luther, H. and J. Rzóska. 1971. Project Aqua: a source book of inland waters proposed for conservation. IBP Handbook No. 21. Blackwell Scientific Publications, Oxford and Edinburgh. 239 p.
- Malakou, M., H. Jerrentrup, A. Kyriazi, D. Hatzantonis, and E. Papayiannakis. 1988. Integrated management of coastal wetlands of the Mediterranean type; Northern Greece. Committee on Nature and Man, Panorama Cultural Society. Athens. 108 p.
- Maltby, E. 1986. Waterlogged wealth. Earthscan. 200 p.
- Mantzavelas, A., G.C. Zalidis, P.A. Gerakis, and S. Dafis (eds). 1995. Criteria for wetland identification. Greek Biotope/Wetland Centre (EKBY). 19 p. (Gr, En su).
- Mavroudis, I. and A. Panoras 1993. Climatological data of the Thessaloniki plain. Institute of Land Reclamation. Sindos. 77 p. (In Greek).
- Meininger, P.L. (Eds). 1990. Birds of the wetlands in Northeast Greece, Spring 1987. WIWO Report 20. Zeist.

- Ministry of Agriculture, II Regional Directorate of Land Reclamation. 1988. Hydrobiological study of the Volvi watershed, Prefecture of Thessaloniki. Preliminary study. 36 p. (In Greek).
- Ministry of Environment, Physical Planning and Public Works, Prefecture of Chalkidiki, Greek Centre for Productivity. 1987. Project on the evaluation (protection - development) of the wetlands of the Chalkidiki Prefecture. 190 p. (In Greek).
- Ministry of Presidency, Youth Service, Local Union of Municipalities and Villages of The Prefecture of Evia. 1984. Environmental Impact Statement (A' type according to the Presidential Decree 1180/81), for the degradation of Aliveri and the Lake Distou. Athens. (In Greek).
- Mitsch, W.J. and J.G. Gosselink. 1986. Wetlands. Van Nostrand Reinhold. 539 p.
- Moustaka, Maria. 1988. Seasonal fluctuations, annual periodicity and spatial distribution of the phytoplankton populations of Lake Volvi. Ph.D. thesis. Scientific Annals of the Faculty of Natural Sciences, School of Biology, Aristotle University of Thessaloniki. Annex No. 13. Thessaloniki. (Gr, En su).
- National Statistics Service of Greece (ESYE). 1987. Statistic List of Greece. ESYE. Athens.
- Olney, P. (ed.). 1965. Project MAR. List of European and North African Wetlands of International Importance. IUCN New Series 5. IUCN, Morges, Switzerland. 120 p.
- Papakostas, G. 1990. Assessment of the ornithological value of the wetland of the Kitros Salt pans, Pieria. School of Biology, Department of Zoology, Aristotle University of Thessaloniki. (In Greek).
- Papamichos, N. (ed.). 1986. Ecological study and use of natural resources of the Strofilia Forest, NW Peloponnisos. School of Forestry and Natural Environment, University of Thessaloniki, School of Biology, University of Patras. Thessaloniki. (In Greek).
- Papastergiadou, Eva. 1990. Phytosociological and ecological studies of aquatic macrophytes (hydrophytes), in Northern Greece. Ph.D. Thesis, Scientific Annals of the Faculty of Natural Sciences, Aristotle University of Thessaloniki. (Gr, En su).
- Papastergiadou, Eva and D. Babalonas. 1992. Ecological studies on aquatic macrophytes of a dam lake - Lake Kerkini, Greece. Arch. Hydrobiol./Suppl. 90: 187-206.
- Papayannis, T. 1992. Greek wetlands: Factors of change. p. 207-227. In Gerakis P.A. (ed.). Conservation and management of Greek wetlands. Proceedings of a Greek Wetland Workshop held in Thessaloniki, Greece, 17-21 April, 1989. IUCN, Gland, Switzerland.
- Pavlidis, G., V. Goutner, Marinela Zarftzian-Likaki, I. Diamantopoulos, Polyxeni Tzortzi, D. Kokkas, and C. Eminoglou. 1986. Delineation study of the Ramsar wetlands: Lake Volvi and Lake Lagada. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Pergantis, P.C. 1988. Study on the integrated management of coastal wetlands in Western Greece. Report prepared for CEC (DG XI) 116 p.
- Psilovikos, A. 1992. Changes in Greek wetlands during the twentieth century: the cases of the Macedonian inland waters and the river deltas of the Aegean and Ionian

- coasts. p. 175-196. In Gerakis P.A. (ed.). Conservation and management of Greek wetlands. Proceedings of a Greek Wetland Workshop held in Thessaloniki, Greece, 17-21 April, 1989. IUCN, Gland, Switzerland.
- Pyrovetsi, Myrto and Eva Papastergiadou. 1992. Biological conservation implications of water level fluctuations in a wetland of international importance: Lake Kerkini, Macedonia, Greece. *Environ. Conservation* 19: 235-244.
- Pyrovetsi, Myrto, A.J. Crivelli, P.A. Gerakis, M.A. Karteris, E.P. Kastro, and N. Komninos. 1984. Integrated environmental study of Prespa National Park, Report prepared for CEC (DG XI). 205 p.
- Pyrovetsi, Myrto. 1990. Conservation and management of the biotopes of the Dalmatian pelicans (*Pelecanus crispus*) in Northern Greece. Commission of the European Communities (DG XI) and Aristotle University of Thessaloniki. 145 p.
- Ramsar Convention Bureau. 1990. Convention of wetlands of international importance especially as waterfowl habitat. Proceedings of the Fourth Meeting of the Conference of the Contracting Parties. 27 June to 4 July 1990, Montreux, Switzerland.
- Rose, P.M. and V. Taylor. 1993. Western Palearctic and South West Asia waterfowl census 1993. IWRB. Slimbridge, UK. 215 p.
- Samanidou, V. and K. Fytianos. 1987. Partitioning of heavy metals into selective chemical fractions in sediments from rivers in Northern Greece. *The Science of the Total Environment* 67: 279-285.
- Scott, D.A.. 1980. A preliminary inventory of wetlands of international importance for waterfowl in West Europe and Northwest Africa. IWRB Special Publication No 2. IWRB, Slimbridge, UK. 127 p.
- Spartinou, Maria-Georgia. 1992. The microflora of the Amvrakia Lake. Taxonomic and ecological study. Ph.D. thesis. National and Kapodistrian University of Athens, School of Biology, Section of Ecology and Taxonomy, Lab. of Systematic Botany. Athens. (Gr, En su).
- Tafas, T. 1991. Microflora of Trichonida Lake, Aitolokarnania. Qualitative and quantitative analysis of phytoplankton. Seasonal succession. Ph.D. thesis. National and Kapodistrian University of Athens. School of Biology, Section of Ecology and Taxonomy, Lab. of Systematic Botany. Athens. (Gr, En su).
- Topiotechniki Ltd. 1992a. Delineation and management study of the Axios-Loudias-Aliakmonas Delta and Alyki Kitrous. Ministry of Environment, Physical Planning and Public Works, Athens. 200 p. (In Greek).
- Topiotechniki Ltd. 1992b. Delineation and management study of the wetlands of Epanomi, Angelochori, Gallikos estuary and Kalohori Lagoon. Ministry of Environment, Physical Planning and Public Works, Athens. (In Greek).
- Troumbis, A. 1992. Management study Dipi Larsos marsh, Geras gulf. University of Aigeon, School of Environment. Mytilini. (In Greek).
- Tsekos, I., P.S. Economidis, S. Haritonidis, A.I. Sinis, G. Nikolaidis, D. Petridis, Maria Moustaka, Marilena Zarftzian, and A. Kokkinakis. 1992. Hydrobiological study of the Tavropos artificial lake, Prefecture of Karditsa. Final Report. Lab. of Botany and Lab. of Zoology, Aristotle University of Thessaloniki. Ministry of Agriculture, Department of Fishery. 257 p. (In Greek).

- Tsiouris, S.E. and P.A. Gerakis. 1991. Wetlands of Greece: values, alterations, conservation. WWF, Laboratory of Ecology and Environmental Protection of Faculty of Agriculture of Aristotelian University of Thessaloniki, IUCN. Thessaloniki, 96 p. (In Greek).
- UNEP/IUCN. 1989. Directive of marine and coastal protected areas in the Mediterranean region. Part I: Sites of biological and ecological value. MAP Technical Reports Series No 26. UNEP, Athens. 196 p.
- Vafiadis, P., G. Giouzevas, A. Zarkanelas, E. Kotleas, G. Papastathis, V. Sortikos, and A. Foutsis. 1990. Environmental impacts on the Lake Volvi due to the construction of irrigation works in the area of Askos and Volvi. Ministry of Agriculture, Directorate of Land Reclamation of the Prefecture of Thessaloniki. (In Greek).
- Varela, Maria, M. Kapantais, Anna Koukouvitaki, Myrsini Malakou, F. Pergantis, S. Spatalas, and T. Tafas. 1986. Delineation study of the Ramsar wetlands: Amvrakikos Gulf. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Vasala, Paraskevi (co-ordinator). 1987. Koutavos: the lagoon of Kephallinia. A survey conducted by the pupils of the B1 grade of the 3rd Gymnasium in Argostoli. 22 p. (In Greek).
- Vasilakis, K. and D. Bousbouras. 1991. The Acheloos diversion. An estimation of environmental, economic and social impacts. Hellenic Ornithological Society. Athens. (In Greek).
- Vasilakis, K. and D. Bousbouras. 1992. The diversion of river Evinos for the water supply of the Attiki basin: environmental impacts and alternative solutions. Hellenic Ornithological Society. Athens. (In Greek).
- Vavdinoudis, K., P. Vafiadis, and P. Hourpouliadis. 1991. Irrigation reservoirs in the Artzan district, Prefecture of Kilkis. Preliminary report. Ministry of Agriculture, II Regional Directorate of Land Reclamation. Thessaloniki. 49 p. (in Greek).
- Voliotis, D., L. Symeonidis, B. Hallmann, V. Voyadzi, P. Korisianos, Vasiliki Katsani, and Eleni Voyadzi. 1986. Delineation study of the Ramsar wetlands: Lake Vistonida - Porto Lagos. Ministry of Environment, Physical Planning and Public Works. Athens. (In Greek).
- Voulgaropoulos, A., K. Fytianos, A. Apostolopoulou, and X. Gounaridou. 1987. Correlation of some organic pollution factors in water systems in Northern Greece. *Wat. Res.* 21: 253-256.
- Zalidis, G.C. 1993. The National Wetlands Inventory in Greece: Prospects and progress. In Moser M., R.C. Prentice and J. van Vesseem (Eds). *Waterfowl and Wetland Conservation in the 1990s - a global perspective* Proc. IWRB Symp., St. Petersburg Beach, Florida, USA. IWRB Spec. Pub. No. 26, Slimbridge, UK, pp. 178-184.
- Zalidis, G.C., M. Karteris, K. Katsampalos, Hrisoula Kourteli, and N. Lampropoulos. 1993a. Inventory study of Greek wetlands using G.I.S. *Proceedings of the First International Fair and Conference for Environmental Technology, HELECO '93*. Athens. pp. 268-279 (Gr, En su).

- Zalidis, G.C., N. Barbayiannis, and Theodora Matsi. 1993b. Total content and forms of heavy metals in the soils of Axios Delta. Greek Biotope/Wetland Centre (EKBY) and Soil Science Laboratory, Faculty of Agriculture, Aristotle University of Thessaloniki. 47 p. (Gr, En su).
- Zalidis, G.C., X.P. Dimitriadis and S.L. Hatjiyiannakis. 1995a. Ideotype of the former lake Karla as an evaluation baseline of the proposed solution for the construction of the reservoir. Greek Biotope/Wetland Centre, Greece. 91 p. (Gr, En su).
- Zalidis, G.C., A. Mantzavelas, and Eleni Fitoka (eds.). 1995b. Topological identification of Mediterranean wetland habitats. Greek Biotope/Wetland Centre. (In press)

Wetlands are areas that are saturated with water for long periods of time, and they are important for many reasons. They provide habitat for many species of plants and animals, and they also play a role in the water cycle. Wetlands can help to filter out pollutants from the water, and they can also help to prevent flooding. In Greece, there are many wetlands, and they are being lost at a rapid rate. It is important to inventory these wetlands so that they can be protected and managed properly.

1

Appendix: Site Data Sheet

THE GOULANDRIS NATURAL HISTORY MUSEUM
GREEK BIOTOPE / WETLAND CENTRE (EKBY)
 14o kilometre Thessaloniki-Mihaniona
 GR-57001 Thermi

Phones: (+30) 31 473.320
 475.604
 Fax: (+30) 31 471.795

INVENTORY OF GREEK WETLANDS

Information Sheet of Wetland Site

1. Date: / / 199...

2. Name, address and phone number of compiler(s):

	1	2	3	4	5
Name:					
Street and N°:					
Area Code:					
Town:					
Phones:					
Fax:					

3. Name(s) of Wetland:

- 1.
- 2.
- 3.

(If the wetland is a complex, mention the names of its parts):

4. Wetland code (supplied by EKBY):

___/___/___

5. Administrative region:

6. Prefecture(s):

7. Location (compass bearing (i.e. NE, SW etc.) and distance from nearest village, town or city):

8. Geographical co-ordinates:

(If known, give co-ordinates of the centre of the area)

Longitude:

Latitude:

9. Altitude above sea level:

Minimum: _____

Average: _____

Maximum: _____

INVENTORY OF GREEK WETLANDS AS NATURAL RESOURCES

10. Wetland area (in ha) (*)

Average: _____

Length: _____

-- (NB: area must be in ha) --

(*) Indicate source of estimation with an X:

Map

Direct information (personal evaluation, on-the-spot observation)

Indirect information (bodies, press)

Studies - Reports

11. Ownership Status (mark with one or more numbers) :

1: Government 2: Municipal 3: Monastery 4: Private 5: Co-owned

Wetland: _____

Surrounding area: _____

12. Wetland type. Mark with one or more X's.

(Fill in all columns)

A	B*	C**	D	E
Estuary	_____	_____	Wetland	Coastal
Delta	_____	_____	Wetland Complex	Inland
Lagoon	_____	_____	Part of Wetland Complex	
River	_____	_____		
Spring	_____	_____		
Marsh	_____	_____		
Freshwater lake	_____	_____		
Peatland	_____	_____		
Salt pan	_____	_____		
Canal or ditch	_____	_____		
Reservoir	_____	_____		

(*) For each wetland type mark: 1: Permanently flooded, 2: Periodically flooded,

(**) For each wetland type mark: 1: Fresh water, 2: Saline-brackish water

13. Biotic characteristics. Note the species found in the wetland (if more space is required, attach tables at the end):

FLORA

CATEGORIES OF FLORA	LIST OF SPECIES	
	SCIENTIFIC NAME	COMMON NAME
Aquatic bed plants		
Emergents		
Scrubs and Shrubs		
Trees		
Dunes and Sandy Shores plants		

FAUNA

CLASS	SCIENTIFIC NAME	COMMON NAME	POPULATION STATUS*	CONSERVATION STATUS**
Fish				
Amphibians				
Reptiles				
Birds				
Mammals				

(*) Mark the population status. Mark specifically for birds: N = nesting, M = migratory, W = wintering, P = permanent presence

(**) Mark the status of the species in the specific wetland. E = endangered, V = vulnerable, R = rare

INVENTORY OF GREEK WETLANDS AS NATURAL RESOURCES

14. Most significant present values. (Mark with X's)

Value	Size of Value				
	Great	Medium	Small	Non-existing	Unknown
Drinking water					
Irrigation water					
Fishing					
Fodder					
Game support					
Logging					
Salt production potential					
Hydroelectric power potential					
Sand extraction potential					
Scientific					
Cultural					
Recreational					
Educational					

15. Significant present uses. (Mark with X's)

Use	Intensity of use				
	High	Medium	Low	Non-existent	Unknown
Drinking water supply					
Irrigation water supply					
Fishing					
Aquaculture					
Grazing					
Hunting					
Wood supply					
Salt production					
Hydroelectricity production					
Sand extraction					
Recreation					
Tourism					
Sports					
Environmental education					

16. Factors changing the wetland's ecological character (Mark with X's):

	Great	Medium	Small	Non-existing	Unknown	Bodies Responsible ^{*1}	Sources of Information ^{*2}
A. Pollution:							
Municipal wastewater							
Municipal solid wastes							
Industrial wastewater							
Industrial solid wastes							
Sewage from tourist facilities							
Agricultural point source pollution							
Non-point source agricultural pollution							
Transboundary pollution							
B. Other anthropogenic activities:							
Drainage							
Non-sustainable sand extraction							
Land clearing							
Land filling							
Overpumping of ground water							
Diversion of water courses							
Dams or other installations for retention and storage of water							
Irrigation schemes							
Construction or expansion of road network							
Construction or expansion of railway network							
Construction or expansion of airport							
Construction of racecourse or speedway							
Establishment of new housing facilities or expansion of old ones							
Establishment of new industrial facilities or expansion of old ones							
Establishment of new tourist facilities or expansion of old ones							
Establishment or expansion of livestock facilities							
Establishment or expansion of cultivated fields							
Overdrilling (for water)							
Intensive fish farming or other aquaculture							
Intensive recreational facilities							
Intensive sports facilities							
Illegal or non-sustainable hunting							
Illegal or non-sustainable wood cutting							
Overfishing							
Overgrazing							
Sedimentation							
Change of water salinity							
Import of exotic species of flora-fauna							
Drop in water level (other than that due to natural causes)							

^{*1} Bodies responsible (In this column write the corresponding letters as per following):

A. Civil Service, B. Local Authorities, C. Private Sector (greenhouses, livestock facilities, tanneries, oil-mills, dairy plants, tourist facilities, etc.), D. NGOs, co-operatives, etc.

^{*2} Source of data and other remarks (In this column write the corresponding number as per following list): 1. Map, 2. Direct information (personal evaluation, on the spot observation), 3. Indirect information (bodies, press), 4. Reports of studies-articles in scientific journals

** (If only broad groups are known, use the letters A, B, C or D. If more specific bodies are also known, list them next to the corresponding letters).

17. List plans for future changes in the use of the wetland and the wider area as well as the bodies involved (*i.e. Civil Service, local authorities, co-operatives, private sector etc.*):

Reason for changes	X*	Bodies*
Drainage	_____	
Sand extraction	_____	
Land clearing	_____	
Land filling	_____	
Overpumping of ground water	_____	
Diversion of water courses	_____	
Construction of dams or other installations for retention and storage of water	_____	
Construction of irrigation schemes	_____	
Construction of projects for the disposal of untreated wastes	_____	
Construction or expansion of road network	_____	
Construction or expansion of railway network	_____	
Construction or expansion of airport	_____	
Construction of racecourse or speedway	_____	
Establishment of new housing facilities or expansion of old ones	_____	
Establishment of new industrial facilities or expansion of old ones	_____	
Establishment of new tourist facilities or expansion of old ones	_____	
Expansion of cultivated fields	_____	
Establishment or expansion of livestock facilities	_____	
Establishment or expansion of farm buildings	_____	
Drilling for water	_____	
Establishment of fish farms or other aquaculture	_____	
Construction of recreational facilities	_____	
Construction of sports facilities	_____	

* In column "X" mark corresponding action with an X

** In column "Bodies" write the corresponding letter for the body, as per following):

A. Civil Service, B. Local Authorities, C. Private Sector (greenhouses, livestock facilities, tanneries, oil-mills, dairy plants, tourist facilities, etc.), D. NGOs, co-operatives, etc.

(If only broad groups are known, use the letters A, B, C or D. If more specific agencies are also known, list them next to the corresponding letters).

18. List the existing legal protection status for the wetland and its broader surrounding area (mark with X's)

Legal protection status

Non-existing/Unknown

Not required

Wetland of international importance in accordance with the Ramsar Convention

Special Protection Area (Directive 79/409/EEC)

Mediterranean Specially Protected Area (Barcelona Convention)

National parks, Nature reserves, Areas of natural beauty

Common Ministerial decision for the delineation of protected areas

Establishment of housing control zones (ZOE)

Regulations on surface and underground waters utilization

Regulations on threshold values for harmful substances in effluents

Regulations on waste disposal

Regulations on the establishment and operation of industrial facilities

Regulations on use of farming and fishing equipment

Health regulations

Game refuge

Prohibition of fishing

Prohibition of grazing

Prohibition of hunting

Prohibition of logging

Prohibition of land clearing

Prohibition of excavations-drilling

Prohibition of new pumping installations

Prohibition of establishment and operation of industrial plants

Prohibition of waste disposal

Prohibition of entrance to the wetland

19. List all positive actions and by whom they were taken (i.e. International organisations, EU, Civil Services and Organisations, Non-government organisations, educational institutions, individuals), are being taken or are being planned for the protection of the wetland.

Positive actions	Presently implemented	Planned	Not existing Unknown	
	X	X		Bodies
Reference in International-European biotopes/wetlands catalogues (Important bird area, ICBP-IWRB, CORINE Biotopes)	_____	_____		
Ecological studies	_____	_____		
Studies on geology, hydrogeology, geophysics	_____	_____		
Soil surveys	_____	_____		
Chemical studies	_____	_____		
Fishing studies	_____	_____		
Land planning studies	_____	_____		
Delineation and management studies	_____	_____		
Development programs-studies	_____	_____		
Environmental impact assessment studies	_____	_____		
Studies for the restoration-rehabilitation of the wetland	_____	_____		
Establishment of wastewater treatment facilities	_____	_____		
Forest conservation projects	_____	_____		
Public awareness projects	_____	_____		

** (Under column "X" mark the corresponding actions with X's, and under "Bodies" write the corresponding number of the agency involved, as per following table):

- | | |
|-------------------------------------|---|
| 1. International Organisations | 5. Local authorities |
| 2. European Union | 6. University institutes - Research centres |
| 3. Non-Government Organisations | 7. Private Sector |
| 4. Civil Services and Organisations | 8. Press - Media |

20. List names of wetlands in your broader region which have been drained. In your opinion, which of these could be restored?

Name of wetland			
Type of wetland			
Year of drainage			
Reason for drainage			
Location (compass bearing, i.e. SE, etc. and distance in km from nearest village town or city)			
Possibility of restoration (mark with X's)			

21. List all individuals or groups who have studied or are presently studying the wetland::

22. List whatever additional information you believe is significant for the wetland:

- Other wetland features:

- Bibliography:

INDEX OF THE GREEK WETLANDS

- * The symbol (●) indicates wetlands whose compiled information sheet is included in Part B
- * The symbol (○) indicates wetlands for which EKBV obtained limited information. These wetlands are not included in Part B

<u>Wetland's Name</u>	<u>Page</u>	<u>Part(s) of the wetland complex</u>	<u>Page</u>
DELTA			
● Acheloos Delta	259		
● Aliakmonas Delta	114		116
		● Agathoupoli Marsh	
● Arachthos Delta	233		
● Axios Delta	111		
● Evros Delta or Aenisio Delta	35		
		● Skepi Lake	37
		● Nymfon Lake	39
		● Paloukia Lagoon	41
		● Drana Lagoon	43
		● Laki Lagoon	45
● Evrotas Delta	355		
		● Asteriou Lake	357
		● Vivari Lagoon	359
● Kalamas Delta or Thyamis Delta	202		
● Louros Delta	231		
		○ Tsopeli Lagoon	
		○ Rodia Lagoon	
		○ Tsoukalio Lagoon	
		○ Logarou Lagoon	
● Nestos Delta	73		
● Pinios Delta	173		
● Sperchios Delta	314		
● Vouvos Delta	235		
ESTUARIES			
○ Acherontas Estuary			
○ Afratia Estuary			
● Alfios Estuary	302		
● Almyropotamos Estuary	312		
○ Anapodaris Estuary			
● Aposelemis Estuary	410		
○ Asopos Estuary			
● Chavrias Estuary	136		
● Cholorrema Estuary	183		
○ Dasias Estuary			
● Evinos Estuary	267		
● Gallikos Estuary or Echedoros Estuary	106		
● Geropotamos Estuary	412		
● Giofyros Estuary	409		

<u>Wetland's Name</u>		<u>Part(s) of the wetland complex</u>
• Ierissos River Estuary	128	
○ Karteros Estuary		
○ Kiliaris Estuary		
• Komi River Estuary	378	
• Lachanorema Estuary	184	
○ Lilas Estuary		
• Limni Preveli Estuary	407	
• Loudias Estuary	113	
○ Melissoudio Estuary		
○ Mesongon Estuary		
• Mornos Estuary	322	
○ Mylopotamos Estuary		
• Nedas Estuary	300	
○ Nedonas Estuary		
○ Pamisos Estuary		
○ Peras Estuary		
• Pinios Estuary	306	
• Piros Estuary	295	
• Platanias Estuary or Keritis Estuary	400	
○ Potamos Estuary		
• Sozopoli River Estuary	141	
○ Stomio Ierapetras Estuary		
○ Stomio Sitias Estuary		
• Strymonas Estuary	85	
• Tavronitis Estuary	399	
• Tripotamos Estuary	133	
• Voudoros Estuary	333	
• Vouvaris Estuary	370	
LAGOONS		
• Agiasma Lagoon or Gkoumpournou Lagoon	73	○ Vassova Lagoon ○ Eratinos Lagoon ○ Kokala Lagoon ○ Keramotis Lagoon ○ Chaidefto Lagoon ○ Monastiraki Lagoon ○ Mangana Lagoon ○ Megali Limni Lagoon
○ Agiasma Lagoon or Gkoumpournou Lagoon		
• Agios Georgios Lagoon	192	
• Aigio Lagoon	292	
• Aitoliko Lagoon	261	
○ Alyki Agkairias Lagoon		
• Alyki Alexandrou Lagoon	251	
• Alyki Angelochoriou or Megalo Emvolo Lagoon	103	
• Alyki Elountas Lagoon	413	

<u>Wetland's Name</u>		<u>Part(s) of the wetland complex</u>
• Alyki Kallonis Lagoon	367	
• Alyki Kitrous Lagoon	118	
• Alyki Lefkimis Lagoon	249	
• Alyki Limnou Lagoon	364	
◦ Alyki Naxou Lagoon		
• Alyki Polychnitou Lagoon	369	
• Alyki Psilis Ammou Lagoon	382	
• Alyki Tigakiou Lagoon	397	
• Anatolika Drepanou Lagoon	341	
• Antinioti Lagoon or Acharavi Lagoon	245	
• Araxos Lagoon or Pappa Lagoon or Kalogria Lagoon	289	
◦ Arogi Lagoon or Karatzas Lagoon or Mavrolimni Lagoon		
• Atalanti Lagoon or Potoki Lagoon or Vourlia Lagoon	319	
◦ Balos Lagoon		
• Bourmpoulithra Lagoon	186	
◦ Chaidefto Lagoon		
• Chalkiopoulou Lagoon	247	
◦ Chivadolimni Milou Lagoon		
◦ Elos Lagoon		
• Epanomi Lagoon	101	
◦ Eratinos Lagoon		
• Gialova Lagoon or Divari Lagoon	361	
• Kapari Bay Lagoon	345	
• Katafourko Lagoon or Anoixiatiko Lagoon	236	
◦ Keramoti Lagoon		
• Keriou Lagoon or Valtos Lagoon	255	
• Klisova Lagoon	265	
◦ Kokala Lagoon		
• Korission Lagoon	248	
• Kotychi Lagoon or Nevythos Lagoon	283	
• Koufos Lagoon or Porto Koufo Lagoon	131	
• Koukounaries Lagoon	193	
• Koutavos Lagoon	254	
◦ Limni Lagoon		
• Livari Lagoon or Mikro & Megalo Livari Lagoon	330	
◦ Logarou Lagoon		
◦ Mangana Lagoon		
• Mazoma Lagoon	229	
◦ Mesi Lagoon or Alyki Lagoon		
• Mesolongi Lagoon	263	
• Meson Lagoon	373	
◦ Monastiraki Lagoon		
• Moustos Lagoon or Moustou Lagoon	353	

<u>Wetland's Name</u>		<u>Part(s) of the wetland complex</u>	
○ Palia Alyki Antiparou Lagoon			
● Panormos Mykonou Lagoon	393		
● Parakoila Lagoon	372		
● Pogonitsa Lagoon	228		
● Porto Lagos Lagoons	61		63
		● Lafri Lagoon	65
		● Lafrouda Lagoon	67
		● Lagos Lagoon	
○ Ptelea Lagoon			
○ Rodia Lagoon			
● Rodopi Lagoons	55		
		○ Limni Lagoon	
		○ Elos Lagoon	
		○ Ptelea Lagoon	
		○ Mesi Lagoon or Alyki Lagoon	
		○ Arogi Lagoon or Karatzas Lagoon or Mavrolimni Lagoon	
		○ Xirolimni Lagoon or Fanari Lagoon	
● Santa Maria Lagoon	395		
● Souvala Lagoon or Svala Lagoon	311		
● Steno Lefkadas Lagoon or Gyra Lefkadas Lagoon	243		
● Strongyli Lagoon	360		
● Thermisia Lagoon	346		
○ Tsopeli Lagoon			
○ Tsoukalio Lagoon			
● Valario Lagoon	363		
● Varvara Lagoons or Avlaki & Agios Stefanos Lagoons	244		
○ Vassova Lagoon			
● Vathy Lagoon	227		
● Vlychos Lagoon	252		
● Vonitsa Lagoon	239		
● Vourvourou Lagoon	130		
● Vromolimni Lagoon or Asproneri Kammenon Vourlon Lagoon	317		
● Vromolimnos Lagoon or Vromolimnos & Argyrolimnos Lagoon	191		
● Xirokamos Zirou Lagoon	416		
○ Xirolimni Lagoon or Fanari Lagoon			
LAKES			
○ Agia Triada Lake			
○ Alyki Xironomis Lake			
● Amvrakia Lake	272		
● Ateni Lake	386		
● Chimaditida Lake or Anargyron Lake	149		
● Doirani Lake	87		

<u>Wetland's Name</u>	<u>Part(s) of the wetland complex</u>
• Drakolimnes Lakes	216
• Dystou Lake or Dystos Lake	337
◦ Flegka Lake	
• Ioanninon Lake or Pamvotida Lake	218
• Ismarida Lake or Mitrikou Lake	53
• Kaiafa Lake	297
• Kalodiki Lake or Valtos Lake	210
• Kaneta Lake	207
• Kastorias Lake or Orestiada Lake	162
◦ Kondyli Lake	
• Koronia Lake or Lagadas Lake	97
or Agioy Vasiliou Lake	
◦ Koumoundourou Lake	
• Kourna Lake	404
• Kyra Panagias Lake	208
• Lakka Agnountos Lake	349
• Limnopoula Lake or Limnoula Lake	205
• Loutsia Lake	190
• Lysimachia Lake	277
• Marantochori Lake	253
◦ Mavri Lake	
◦ Megali Limni Lake	
• Megali Prespa Lake	157
◦ Melisani Lake	
• Mesovouniou Lake	204
• Mikri Prespa Lake or Vrygiida Lake	155
◦ Nanon Lake	
• Nisiou Lake	125
• Ozeros Lake	274
• Palaiokastro Lake	209
• Paralimni Lake	329
• Petron Lake	147
• Pikrolimni Lake	89
• Prokopou Lake	287
• Prontani Lake	206
◦ Pyliou Lake	
• Rouga Lake	279
• Sachtouri Lake	348
• Saltini Lake	240
• Skotini Lake	246
◦ Stymfalia Lake	
• Trichonida Lake	275
• Tsatali Lake	180
• Vegoritida Lake	126
• Vistonida Lake	59
• Volvi Lake	99

<u>Wetland's Name</u>	<u>Part(s) of the wetland complex</u>
○ Vouliagmenis Lake	
• Voulkaria Lake	241
• Yliki Lake	327
• Zaravina Lake or Pogoniou Lake	217
• Zazari Lake or Limnochoriou Lake	151
• Zirelia Lake	181
• Zirou Lake	221
MARSHES	
• Achla Bay Marsh	387
• Achladeri Marsh	374
• Agia Kioura Marsh or Pathenio Marsh	396
• Agios Dimitrios Marsh	196
• Agios Fokas Marsh	392
• Agios Mamas Marsh or Agios Mamantas Marsh	137
• Agyia Marsh	296
• Aliveri Marsh	338
• Alykoudi Marsh	371
• Bouka Marsh or Paliavli Marsh	238
• Chortarolimni Marsh or Chortatos Marsh	365
○ Delfinos Marsh	
• Dipi Larsos Marsh	376
• Evriaki Marsh	377
• Former Lake Artzan Marsh	88
• Former Lake Taka Marshes	352
○ Fragkokastelo Marsh	
• Georgiopolou Marsh	343
• Georgioupoli Marsh	402
• Gitzirona Marsh	342
• Glyfada Marsh	384
○ Gournas Marsh	
• Gouves - Skepetari Marsh or Gouves - Skepetara Marsh	320
○ Gyaros Marsh	
• Kalami Marsh	335
○ Kalamoti Marsh	
• Kalatzis Marsh	129
• Kampos Karyas Marsh	250
• Kato Lechonia Marsh	187
• Keramio Marsh	375
• Koilada Marsh	344
• Kolymithra Tinou Marsh	389
• Kolymithres Parou Marsh	394
• Kontari Marsh	379
• Lagadas Marsh	380

<u>Wetland's Name</u>	<u>Part(s) of the wetland complex</u>
• Lamia Marsh	285
◦ Lavrio Marsh	
◦ Lechaio Marsh	
• Lichoura Marsh	179
• Limnos & Parpanta Marshes	381
◦ Livadi Marsh	
• Loutraki Marsh	280
• Loutsa Marsh	195
• Mandraki Marsh	199
◦ Margaritio Marsh	
• Mesokampos Marsh	383
◦ Metamorfofi Marsh	
◦ Mikra Marsh	
• Milies Marsh	194
• Moira Marsh or Chrysi Ammoudia Marsh	140
• Notiodytiki Agoulinitza Marsh	298
◦ Palia Malia Marsh	
• Paliofanaro Marsh	197
• Palioura Marsh	105
• Panormos Tinou Marsh	388
• Petra Marsh	230
• Pigadia And Plepi Marshes	347
• Planitis Marsh	198
• Porto Tinos Marshes or Agios Sostis Marshes or Agios Ioannis Lake	390
• Potoki Marsh	189
◦ Prokopiou Marsh	
• Psachna Marsh or Livadi Marsh or Kolovrechtis Marsh	334
• Psalidi Marsh	398
• Roumani Marsh	339
◦ Schoinia Marsh	
• Sises Marsh	405
• Skarfia Marsh	316
• Sourpi Bay Marsh or Livari Marsh	182
• Stavronikitas Marshes or Nea Fokaia Marshes	139
• Toroni Marsh	132
• Tristinika Marsh	134
• Tsalapatas Marsh	185
• Vai Marsh or Foinikodasos Vai Marsh	415
• Vitali Bay Marsh	385
• Zervochia Marsh	188
RESERVOIRS	
• Agia Reservoir	401

<u>Wetland's Name</u>	<u>Part(s) of the wetland complex</u>
• Agras Reservoir	124
• Aliveri Mine Reservoir	336
• Almyros Reservoir	408
○ Aaos Reservoir	
○ Apolakkia Reservoir	
○ Arachthos Reservoir	
○ Bramianos Reservoir	
• Former Lake Karla Reservoir or Karla Reservoir	178
○ Geropotamos Reservoir	
○ Karystos Reservoir	
• Kerkini Reservoir	81
• Kontia Reservoir	366
• Kremaston Reservoir	308
• Ladonas Reservoir	351
○ Marathiou Reservoir	
• Marathonas Reservoir	362
• Mati Tyrnavou Reservoir	175
○ Mornou Reservoir	
• Pinios Reservoir	307
• Polyfytou Reservoir	164
• Skopos Reservoir	142
• Stratos Reservoir	273
• Tavropou Reservoir	167
• Vevi Reservoir	143
RIVERS	
• Acheloos River or Aspropotamos River	269
• Acherontas River	215
• Agrafiotis River	309
• Akritas River	145
• Alfios River	301
• Aliakmonas River	160
• Almopaios River or Roidas River	122
○ Almyros River	
○ Anapodaris River	
• Angitis River	75
○ Anthemountas River	
• Aaos River or Aias River	211
○ Aposelemis River	
• Arachthos River	222
○ Ardas River	
○ Argyros River	
• Asopos River (Sterea Ellada)	324
○ Asopos River (Peloponnisos)	
• Axios River	92
• Chavrias River	135

<u>Wetland's Name</u>	<u>Part(s) of the wetland complex</u>
• Edessaïos River or Agras River	123
• Elassonitikos River	176
◦ Enippeas River	
• Erymanthos River	303
◦ Erythropotamos River	
• Evinos River or Fidaros River	271
• Evros River	31
• Evrotas River	354
• Farsalitis River	170
◦ Fonias River	
◦ Gadouras River	
• Gallikos River or Echedoros River	90
◦ Gazanos River	
• Geropotamos River (Kriti)	411
• Geropotamos River or Papadia Stream or Paliorema Stream (Dytiki Makedonia)	144
• Glafkos River	293
• Grevenitis River	165
◦ Gyalis River	
◦ Inachos River	
• Kalamas River or Thyamis River	200
• Kalentzis River or Karditsiotikos River	168
◦ Kamare River	
◦ Karteros River	
◦ Katelios River	
• Kifisos River	323
• Kireas River	332
• Kompsatos River or Polyanthos River	49
◦ Kosynthos River	
• Kourtaliotis River	406
◦ Kremastinos River	
• Ladonas River	350
• Ladopotamos River or Pisoderi Stream	159
◦ Lilas River	
• Lissos River or Filiouris River	48
• Loudias River or Mavroneri River	120
• Louros River	220
◦ Loutanis River	
◦ Melas River	
• Mornos River	321
◦ Nagos River	
• Nedas River	299
◦ Nedonas River	
• Nestos River	69
• Nileas River	331
◦ Pamisos River (Peloponnisos)	
◦ Pamisos River (Thessalia)	
• Pinios River (Thessalia)	171

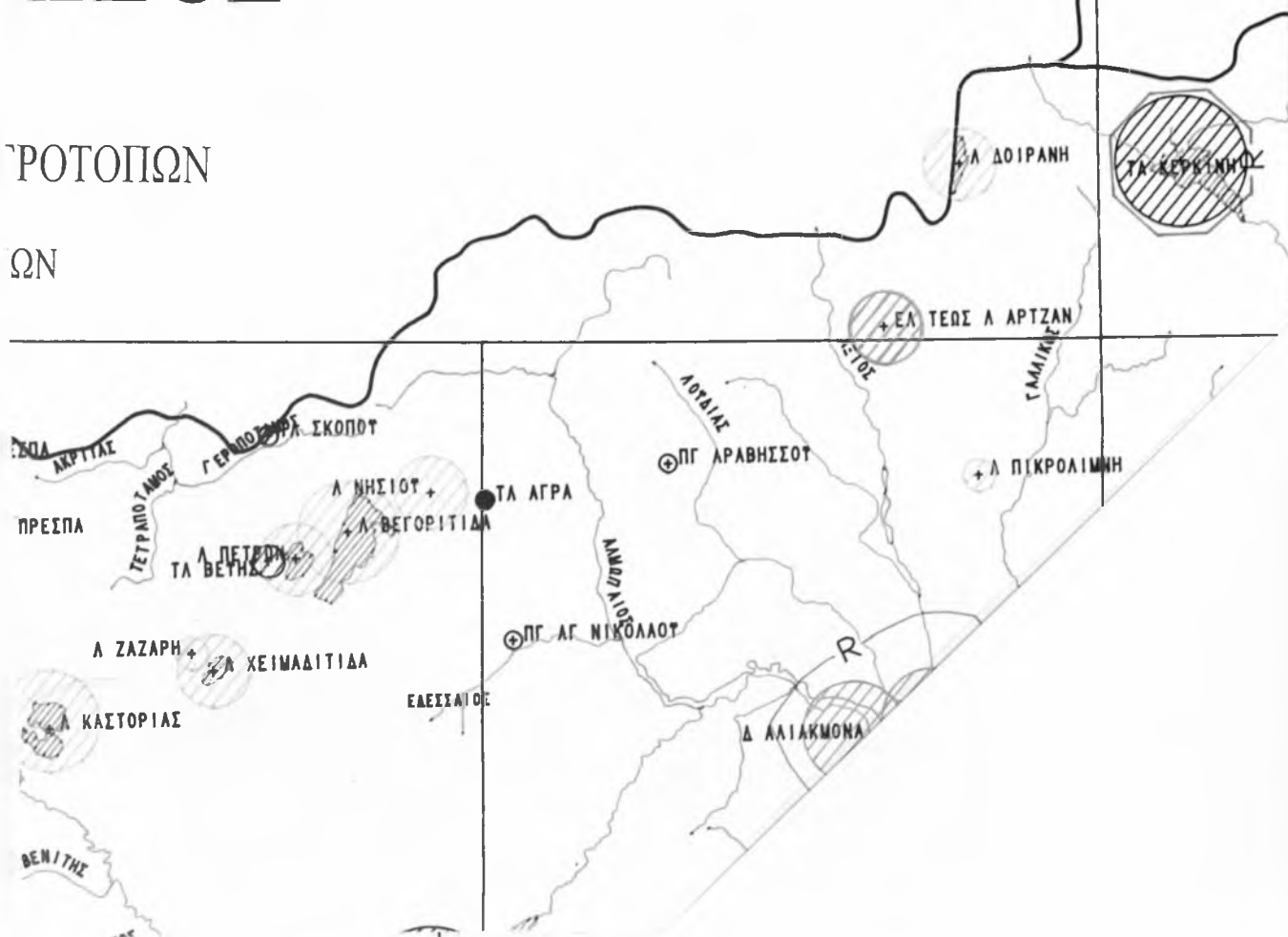
<u>Wetland's Name</u>		<u>Part(s) of the wetland complex</u>
• Pinios River (Dytiki Ellada)	304	
• Piros River	294	
◦ Platys River		
• Richios River or Rentina Gorge	94	
• Sarantaporos River	213	
• Selinountas River	291	
• Sofaditis River	169	
• Sperchios River	318	
• Strymonas River	83	
◦ Tanos River		
• Tavropos River or Megdovas River	310	
• Tetrapotamos River	146	
◦ Therma River		
• Titarisios River	177	
◦ Travos River		
◦ Tyflos River		
• Vatos River	47	
◦ Vatsas River		
• Venetikos River	166	
• Voidomatis River or Vikos River	214	
• Vouraikos River	290	
• Vouvos River	223	
◦ Vozvozis River or Pospos River		
◦ Xerias River		
SPRINGS		
• Agia Paraskevi Springs	313	
• Agia Varvara Springs	77	
◦ Agios Georgios Springs		
◦ Agios Ioannis Springs		
◦ Agios Nikolaos Springs		
• Almyrou Springs or Vourkia Marsh	414	
• Aravissos Springs	121	
• Chariton Springs	328	
◦ Kaitsa Springs		
• Krya Livadia Springs	326	
◦ Lakkos Springs		
◦ Loutropigi Springs		
• Maara Angitis Springs	76	
• Mavroneri Springs	325	
◦ Paradisos Springs		
◦ Planiteros Springs		
◦ Vathylakkos Springs		

Ι ΤΗΣ ΕΛΛΑΔΑΣ

REESE

ΥΡΟΤΟΠΩΝ

ΩΝ





The Greek Biotope/Wetland Centre (EKBY) was established in 1991, as a result of a proposal to CEC by the Greek Ministry of Environment, Physical Planning and Public Works, under CEC Contract Number B91/91/SIN/8192 signed by the Commission of European Communities (DG XI) and the Goulandris Natural History Museum.