

ΥΠΕΧΩΔΕ

Διεύθυνση Περιβαλλοντικού Σχεδιασμού
Τμήμα Διαχείρισης Φυσικού Περιβάλλοντος

421

ΠΡΟΓΡΑΜΜΑ ΣΥΝΕΡΓΑΣΙΑΣ 1999-2001

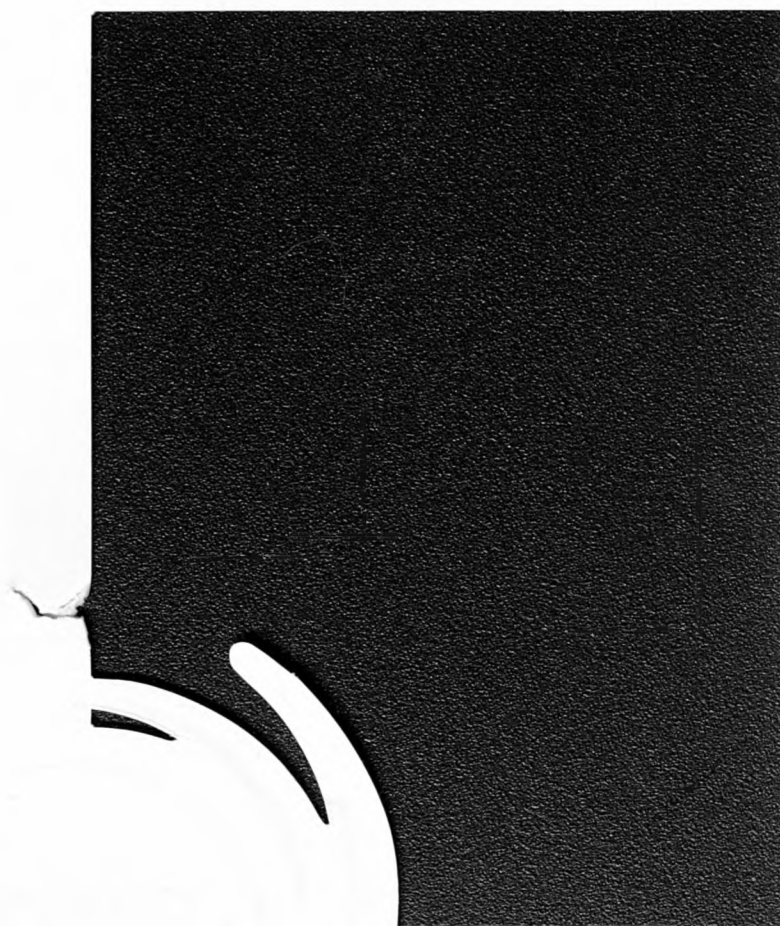
Δράση Β.2.4:

Έκθεση πεπραγμένων για τη Σύμβαση
της Βαρκελώνης «Για την προστασία
του θαλάσσιου περιβάλλοντος» -

Πρωτόκολλο «Περί των Ειδικά
Προστατευόμενων Περιοχών»



ΜΟΥΣΕΙΟ ΓΟΥΛΑΝΔΡΗ ΦΥΣΙΚΗΣ ΙΣΤΟΡΙΑΣ
ΕΛΛΗΝΙΚΟ ΚΕΝΤΡΟ ΒΙΟΤΟΠΩΝ - ΥΓΡΟΤΟΠΩΝ



ΠΡΟΓΡΑΜΜΑ ΣΥΝΕΡΓΑΣΙΑΣ ΥΠΕΧΩΔΕ - ΕΣΠΥ 1999-2001

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ΠΡΟΓΡΑΜΜΑ ΣΥΝΕΡΓΑΣΙΑΣ ΥΠΕΧΩΔΕ – ΕΚΒΥ 1999-2001

ΤΟΜΕΑΣ Β: ΘΕΜΑΤΑ ΠΟΥ ΠΡΟΚΥΠΤΟΥΝ ΑΠΟ ΚΟΙΝΟΤΙΚΕΣ
ΚΑΙ ΔΙΕΘΝΕΙΣ ΥΠΟΧΡΕΩΣΕΙΣ

ΥΠΟΤΟΜΕΑΣ Β.2: ΔΙΕΘΝΗ ΘΕΜΑΤΑ

Δράση Β.2.4: Έκθεση πεπραγμένων για τη Σύμβαση της Βαρκελώνης
– Πρωτόκολλο για τις Ειδικά Προστατευόμενες
Περιοχές

ΥΠΕΥΘΥΝΗ ΣΥΝΤΑΞΗΣ: Θάλεια Λαζαρίδου, Δρ. Θαλάσσιας Βιολογίας

ΘΕΣΣΑΛΟΝΙΚΗ
ΔΕΚΕΜΒΡΙΟΣ 2001

Η πλήρης αναφορά στην παρούσα έκθεση είναι:

Θάλεια Λαζαρίδου 2001. Έκθεση πεπραγμένων για τη Σύμβαση της Βαρκελώνης – Πρωτόκολλο για τις Ειδικά Προστατευόμενες Περιοχές. ΥΠΕΧΩΔΕ-ΕΚΒΥ. Θεσσαλονίκη 6σελ. + II Παραρτήματα.

This document may be cited as follows:

Thalia Lazaridou 2001. Report on Barcelona Convention. ΥΠΕΧΩΔΕ- ΕΚΒΥ. Thessaloniki 6p + II Annexes.

1. ΕΙΣΑΓΩΓΗ

Η παρούσα έκθεση αποτελεί παραδοτέο του τομέα Β: "Θέματα που προκύπτουν από κοινοτικές και διεθνείς υποχρεώσεις", Υποτομέας Β.2. «Διεθνή θέματα» του προγράμματος συνεργασίας ΥΠΕΧΩΔΕ - ΕΚΒΥ (1999-2001), για τη δράση Β.2.4. "Σύμβαση Βαρκελώνης-Πρωτόκολλο για τις Ειδικά Προστατευόμενες Περιοχές". Η δράση αυτή αφορά την ενημέρωση του φακέλου για τη Σύμβαση της Βαρκελώνης και ειδικότερα του Πρωτοκόλλου 4 "*Περί των ειδικά προστατευόμενων περιοχών της Μεσογείου*" και του Πρωτοκόλλου 6 (το οποίο αντικατέστησε το Πρωτ. 4 αλλά δεν έχει κυρωθεί από την Ελλάδα), που συντάχθηκε τα προηγούμενα έτη και αφορά τα πεπραγμένα για το έτος 2001.

2. ΓΕΝΙΚΑ ΣΤΟΙΧΕΙΑ

Στο πλαίσιο εφαρμογής του Μεσογειακού Προγράμματος Δράσης (Mediterranean Action Plan, MAP, UNEP, Βαρκελώνη, 1975) των Ενωμένων Εθνών, στις 16 Φεβρουαρίου 1976, 16 παραμεσόγεια Κράτη υπέγραψαν στη Βαρκελώνη τη Σύμβαση "*Για την προστασία της Μεσογείου Θαλάσσης από τη ρύπανση*" και δύο συνοδά πρωτόκολλα (βλ. Πρωτόκολλα 1 και 2).

Τα συμβαλλόμενα Κράτη – Μέρη, σήμερα είναι τα ακόλουθα: Αίγυπτος, Αλβανία, Αλγερία, Βοσνία-Ερζεγοβίνη, Γαλλία, Ελλάδα, Ε.Ε., Ισραήλ, Ισπανία, Ιταλία, Κροατία, Κύπρος, Λίβανος, Λιβύη, Μάλτα, Μαρόκο, Μονακό, Σλοβενία, Τουρκία, Τυνησία, Συρία.

Η Σύμβαση συνοδεύεται από τα ακόλουθα πρωτόκολλα:

- i. Πρωτόκολλο 1 συνοδό της Σύμβασης (1976) "*Για την πρόληψη της ρύπανσης της Μεσογείου από απορρίψεις πλοίων και αεροσκαφών*".
- ii. Πρωτόκολλο 2 συνοδό της Σύμβασης (1976) "*Για την πρόληψη της ρύπανσης της Μεσογείου από πετρέλαια και άλλες επιβλαβείς ουσίες*".
- iii. Πρωτόκολλο 3 (1980) "*Για την προστασία της Μεσογείου Θαλάσσης από τη ρύπανση από χερσαίες πηγές*" και τα τεχνικά παραρτήματα I, II και III αυτού.
- iv. Πρωτόκολλο 4 (1982) "*Περί των ειδικά προστατευόμενων περιοχών της Μεσογείου*".
- v. Πρωτόκολλο 5 (1994) "*Σχετικά με την προστασία της Μεσογείου Θαλάσσης από τη ρύπανση από την εξερεύνηση και εκμετάλλευση της υφαλοκρηπίδας, του θαλάσσιου βυθού και του υπεδάφους*".

vi. Πρωτόκολλο 6 ή Νέο Πρωτόκολλο (1995) “Σχετικά με τις Ειδικά Προστατευόμενες Περιοχές και τη βιολογική ποικιλία στη Μεσόγειο”.

Το Πρωτόκολλο αυτό αντικαθιστά το Πρωτόκολλο 4 (1982) “Περί των ειδικά προστατευόμενων περιοχών της Μεσογείου”. (βλ. 2. τροποποιήσεις πρωτοκόλλων). Από τον Δεκέμβριο του 1999 το Νέο Πρωτόκολλο έχει τεθεί.

Το Τμήμα Διαχείρισης Φυσικού Περιβάλλοντος, Διεύθυνση Περιβαλλοντικού Σχεδιασμού του ΥΠΕΧΩΔΕ έχει ορισθεί ως Εθνικό Εστιακό Σημείο για τις Ειδικά Προστατευόμενες Περιοχές (Πρωτ. 4 και 6 το οποίο δεν έχει τεθεί σε ισχύ).

Η Ελλάδα κύρωσε τη Σύμβαση της Βαρκελώνης και των πρωτοκόλλων (1) και (2) με τον Ν. 855/23-12-78 (ΦΕΚ 235/Α 23-12-78) και τα πρωτοκόλλα 3 και 4 με τον Ν. 1634/17-7-86 (ΦΕΚ 104/Α/18-7-86).

Τροποποιήσεις της Σύμβασης της Βαρκελώνης και των Πρωτοκόλλων

Στη Συνάντηση των Συμβαλλόμενων Μερών, που πραγματοποιήθηκε στις 10 Ιουνίου 1995 στη Βαρκελώνη, υπεγράφη η τροποποίηση της Σύμβασης.

Ο τίτλος της Σύμβασης τροποποιείται από “**Σύμβαση Για την προστασία της Μεσογείου Θαλάσσης από τη ρύπανση**” σε “**Σύμβαση Για την προστασία του θαλάσσιου περιβάλλοντος και των παράκτιων περιοχών της Μεσογείου**”. Εισάγεται η έννοια της αειφόρου ανάπτυξης, γίνεται αναφορά σε διεθνείς Διακυρήξεις και Συνδιασκέψεις. Επίσης τροποποιούνται άρθρα ή γίνονται προσθήκες σε προϋπάρχοντα σχετικά με τη διεύρυνση της γεωγραφικής κάλυψης της εφαρμογής, την αύξηση των υποχρεώσεων για τη λήψη μέτρων, την ίδρυση Γραφείου Συμβαλλόμενων Μερών κ.ά.

Κατά την ίδια Συνεδρίαση έγιναν τροποποιήσεις του Πρωτοκόλλου «για την πρόληψη της ρύπανσης της Μεσογείου Θάλασσας από την εκφόρτωση απορριμμάτων από πλοία και αεροσκάφη» και αντικαταστάθηκε το Τέταρτο Πρωτόκολλο (1982) “Περί των ειδικά προστατευόμενων περιοχών της Μεσογείου” της Σύμβασης με το Νέο Πρωτόκολλο για το ίδιο θέμα.

Σημείωση: Η αναλυτική παρουσίαση των θεσμικών οργάνων, του περιεχομένου της Σύμβασης και των πρωτοκόλλων της περιέχεται στην αντίστοιχη έκθεση που συντάχθηκε στο πλαίσιο του Συμφώνου Συνεργασίας ΥΠΕΧΩΔΕ-ΕΚΒΥ (1997-98) (γγραφο ΕΚΒΥ Αρ.Πρωτ.: 4029/31.12.98)

3. ΠΡΩΤΟΚΟΛΛΟ ΓΙΑ ΤΙΣ ΕΙΔΙΚΑ ΠΡΟΣΤΑΤΕΥΟΜΕΝΕΣ ΠΕΡΙΟΧΕΣ (SPA): Πεπραγμένα -Προοπτικές

Μετά την όγδοη τακτική συνάντηση των συμβαλλόμενων μερών, το 1993, άρχισε μια ενεργός περίοδος για την εφαρμογή του Πρωτοκόλλου για τις Ειδικά Προστατευόμενες Περιοχές. Ειδικότερα με την αναθεώρηση του Μεσογειακού Σχεδίου Δράσης (MAP phase II “Σχέδιο Δράσης για την προστασία του θαλάσσιου περιβάλλοντος και την αειφορική ανάπτυξη των παράκτιων περιοχών της Μεσογείου”), την τροποποίηση της Σύμβασης και την υιοθέτηση του Νέου Πρωτοκόλλου για τις Ειδικά Προστατευόμενες Περιοχές και τη Βιολογική Ποικιλότητα της Μεσογείου το 1995 αρχίζει μια σειρά ενεργειών και δράσεων για την εφαρμογή τους. Στο πλαίσιο αυτό:

- καταρτίσθηκαν τα σχέδια δράσης για τη θαλάσσια χελώνα *Caretta caretta*, τα κοιτώδη και τη θαλάσσια βλάστηση.
- σχεδιάσθηκαν τα Τυποποιημένα Δελτία Δεδομένων για τις Ειδικά Προστατευόμενες Περιοχές Μεσογειακού Ενδιαφέροντος (SPAMI)
- καταρτίσθηκαν οι κατάλογοι αναφοράς των ειδών και των τύπων οικοτόπων των Παραρτημάτων του Νέου Πρωτοκόλλου
- είναι σε εξέλιξη το πρόγραμμα “Προετοιμασία του Στρατηγικού Σχεδίου Δράσης για τη διατήρηση της βιοποικιλότητας της Μεσογείου (Strategic Action Plan for the conservation of Biological Diversity in the Mediterranean-SAP BIO”, το οποίο θα αποτελέσει τη βάση για την εφαρμογή του νέου Πρωτοκόλλου. Το πρόγραμμα περιλαμβάνεται στο ευρύτερο πρόγραμμα “Καθορισμός των δράσεων προτεραιότητας για την κατάρτιση και εφαρμογή του Στρατηγικού Προγράμματος για τη Μεσόγειο Θάλασσα”, το οποίο χρηματοδοτείται από το GEF.

Η Ελλάδα, αν και δεν έχει κυρώσει ακόμη το Νέο Πρωτόκολλο συμμετείχε ενεργά σε όλες τις διαδικασίες. Το Τμήμα Διαχείρισης Φυσικού Περιβάλλοντος του ΥΠΕΧΩΔΕ, ως Εθνικό Εστιακό Σημείο έχει αναλάβει σε συνεργασία με το ΕΚΒΥ, τη σύνταξη της εθνικής αναφοράς για το πρόγραμμα SAP BIO, η οποία θα ολοκληρωθεί τον Ιούνιο του 2002.

Η συμμετοχή και οι ενέργειες της Ελλάδας για το διάστημα 1999-2000 αναφέρονται στις αντίστοιχες εκθέσεις του ΕΚΒΥ, οι οποίες συντάχθηκαν στο πλαίσιο του προγράμματος συνεργασίας ΥΠΕΧΩΔΕ - ΕΚΒΥ 1999-2001. Στη συνέχεια αναφέρονται η συμμετοχή της Ελλάδας στις συναντήσεις για την

εφαρμογή του SPA Πρωτοκόλλου και οι σχετικές δράσεις του ΕΚΒΥ για το έτος 2001.

4. ΣΥΝΑΝΤΗΣΕΙΣ ΚΑΙ ΣΥΜΜΕΤΟΧΗ ΤΗΣ ΕΛΛΑΔΑΣ ΚΑΤΑ ΤΟ ΔΙΑΣΤΗΜΑ 2001

4.1. Κοινή Συνάντηση των Εθνικών Εστιακών Σημείων για τις Ειδικά Προστατευόμενες Περιοχές και των Εθνικών Εστιακών Σημείων της Σύμβασης για τη Βιοποικιλότητα. 20-21 Απριλίου, Βαλένθια, Ισπανία

Η συνάντηση διοργανώθηκε στο πλαίσιο του μνημονείου συνεργασίας που υπογράφηκε τον Μάιο του 2000 μεταξύ της Γραμματείας της Σύμβασης για τη Βιοποικιλότητα και της Συντονιστικής Μονάδας MAP (Μεσογειακό Σχέδιο Δράσης) για την προώθηση συντονιμένων δράσεων και ενεργειών για την εφαρμογή του πρωτοκόλλου για τις Ειδικά Προστατευόμενες Περιοχές της Σύμβασης της Βαρκελώνης και της Σύμβασης για τη Βιοποικιλότητα στην περιοχή της Μεσογείου.

4.2. Πέμπτη Συνάντηση των Εθνικών Εστιακών Σημείων για τις Ειδικά Προστατευόμενες Περιοχές. 23-26 Απριλίου, Βαλένθια, Ισπανία

Κατά τη συνάντηση παρουσιάσθηκαν οι εθνικές εκθέσεις για τη διατήρηση των φυσικών περιοχών και των ειδών και συζητήθηκαν τα θέματα σχετικά με τον καθορισμό του Καταλόγου των Ειδικά Προστατευόμενων Περιοχών Μεσογειακού Ενδιαφέροντος (SPAMI), την ανάπτυξη περιφερειακού συστήματος για την ανταλλαγή πληροφοριών και της μεσογειακής πρωτοβουλίας για θέματα ταξονομίας. Στη συνάντηση συμμετείχε η κ. Σ. Σπυροπούλου, ΥΠΕΧΩΔΕ, Διεύθυνση Περιβαλλοντικού Σχεδιασμού, Τμήμα Διαχείρισης Φυσικού Περιβάλλοντος. Η αναφορά της χώρας παρατίθεται στο Παράρτημα Ι.

4.3. Πρώτη συνάντηση των εθνικών εκπροσώπων του προγράμματος για την προετοιμασία του Στρατηγικού Σχεδίου Δράσης για τη διατήρηση της βιοποικιλότητας της Μεσογείου (Strategic Action Plan for the conservation of Biological Diversity in the Mediterranean region, SAP BIO. 2-4 Ιουλίου, Alicante, Ισπανία

Η ανάλυση του προγράμματος δίνεται στο κείμενο: UNEP (DEC)/MED WG.191/Inf.3).

4.4. Συνάντηση ειδικών για τους παράκτιους (χερσαίους και υγροτοπικούς) τύπους οικοτόπων της περιοχής της Μεσογείου. 1-3 Νοεμβρίου, Montpellier, Γαλλία

Το Περιφερειακό Κέντρο Δράσης για τις Ειδικά Προστατευόμενες Περιοχές (RAC/SPA) διοργάνωσε συνάντηση εργασίας των ειδικών για τον καθορισμό του καταλόγου αναφοράς των χερσαίων και υγροτοπικών τύπων οικοτόπων.

Την Ελλάδα εκπροσώπησε κατόπιν εισηγήσεως του Τμήματος Διαχείρισης Φυσικού Περιβάλλοντος και στο πλαίσιο του προγράμματος συνεργασίας ΥΠΕΧΩΔΕ – ΕΚΒΥ, η επιστημονική συνεργάτιδα του ΕΚΒΥ, Ελένη Φυτώκα. Η αναλυτική έκθεση σχετικά με τη θεματολογία και τα αποτελέσματα της συνάντησης δίνεται στο Παράρτημα II.

5. ΔΡΑΣΕΙΣ ΤΟΥ ΕΚΒΥ ΓΙΑ ΤΗ ΧΡΟΝΙΚΗ ΠΕΡΙΟΔΟ 2001

- ✓ Αποστολή στοιχείων στο ΤΔΦΠ για τη σύνταξη της εθνικής έκθεσης περιόδου 1999-2001 στο πλαίσιο της πέμπτης συνάντησης των Εθνικών Εστιακών Σημείων για τις Ειδικά Προστατευόμενες Περιοχές (SPA) (Σχ. Έγγραφο ΕΚΒΥ: 5559/13.04.01).
- ✓ Διατύπωση απόψεων επί των εκθέσεων α) Draft guidelines for impact assessment on seagrass meadows, UNEP(DEC)/MED WG.177/8, β) Draft guidelines for introduction and reintroduction of marine species in the Mediterranean, UNEP(DEC)/MED WG.177/6 (Σχ. Έγγραφο ΕΚΒΥ: 5569/19.04.01).

- ✓ Συμπλήρωση στοιχείων της έκθεσης “Draft guidelines for impact assessment on seagrass meadows” (UNEP(DEC)MED WG.177/8) σχετικά με την εφαρμογή του Πρωτοκόλλου για τις Ειδικά Προστατευόμενες Περιοχές, Σύμβαση Βαρκελώνης. Τα στοιχεία αφορούσαν α) την περιγραφή του υφιστάμενου πλαισίου της χώρας για την εκτίμηση των περιβαλλοντικών επιπτώσεων και β) τη συμπλήρωση του ερωτηματολογίου της ίδιας έκθεσης (Σχ. Έγγραφο ΕΚΒΥ: 5616/09.05.01).
- ✓ Αποστολή α) καταλόγου ενδημικών και ξενικών ειδών των μαλακίων, β) καταλόγου και περιγραφής των χερσαίων παράκτιων τύπων οικοτόπων της Ελλάδας (Σχ. Έγγραφο ΕΚΒΥ: 5709/15.06.01)
- ✓ Συμμετοχή στη συνάντηση των ειδικών για τον καθορισμό του καταλόγου αναφοράς των παράκτιων χερσαίων και υγροτοπικών τύπων οικοτόπων. Η σχετική έκθεση του ΕΚΒΥ και η τελική αναφορά της συνάντησης παρατίθενται στο Παράρτημα ΙΙ.

FIFTH MEETING OF NATIONAL FOCAL POINTS FOR SPA

(Yalovitsa, 23-26/4/91)

ΠΑΡΑΡΤΗΜΑ Ι

REPORT OF THE HELLENIC REPUBLIC

SPA Focal Point: Section of Nature Management, Environmental Planning Division, General Directorate of Environment, Ministry of Environment, Physical Planning and Public Works

Πέμπτη συνάντηση Εθνικών Εστιακών Σημείων για τις Ειδικά Προστατευόμενες Περιοχές - Εθνική Έκθεση

INSTITUTIONAL FRAMEWORK

The overall responsibility for the coordination of implementation of environmental policies lies with the General Directorate of the Environment in the Ministry of Environment, Physical Planning and Public Works. In the implementation of the SPA Program competence lies jointly with the Ministry of Environment - General Directorate for Environment, the Ministry of Agriculture - General Directorate of Forests, General Directorate of Agriculture and Forestry, Directorate of Fisheries and the Ministry of Merchant Marine - Port authorities (species conservation- established and management of environmental protected areas). Environmental authorities at the Regional, Prefecture and Municipality levels contribute at the enforcement of national laws and regulations.

LEGAL FRAMEWORK FOR THE CONSERVATION OF SPECIES AND SITES

A new Law, (L. 3742/89) «Physical Planning and sustainable development, Articles 13-17), issued in 1989, has introduced provisions for the administration and management of protected areas. Obligatory for National Parks, but to be also used for other categories of protected areas if suitable, is the establishment of management bodies which will be run by a Council (7-11 members) to include representatives of the Ministries of Environment and Agriculture, other relevant to the area concerned,

FIFTH MEETING OF NATIONAL FOCAL POINTS FOR SPA

(Valencia, 23-26/4/01)

REPORT OF THE HELLENIC REPUBLIC

SPA Focal Point: Section of Nature Management, Environmental Planning Division, General Directorate of Environment, Ministry of Environment, Physical Planning and Public Works

Main contributions to this report were made by Thalia Lazaridou (Greek Biotope – Wetland Centre), Mom (Hellenic Society for the study and protection of the monk seal), ARCHELON (Sea Turtle Protection Society of Greece), WWF- Greece

INSTITUTIONAL FRAMEWORK

The overall responsibility for the coordination of implementation of environmental policies lies with the General Directorate of the Environment in the Ministry of Environment, Physical Planning and Public Works. In the implementation of the SPA Protocol competence lies jointly with the Ministry of Environment - General Directorate for Environment, the Ministry of Agriculture -General Directorate of Forests, General Directorate of Agriculture and General Directorate of Fisheries and the Ministry of Merchant Marine – Port authorities (species conservation- establishment and management of marine/coastal protected areas). Environmental authorities at the Regional, Prefecture and Municipality levels contribute at the enforcement of national laws and regulations.

LEGAL FRAMEWORK FOR THE CONSERVATION OF SPECIES AND SITES

- A new Law, (L.2742/99 «Physical Planning and sustainable development», Articles 15-17), issued in 1999, has introduced provisions for the administration and management of protected areas. Obligatory for National Parks, but to be also used for other categories of protected areas if suitable, is the establishment of management bodies which will be run by a Council (7-11 members) to include representatives of the Ministries of Environment and Agriculture, other relevant to the area ministries,

representatives of local and regional authorities, specialists and representatives of environmental NGOs (which possess previous experience, activities and infrastructure within this geographical area and are represented nationally).

The older existing provisions are listed below:

- Law 1650/86 «For the protection of the environment», Articles 18-22 (Protection of nature and landscape), 31, par.9 (modification of existing provisions)
- Joint Ministerial Decision 33318/3028/1998 «Establishment of measures and procedures for the conservation of natural habitats, and of wild fauna and flora»
- Ministerial Decision 414985/1985 «Management measures for wild birds»
- Joint Ministerial Decision 69269/5387/1990 «Categories of projects and activities with regard to their environmental impacts, Environmental impact studies, Special Environmental Studies»
- Presidential Decree 67/1971 « Procedures for the conduct of research and measures for the conservation of protected species of fauna and flora»

RELEVANT INTERNATIONAL AGREEMENTS

Conventions Ratified: Paris, Ramsar, Barcelona , Bern, Bonn, Washington, Rio (Biodiversity)

Conventions Signed, under the process of ratification: Barcelona (Rev.1995), European Convention for landscape

Agreements and Protocols ratified: SPA, Eurasian Migratory Birds

Agreements and Protocols Signed, under the process of ratification: ACCOBAMS, SPA (rev1995)

PROGRESS IN MARINE AND COASTAL PROTECTED AREAS

1. As ten years of management of the National Marine Park of Alonissos- Northern Sporades (NMPANS) have been completed in 2000, a short report with facts has been compiled by MOm (Hellenic Society for the Study and Protection of the Monk Seal), who have been engaged by an agreement with the Ministry of Environment to support several operations of the Marine Park during this period.

The positive response of the monk seal population to the management measures was documented by its observed reproduction rates during this period (see Action Plan for Monk Seal below). The local society and fishermen have supported the operation of the park, a fact documented by the very few occasions of offending the regulations that were observed during this period. The main recommendations of the report concern the need for the establishment of a permanent Management Institution and the potential for optimizing the procedures for collection of fines and penalties.

2. The National Marine Park of Zakynthos (NMPZ) and its Management Institution were established by a Presidential Decree issued in December 22, 1999 (O.J. 906/D). The Marine Park covers 1420 ha of land, and 8920 ha of marine area and its aim is twofold : (1) the conservation of : nesting habitat of *Caretta caretta*, monk seal habitats, habitats of migratory bird species, endemic plants habitats, sea grass meadows, fish stocks and (2) the sustainable development of activities such as environmental awareness and education, tourism and recreation, and those related to the maintenance of traditional uses and the protection of physical and cultural landscape.

Management objectives and regulations for each of its internal zones are contained in the same Decree and a Peripheral Zone to the Marine Park, of 3120 ha, has been designated encompassing existing settlements and specifying land uses that ensure the viability of the Marine Park.

The Management Institution of the Marine Park, its responsibilities and legal status were established by the same Decree and its Governing Council was set up by a Decision of the Minister of Environment, Physical Planning and Public Works, on 20/7/2000 (revised 30/01/01). Members of the Council appointed are the representatives of the Ministry of Environment, of the respective Region, of the local authorities and the Prefecture as well as of an NGO with longstanding presence in the area (ARCHELON- The Sea turtle protection Society and WWF- Greece have a joint representation). Safeguarding for the enforcement of regulations, management of nesting beaches, monitoring of the loggerhead nesting activity, operation of information stations, targeted

awareness campaigns and systematic presentations to visitors were carried out throughout this period, in collaboration with ARCHELON- The Sea turtle protection Society.

3. The National Park of Schinias, in the vicinity of Athens metropolitan area, was established by a Presidential Decree, issued on July 3rd, 2000, (OJ 395/D). The National Park covers 1500 ha in total, 15 % of which are marine and its aim is the protection, conservation, management and restoration of nature and landscape in the terrestrial and marine area of Schinias- Marathonas.

Within the National Park there is distinction of 5 areas of nature protection, designed for the conservation of a coastal wetland, of typical Mediterranean vegetation on surrounding hills, of the coastal forest of *Pinus pinea* and *Pinus halepensis*, of a freshwater spring and of the sea grass meadows in the marine part of the Park, the Bay of Marathon. In addition to those, there are also designations of Zones for environmental education, research, sports, recreation, housing and agriculture.

Management responsibilities for the Park have been given to the existing Environmental Agency for Athens, until the establishment of a Management Institution for the Park, foreseen in the coming year.

PROTECTED MARINE AND COASTAL SPECIES OF FAUNA AND FLORA

see next paragraph

NATIONAL BIODIVERSITY STRATEGY/ ACTION PLANS

1. The existing draft of the National Biodiversity Strategy includes several sections relevant to the SPA protocol, namely those concerning Protected Areas, Fisheries, Tourism. The text has been elaborated by the Co-ordinating Unit for the Implementation of the CBD in Greece, based in the University of Athens, under the guidance of a Committee of representatives of respective national authorities. The existing draft is open for comments from different sectors and is expected to be finalized at the end of the year.

2. In parallel to this project, all obligations of the country arising from International conventions and agreements and the European Communities Directives and Regulations were taken into account in the compilation of the National Master Plan for the Natural

Environment, elaborated in 1999 by the Ministry of Environment. The Master Plan deals with the planning of activities for the next 6 years and contains three Action Plans:

The Action Plan for the National Network of Protected Areas deals with the legal and administrative considerations for the establishment and management of protected areas, the organisation and operation of their Management Bodies and the overall Operation of the National System of administration and management of protected areas. The proposals include the most critical habitats of all endangered and protected species as well as protected habitat types.

The Action Plan for the conservation of species of fauna and flora deals with endangered and protected species conservation in a horizontal approach, mainly outside protected areas.

The Action Plan for Critical Issues of the management of the natural environment deals with the conservation of biodiversity and landscape outside protected areas and the protection, restoration and sustainable use of natural resources. Specific attention is paid to the protection, management and restoration needs of the coastal and island ecosystems and landscapes.

OBSERVATION /STUDIES ON ALIEN SPECIES IN THE MEDITERRANEAN

At this point in time, information has been available for Marine Macrophytes (macroalgae and seagrasses) and is given below. Any further information on other categories will be sent at a later stage.

Six macrophytes can be considered as probably introduced species to the Greek coasts from the 61 referred to in the Mediterranean Sea . The chlorophyte *Caulerpa racemosa* (Forskal) J. Agardh, the rhodophyte *Acanthophora najadiformis* (Delile) Papenfuss and the seagrass *Halophila stipulacea* (Forskal) Ascherson were introduced after the opening of Suez Canal, in the Aegean coasts. The Chlorophyte *Codium fragile* (Suringar) Hariot and the rhodophytes *Asparagopsis armata* Harvey, and *Womersleyella setacea* (Hollenberg) R. Norris (=Polysiphonia setacea Hollenberg) were introduced via different routes (i.e. aquaculture, transportation on ship hulls) first in western Mediterranean coasts and later on in the Greek coastline.

The species *Caulerpa racemosa* is considered to have the most important expansion along the Aegean coasts and occupies different habitats. Moreover, the seagrass *Halophila stipulacea*, was found to have a considerable expansion from the southern to the central Aegean coasts.

(Lazaridou Thalia and S. Haritonidis, 1999. Invasive species in the E. Mediterranean Sea. 7th Congress of Hellenic Botanical Society, Alexandroupoli, 1-4/10/1998)

LIST OF MEDITERRANEAN ENDEMIC SPECIES

A list of Mediterranean endemic macroalgal species encountered along the Greek coastline is attached at the end of this report (2 pages). Any further information will be sent when made available.

ACTION PLAN FOR THE MANAGEMENT OF THE MEDITERRANEAN MONK SEAL.

Activities undertaken were based on the National Strategy for the Protection of the Mediterranean monk seal (Archipelagos & MOM, 1996) and were carried out within the National Action Plan for the Conservation of the Species, mainly by MOM and WWF Greece (for Zakynthos), in collaboration with the Ministry of the Environment and the other responsible authorities.

Reduction in Adult Mortality

The operation of MOM's Rescue and Information Network throughout Greece has maintained and further promoted a good working relationship with fishermen and authorities, thus contributing to the collection of information on the species and the rescue of wounded animals and in parallel altering fishermen's attitude towards the monk seal.

Establishment of a Network of Marine Reserves

The effective operation of the National Marine Park of Alonissos Northern Sporades included guarding by a team already established in previous years and monitoring activities on a regular basis. During the reproductive period of the year 2000, 12 monk seal pups were recorded. This number compared with the mean reproductive activity of the previous years (6 pups per year) provides evidence of the positive impact of

NMPANS to the monk seal population of the area. Concerning awareness activities in the area, three information centers operated throughout the summer period. The Research Centre in Gerakas was re-organized as the basis of management activities within the Park in the following years.

In the framework of the LIFE-Nature Program «The Mediterranean Monk Seal in Greece: Conservation in Action» Specific Environmental Studies for the establishment of two Special Areas of Conservation on the islands of Kimolos-Polyaigos and Northern Karpathos-Saria, which are considered as areas of primary importance for the conservation of the Mediterranean monk seal in the Aegean Sea. These studies, elaborated by MOM, contain a detailed zoning system, specific regulations and management proposals and were submitted to the Greek Ministry of the Environment in December of 1999.

In the framework of the same project the elaboration of a Specific Environmental Study for the establishment of a Special Area of Conservation on the West and Northeastern coast of Zakynthos was conducted by WWF-Greece. This area was also monitored for the evaluation of the monk seal habitat, the species population rising to 17 individuals approximately, human activities and development trends have been recorded and interactions of seals and fishermen have been studied.

Research, Data Collection and Rehabilitation.

The monitoring of the monk seal population in the wider area of the NMPANS was continued by MOM. In addition, during the period 1997-1999 and in the framework of the LIFE-Nature programme «The Mediterranean Monk Seal in Greece: Conservation in Action» (contract no B4/3200/96/500) surveys and monitoring of the monk seal population and its habitat were conducted in the islands of Milos-Kimolos-Antimilos-Polyaigos, Karpathos-Kasos and Samos-Fourni-Ikaria by MOM. Furthermore, in the year 2000, the same NGO surveyed the coast of the NATURA 2000 sites on the islands of Tinos and Andros with the support of the Prefecture of Cyclades.

The West and Northeastern coasts of Zakynthos were monitored by WWF – Greece for the evaluation of the monk seal population and habitat, human activities and development trends have been recorded and interactions of seals and fishermen have been studied.

Data on the status of the monk seal and its habitat as well as to seal-fisheries interactions through the continuous operation of the RINT by MOm, a network of observers throughout the country that constantly provide data in the above fields. Based on the operation of this network for the period 1999-April 2000, the RINT responded in cases of seals reported dead and performed 16 necropsies.

The operation of the Seal Treatment Rescue and Rehabilitation Centre on the island of Alonissos continued by MOm and 2 monk orphan monk seal pups were transferred to this unit . A new rehabilitation unit was constructed in the Research Centre in Gerakas, where the STRC will be transferred.

Information Programmes

Six information centers on the islands of Alonissos, Skopelos, Milos and Karpathos were operated by MOm that contributed considerably to the sensitisation of locals and visitors. Environmental education programmes for school children were carried out in Athens and on the islands of Alonissos, Milos-Kimolos-Antimilos-Polyaigos, Karpathos-Kasos and Samos-Fourni-Ikaria. Furthermore, informative material (leaflets, stickers, posters etc) was produced and disseminated throughout Greece and especially in areas of specific interest for the monk seal. Lastly, MOm's periodical publication "Seal Stories" was distributed to more than 4.000 people and numerous presentations were made through the mass media.

WWf – Greece has operated an information center on Zakynthos, and has made public presentations on the subject at a local level.

ACTION PLAN FOR THE CONSERVATION OF MARINE TURTLES

LEGISLATION

The major nesting sites in Greece have been included in the national list proposed for the NATURA 2000 European network: Zakynthos, Bay of Kyparissia, Rethymnon, Bay of Lakonikos and Bay of Chania.

Three other nesting sites not classified as “major” nesting sites are under specific legal protection status: Messara Bay (proposed NATURA site, GR 4310004), Kotychi Lagoon area (Ramsar site) and Mounda beach on Kefhalonia included in land planning study.

On 1 December 1999, the National Marine Park of Zakynthos (NMPZ) was legally established. It is the first National Park in the Mediterranean for sea turtles. To date the Management Agency Board has convened 12 times, has acquired premises, permanent staff and is proceeding with wardening and the elaboration of compensation schemes for affected landowners.

PROTECTION AND MANAGEMENT OF CRITICAL HABITATS

A management plan for the nesting beaches on Crete (Rethymnon, Chania, Messara Bay) has been completed by ARCHELON (Sea Turtle Protection Society) and is being updated and implemented in collaboration with national and local authorities. A management plan was completed in 2000 for Lakonikos Bay and is currently being implemented by the same Organisation.

On 1 March 2000, the Ministry of Environment issued a circular to all competent authorities regarding the operation of watersports, the use of beach furniture, and photo pollution from buildings and street lights on the nesting beaches in Greece.

On average 2,500 nests are protected against human interference, predation, sea inundation through nest translocation or in situ screening/caging on all major nesting sites (Zakynthos, bay of Kyparissia, Bay of Lakonikos, Crete) totalling 75 km in length.

Close co-operation with local authorities has been established in almost all major nesting sites to promote sea turtle conservation.

REDUCING MORTALITY AT SEA AND ELIMINATING LOCAL CONSUMPTION AND USE

A pilot project to assess incidental catch in Lakonikos Bay was completed in 2000. It established that the area is a foraging ground for green turtles (*Chelonia mydas*). A similar project is underway in Western Peloponnesus and in the Bay of Amvrakikos.

Over 280 turtles have been admitted to the Sea Turtle Rescue Centre, since 1994, of which 64 only in 2000. About 60% of admitted turtles have been released after treatment.

A Mediterranean project (Spain, France, Italy and Greece) to assess interaction between turtles and fishing gear was completed in 2000.

Active participation of local Port Authorities in reporting strandings has increased in the last two years. Actions to regulate speedboats off certain nesting beaches have been taken.

INFORMATION, EDUCATION AND TRAINING

Through 11 seasonal information stations, two permanent information centres, 850 slide shows in hotels, regular beach patrols, over 150,000 visitors are directly informed about the sea turtles annually by ARCHELON. Over 400 volunteers from all over the world are trained and participate in the conservation projects. Every year over 10,000 school children participate in environmental education activities.

SCIENTIFIC RESEARCH AND MONITORING

Genetic analysis of populations, satellite and radio tracking projects are underway by ARCHELON. Tagging programmes are carried out yearly on all major nesting sites.

Systematic monitoring of all major nesting beaches (75 km in total) in a standardised way is carried out yearly, by ARCHELON.

ACTION PLAN FOR THE CONSERVATION OF CETACEANS

In December 2000, the Ministry of Merchant Marine- Port Authorities has issued a new circular to all Port Police Stations with regard to data collection on cetacean sightings and strandings and has initiated a relevant data base. Currently, permission to perform non lethal research, monitoring and handling of stranded animals is given by the Ministry of Agriculture and several research groups are active in a non coordinated way in this field, including educational activities of the public and fishermen.

ACTION PLAN FOR THE CONSERVATION OF MARINE VEGETATION

Several sites of the NATURA 2000 network in Greece include coastal areas with important features of marine vegetation.

All projects likely to affect the integrity of this type of habitats are thoroughly screened, through the legal provisions of environmental permission.

A marine and coastal habitat-mapping project has been carried out in 67 sites, spread throughout the country, in the frame of an overall habitat mapping program in sites of conservation interest, by the Ministry of Environment. The project was undertaken in 1999 by a consulting firm in collaboration with the main Marine Research Institutions of Greece and has proceeded in the phyto- sociological analysis of about 1000 relevés. The first results of this exercise have led to the identification of 21 vegetation associations listed in Appendix B of the SDF, and all data have been stored in a relevant Data base. A further qualitative and quantitative evaluation of the findings will be available after the project is completed, end of 2001.

NATIONAL INVENTORIES OF NATURAL SITES OF CONSERVATION INTEREST.

The national Database currently in operation does not provide for the separate elaboration of data for the marine and coastal areas, as many of the sites identified so far, present conservation interest both in their terrestrial and marine parts. However, several of the information fields contained in the SDFs are completed in the 113 sites that have a significant marine component.

COLLABORATION AT BILATERAL OR SUB REGIONAL LEVELS

In the frame of a European network for *Monachus monachus*, funded by the European Commission, exchange visits have taken place between Madeira and Greece, Greece and Spain (the University of Barcelona team, working in Mauritania), Madeira and Spain.

The Greek Ministry of Environment has proceeded in funding a joint project for the technical exchange of experience for the conservation of the monk seal between a Greek and a Turkish NGO, under the guidelines of DAC/ OECD, which is underway.

ΠΑΡΑΡΤΗΜΑ II

ΕΚΘΕΣΗ

Για τη συμμετοχή της Ελλάδας στη Συνάντηση των Ειδικών για τους παράκτιους (υγροτοπικούς και χερσαίους) τύπους οικοτόπων της Μεσογείου (Hyeres, Γαλλία, 18-20 Νοεμβρίου 1998)

Συνάντηση ειδικών για τους παράκτιους τύπους οικοτόπων (υγροτοπικούς και χερσαίους) της Μεσογείου

Διοργάνωση: United Nations Environment Programme, Mediterranean Action Plan – RAC/SPA

Υπεύθυνη σύνταξης: Ελένη Φυτώκα

Η συνάντηση πραγματοποιήθηκε από 1 έως 3 Νοεμβρίου 2001 στο Montpellier της Γαλλίας. Στη συνάντηση συμμετείχαν ειδικοί επιστήμονες εκπρόσωποι των χωρών μελών της Σύμβασης (Annex I).

Η συνάντηση εξελίχθηκε βάσει του προγράμματος που είχε προταθεί από τη Γραμματεία (Annex II). Τα αποτελέσματα συντάχθηκαν από την Γραμματεία μετά την ολοκλήρωση των συζητήσεων και παρουσιάστηκαν στους συμμετέχοντες την τρίτη ημέρα της συνάντησης. Οι συμμετέχοντες έκαναν τα τελευταία σχόλια και αποδέχθηκαν την τελική αναφορά. Η αναφορά της συνάντησης αυτής επισυνάπτεται (UNEP(DEC)/MED WG. 193/5, 08 November 2001).

➤ Τα κυριότερα σημεία της συνάντησης έχουν ως εξής:

1. Η Γραμματεία εισήγαγε την 5η ενότητα (agenda item 5) "Ανάπτυξη συστήματος ταξινόμησης των παράκτιων (υγροτοπικών και χερσαίων) Μεσογειακών τύπων οικοτόπων", καλώντας τους συμμετέχοντες να εξετάσουν την προοπτική να υιοθετηθεί το σύστημα ταξινόμησης υγροτόπων που έχει αναπτυχθεί στα πλαίσια της Πρωτοβουλίας MedWet.

Για την καλύτερη ενημέρωση των συμμετεχόντων η Γραμματεία ζήτησε από τον εκπρόσωπο της Πρωτοβουλίας MedWet κ. Pere TOMAS VIVES, να παρουσιάσει το πλαίσιο της MedWet μεθόδου απογραφής υγροτόπων καθώς και ειδικότερα το σύστημα ταξινόμησης υγροτόπων. Ο εκπρόσωπος της Πρωτοβουλίας MedWet, παρουσίασε τα κύρια σημεία της μεθόδου καθώς επίσης και τους λόγους που οδήγησαν στην ανάπτυξη ενός συστήματος ταξινόμησης υγροτόπων προσαρμοσμένο

στις μεσογειακές συνθήκες. Για τη λεπτομερή παρουσίαση του MedWet συστήματος ταξινόμησης, παρέπεμψε στην εκπρόσωπο της Ελλάδας κα. Ελένη Φυτώκα, η οποία και παρουσίασε, την ιεραρχική δομή και τη φιλοσοφία του MedWet συστήματος ταξινόμησης υγροτόπων τονίζοντας την καταλληλότητά του για χαρτογράφηση και παρακολούθηση υγροτόπων.

Στη συνέχεια συζητήθηκε μεταξύ όλων των συμμετεχόντων η προοπτική να χρησιμοποιηθεί το MedWet σύστημα από τα μέλη της Σύμβασης. Παρουσιάστηκαν υποστηρικτικές αλλά και επιφυλακτικές απόψεις. Επιφυλακτικοί ήταν οι εκπρόσωποι των Ευρωπαϊκών χωρών, καθώς στις χώρες αυτές έχει ήδη χρησιμοποιηθεί το Παλαιαρκτικό σύστημα ταξινόμησης. Ενώ οι εκπρόσωποι των χωρών που δεν το έχουν χρησιμοποιήσει προέβαλλαν θετικότερη στάση. Τελικά αποφασίσθηκε να υιοθετηθούν και οι δύο προσεγγίσεις και να συζητηθεί το θέμα στην επόμενη συνάντηση των Εθνικών Εστιάκών Σημείων για τις Ειδικά Προστατευόμενες Περιοχές.

2. Ακολούθησε συζήτηση για την αποδοχή του συστήματος ταξινόμησης των χερσαίων και υγροτοπικών οικοτόπων των παράκτιων περιοχών. Βάσει των παρεμβάσεων των συμμετεχόντων έγιναν προσθήκες αλλά και διαγραφές κάποιων τύπων οικοτόπων και συντάχθηκε το τελικό σύστημα ταξινόμησης (Annex III).

3. Στην επόμενη ενότητα (agenda item 6) οι συμμετέχοντες εξέτασαν τον προτεινόμενο κατάλογο των Μεσογειακών παράκτιων (υγροτοπικών και χερσαίων) τύπων οικοτόπων. Βάσει των παρεμβάσεων των συμμετεχόντων έγιναν αντίστοιχες προσθήκες και διαγραφές και συντάχθηκε ο τελικός κατάλογος (Annex IV).

4. Για την έβδομη ενότητα (agenda item 7) συζητήθηκε η δυνατότητα να συμπεριληφθούν μη - φυσικοί τύποι οικοτόπων και προτάθηκε αντίστοιχος κατάλογος αυτών ο οποίος ενσωματώθηκε στο προτεινόμενο σύστημα ταξινόμησης (Annex III).

➤ Οι προσθήκες και διαγραφές τύπων οικοτόπων που έγιναν στο σύστημα ταξινόμησης και αντιστοίχως στον κατάλογο τύπων οικοτόπων παρουσιάζονται συνοπτικά παρακάτω:

1. Η ονομασία του τύπου οικοτόπου 16.11 άλλαξε από "Unvegetated sand beaches" σε "Unvegetated sand beaches and microbial mats"

2. Δύο νέοι οικοτόποι προστέθηκαν κάτω από τον κωδικό 16.2244:

xx.xxxxx Southeastern Mediterranean Juncus dune communities

xx.xxxxx Southeastern Mediterranean Inula dune communities

3. Προστέθηκαν εκ νέου τύποι οικοτόπων γλυκών υδάτων (2. NON-MARINE WATERS) και συγκεκριμένα οι οικοτόποι στάσιμων υδάτων (22. STANDING FRESHWATER) και οι οικοτόποι τρεχούμενων υδάτων (24. RUNNING WATER).

4. Διατηρήθηκε μόνον η γενική κατηγορία 31.7 Hedgehog-heaths και διαγράφηκαν οι οικοτόποι κάτω από την κατηγορία αυτή.

5. Προστέθηκε κάτω από τον κωδικό 32.11 νέος οικοτόπος:

xx.xxx Macedonian Oak.

6. Κάτω από τον κωδικό 32.12 Olive διαγράφηκαν τρεις τύποι οικοτόποι 32.121, 32.122, και 32.123 και προστέθηκαν δύο νέοι τύποι οικοτόπων:

xx.xxx Oleo - Lentiscetum matorral with carob tree

xx.xxx Oleo - Lentiscetum matorral without carob tree

7. Κάτω από τον κωδικό 32.13 προστέθηκε ένας νέος τύπος οικοτόπου:

xx.xxx Calycotome infesta arborescent matorral

8. Κάτω από τον κωδικό 32.4 προστέθηκε ένας νέος τύπος οικοτόπου:

32.441 Euphorbia communities.

9. Η ονομασία του τύπου οικοτόπου 35.3 άλλαξε από "Mediterranean siliceous grasslands" σε "Mediterranean acidophilous grasslands"

10. Κάτω από τον κωδικό 41

διαγράφηκε ο τύπος οικοτόπου: 41.9 Chestnut woods,

προστέθηκε ένας νέος τύπος οικοτόπου: xx.x Supra Mediterranean oak woods

και η ονομασία του τύπου οικοτόπου 41.7 άλλαξε από "Thermophilous and supra-Mediterranean oak woods" σε "Thermophilous oak woods"

11. Κάτω από τον κωδικό 42 προστέθηκαν δύο νέοι τύποι οικοτόπων:

xx.x Cedrus libani forest

xx.x Abies cilicica forest

12. Κάτω από τον κωδικό 45 προστέθηκε ένας νέος τύπος οικοτόπου:

xx.x Coastal oases

13. Κάτω από τον κωδικό 53 διατηρήθηκαν μόνον οι κωδικοί με δύο υποδιαιρέσεις

και διαγράφηκαν όλοι οι κωδικοί με τρεις και με τέσσερις υποδιαιρέσεις.

14. Κάτω από τον κωδικό 54 προστέθηκε ένας νέος τύπος οικοτόπου:

xx.x Drainage channel vegetation

15. Κάτω από τον κωδικό 61 προστέθηκαν δύο νέοι τύποι οικοτόπων:

xx.x Rocky ridges

xx.x Maltese Rdm communities

16. Προστέθηκε νέος τύπος οικοτόπου:

66. Volcanic features

17. Προστέθηκαν οι ακόλουθοι μη φυσικοί τύποι οικοτόπων

xx Coastal cultural habitats

- xx Coastal traditional agro-ecosystem habitats
- xx Sacred site habitats with biological features of interest
- xx Other non-natural habitats
- xx.x Salinas
- xx.x Littoral water-retaining facilities
- xx.x Artificial islets and beaches
- xx.x Decommissioned extractions sites
- xx.x Historic gardens or reserves used as recreational areas

18. Προστέθηκε η MedWet τυπολογία για τους υγροτόπους.

REPORT OF
THE MEETING OF EXPERTS
ON COASTAL (TERRESTRIAL AND WETLAND)
HABITAT TYPES IN THE MEDITERRANEAN REGION



United Nations Environment Programme



UNEP(DEC)/MED WG.193/5
08 November 2001

ENGLISH
Original: FRENCH



MEDITERRANEAN ACTION PLAN

Meeting of experts on coastal
(terrestrial and wetlands) habitat types
in the Mediterranean region.

Montpellier, 1-3 November 2001

REPORT OF

THE MEETING OF EXPERTS ON COASTAL (TERRESTRIAL AND WETLAND) HABITAT TYPES IN THE MEDITERRANEAN REGION

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Introduction:

1. At their Tenth Ordinary Meeting (Tunis, 18-21 November 1997), the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution adopted common criteria for preparing national inventories of natural sites of conservation interest. The criteria provide for drawing up a reference list of marine and coastal natural habitat types on the basis of a model classification to be established by the Regional Activity Centre for Specially Protected Areas (RAC/SPA).
2. Within this context and with a view to assisting the Contracting Parties to compile inventories of natural sites of conservation interest, RAC/SPA has, in collaboration with experts from the Mediterranean countries and the concerned international organisations, elaborated the following technical tools: (i) the Standard Data-Entry Form (SDF) for national inventories of natural sites of conservation interest, (ii) a classification of Mediterranean marine habitat types, (iii) a reference list of Mediterranean marine habitat types and (iv) a reference list of species.
3. After working on the technical tools related to the marine environment, RAC/SPA was requested by the Contracting Parties to complete these technical tools with a view to also covering terrestrial coastal environments.
4. The present Meeting of Experts on coastal (terrestrial and wetlands) habitat types in the Mediterranean region (Montpellier, France, 1-3 November 2001) was held to define a reference classification of coastal (terrestrial and wetland) habitat types for the Mediterranean region and to draw up a list of Mediterranean coastal (terrestrial and wetland) habitat types of conservation interest.
5. The meeting was organised by RAC/SPA in collaboration with the Maison de l'Environnement de Montpellier (MEM). It took place in the MEM meetings room, 16, rue Ferdinand Fabre, Montpellier, France.

Participants:

6. Experts appointed by the following Contracting Parties to the Barcelona Convention attended the Meeting: Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libyan Arab Jamahiriya, Malta, Monaco, Morocco, Spain, Syrian Arab Republic, Tunisia and Turkey.
7. The following organisations were represented by observers: MEDMARAVIS, MedWet, RAMOGE and the Station Biologique de la Tour du Valat.
8. RAC/SPA acted as the Secretariat for the Meeting.
9. The list of participants is attached as Annex I to this Report.

Agenda item 1 - Opening of the Meeting

10. The Meeting was opened at 9.30 a.m. on Thursday, 1 November 2001, by Mr. Mohamed Adel Hentati, Director of RAC/SPA, who welcomed the participants and thanked the authorities of the host country for their support. He stressed the excellence of the collaboration that had been initiated several years before between the RAC/SPA and the city of Montpellier, through the Maison de l'Environnement. Then Mr. Hentati mentioned the various stages of the process of elaborating technical tools for making inventories of the elements that constitute marine and coastal biological diversity in the Mediterranean, that RAC/SPA had been working on in the context of implementing the new SPA Protocol that came into force in December 1999. Lastly he recalled the aims of the Meeting and outlined the major themes of the working and information documents proposed by the Secretariat.
11. Mrs. Anne Cherel, the Director of the Maison de l'Environnement de Montpellier (MEM), welcomed participants and confirmed her determination to maintain and further strengthen the links of collaboration established with RAC/SPA. She said that the Ville de Montpellier was extremely interested in the subjects addressed by the Meeting and that it was happy to contribute to this Mediterranean process. Mrs. Cherel told the participants that they were all invited by Mr. Georges Frêche, the Deputy Mayor of the Ville de Montpellier, and the Town Council to a reception offered for them at the Maison des Relations Internationales.

Agenda item 2 - Rules of Procedure

12. The Meeting noted that the rules of procedure adopted for the meetings and conferences of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its related protocols (UNEP(OCA)/IG.43/6, Annex XI) would apply *mutatis mutandis* to its deliberations.

Agenda item 3 - Election of officers

13. After the customary informal consultations, the Meeting unanimously elected the following officers:

Chairperson:	Mr. Sid Ali RAMDANE (Algeria)
Vice-Chairpersons:	Mrs. Jasenka TOPIC (Croatia)
	Mr. Ghazi BITAR (Lebanon)
Rapporteur:	Mr. Frédéric PLATINI (Monaco)

Agenda item 4 - Adoption of the Agenda and organisation of work

14. The Meeting adopted the provisional agenda suggested by the Secretariat, distributed as UNEP(DEC)/MED WG.193/1 and annotated in document UNEP(DEC)/MED WG.193/2. The Meeting also reviewed and approved the proposed timetable appearing at the end of document UNEP(DEC)/MED WG.193/2. The Agenda of the Meeting appears in Annex II to this Report.

Agenda item 5 - Establishment of a reference classification of coastal (terrestrial and wetland) habitat types for the Mediterranean region

15. The Secretariat introduced this Agenda item by presenting the main technical tools already elaborated by RAC/SPA and recalling the main elements of the criteria adopted by the Contracting Parties, referring to the "GENERAL PRINCIPLES AND DEFINITION OF THE GEOGRAPHICAL COVERAGE FOR THE PREPARATION OF INVENTORIES OF THE ELEMENTS OF BIOLOGICAL DIVERSITY IN THE MEDITERRANEAN REGION, AND CRITERIA FOR THE PREPARATION OF NATIONAL INVENTORIES OF NATURAL SITES OF CONSERVATION INTEREST", as adopted by the Tenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (Tunis, November 1997). The Secretariat stressed the fact that in elaborating the various technical tools related to the inventories, RAC/SPA had as far as possible kept in mind similar pertinent initiatives for the Mediterranean region, those related to CORINE, Natura 2000 and MedWet in particular.
16. The Meeting was then invited to give its opinion on the use of the wetlands typology developed in the MEDWET context and to look into the Secretariat's suggestion on the subject. Here, several delegates, while stressing the interest of the typology developed within the MedWet framework to characterise Mediterranean wetlands, indicated that this was not similar to the approach followed for other habitat types.
17. The MedWet representative mentioned the aims of the MedWet initiative and its main subjects of interest, among them that related to the inventorying of Mediterranean wetlands. He enumerated the technical tools developed to back up the use of MedWet typology (manuals, software, databases, etc.). The MedWet representative explained that to elaborate the typology proposed by MedWet an analysis was made of the various systems of classification that exist in the region at national and international level. This analysis showed that none of these systems was applicable to the Mediterranean wetlands as a whole. It was thus necessary to establish a new classification based on a typology developed in the United States of America and which MedWet had modified to suit the Mediterranean. He informed the Meeting that the MedWet typology is at present being used by several countries of the region.
18. After speeches from the various delegations that aimed either at highlighting the interest of the MedWet typology (easy to implement, suitable for updating and continuous monitoring) or at mentioning some of its limitations (not applicable for small wetlands, incompatible with the inventories already compiled within the framework of the Emerald or Natura 2000 networks), the Meeting decided to keep both classification systems for the Draft Classification of coastal (terrestrial and wetland) habitat types. It was suggested that RAC/SPA in collaboration with MedWet entrust a small group of experts with the task of both working on practical modes of simultaneous application of the two systems to inventory the Mediterranean coastal sites containing wetlands, and furthering the MedWet

typology concerning marine areas to take into account the classification of marine habitat types adopted within the MAP framework. Results from the small group of experts will be submitted to the next Meeting of National Focal Points for SPAs.

19. The Meeting then examined the Draft Classification of coastal (terrestrial and wetland) habitat types for the Mediterranean region, proposed by the Secretariat in document UNEP(DEC)/MED WG.193/3. The Meeting's work on this item led to a modified version of the Draft Classification, which takes into account the changes suggested by the delegations. This new version appears in Annex III to the present Report.

Agenda item 6 - Drawing up of a List of Mediterranean coastal (terrestrial and wetland) habitat types of conservation interest

20. The Secretariat presented document UNEP(DEC)/MED WG.193/4, "Draft Reference List of Mediterranean coastal (terrestrial and wetland) habitat types of conservation interest". The Secretariat recalled that as a result of the work of the Meeting concerning the previous Agenda item, certain changes to this document had become necessary.
21. The Meeting then examined the Draft Reference List, making those changes the participants deemed necessary. The version of the Reference List produced by the Meeting appears in Annex IV to the present Report.

Agenda item 7 - Any other matters

22. In the context of this item on the Agenda, the Meeting was invited to give its opinion on the interest of including non-natural habitat types in the classification that was the object of the Meeting. The Secretariat presented its suggestions on this subject, referring to the pertinent sections of document UNEP(DEC)/MED WG.193/Inf.3.
23. Several delegations, while stressing the complexity of the question, were in favour of including non-natural habitat types, approving the suggestions of the Secretariat and those formulated by certain participants during the session. These suggestions appear at the end of Annex III under the heading "Non-natural habitats".
24. At the end of the Meeting's discussions, it was stressed that RAC/SPA should give priority, in its activities, to the marine environment, without however neglecting the terrestrial coastal environments covered by the SPA Protocol. The necessity to endow RAC/SPA with additional means to face the increase in its activities was also emphasised.

Agenda item 8 - Adoption of the Report of the Meeting

25. The Draft Report submitted to the Meeting was examined and adopted by the Meeting, taking into account the changes requested by the participants.

Agenda item 9 - Closure of the Meeting

26. After the customary exchange of courtesies, the Chairperson declared the Meeting closed at 12.20 a.m. on Saturday, 3 November 2001.

Annex I: List of Participants

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AGENDA OF THE MEETING

1. Opening of the Meeting
2. Rules of procedure
3. Election of officers
4. Adoption of the Agenda and Organisation of work
5. Establishment of a reference classification of coastal (terrestrial and wetland) habitat types for the Mediterranean region
6. Drawing up of a reference classification of coastal (terrestrial and wetland) habitat types of conservation interest
7. Any other matters
8. Adoption of the report of the meeting
9. Closure of the meeting

Annex II: Agenda of the Meeting

AGENDA OF THE MEETING

1. Opening of the Meeting
2. Rules of procedure
3. Election of officers
4. Adoption of the Agenda and organisation of work
5. Establishment of a reference classification of coastal (terrestrial and wetland) habitat types for the Mediterranean region
6. Drawing up of a list of Mediterranean coastal (terrestrial and wetland) habitat types of conservation interest
7. Any other matters
8. Adoption of the report of the meeting
9. Closure of the meeting

PROPOSED CLASSIFICATION OF COASTAL MEDITERRANEAN HABITAT TYPES¹

1. COASTAL AND HALOPHYTIC COMMUNITIES

15. SALT MARSHES, SALT STEPPES, SALT SCRUBS

15.1 Annual salt pioneer swards

15.11 Grassland swards

15.12 Mediterranean non-marshy salt pioneer communities

15.2 Perennial salt pioneer swards

15.21 Sea-beach swards / Sea-beach swards

15.22 Rush-leaved swards / Perennial swards

15.3 Mediterranean and Atlantic-Mediterranean salt meadows

15.31 Mediterranean salt meadow swards

15.32 Mediterranean salt meadow swards with sea-beds, salt meadows

15.33 Mediterranean salt meadow swards

15.34 Mediterranean salt meadow swards

15.35 Mediterranean salt meadow swards

15.36 Mediterranean salt meadow swards with sea-beds

15.37 Mediterranean salt meadow swards

15.4 Mediterranean annual salt meadow swards

15.41 Mediterranean salt meadow swards

Annex III: Draft Classification of coastal (terrestrial and wetland) habitat types for the Mediterranean region

15.5 Mediterranean salt steppes

15.51 Mediterranean salt steppes

15.52 Mediterranean salt steppes

15.6 Mediterranean gypsum scrubs

15.61 Mediterranean gypsum scrubs

15.62 Afro-Mediterranean gypsum scrubs

15.7 Bahari-Sinai salt marshes

15.71 Northern Sinai salt marshes

16. COASTAL SAND DUNES AND SAND BEACHES

16.1 Sand beaches

16.11 Mediterranean sand beaches and dunes

16.12 Sand beach and dune communities

16.14 Sand beach and dune communities

¹ The codes used in this document are those used by the classification of Palearctic habitats. It follows that the presence of codes is not always continuous since several types of Palearctic habitats are missing for the Mediterranean coastal area and thus do not appear in the classification suggested here. These codes will be replaced in the final classification table by its own classification system.

PROPOSED CLASSIFICATION OF COASTAL MEDITERRANEAN HABITAT TYPES¹

1. COASTAL AND HALOPHYTIC COMMUNITIES

15. SALTMARSHES, SALT STEPPES, SALT SCRUBS

15.1 Annual salt pioneer swards

- 15.11 Glasswort swards
- 15.12 Mediterranean halo-nitrophilous pioneer communities

15.2 Perennial salt pioneer swards

- 15.21 Flat-leaved cordgrass (*Spartina*) swards
- 15.22 Rush-leaved cordgrass (*Spartina*) swards

15.5 Mediterranean and thermo-Atlantic salt meadows

- 15.51 Mediterranean tall rush saltmarshes
- 15.52 Mediterranean short rush, sedge, barley, clover salt meadows
- 15.53 Mediterranean halo-psammophile meadows
- 15.55 Mediterranean saltmarsh grass swards
- 15.56 Mediterranean saltmarsh driftlines
- 15.57 Mediterranean saltmarsh couch-wormwood stands
- 15.58 Mediterranean fine-leaved rush beds

15.6 Mediterraneo-nemoral saltmarsh scrubs

- 15.61 Mediterranean saltmarsh scrubs
- 15.63 Mediterranean *Limoniastrum* scrubs

15.7 Mediterraneo-Canarian xero-halophile scrubs

- 15.72 Mediterranean halo-nitrophilous scrubs

15.8 Mediterranean salt steppes

- 15.81 Mediterranean sea-lavender salt steppes
- 15.82 Mediterranean esparto salt steppes

15.9 Mediterranean gypsum scrubs

- 15.93 South-eastern Iberian gypsum scrubs
- 15.94 Afro-Mediterranean gypsum scrubs

15.C Saharo-Sindian saltmarshes

- 15.C1 Northern Sinai saltmarshes

16.COASTAL SAND DUNES AND SAND BEACHES

16.1 Sand beaches

- 16.11 Unvegetated sand beaches and microbial mats
- 16.12 Sand beach driftline communities
- 16.14 Saharo-Sindian sand beach communities

¹ The codes used in this document are those used by the classification of Palearctic habitats. It follows that the sequence of codes is not always continuous since several types of Palearctic habitat do not concern the Mediterranean coastal area and thus do not appear in the classification suggested here. These codes will be replaced in the final classification version by its own classification system.

16.2 Dunes

16.21 Shifting dunes

16.211 Embryonic dunes

16.2112 Western Tethyan embryonic dunes

16.21121 Western Tethyan sand couch dunes

16.21122 Western Tethyan *Sporobolus* dunes

16.21123 East Mediterranean embryonic dunes

16.212 White dunes

16.2122 Western Tethyan white dunes

16.21221 Mediterranean-Atlantic marram grass dunes

16.21222 Northern Mediterranean marram grass dunes

16.21223 Cyrno-Sardinian marram grass dunes

16.21224 Aegean white dunes

16.21225 Southeastern Mediterranean white dunes

16.22 Fixed dunes (Grey dunes)

16.223 Mediterranean-Atlantic grey dune communities

16.2232 Tyrrhenian *Crucianella* communities

16.2233 Southwestern Mediterranean *Crucianella* communities

16.224 East Mediterranean grey dune communities

16.2241 Adriatic grey dunes

16.2242 Eastern Ionian *Ephedra* dune communities

16.2243 Aegean *Ephedra* dune communities

16.2244 Southeastern Mediterranean rear dune communities

16.22441 Southeastern Mediterranean *Ononis* dune communities

16.22442 Southeastern Mediterranean *Artemisia* dune communities

16.22443 Southeastern Mediterranean tall cane dune communities

16.22444 Southeastern Mediterranean *Nitraria* dunes

xx.xxxxx Southeastern Mediterranean *Juncus* dune communities

xx.xxxxx Southeastern Mediterranean *Inula* dune communities

16.227 Dune fine-grass therophyte communities

16.228 Tethyan dune deep sand therophyte communities

16.2281 Mediterranean-Atlantic dune malcolmia communities

16.229 Dune Mediterranean xeric grasslands

16.25 Dune nemoral thickets

16.252 Western nemoral mixed dune thickets

16.27 Dune juniper thickets

16.271 Dune prickly juniper thickets

16.272 Lycian juniper thickets

16.28 Dune sclerophyllous scrubs and thickets

16.281 Dune sclerophyllous retam brushes

16.282 Dune sclerophyllous thickets

16.283 Dune sclerophyllous low scrubs

16.284 Dune phrygas and bathas

16.29 Wooded dunes

16.2A Saharo-Sindian coastal dunes

16.2A1 Northern Sinai coastal dunes

16.2A11 Northern Sinai *Aristida* coastal dunes

16.2A12 Northern Sinai marram grass coastal dunes

16.2A13 Northern Sinai sand couch and silene coastal dunes

16.3 Humid dune-slacks

- 16.31 Dune-slack pools
- 16.32 Dune-slack pioneer swards
- 16.33 Dune-slack fens
- 16.34 Dune-slack grasslands and heaths
- 16.35 Dune-slack reedbeds, sedgebeds and canebeds

17. SHINGLE BEACHES

17.1 Unvegetated shingle beaches

17.2 Shingle beach drift lines and pioneer swards

- 17.23 Tethyan gravel beach communities

17.4 Gravel bank heaths, scrubs and grasslands

- 17.43 Tethyan gravel bank scrubs and heaths

17.5 Gravel bank thickets

17.6 Gravel bank woods

18. SEA-CLIFFS AND ROCKY SHORES

18.1 Sea-cliff faces, seaside rocks

- 18.16 Mediterraneo-Pontic sea-cliffs and rocky shores

18.2 Sea-cliff and rocky shore aerohaline communities

- 18.22 Tethyan sea-cliff communities

- 18.221 Western Tethyan sea-cliff communities

18.3 Coastal lagoon cliff communities

- 18.31 Pantellerian lagoon cliff communities

18.4 Deposit sea-cliffs

19. ISLETS, ROCK STACKS, REEFS, BANKS, SHOALS

19.1 Lithogenic rock stacks and islets

19.3 Barrier islands, spits

2. NON-MARINE WATERS

22. STANDING FRESHWATER

22.1 Permanent freshwater ponds and lakes

- 22.12 Mesotrophic waterbodies
- 22.13 Eutrophic waterbodies
- 22.14 Dystrophic waterbodies
- 22.15 Lime-rich oligo-mesotrophic waterbodies
- 22.16 Lacustrine benthic communities

22.2 Temporary freshwater bodies

- 22.22 Mesotrophic temporary waterbodies
- 22.23 Eutrophic temporary waterbodies
- 22.25 Lime-rich oligo-mesotrophic temporary waterbodies
- 22.26 Lake muds, sands and shingles
- 22.27 Temporary waterbody benthic communities

22.3 Amphibious macrophyte communities

- 22.33 Bur marigold communities
- 22.34 Mediterranean-Atlantic amphibious communities

22.4 Lacustrine euhydrophyte communities

- 22.41 Free-floating vegetation
- 22.42 Rooted submerged vegetation
- 22.43 Rooted floating vegetation

24. RUNNING WATER

24.1 Rivers and streams

- 24.15 Metapotamal and hypopotamal streams
- 24.16 Intermittent streams
- 24.17 Waterfalls

24.2 River gravel banks

- 24.22 Vegetated river gravel banks

24.4 Euhydrophytic river vegetation

- 24.42 Lime-rich oligotrophic river vegetation
- 24.43 Mesotrophic river vegetation
- 24.44 Eutrophic river vegetation

24.5 River mud banks

- 24.53 Mediterranean river mud communities

24.6 Riverbed rocks, pavements and blocks

3. SCRUB AND GRASSLAND

31. TEMPERATE HEATH AND SCRUB

31.7 Hedgehog-heaths

31.8 Western Palaearctic temperate thickets

31.8A Tyrrhenian sub-Mediterranean deciduous thickets

31.8G Coniferous scrub woodland

32. SCLEROPHYLLOUS SCRUB

32.1 Arborescent matorral

32.11 Evergreen oak matorral

32.111 Cork-oak matorral

32.112 Acidiphile western Mediterranean holm-oak matorral

32.113 Calciphile western Mediterranean oak matorral

32.114 Eastern Mediterranean oak matorral

32.115 Iberian mixed oak arborescent matorral

32.116 Mediterranean evergreen oak low woods

xx.xxx Macedonian Oak

32.12 Olive and lentisc matorral

xx.xxx *Oleo-Lentiscetum* matorral with carob tree

xx.xxx *Oleo-Lentiscetum* matorral without carob tree

32.124 Myrtle arborescent matorral

32.13 Juniper matorral

32.131 *Juniperus oxycedrus* arborescent matorral

32.132 *Juniperus phoenicea* arborescent matorral

xx.xxx *Calycotome infesta* arborescent matorral

32.14 Pine matorral

32.141 Mesogean pine arborescent matorral

32.142 Stone pine arborescent matorral

32.143 Aleppo pine arborescent matorral

32.144 Aegean pine arborescent matorral

32.145 Black pine and scots pine arborescent matorral

32.15 Arbor-vitae matorral

32.151 Iberian arbor-vitae matorral

32.152 North African arbor-vitae matorral

32.153 Maltese arbor-vitae matorral

32.16 Deciduous oak matorral

32.161 Eastern deciduous oak matorral

32.162 Western deciduous oak matorral

32.17 Arid zone matorral

32.171 Iberian arid zone matorral

32.172 North African jujube matorral

32.173 Anatolian jujube matorral

32.175 Levantine spiny matorral

32.18 European laurel matorral

32.19 Cypress matorral

32.2 Thermo-Mediterranean shrub formations

- 32.21 Thermo-Mediterranean brushes, thickets and heath-garrigues
- 32.22 Tree-spurge formations
- 32.23 Diss-dominated garrigues
- 32.24 Palmetto brush
- 32.25 Euro-mediterranean pre-desert scrub
- 32.26 Thermo-mediterranean broom fields (*retamares*)
- 32.27 Mediterranean gorse-heaths
- 32.28 Iberian thermo-Mediterranean garrigues
- 32.29 *Stauracanthus boivini* gorse-heaths
- 32.2A Western Tethyan xero-psammitic brushes
- 32.2C Thermo-Mediterranean heaths
- 32.2D North African thermomediterranean garrigues

32.3 Meso-Mediterranean silicicolous maquis

32.4 Western meso-mediterranean calcicolous garrigues

- 32.441 *Euphorbia* communities (lato sensu)

32.5 Eastern garrigues

32.9 Ermes

32.A Spanish-broom fields

32.B Illyrian garrigues

33. PHRYGANA

- 33.1 West Mediterranean clifftop phrygas
- 33.2 Sardinian *Centaurea horrida* phrygas
- 33.3 Aegean phrygas
- 33.5 *Hypericum* phrygas
- 33.6 Italian *Sarcopoterium* phrygas
- 33.7 Sardinian *Genista acanthoclada* phryga
- 33.8 Balearic clifftop phrygas
- 33.9 Cymo-Sardinian *Genista* phrygas
- 33.A Pantelleria phryga
- 33.C East Mediterranean bathas
- 33.D North African phrygas

34. STEPPES AND DRY CALCAREOUS GRASSLANDS

- 34.3 Dense perennial grasslands and middle European steppes
- 34.5 Mediterranean xeric grasslands
- 34.6 Mediterranean tall-grass and wormwood steppes
- 34.8 Mediterranean subnitrophilous grasslands

35. DRY ACIDOPHILOUS GRASSLANDS

35.3 Mediterranean acidophilous grasslands

35.4 Mediterranean annual deep-sand communities

37. HUMID GRASSLAND AND TALL HERB COMMUNITIES

37.4 Mediterranean tall humid grasslands

37.5 Mediterranean short humid grasslands

37.7 Humid tall herb fringes

4. FORESTS

41. BROAD-LEAVED DECIDUOUS FORESTS

41.7 Thermophilous oak woods

xx.x Supra-Mediterranean oak woods

41.8 Mixed thermophilous forests

42. TEMPERATE CONIFEROUS FORESTS

42.6 Black pine forests

xx.x *Cedrus libani* forest

xx.x *Abies cilicica* forest

42.8 Mediterranean pine woods

42.A Western Palearctic cypress, juniper and yew forests

44. TEMPERATE RIVERINE AND SWAMP FORESTS AND BRUSH

44.1 Riparian willow formations

44.4 Mixed oak-elm-ash forests of great rivers

44.5 Southern alder and birch galleries

44.6 Mediterranean-Turanian riverine forests

44.7 Oriental plane and sweet gum woods

44.8 Southern riparian galleries and thickets

44.9 Alder, willow, oak, aspen swamp woods

45. TEMPERATE BROAD-LEAVED EVERGREEN FORESTS

45.1 Olive-carob forests

45.2 Cork-oak forests

45.3 Holm-oak forests

45.4 Kermes oak forests

45.5 Eurasian continental lauriphyllous forests

45.7 Temperate palm groves

xx.x Coastal oases

5. BOGS AND MARSHES

53. WATER-FRIDGE VEGETATION

53.1 Reed beds

- 53.11 Common reed beds
- 53.12 Common clubrush beds
- 53.13 Reedmace beds
- 53.14 Medium-tall waterside communities
- 53.15 Water-fringe grass beds
- 53.16 Reed canary-grass beds
- 53.17 Halophile clubrush beds

53.2 Large sedge communities

- 53.21 Large *Carex* beds
- 53.22 Tall galingale beds
- 53.23 Papyrus swamps

53.3 Fen-sedge beds

- 53.32 Valencia *Cladium* islands
- 53.33 Riparian *Cladium* beds

53.4 Small reed beds of fast-flowing waters

53.5 Tall rush swamps

53.6 Riparian cane formations

- 53.61 Ravenna cane communities
- 53.62 Provence cane beds

54. FENS, TRANSITION MIRES AND SPRINGS

54.1 Springs vegetation

xx.x Drainage channel vegetation

6. INLAND ROCKS, SCREES AND SANDS

61. SCREES

61.3 Western Mediterranean and thermophilous screes

61.5 Illyrian screes

61.8 North African screes

xx.x Rocky ridges

xx.x Maltese Rdum communities

65. CAVES

65.1 Troglobiont vertebrate caves

65.2 Continental subtroglophile vertebrate caves

65.3 Insular subtroglophile vertebrate caves

65.4 Troglobiont invertebrate caves

65.5 Troglophile invertebrate caves

65.6 Subtroglophile invertebrate caves

65.7 Atroglozoocenotic caves

66. Volcanic features

7. DESERTS

73. HOT DESERTS AND SEMIDESERTS

73.1 Saharo-Arabian deserts and semideserts

73.11 Saharo-Arabian sand deserts and semideserts

73.111 Saharo-Arabian ergs and barchans

73.112 Saharo-Arabian sandy regs

73.12 Saharo-Arabian regs

73.121 Saharo-Arabian reg communities

73.122 Saharo-Arabian unvegetated regs

73.14 Saharo-Arabian wadis

73.16 Saharo-Arabian halogypsophilous communities

X. NON-NATURAL COASTAL HABITATS

xx. Coastal cultural habitats

xx. Coastal traditional agro-ecosystem habitats

xx. Sacred site habitats with biological features of interest

xx. Other non-natural habitats

xx.x Salinas

xx.x Littoral water-retaining facilities

xx.x Artificial islets and beaches

xx.x Extensive or semi-intensive fish farms

xx.x Decommissioned extraction sites.

xx.x Historic gardens or reserves used as recreational areas

PROPOSED TYPOLOGY FOR WETLANDS

RIVERINE (R) (System)

TIDAL (T) (Subsystem)			
		Water Surface	(O) (Class)
Sub-Classes		R	Rock
		C	Cobbles/Gravel
		S	Sand
		M	Mud
		O	Organic
		K	Unknown Bottom (1)
		<u>Non-vegetated (S)</u>	
Sub-Classes		R	Rock
		C	Cobbles/Gravel
		S	Sand
		M	Mud
		O	Organic
		V	Vegetated Pioneer
		<u>Aquatic Bed (A)</u>	
Sub-Classes		A	Algal
		M	Aquatic Moss
		L	Floating – leaved
		F	Floating-vascular
		R	Rooted Vascular
		Z	Unknown Submergent (1)
		X	Unknown Surface (1)
		<u>Emergent (E)</u>	
Sub-Classes		N	Non-persistent

LOWER PERENNIAL (W) (Subsystem)

<u>Water Surface (O) (Class)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	K	Unknown bottom

<u>Non-vegetated (S)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	V	Vegetated Pioneer

<u>Aquatic Bed (A)</u>		
Sub-Classes	A	Algal
	M	Aquatic Moss
	L	Floating-leaved
	F	Floating – vascular
	R	Rooted Vascular
	Z	Unknown Submergent (1)
	X	Unknown Surface (1)

<u>Emergent (E)</u>		
	N	Non-persistent

UPPER-PERENNIAL (U) (Subsystem)

<u>Water Surface (O) (Class)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	K	Unknown Bottom (1)

<u>Non-vegetated (S)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	V	Vegetated Pioneer

<u>Aquatic Bed (A)</u>		
Sub-Classes	A	Algal
	M	Aquatic Moss
	L	Floating - leaved
	F	Floating – vascular
	R	Rooted Vascular
	Z	Unknown Submergent (1)
	X	Unknown Surface (1)

<u>Emergent (E)</u>	
N	Non-persistent

INTERMITTENT (E) (Subsystem)

<u>Non-vegetated (S)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	V	Vegetated Pioneer

LACUSTRINE (L) (System)

LIMNETIC (M) (Subsystem)

<u>Water Surface (O)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	A	Salt crust
	K	Unknown bottom

<u>Aquatic Bed (A)</u>		
Sub-Classes	A	Algal
	M	Aquatic Moss
	L	Floating - leaved
	F	Floating – vascular
	R	Rooted Vascular
	Z	Unknown Submergent (1)
	X	Unknown Surface (1)

LITTORAL (L) (Subsystem)

<u>Water Surface (O)(Class)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	A	Salt crust
	K	Unknown bottom

<u>Non-vegetated (S)</u>		
Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	A	Salt crust
	V	Vegetated Pioneer

<u>Aquatic Bed (A)</u>		
Sub-Classes	A	Algal
	M	Aquatic Moss
	L	Floating - leaved
	F	Floating – vascular
	R	Rooted Vascular
	Z	Unknown Submergent (1)
	X	Unknown Surface (1)

<u>Emergent (E)</u>		
	N	Non-persistent

PALUSTRINE (P) (System)

Water Surface (Class)

Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	A	Salt crust
	K	Unknown bottom

Non-vegetated

Sub-Classes	R	Rock
	C	Cobbles/Gravel
	S	Sand
	M	Mud
	O	Organic
	A	Salt crust
	V	Vegetated Pioneer

Aquatic Bed

Sub-Classes	A	Algal
	M	Aquatic Moss
	L	Floating - leaved
	F	Floating - vascular
	R	Rooted Vascular
	Z	Unknown Submergent (1)
	X	Unknown Surface (1)

Moss-Lichen

Sub-Classes	M	Moss
	L	Lichen

Emergent

Sub-Classes	P	Persistent
	N	Non-persistent

Scrub-Shrub

Sub-Classes	D	Deciduous
	E	Evergreen
	A	Dead

Forested

Sub-Classes	D	Deciduous
	E	Evergreen
	A	Dead

COASTAL TERRESTRIAL HABITAT TYPES

1. COASTAL TERRESTRIAL HABITAT TYPES

15. SALT MARSHES, SALT PANS, AND SALT FLATS

15.1 Marshes and salt pans

15.11 Marshes

15.12 Salt pans

15.2 Pans and salt flats

15.21 Pans

15.22 Salt flats

15.3 Mangroves and other coastal forests

15.31 Mangroves

15.32 Other coastal forests

15.33 Mangroves and other coastal forests

15.34 Mangroves and other coastal forests

15.35 Mangroves and other coastal forests

15.36 Mangroves and other coastal forests

15.37 Mangroves and other coastal forests

15.4 Mangroves and other coastal forests

15.41 Mangroves

Annex IV: Draft Reference List of Habitat Types for the Selection of Sites to be included in the National Inventories of Natural Sites of Conservation Interest

15.5 Mangroves and other coastal forests

15.51 Mangroves

15.52 Mangroves and other coastal forests

15.6 Mangroves and other coastal forests

15.61 Mangroves

15.62 Mangroves and other coastal forests

15.7 Mangroves and other coastal forests

15.71 Mangroves

16. COASTAL SAND DUNES AND SAND BEACHES

16.1 Sand beaches

16.11 Unvegetated sand beaches

16.12 Sand beaches with vegetation

16.14 Sand dunes and sand beaches

16.2 Dunes

16.21 Coastal COASTAL TERRESTRIAL HABITAT TYPES¹

16.211 Embryonic dunes

16.211.1 Western Tethyan embryonic dunes

16.211.2 Tethyan sand couch dunes

16.211.3 Sporadic dunes

16.211.4 East Mediterranean embryonic dunes

1. COASTAL AND HALOPHYTIC COMMUNITIES

15. SALT MARSHES, SALT STEPPES, SALT SCRUBS

15.1 Annual salt pioneer swards

15.11 Glasswort swards

15.12 Mediterranean halo-nitrophilous pioneer communities

15.2 Perennial salt pioneer swards

15.21 Flat-leaved cordgrass (*Spartina*) swards

15.22 Rush-leaved cordgrass (*Spartina*) swards

15.5 Mediterranean and thermo-Atlantic salt meadows

15.51 Mediterranean tall rush saltmarshes

15.52 Mediterranean short rush, sedge, barley, clover salt meadows

15.53 Mediterranean halo-psammophile meadows

15.55 Mediterranean saltmarsh grass swards

15.56 Mediterranean saltmarsh driftlines

15.57 Mediterranean saltmarsh couch-wormwood stands

15.58 Mediterranean fine-leaved rush beds

15.6 Mediterranean-nemoral saltmarsh scrubs

15.61 Mediterranean saltmarsh scrubs

15.63 Mediterranean *Limoniastrum* scrubs

15.7 Mediterranean-Canarian xero-halophile scrubs

15.72 Mediterranean halo-nitrophilous scrubs

15.8 Mediterranean salt steppes

15.81 Mediterranean sea-lavender salt steppes

15.82 Mediterranean esparto salt steppes

15.9 Mediterranean gypsum scrubs

15.93 South-eastern Iberian gypsum scrubs

15.94 Afro-Mediterranean gypsum scrubs

15.C Saharo-Sindian saltmarshes

15.C1 Northern Sinai saltmarshes

16. COASTAL SAND DUNES AND SAND BEACHES

16.1 Sand beaches

16.11 Unvegetated sand beaches and microbial mats

16.12 Sand beach driftline communities

16.14 Saharo-Sindian sand beach communities

¹ Additions could be made to the Reference List to suit local circumstances.

16.2 Dunes

16.21 Shifting dunes

16.211 Embryonic dunes

16.2112 Western Tethyan embryonic dunes

16.21121 Western Tethyan sand couch dunes

16.21122 Western Tethyan *Sporobolus* dunes

16.21123 East Mediterranean embryonic dunes

16.212 White dunes

16.2122 Western Tethyan white dunes

16.21221 Mediterranean-Atlantic marram grass dunes

16.21222 Northern Mediterranean marram grass dunes

16.21223 Cyrno-Sardinian marram grass dunes

16.21224 Aegean white dunes

16.21225 Southeastern Mediterranean white dunes

16.22 Fixed dunes (Grey dunes)

16.223 Mediterranean-Atlantic grey dune communities

16.2232 Tyrrhenian *Crucianella* communities

16.2233 Southwestern Mediterranean *Crucianella* communities

16.224 East Mediterranean grey dune communities

16.2241 Adriatic grey dunes

16.2242 Eastern Ionian *Ephedra* dune communities

16.2243 Aegean *Ephedra* dune communities

16.2244 Southeastern Mediterranean rear dune communities

16.22441 Southeastern Mediterranean *Ononis* dune communities

16.22442 Southeastern Mediterranean *Artemisia* dune communities

16.22443 Southeastern Mediterranean tall cane dune communities

16.22444 Southeastern Mediterranean *Nitraria* dunes

xx.xxxxx Southeastern Mediterranean *Juncus* dune communities

xx.xxxxx Southeastern Mediterranean *Inula* dune communities

16.227 Dune fine-grass therophyte communities

16.228 Tethyan dune deep sand therophyte communities

16.2281 Mediterranean-Atlantic dune malcolmia communities

16.229 Dune Mediterranean xeric grasslands

16.25 Dune nemoral thickets

16.252 Western nemoral mixed dune thickets

16.27 Dune juniper thickets

16.271 Dune prickly juniper thickets

16.272 Lycian juniper thickets

16.28 Dune sclerophyllous scrubs and thickets

16.281 Dune sclerophyllous retam brushes

16.282 Dune sclerophyllous thickets

16.283 Dune sclerophyllous low scrubs

16.284 Dune phrygas and bathas

16.29 Wooded dunes

16.2A Saharo-Sindian coastal dunes

16.2A1 Northern Sinai coastal dunes

16.2A11 Northern Sinai *Aristida* coastal dunes

16.2A12 Northern Sinai marram grass coastal dunes

16.2A13 Northern Sinai sand couch and silene coastal dunes

16.3 Humid dune-slacks

- 16.31 Dune-slack pools
- 16.32 Dune-slack pioneer swards
- 16.33 Dune-slack fens
- 16.34 Dune-slack grasslands and heaths
- 16.35 Dune-slack reedbeds, sedgebeds and canebeds

17. SHINGLE BEACHES**17.1 Unvegetated shingle beaches****17.2 Shingle beach drift lines and pioneer swards**

- 17.23 Tethyan gravel beach communities

17.4 Gravel bank heaths, scrubs and grasslands

- 17.43 Tethyan gravel bank scrubs and heaths

17.5 Gravel bank thickets**17.6 Gravel bank woods****18. SEA-CLIFFS AND ROCKY SHORES****18.1 Sea-cliff faces, seaside rocks**

- 18.16 Mediterranean-Pontic sea-cliffs and rocky shores

18.2 Sea-cliff and rocky shore aerohaline communities

- 18.22 Tethyan sea-cliff communities
- 18.221 Western Tethyan sea-cliff communities

18.3 Coastal lagoon cliff communities

- 18.31 Pantellerian lagoon cliff communities

18.4 Deposit sea-cliffs**19. ISLETS, ROCK STACKS, REEFS, BANKS, SHOALS****19.1 Lithogenic rock stacks and islets****19.3 Barrier islands, spits****2. NON-MARINE WATERS****22. STANDING FRESHWATER****22.1 Permanent freshwater ponds and lakes**

- 22.12 Mesotrophic waterbodies
- 22.13 Eutrophic waterbodies
- 22.14 Dystrophic waterbodies
- 22.15 Lime-rich oligo-mesotrophic waterbodies
- 22.16 Lacustrine benthic communities

22.2 Temporary freshwater bodies

- 22.22 Mesotrophic temporary waterbodies
- 22.23 Eutrophic temporary waterbodies
- 22.25 Lime-rich oligo-mesotrophic temporary waterbodies
- 22.26 Lake muds, sands and shingles
- 22.27 Temporary waterbody benthic communities

22.3 Amphibious macrophyte communities

22.33 Bur marigold communities

22.34 editerranean-Atlantic amphibious communities

22.4 Lacustrine euhydrophyte communities

22.41 Free-floating vegetation

22.42 Rooted submerged vegetation

22.43 Rooted floating vegetation

24. RUNNING WATER

24.1 Rivers and streams

24.15 Metapotamal and hypopotamal streams

24.16 Intermittent streams

24.17 Waterfalls

24.2 River gravel banks

24.22 Vegetated river gravel banks

24.4 Euhydrophytic river vegetation

24.42 Lime-rich oligotrophic river vegetation

24.43 Mesotrophic river vegetation

24.44 Eutrophic river vegetation

24.5 River mud banks

24.53 Mediterranean river mud communities

24.6 Riverbed rocks, pavements and blocks

3. SCRUB AND GRASSLAND

31. TEMPERATE HEATH AND SCRUB

31.7 Hedgehog-heaths

32. SCLEROPHYLLOUS SCRUB

32.1 Arborescent matorral

32.12 Olive and lentisc matorral

xx.xxx *Oleo-Lentiscetum* matorral with carob tree

xx.xxx *Oleo-Lentiscetum* matorral without carob tree

32.13 Juniper matorral

32.131 *Juniperus oxycedrus* arborescent matorral

32.132 *Juniperus phoenicea* arborescent matorral

xx.xxx *Calycotome infesta* arborescent matorral

32.15 Arbor-vitae matorral

32.153 Maltese arbor-vitae matorral

32.17 Arid zone matorral

32.171 Iberian arid zone matorral

32.172 North African jujube matorral

32.173 Anatolian jujube matorral

32.175 Levantine spiny matorral

32.18 European laurel matorral

32.2 Thermo-Mediterranean shrub formations

- 32.22 Tree-spurge formations
- 32.23 Diss-dominated garrigues
- 32.24 Palmetto brush
- 32.25 Euro-mediterranean pre-desert scrub
- 32.26 Thermo-mediterranean broom fields (*retamares*)

32.4 Western meso-mediterranean calcicolous garrigues

- 32.441 *Euphorbia* communities (lato sensu)

33. PHRYGANA

33.1 West Mediterranean clifftop phryganas

33.3 Aegean phryganas

34. STEPPES AND DRY CALCAREOUS GRASSLANDS

34.3 Dense perennial grasslands and middle European steppes

34.5 Mediterranean xeric grasslands

37. HUMID GRASSLAND AND TALL HERB COMMUNITIES

37.4 Mediterranean tall humid grasslands

37.7 Humid tall herb fringes

4. FORESTS

41. BROAD-LEAVED DECIDUOUS FORESTS

41.7 Thermophilous oak woods

xx.x Supra-Mediterranean oak woods

41.8 Mixed thermophilous forests

42. TEMPERATE CONIFEROUS FORESTS

42.A Western Palaearctic cypress, juniper and yew forests

44. TEMPERATE RIVERINE AND SWAMP FORESTS AND BRUSH

44.8 Southern riparian galleries and thickets

45. TEMPERATE BROAD-LEAVED EVERGREEN FORESTS

45.1 Olive-carob forests

xx.x Coastal oasis

5. BOGS AND MARSHES

53. WATER-FRIDGE VEGETATION

53.1 Reed beds

- 53.11 Common reed beds
- 53.12 Common clubrush beds
- 53.13 Reedmace beds
- 53.14 Medium-tall waterside communities
- 53.15 Water-fringe grass beds
- 53.16 Reed canary-grass beds
- 53.17 Halophile clubrush beds

53.2 Large sedge communities

- 53.21 Large *Carex* beds
- 53.22 Tall galingale beds
- 53.23 Papyrus swamps

53.3 Fen-sedge beds

- 53.32 Valencia *Cladium* islands
- 53.33 Riparian *Cladium* beds (non-native species excluded)

53.4 Small reed beds of fast-flowing waters

53.5 Tall rush swamps

53.6 Riparian cane formations

- 53.61 Ravenna cane communities
- 53.62 Provence cane beds

54. FENS, TRANSITION MIRES AND SPRINGS

54.1 Springs vegetation

6. INLAND ROCKS, SCREES AND SANDS

61. SCREES

61.3 Western Mediterranean and thermophilous screes

61.5 Illyrian screes

61.8 North African screes

xx.x Rocky ridges

xx.x Maltese Rdum communities

65. CAVES

65.1 Troglobiont vertebrate caves

65.2 Continental subtroglophile vertebrate caves

65.3 Insular subtroglophile vertebrate caves

65.4 Troglobiont invertebrate caves

65.5 Troglophile invertebrate caves

65.6 Subtroglophile invertebrate caves

65.7 Atroglozoocoenotic caves

7. DESERTS

73. HOT DESERTS AND SEMIDESERTS

73.1 Saharo-Arabian deserts and semideserts

- 73.14 Saharo-Arabian wadis



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