EP

United Nations
Environment
Programme

UNEP(OCA)/MED WG.157/7
25 June 1999

Original: FRENCH

MEDITERRANEAN ACTION PLAN

Meeting of MAP National Focal Points

Athens, 6-9 September 1999

DRAFT REFERENCE LIST OF HABITAT TYPES FOR THE SELECTION OF SITES TO BE INCLUDED IN THE NATIONAL INVENTORIES OF NATURAL SITES OF CONSERVATION INTEREST

UNEP
Athens, 1999

FOREWORD

Section 2.1 of the Mediterranean Action Plan - Phase II and Articles 3.3 and 15 of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean contain provisions for the preparation of inventories of the elements of biological diversity important for its conservation and sustainable use. MAP Phase II also provides for such inventories to be prepared according to common criteria jointly established by the Contracting Parties.

In this framework, the Regional Activity Centre for Specially Protected Areas (SPA/RAC) was invited by the Extraordinary Meeting of the Contracting Parties held in Montpellier, 1-4 July 1996, to prepare common criteria and guidelines for the preparation of inventories.

Within the fulfilment of this mandate, SPA/RAC convened a Meeting of experts on criteria for the preparation of inventories of the elements of biological diversity in the Mediterranean region (Athens, 8-10 September 1997). The meeting finalized criteria for the preparation of national inventories of natural sites of conservation interest, which were subsequently adopted by the Tenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Tunis, 18-21 November 1997).

To guide the identification of sites to be inventoried, the criteria provide inter alia for the establishment of a reference list of marine and coastal habitat types. The criteria also indicate that the list should be elaborated taking into account a model classification of habitat types to be established by the SPA/RAC.

The Tenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention invited SPA/RAC to work on the elaboration of the reference list of habitat types, as well as of the model classification of marine habitat types for the Mediterranean region. The same meeting decided that such tools will be finalized at the level of the meeting of the National Focal Points for SPA and adopted at the level of the Meeting of the Contracting Parties (Doc. UNEP(OCA)/MED IG.11/10, Annex IV).

With a view to provide input to the elaboration of the above mentioned habitat classification and reference list, SPA/RAC convened a Meeting of Experts on marine habitat types in the Mediterranean region. The meeting, which received financial and technical support from France, was held in Hyères from 18 to 20 November 1999. The works of the meeting led to the following main outputs:
- draft classification of benthic marine habitat types for the Mediterranean region;
- criteria for the evaluation of the conservation interest of each habitat type and a proposal of rating.

On the basis of the outcomes of the mentioned meeting of experts in Hyères, the 4th Meeting of the National Focal Points for SPA (12-14 April 1999) finalized the marine component of the above-mentioned reference list of marine and coastal habitat types of conservation interest.

The present document includes the draft list as it has been finalized by the 4th Meeting of the National Focal Points for SPA. It is submitted to the present Meeting of the MAP National Focal Points, with a view to being transmitted to the 11th Ordinary Meeting of the Contracting Parties for adoption. The nomenclature used to designate the different habitat units is the one adopted in the draft classification of benthic marine habitat types for the Mediterranean region. The whole classification can be found in document UNEP(OCA)/MED WG.157/6.

The habitat types which have been selected belong to the hierarchical levels 3 (Biocenosis) and 4 (Facies/Association) of the classification. In this regard it is worth noting that the selection of a unit of level 4 do not necessarily imply that the higher hierarchical levels, and in particular the biocenosis it belongs to, is selected as well. For instance, Unit « II.1.1.1 Association with halophytes » was selected as a priority one, while the « biocenosis of muddy sands and muds (II.1.1) » it belongs to was not considered in general of particular interest. For each selected habitat type also the higher hierarchical levels are reported on the list, with a view to help the reader in identifying the unit. However, in order to try to avoid confusion between selected and non-selected units, the selected ones are indicated by an asterisk (*) on the left and are put on a grey background.

DRAFT REFERENCE LIST OF HABITAT TYPES FOR THE SELECTION OF SITES TO BE INCLUDED IN THE NATIONAL INVENTORIES OF NATURAL SITES OF CONSERVATION INTEREST

as approved by the 4th Meeting of National Focal Points for SPA (Tunis, 12-14 April 1999)

SECTION I - MARINE HABITAT TYPES[1]

I. SUPRALITTORAL

I. 2. SANDS

I. 2. 1 Biocenosis of supralittoral sands

* I. 2. 1. 5. Facies of phanerogams which have been washed ashore (upper part)

II. MEDIOLITTORAL

II. 1. MUDS, SANDY MUDS AND SANDS

II. 1. 1. Biocenosis of muddy sands and muds

* II. 1. 1. 1. Association with halophytes

* II. 1. 1. 2. Facies of saltworks

II. 3. STONES AND PEBBLES

II. 3. 1. Biocenosis of mediolittoral coarse detritic bottoms

* II. 3. 1. 1. Facies of banks of dead leaves of *P. oceanica* and other phanerogams

II. 4. HARD BEDS AND ROCKS

II. 4. 1. Biocenosis of the upper mediolittoral rock

* II. 4. 1. 3. Association with *Nemalion helminthoides* and *Rissoella verruculosa*

* II. 4. 1. 4. Association with *Lithophyllum papillosum* and *Polysiphonia* spp.

---

[1] The present list is based on the Classification of Benthic Marine Habitat Types for the Mediterranean Region, as it has been elaborated by the Meeting of Experts on Marine Habitat Types in the Mediterranean Region (Hyères, France, 18-20 November 1998) and subsequently reviewed by the Fourth Meeting of National Focal Points for SPA (Tunis, 12-14 April 1999). The selection of habitat types to be included in the list was made by the latter meeting on the basis of an evaluation of the conservation interest of each habitat type identified in the classification, which had been undertaken by the Meeting of Experts in Hyères according to an agreed set of criteria. The revised classification can be found in the report of the meeting of the National Focal Points, edited by RAC/SPA under the code UNEP(OCA)/MED WG.154/7, while the criteria and the full results of the evaluation exercise can be found in the report of the meeting in Hyères, edited by RAC/SPA under the code UNEP(OCA)/MED WG.149/5/Rev.1.

With a view to helping the reader in identifying the habitat units, for each selected habitat type also the higher hierarchical levels of the classification are indicated on the list. However, in order to try to avoid confusion between selected and non-selected units, the selected ones are indicated by an asterisk (*) on the left of the page, and are put on a grey background.

II. 4. 2. Biocenosis of the lower mediolittoral rock

* II. 4. 2. 1. Association with *Lithophyllum lichenoides* (= entablature with *L. tortuosum*)

* II. 4. 2. 5. Facies with *Pollicipes cornucopiae*

* II. 4. 2. 7. Association with *Fucus virsoides*

* II. 4. 2. 8. *Neogoniolithon brassica-florida* concretion

* II. 4.2.10. Pools and lagoons sometimes associated with vermetids (infralittoral enclave)

* II. 4. 3. Mediolittoral caves

* II. 4. 3. 1. Association with *Phymatolithon lenormandii* and *Hildenbrandia rubra*

III. INFRALITTORAL

III.1 SANDY MUDS, SANDS, GRAVELS AND ROCKS IN EURYHALINE AND EURYTHERMAL ENVIRONMENT

III. 1. 1. Euryhaline and eurythermal biocenosis

* III. 1. 1. 1. Association with *Ruppia cirrhosa* and/or *Ruppia maritima*

* III. 1. 1. 3. Association with *Potamogeton pectinatus*

* III. 1. 1. 4. Association with *Zostera noltii* in euryhaline and eurythermal environment

* III. 1. 1. 5. Association with *Zostera marina* in euryhaline and eurythermal environment

* III. 1. 1. 8. Association with *Halopithys incurva*

III. 2. FINE SANDS WITH MORE OR LESS MUD

III. 2. 2. Biocenosis of well sorted fine sands

* III. 2. 2. 2. Association with *Halophila stipulacea*

III. 2. 3. Biocenosis of superficial muddy sands in sheltered waters

* III. 2. 3. 3. Facies with *Loripes lacteus*, *Tapes* spp.

* III. 2. 3. 5. Association with *Zostera noltii* on superficial muddy sands in sheltered waters

* III. 2. 3. 7. Facies of hydrothermal oozes with *Cyclope neritea* and nematodes

III. 3. COARSE SANDS WITH MORE OR LESS MUD

III. 3. 1. Biocenosis of coarse sands and fine gravels mixed by the waves

* III. 3. 1. 1. Association with rhodolithes

III. 3. 2. Biocenosis of coarse sands and fine gravels under the influence of bottom currents (also found in the Circalittoral)

* III. 3. 2. 1. Maërl facies (= Association with *Lithothamnion corallioides* and *Phymatolithon calcareum*) (can also be found as facies of the biocenosis of coastal detritic).

* III. 3. 2. 2. Association with rhodolithes

III. 5. POSIDONIA OCEANICA MEADOWS

* III. 5. 1. Posidonia oceanica meadows (= Association with *Posidonia oceanica*)

* III. 5. 1. 1. Ecomorphosis of striped meadows

* III. 5. 1. 2. Ecomorphosis of "barrier-reef" meadows

III. 6. HARD BEDS AND ROCKS

III. 6. 1. Biocenosis of infralittoral algae

* III. 6. 1. 2. Association with *Cystoseira amentacea* (var. *amentacea*, var. *stricta*, var. *spicata)*

* III. 6. 1. 3. Facies with Vermetids

* III. 6. 1. 10. Association with *Cystoseira tamariscifolia* and *Saccorhiza polyschides*

* III. 6. 1. 14. Facies with *Cladocora caespitosa*

* III. 6. 1. 15. Association with *Cystoseira brachycarpa*

* III. 6. 1. 16. Association with *Cystoseira crinita*

* III. 6. 1. 17. Association with *Cystoseira crinitophylla*

* III. 6. 1. 18. Association with *Cystoseira sauvageauana*

* III. 6. 1. 19. Association with *Cystoseira spinosa*

* III. 6. 1. 20. Association with *Sargassum vulgare*

* III. 6. 1. 25. Association with *Cystoseira compressa*

* III. 6. 1. 35. Facies and Associations of Coralligenous biocenosis (in enclave)

IV. CIRCALITTORAL

IV. 2. SANDS

IV. 2. 2. Biocenosis of the coastal detritic bottom

* IV. 2. 2. 7. Association with *Laminaria rodriguezii* on detritic

* IV. 2. 2. 10. Facies with large Bryozoa

IV. 3. HARD BEDS AND ROCKS

* IV. 3. 1. Coralligenous biocenosis
* IV. 3. 1. 1. Association with *Cystoseira zosteroides*
* IV. 3. 1. 2. Association with *Cystoseira usneoides*
* IV. 3. 1. 3. Association with *Cystoseira dubia*
* IV. 3. 1. 4. Association with *Cystoseira comiculata*
* IV. 3. 1. 5. Association with *Sargassum* spp. (indigenous)
* IV. 3. 1. 8. Association with *Laminaria ochroleuca*
* IV. 3. 1. 9. Association with *Rodriguezella strafforelli*
* IV. 3. 1. 10. Facies with *Eunicella cavolinii*
* IV. 3. 1. 11. Facies with *Eunicella singularis*
* IV. 3. 1. 12. Facies with *Lophogorgia sarmentosa*
* IV. 3. 1. 13. Facies with *Paramuricea clavata*
* IV. 3. 1. 15. Coralligenous platforms

* IV.3. 2. Semi-dark caves (also in enclave in upper stages)
* IV. 3. 2. 2. Facies with *Corallium rubrum*

V. BATHYAL

V. 1. MUDS

V. 1. 1. Biocenosis of bathyal muds

* V. 1. 1. 3. Facies of soft muds with *Funiculina quadrangularis* and *Apporhais seressianus*
* V. 1. 1. 4. Facies of compact muds with *Isidella elongata*

V. 3. HARD BEDS AND ROCKS

* V. 3. 1. Biocenosis of deep sea corals
* V. 3. 2. Caves and ducts in total darkness (in eclave in the upper stages)