

### ISO Codes that Identify the Country

These are the country codes created by the International Standards Organisations and they are internationally recognised and used.

<b>AL</b>	Albania
<b>DZ</b>	Algeria
<b>AD</b>	Andorra
<b>BA</b>	Bosnia and Herzegovina
<b>HR</b>	Croatia
<b>CY</b>	Cyprus
<b>EG</b>	Egypt
<b>FR</b>	France
<b>GR</b>	Greece
<b>IL</b>	Israel
<b>IT</b>	Italy
<b>JO</b>	Jordan
<b>LB</b>	Lebanon
<b>LY</b>	Libyan Arab Jamahiriya
<b>MK</b>	Former Yugoslav Republic of Macedonia
<b>MT</b>	Malta
<b>MC</b>	Monaco
<b>MA</b>	Morocco
<b>PT</b>	Portugal
<b>SM</b>	San Marino
<b>SI</b>	Slovenia
<b>ES</b>	Spain
<b>SY</b>	Syrian Arab Republic
<b>TN</b>	Tunisia
<b>TR</b>	Turkey
<b>YU</b>	Yugoslavia

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## Coding Wetland Site and Complex

A coding system for referencing all identified wetlands is required in the inventory procedure. The aim of this reference code is to identify all areas of wetlands as spatially separated entities and to facilitate data entry and analysis in data sheets and database. Although a ten digit space is provided for code input, it is recommended to use a standard and flexible code number (MedWet code number).

### MedWet code number

The MedWet code number (MWCN) is an unique ten alphanumeric identifier assigned to each wetland site. Several coding options are given with ten digits, always identifying each Mediterranean country with the two first digits for the ISO code:

coding format - **CC.NNNNNN.SS**

**CC** - (two digits) identifies each Mediterranean country using the corresponding ISO codes (see [Appendix C](#)).

Example:

**FR** - - - - - : the ISO code for France (FR).

**NNNNNN** - these six digits can be used as a unique number or divided in two parts:

**option A** - as a simple counter related to the order of the wetland designation within an area, region or country;

Example:

**DZ.000001** - - : site referenced to number 000001 related to the order of the wetland in the inventory for Algeria (DZ)

**option B** - where the first group of digits relates to a subdivision of the country such as: the **reference number of a topographic map**; the **UTM grid squares**; the code of a **administrative region**; or the **catchment and sub-catchment area code** (see [Appendix A](#)) + a counter related to the order of the wetland within the first group referred;

Examples:

#### 1. Reference number of a topographic map

**PT.0455.01** - - : site referenced to a topographic map code with four digits (1:25.000 scale) + two digits for the counter in the inventory for Portugal (PT).

**PT.02.0001** - - : site referenced to a topographic map code with two digits (1:250.000 scale) + four digits for the counter in the inventory for Portugal (PT).

#### 2. UTM grid squares

**GR.LV21.01** - - : site referenced to the UTM grid squares with four digits (10 x 10 Km) + two digits for the counter in the inventory for Greece (GR).

*The use of the Nuts code in some countries is not recommended (e.g. Portugal) because the boundaries and designations can change with time and are not always referenced on common topographic maps.*

### 3. Administrative region (e.g. the NUTS code; Provinces)

IT.3204.01 - - : site referenced to the Nuts code number 3204 (Milano) + two digits for the counter in the inventory for Italy (IT).

### 4. Catchment area code

PT.TJ.0001 - - : site referenced to the catchment area code (TJ) without a reference to a subcatchment + four digits for the counter in the inventory for Portugal (PT).

ES.EB01.01 - - : site referenced to the catchment area code (EB) with a reference to a sub-catchment (EB01) + two digits for the counter in the inventory for Spain (ES).

**SS** - these last two digits are '00', except if we record separately each site within a complex. In this case the two-digits are related to the order of designation of each site within the complex.

Example:

#### 1. Recording code for a simple wetland or a complex

ES.000001.00 : Laguna Dulce and Laguna Amarga. The current wetland (000001.00) is part of the inventory for Spain (ES).

#### 2. Recording code of sites merged in a complex

ES.000001.01 : Laguna Dulce (Spain). The current wetland (000001.01) is part of a larger wetland (000001.00) in the inventory for Spain (ES).

ES.000001.02 : Laguna Amarga (Spain). The current wetland (000001.02) is merged into a larger wetland (000001.00) together with the wetland (000001.01) in the inventory for Spain (ES).

The complexity of the code in each country will depend on the aims of the inventory. An inventory at national level will require a more complex code than at regional or local level. The MedWet methodology can even be used to survey only one specific site. However, it is very important to take in consideration that, in the future, a local or regional inventory might be merged into a broader inventory. Thus, care must be taken when creating the code.

### Reference table for the use of the coding system at national level

(1 - less appropriate to the level; 2 - adequate to the level; 3 - more appropriated to the level)

	Inventory at national level
ISO code + counter + no. of sites	1
ISO code + topographic map code + counter + no. of sites	3
ISO code + UTM code + counter + no. of sites	3*
ISO code + NUTS code + counter + no. of sites	2*
ISO code + other Administrative code + counter + no. of sites	2
ISO code + catchment area code + counter + no. of sites	2

\* the boundaries designated are not always referenced on common topographic maps



### Example of a National level coding - the Portuguese inventory

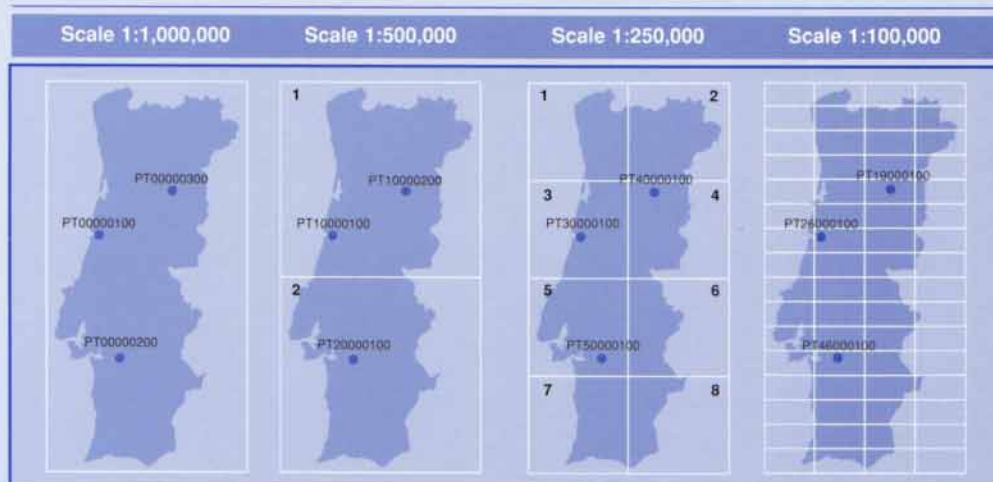
The method for coding wetland sites presented here was tested in Portugal by the Instituto da Conservação da Natureza (ICN) and is shown as an example of possible coding. The selected option from the MedWet coding system was to identify all areas of wetlands spatially referenced to a topographic map base.

#### ISO code + Topographic map code + counter + no. of sites

##### Which scale shall be used?

The choice of the appropriate scale to be used is very important and will depend on the aims of the inventory. The Portuguese wetlands can refer to one or several maps. This will affect the number of digits to be used in the topographic map code and the number of digits in the counter.

Scale	Number of maps	Example of a possible Code format ISO code + Topographic map code + counter + no. of sites
1:1,000,000	1	PT + 0 + 00001 + 01
1: 500,000	2	PT + 1 + 00001 + 01
1: 250,000	8	PT + 6 + 00001 + 01
1:100,000	64	PT + 53 + 0001 + 01
1:50,000	150	PT + 123 + 001 + 01
1:25,000	612	PT + 234 + 001 + 01

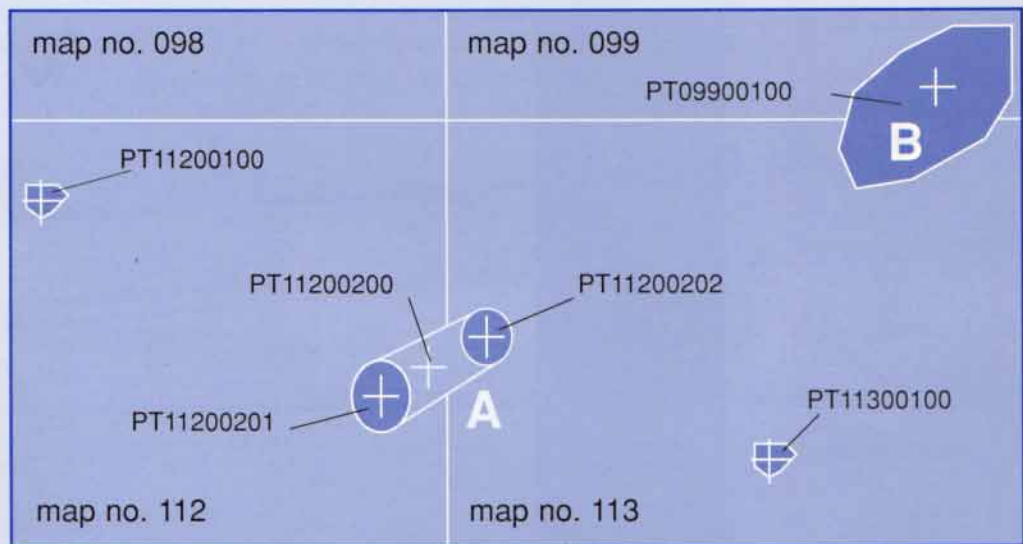


The choice of the Portuguese team was to work with the 1:50,000 maps. Each 1:50,000 map for Portugal has a unique three digit number. *For countries without such codes, a specific code can easily be created only for the inventory purpose. This can be made by the co-ordinator of the inventory, changing the code of the existing maps or even dividing a unique country map in grid squares creating his own sequence number code.*

After establishing the scale to be used, the codes can be created by each team responsible on different regions independently from the co-ordinator. Each team can enter the information in a different MedWet database that can be compiled later at a national level.

Each wetland identified (before or after fieldwork) should be referenced on the map with the respective MedWet code at its approximate centre. If the wetland limits include more than one map, the wetland code should refer to the code of the map where the centre of the wetland site or complex occurs.

*The maps used for reference of the site codes might not be used as the base map to delineate the different habitats of the wetland, where a higher scale is usually needed.*



⊕ Center of the Wetland site or complex

System code referencing different wetland sites within 1:50,000 map sheets with a hypothetical code number of 098, 099, 112 and 113:

shows **A** a complex disjunct wetland (PT11200200) whose boundaries are arbitrarily defined to encompass the two discrete sites (PT11200201 and PT11200202)

shows **B** a simple wetland (PT09900100).

## Nomenclature of Territorial Units for Statistical (NUTS)

The Statistical Office of the European Communities (Eurostat) has developed a standard hierarchical coding system for the regions of the European Union to reference statistical data. In the Mediterranean region these codes exist for five countries: Portugal, Spain, France, Italy and Greece (see list). The first two digits identify the country and are known for members of the European Union. The next digits refer to hierarchical administrative regions, from the bigger to the smaller ones.

Non-EU countries should use existing lists or develop a new one. It is recommended to use the ISO code of the country (see [Appendix C](#)) for the first two digits.

The NUTS divisions are listed here for Greece, Spain, France, Italy, and Portugal.

<b>GR</b>	<b>ELLADA</b>	<i>Code</i>	<i>NUTS 1</i>	<i>NUTS 2</i>	<i>NUTS 3</i>
<b>GR1</b>	<b>VOREIA ELLADA</b>				
<b>GR11</b>				Anatoliki Makedonia, Thraki	
<b>GR111</b>					Evros
<b>GR112</b>					Xanthi
<b>GR113</b>					Rodopi
<b>GR114</b>					Drama
<b>GR115</b>					Kavala
<b>GR12</b>				Kentriki Makedonia	
<b>GR121</b>					Imathia
<b>GR122</b>					Thessaloniki
<b>GR123</b>					Kilkis
<b>GR124</b>					Pella
<b>GR125</b>					Pieria
<b>GR126</b>					Serres
<b>GR127</b>					Chalkidiki
<b>GR13</b>				Dytiki Makedonia	
<b>GR131</b>					Grevena
<b>GR132</b>					Kastoria
<b>GR133</b>					Kozani
<b>GR134</b>					Florina
<b>GR14</b>				Thessalia	
<b>GR141</b>					Karditsa
<b>GR142</b>					Larisa
<b>GR143</b>					Magnisia
<b>GR144</b>					Trikala
<b>GR2</b>	<b>KENTRIKI ELLADA</b>				
<b>GR21</b>				Ipeiros	
<b>GR211</b>					Arta
<b>GR212</b>					Thesprotia
<b>GR213</b>					Ioannina
<b>GR214</b>					Preveza
<b>GR22</b>				Ionia Nisia	
<b>GR221</b>					Zakynthos
<b>GR222</b>					Kerkyra
<b>GR223</b>					Kefallinia
<b>GR224</b>					Lefkada
<b>GR23</b>				Dytiki Ellada	
<b>GR231</b>					Aitoloakarnania



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GR232		Achaia
GR233		Ileia
GR24	Stereia Ellada	
GR241		Voiotia
GR242		Evvoia
GR243		Evrytania
GR244		Fthiotida
GR245		Fokida
GR25	Peloponnisos	
GR251		Argolida
GR252		Arkadia
GR253		Korinthia
GR254		Lakonia
GR255		Messinia

## GR3 ATTIKI

## GR4 NISIA AIGAIYOU, KRITI

GR41	Voreio Aigaio	
GR411		Lesvos
GR412		Samos
GR413		Chios
GR42	Notio Aigaio	
GR421		Dodekanisos
GR422		Kyklades
GR43	Kriti	
GR431		Irakleio
GR432		Lasithi
GR433		Rethymni
GR434		Chania

## ES ESPAÑA

<i>Code</i>	<i>NUTS 1</i>	<i>NUTS 2</i>	<i>NUTS 3</i>
ES1	NOROESTE		
ES11		Galicia	
ES111			La Coruna
ES112			Lugo
ES113			Orense
ES114			Pontevedra
ES12		Principado de Asturias	
ES13		Cantabria	
ES2	NORESTE		
ES21		Pais Vasco	
ES211			Alava
ES212			Guipuzcoa
ES213			Vizcaya
ES22		Comunidad Foral de Navarra	
ES23		La Rioja	
ES24		Aragon	
ES241			Huesca
ES242			Teruel
ES243			Zaragoza

<b>ES3</b>	<b>COMUNIDAD DE MADRID</b>		
<b>ES4</b>	<b>CENTRO (E)</b>		
<b>ES41</b>		Castilla y Leon	
<b>ES411</b>			Avila
<b>ES412</b>			Burgos
<b>ES413</b>			León
<b>ES414</b>			Palencia
<b>ES415</b>			Salamanca
<b>ES416</b>			Segovia
<b>ES417</b>			Soria
<b>ES418</b>			Valladolid
<b>ES419</b>			Zamora
<b>ES42</b>		Castilla-La Mancha	
<b>ES421</b>			Albacete
<b>ES422</b>			Ciudad Real
<b>ES423</b>			Cuenca
<b>ES424</b>			Guadalajara
<b>ES425</b>			Toledo
<b>ES43</b>		Extremadura	
<b>ES431</b>			Badajoz
<b>ES432</b>			Cáceres
<b>ES5</b>	<b>ESTE</b>		
<b>ES51</b>		Cataluña	
<b>ES511</b>			Barcelona
<b>ES512</b>			Girona
<b>ES513</b>			Lleida
<b>ES514</b>			Tarragona
<b>ES52</b>		Comunidad Valenciana	
<b>ES521</b>			Alicante
<b>ES522</b>			Castellon de La Plana
<b>ES523</b>			Valencia
<b>ES53</b>		Islas Baleares	
<b>ES6</b>	<b>SUR</b>		
<b>ES61</b>		Andalucia	
<b>ES611</b>			Almeria
<b>ES612</b>			Cadiz
<b>ES613</b>			Cordoba
<b>ES614</b>			Granada
<b>ES615</b>			Huelva
<b>ES616</b>			Jaen
<b>ES617</b>			Málaga
<b>ES618</b>			Sevilla
<b>ES62</b>		Region de Murcia	
<b>ES63</b>		Ceuta y Melilla	
<b>ES631</b>			Ceuta
<b>ES632</b>			Melilla



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FR FRANCE			
Code	NUTS 1	NUTS 2	NUTS 3
<b>FR1</b>	<b>ILE DE FRANCE</b>		
<b>FR101</b>			Paris
<b>FR102</b>			Seine-et-Marne
<b>FR103</b>			Yvelines
<b>FR104</b>			Essonne
<b>FR105</b>			Hauts-de-Seine
<b>FR106</b>			Seine-Saint-Denis
<b>FR107</b>			Val-de-Marne
<b>FR108</b>			Val-d'Oise
<b>FR2</b>	<b>BASSIN PARISIEN</b>		
<b>FR21</b>		Champagne-Ardenne	
<b>FR211</b>			Ardennes
<b>FR212</b>			Aube
<b>FR213</b>			Marne
<b>FR214</b>			Haute-Marne
<b>FR22</b>		Picardie	
<b>FR221</b>			Aisne
<b>FR222</b>			Oise
<b>FR223</b>			Somme
<b>FR23</b>		Haute-Normandie	
<b>FR231</b>			Eure
<b>FR232</b>			Seine-Maritime
<b>FR24</b>		Centre	
<b>FR241</b>			Cher
<b>FR242</b>			Eure-et-Loir
<b>FR243</b>			Indre
<b>FR244</b>			Indre-et-Loire
<b>FR245</b>			Loir-et-Cher
<b>FR246</b>			Loiret
<b>FR25</b>		Basse-Normandie	
<b>FR251</b>			Calvados
<b>FR252</b>			Manche
<b>FR253</b>			Orne
<b>FR26</b>		Bourgogne	
<b>FR261</b>			Côte-d'Or
<b>FR262</b>			Nièvre
<b>FR263</b>			Saône-et-Loire
<b>FR264</b>			Yonne
<b>FR3</b>	<b>NORD - PAS-DE-CALAIS</b>		
<b>FR301</b>			Nord
<b>FR302</b>			Pas-de-Calais
<b>FR4</b>	<b>EST</b>		
<b>FR41</b>		Lorraine	
<b>FR411</b>			Meurthe-et-Moselle
<b>FR412</b>			Meuse
<b>FR413</b>			Moselle

FR414			Vosges
FR42		Alsace	
FR421			Bas-Rhin
FR422			Haut-Rhin
FR43		Franche-Comté	
FR431			Doubs
FR432			Jura
FR433			Haute-Saône
FR434			Territoire de Belfort
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FR5	OUEST		
FR51		Pays de La Loire	
FR511			Loire-Atlantique
FR512			Maine-et-Loire
FR513			Mayenne
FR514			Sarthe
FR515			Vendée
FR52		Bretagne	
FR521			Côtes-d'Armor
FR522			Finistère
FR523			Ille-et-Vilaine
FR524			Morbihan
FR53		Poitou-Charentes	
FR531			Charente
FR532			Charente-Maritime
FR533			Deux-Sèvres
FR534			Vienne
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FR6	SUD-OUEST		
FR61		Aquitaine	
FR611			Dordogne
FR612			Gironde
FR613			Landes
FR614			Lot-et-Garonne
FR615			Pyrénées-Atlantiques
FR62		Midi-Pyrénées	
FR621			Ariège
FR622			Aveyron
FR623			Haute-Garonne
FR624			Gers
FR625			Lot
FR626			Hauts-Pyrénées
FR627			Tarn
FR628			Tarn-et-Garonne
FR63		Limousin	
FR631			Corrèze
FR632			Creuse
FR633			Haute-Vienne
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FR7	CENTRE-EST		
FR71		Rhône-Alpes	
FR711			Ain
FR712			Ardèche

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FR713		Drôme
FR714		Isère
FR715		Loire
FR716		Rhône
FR717		Savoie
FR718		Haute-Savoie
FR72	Auvergne	
FR721		Allier
FR722		Cantal
FR723		Haute-Loire
FR724		Puy-de-Dôme

FR8	MÉDITERRANÉE	
FR81		Languedoc-Roussillon
FR811		Aude
FR812		Gard
FR813		Hérault
FR814		Lozère
FR815		Pyrénées-Orientales
FR82		Provence-Alpes-Côte d'Azur
FR821		Alpes-de-Haute-Provence
FR822		Hautes-Alpes
FR823		Alpes-Maritimes
FR824		Bouches-du-Rhône
FR825		Var
FR826		Vaucluse
FR83		Corse
FR831		Corse-du-Sud
FR832		Haute-Corse

## IT ITALIA

Code	NUTS 1	NUTS 2	NUTS 3
IT1	NORD OVEST		
IT11		Piemonte	
IT111			Torino
IT112			Vercelli
IT113			Biella
IT114			Verbano-Cusio-Ossola
IT115			Novara
IT116			Cuneo
IT117			Asti
IT118			Alessandria
IT12		Valle d'Aosta	
IT13		Liguria	
IT131			Imperia
IT132			Savona
IT133			Genova
IT134			La Spezia
IT2	LOMBARDIA		
IT201			Varese
IT202			Como



IT203			Lecco
IT204			Sondrio
IT205			Milano
IT206			Bergamo
IT207			Brescia
IT208			Pavia
IT209			Lodi
IT20A			Cremona
IT20B			Mantova
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IT3	NORD EST		
IT31		Trentino-Alto Adige	
IT311			Bolzano-Bozen
IT312			Trento
IT32		Veneto	
IT321			Verona
IT322			Vicenza
IT323			Belluno
IT324			Treviso
IT325			Venezia
IT326			Padova
IT327			Rovigo
IT33		Friuli-Venezia Giulia	
IT331			Pordenone
IT332			Udine
IT333			Gorizia
IT334			Trieste
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IT4	EMILIA-ROMAGNA		
IT401			Piacenza
IT402			Parma
IT403			Reggio nell'Emilia
IT404			Modena
IT405			Bologna
IT406			Ferrara
IT407			Ravenna
IT408			Forlì-Cesena
IT409			Rimini
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IT5	CENTRO (I)		
IT51		Toscana	
IT511			Massa-Carrara
IT512			Lucca
IT513			Pistoia
IT514			Firenze
IT515			Prato
IT516			Livorno
IT517			Pisa
IT518			Arezzo
IT519			Siena
IT51A			Grosseto
IT52		Umbria	
IT521			Perugia
IT522			Terni
IT53		Marche	

IT531			Pesaro e Urbino
IT532			Ancona
IT533			Macerata
IT534			Ascoli Piceno
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IT6	LAZIO		
IT601			Viterbo
IT602			Rieti
IT603			Roma
IT604			Latina
IT605			Frosinone
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IT7	ABRUZZO-MOLISE		
IT71		Abruzzo	
IT711			L'Aquila
IT712			Teramo
IT713			Pescara
IT714			Chieti
IT72		Molise	
IT721			Isernia
IT722			Campobasso
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IT8	CAMPANIA		
IT801			Caserta
IT802			Benevento
IT803			Napoli
IT804			Avellino
IT805			Salerno
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IT9	SUD		
IT91		Puglia	
IT911			Foggia
IT912			Bari
IT913			Taranto
IT914			Brindisi
IT915			Lecce
IT92		Basilicata	
IT921			Potenza
IT922			Matera
IT93		Calabria	
IT931			Cosenza
IT932			Crotone
IT933			Catanzaro
IT934			Vibo Valentia
IT935			Reggio di Calabria
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ITA	SICILIA		
ITA01			Trapani
ITA02			Palermo
ITA03			Messina
ITA04			Agrigento
ITA05			Caltanissetta
ITA06			Enna

ITA07		Catania
ITA08		Ragusa
ITA09		Siracusa

ITB	SARDEGNA	
ITB01		Sassari
ITB02		Nuoro
ITB03		Oristano
ITB04		Cagliari

## PT PORTUGAL

<i>Code</i>	<i>NUTS 1</i>	<i>NUTS 2</i>	<i>NUTS 3</i>
PT1	CONTINENTE		
PT11		Norte	
PT111			Minho-Lima
PT112			Cávado
PT113			Ave
PT114			Grande Porto
PT115			Tâmega
PT116			Entre Douro e Vouga
PT117			Douro
PT118			Alto Trás-os-Montes
PT12		Centro (P)	
PT121			Baixo Vouga
PT122			Baixo Mondego
PT123			Pinhal Litoral
PT124			Pinhal Interior Norte
PT125			Dão-Lafões
PT126			Pinhal Interior Sul
PT127			Serra da Estrela
PT128			Beira Interior Norte
PT129			Beira Interior Sul
PT12A			Cova da Beira
PT13		Lisboa e Vale do Tejo	
PT131			Oeste
PT132			Grande Lisboa
PT133			Península de Setúbal
PT134			Médio Tejo
PT135			Lezíria do Tejo
PT14		Alentejo	
PT141			Alentejo Litoral
PT142			Alto Alentejo
PT143			Alentejo Central
PT144			Baixo Alentejo
PT15		Algarve	



## Corine Biotopes: Wetland Habitat Types

This list covers the CORINE biotopes types which are wetlands or which include wetland areas and can be found in Mediterranean countries.

Any further information can be found in: European Communities - Commission. 1991.

*CORINE biotopes manual. Habitats of the European Community*. Part 2. Office for Official Publications of the European Communities.

### 1 COASTAL AND HALOPHYTIC COMMUNITIES

- 11 Ocean and seas, marine communities**  
Oceanic and continental shelf waters, their associated open-water and bottom communities, and marine vascular vegetation beds.
- 12 Sea inlets and coastal features**  
Bays and narrow channels, including sea rias and straits but excluding estuaries.
- 13 Estuaries and tidal rivers**  
River channels below the tidal limit, including the water and the channel bed but not the fringing vegetation.
- 14 Mud flats and sand flats**  
Sands and muds, submerged for part of every tide, devoid of vascular plants, but usually coated by blue algae and diatoms.
- 15 Saltmarshes, salt steppes, salt scrubs, salt forests**  
Plant communities which are submerged by high tides at some stage of the annual tidal cycle. Also continental and coastal halophile and gypsophile communities, e.g. Mediterranean salt marshes, saltmarsh scrubs, etc.
- 16 Coastal sand dunes and sand beaches**  
Sand-covered shorelines in general, but in particular, onshore areas of sand created by the action of wind and often colonised and stabilised by communities of coarse maritime grasses.
- 17 Shingle beaches**  
Beaches covered by pebbles, or sometimes boulders, usually formed by wave action.
- 18 Sea-cliffs and rocky shores**  
Rock exposures adjacent to the sea or separated from it by a narrow shoreline.
- 19 Islets, rock stacks, reefs, banks, shoals**  
Small islands in the sea or in large bodies of water.
- 1A Coastal agrosystems**

### 2 NON-MARINE WATERS

- 21 Coastal lagoons**  
Brackish to hypersaline coastal waters, often formed from sea inlet by silting and cut off from the sea by sand or mud banks.
- 22 Standing fresh water**  
Lakes, ponds and pools of natural origin containing fresh (i.e. non-saline) water. Man-made fresh water bodies, including reservoirs and canals.
- 23 Standing brackish and salt water**  
Brackish, saline or hypersaline lakes, pools and ditches.
- 24 Running water**  
All rivers and streams.

**3 SCRUB AND GRASSLAND**

- 31 **Temperate heath and scrub**  
Humid, peaty or semi peaty heaths (other than blanket bogs).
- 37 **Humid grassland and tall herb communities**  
Unimproved or lightly improved wet meadows; tall herb communities.

**4 FORESTS**

- 44 **Temperate riverine and swamp forests and brush**  
Tree and shrub vegetation of flood plains, marshes, fens and bogs.

**5 BOGS AND MARSHES**

- 51 **Raised bogs**  
Highly oligotrophic, strongly acidic communities composed mainly of sphagnum growing on, and forming, peat and deriving moisture and nutrients only from rainfall.
- 53 **Water-fringe vegetation:**  
Reeds and large sedge communities of the margins of lakes, rivers, and brooks and of fens and eutrophic marshes.
- 54 **Fens, transition mires and springs**  
Small sedge and related communities of fens, transition mires and quaking bogs; vegetation of springs.

**6 INLAND ROCKS, SCREES AND SANDS**

- 62 **Inland cliffs and exposed rocks**  
Particularly very wet, dripping, overhanging or vertical rocks or hills, mountains and Mediterranean lowlands.
- 64 **Inland sand dunes**  
Particularly paleo-coastal and fossil dunes and fluvial dunes.
- 65 **Caves:**  
Natural caves or cave systems at least partially flooded
- 66 **Volcanic features**  
Sites and products of recent volcanic activity harbouring distinct biological communities e.g. volcanic lake.

**8 AGRICULTURAL LAND AND ARTIFICIAL LANDSCAPES**

- 81 **Improved grasslands**  
Humid intensive pastures, often scored with drainage ditches.
- 82 **Crops**  
Flooded crops, e.g. rice fields and other inundatable croplands.
- 86 **Towns, villages, industrial sites**  
Particularly flooded quarries.
- 88 **Mines and underground passages**  
Artificial underground spaces, inundated.
- 89 **Industrial lagoons and reservoirs, canals**  
Very artificial aquatic habitats.



## Habitats Directive Annex I / Natura 2000 habitat types

This list covers the Habitats Directive Annex I/Natura 2000 habitat types which include wetlands and can be found in the Mediterranean region. The codes presented here and requested for the data sheet are the Natura 2000 codes. "P" indicates the priority habitats of the Directive.

Code	HABITAT TYPE
1110	Sandbanks which are slightly covered by sea water all the time
1120	P <i>Posidonia beds</i>
1130	Estuaries
1140	Mudflats and sandflats not covered by seawater at low tide
1150	P Lagoons
1160	Large shallow inlets and bays
1170	Reefs
1180	Marine 'columns' in shallow water made by leaking gases
1210	Annual vegetation of drift lines
1220	Perennial vegetation of stony banks
1230	Vegetated sea cliffs of the Atlantic and Baltic coasts
1240	Vegetated sea cliffs of the Mediterranean coasts (with endemic <i>Limonium spp.</i> )
1310	<i>Salicornia</i> and other annuals colonising mud and sand
1320	<i>Spartina</i> swards (Spartinion)
1330	Atlantic salt meadows (Glauco-Puccinellietalia)
1340	P Continental salt meadows ( <i>Puccinellietalia distantis</i> )
1410	Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )
1510	P Salt steppes (Limonietalia)
2190	Humid dune slacks
2191	Dune-slack pools
2192	Dune-slack pioneer swards
2193	Dune-slack fens
2194	Dune-slack grasslands
2195	Dune-slack reedbeds and sedgebeds
3110	Oligotrophic waters containing very few minerals of Atlantic sandy plains with amphibious vegetation: <i>Lobelia</i> , <i>Littorelia</i> and <i>Isoetes</i>
3120	Oligotrophic waters containing very few minerals of West Mediterranean sandyplains with <i>Isoetes</i>
3130	Oligotrophic waters in medio-European and perialpine area with amphibious vegetation: <i>Littorella</i> or <i>Isoetes</i> or annual vegetation on exposed banks (Nanocyperetalia)
3131	Oligotrophic waters in medio-European and perialpine area with amphibious vegetation: <i>Littorella</i> or <i>Isoetes</i>
3132	Oligotrophic waters in medio-European and perialpine area with amphibious vegetation: annual vegetation on exposed banks (Nanocyperetalia)
3140	Hard oligo-mesotrophic waters with benthic vegetation of chara formations
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition-type-vegetation
3160	Dystrophic lakes
3170	P Mediterranean temporary ponds
3220	Alpine rivers and the herbaceous vegetation along their banks
3221	Subalpine willowherb stream community
3222	Alpine gravel bed community
3230	Alpine rivers and their ligneous vegetation with <i>Myricaria germanica</i>
3240	Alpine rivers and their ligneous vegetation with <i>Salix elaeagnos</i>
3250	Constantly flowing Mediterranean rivers with <i>Glaucium flavum</i>



3260		Floating vegetation of <i>Ranunculus</i> of plane, submountainous rivers
3270		Pioneer annual vegetation on muds ( <i>Chenopodium rubri</i> ) of submountainous rivers
3280		Constantly flowing Mediterranean rivers: Paspalo-Agrostidion and hanging curtains of <i>Salix</i> and <i>Populus alba</i>
3290		Intermittently flowing Mediterranean rivers
4020	P	Southern Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i>
5140	P	<i>Cistus palhinhae</i> formations on maritime wet heaths (Junipero-Cistetum palhinhae)
6410		<i>Molinia</i> meadows on chalk and clay (Eu-Molinion)
6431		Humid tall herb fringes of watercourses and woodlands
6440		<i>Cnidion venosae</i> meadows liable to flooding
7110	P	Active raised bogs
7120		Degraded raised bogs (still capable of natural regeneration)
7140		Transition mires and quaking bogs
7150		Depressions on peat substrates (Rhynchosporion)
7210	P	Calcareous fens with <i>Cladium mariscus</i> and <i>Carex davalliana</i>
7220	P	Petrifying springs with tufa formation (Cratoneurion)
7230		Alkaline fens
8310		Caves not open to the public
8330		Submerged or partly submerged sea caves
91D0	P	Bog woodland
91D1	P	Sphagnum birch woods
91D2	P	Scots pine bog woods
91D3	P	Mountain pine bog woods
91D4	P	Sphagnum spruce woods
91E0	P	Residual alluvial forests ( <i>Alnion glutinoso-incanae</i> )
91F0		Mixed oak-elm-ash forests of great rivers
92A0		<i>Salix alba</i> and <i>Populus alba</i> galleries
92B0		Riparian formations on intermittent Mediterranean water courses with <i>Rhododendron ponticum</i> , <i>Salix</i> and others
92D0		Thermo-Mediterranean riparian galleries ( <i>Nerio-Tamariceteae</i> ) and south-west Iberian Peninsula riparian galleries ( <i>Securinegion tinctoriae</i> )

## RAMSAR WETLAND TYPES

The Ramsar *Classification System* for "Wetland types" was approved at the Fourth Conference of the Contracting Parties of the Ramsar Convention, Montreux, 1990. The actual wetland types and correspondent codes presented here are those used in the Ramsar Database. They have evolved slightly but continue to accommodate the original classification. These types are intended only to provide a very broad framework to aid swift identification of the principal wetland habitats represented at each site.

- A** Permanent **shallow marine waters** less six metres deep at low tide; includes sea bays and straits.
- B** Marine **subtidal aquatic beds**; includes kelp beds, sea-grass beds, tropical marine meadows.
- C** **Coral reefs**
- D** **Rocky marine shores**; includes rocky offshore islands, sea cliffs.
- E** **Sand, shingle or pebble shores**; includes sand bars, spits and sandy islets; includes dune systems.
- F** **Estuarine waters**; permanent water of estuaries and estuarine systems of deltas.
- G** **Intertidal mud, sand or salt flats.**
- H** **Salt marshes**; includes salt meadows, saltings, raised salt marshes.
- I** **Intertidal forested wetlands**; includes mangrove swamps, nipah swamps and tidal freshwater swamp forests.
- J** **Coastal brackish/saline lagoons**; brackish to saline lagoons with at least one relatively narrow swamp forests.
- K** **Coastal freshwater lagoons**; includes freshwater delta lagoons.
- L** Permanent **inland deltas**
- M** **Permanent rivers, streams or creeks**; includes waterfalls.
- N** **Seasonal/intermittent/irregular rivers, streams or creeks.**
- O** **Permanent freshwater lakes** (over 8 ha); includes large oxbow lakes.
- P** **Seasonal/intermittent freshwater lakes** (over 8 ha); includes floodplain lakes.
- Q** **Permanent saline/brackish/alkaline lakes**
- R** **Seasonal/intermittent saline/brackish/alkaline lakes\***
- Sp** **Permanent saline/brackish/alkaline marshes or pools**
- Ss** **Seasonal/intermittent saline/brackish/alkaline marshes or pools\***
- Tp** **Permanent freshwater marshes or pools**; ponds (below 8 ha), marshes and swamps on inorganic soils with emergent vegetation water-logged for at least most of the growing season.
- Ts** **Seasonal/intermittent freshwater marshes or pools** on inorganic soil; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.\*
- U** Non-forested **peatlands**; includes shrub or open bogs, swamps, fens.
- Va** **Alpine wetlands**; includes alpine meadows, temporary waters from snowmelt.
- Vt** **Tundra wetlands**; includes tundra pools, temporary waters from snowmelt.
- W** **Shrub-dominated wetlands**; shrub-swamps, shrub-dominated freshwater marsh, shrub carr, alder thicket; on inorganic soils.\*
- Xf** **Freshwater, tree-dominated wetlands**; includes freshwater swamp forest, wooded swamps; on inorganic soils.\*
- Xp** **Forested peatlands**; peat swamp forest.\*
- Y** **Freshwater springs; oases.**
- Zg** **Geothermal wetlands.**
- Zk** **Subterranean karst and cave hydrological systems.**

**Man-made/intensively farmed or grazed wetlands**

- 1 Aquaculture** (e.g. fish/shrimp) **ponds**
- 2 Ponds**; includes farm ponds, stock ponds, small tanks (generally below 8 ha).
- 3 Irrigated land**; includes irrigation channels and rice fields.
- 4 Seasonally flooded agricultural land.#**
- 5 Salt exploitation sites**; salt pans, salines, etc.
- 6 Water storage areas**; reservoirs/barrages/dams/impoundments (generally over 8 ha).
- 7 Excavations**; gravel/brick/clay pits, borrow pits, mining pools.
- 8 Wastewater treatment areas**; sewage farms, settling ponds, oxidation basins, etc.
- 9 Canals and drainage channels**; ditches.
- 0** No information

\* As appropriate, includes: floodplain wetlands such as seasonally inundated grassland (including natural wet meadows), shrublands, woodlands or forest.

# To include intensively managed or grazed wet meadow or pasture.



## CODES OF CONSERVATION/DESIGNATION INFORMATION

This list includes the legal status figures for protection and management in use within each country, at a national and international level. The Natura 2000 coding system presented here will be used in the European Union countries. Non EU-countries should use existing lists or develop new lists similar to the ones below. **The international list is the same for all the countries around the Mediterranean.**

### GREECE

GR01	Core strict nature reserve in National Park
GR02	Absolute nature reserve
GR03	Natural monuments and landmarks (protected as strict nature reserve)
GR04	Aesthetic Forest
GR05	Absolute nature reserve zone in Nature (Woodland) Park
GR06	Absolute marine reserve zone in Marine Park
GR07	Absolute nature reserve in Ecodevelopment area
GR08	Nature reserve
GR09	Nature reserve zone in Nature (Woodland) Park
GR10	Marine reserve zone in Marine Park
GR11	Nature reserve zone in Ecodevelopment area
GR12	Peripheral zone of National Park
GR21	Game breeding station
GR22	Game refuge
GR23	Controlled hunting area
GR24	Protected Forest
GR25	Nature (Woodland) Park - Multiple use management zone
GR26	Marine Park - multiple use management zone
GR27	Ecodevelopment area - multiple use management Zone/managed resource area
GR31	Land owned by a non-governmental organisation for nature conservation

### SPAIN

ES01	Reserva Biologica Nacional
ES02	Reserva integral
ES03	Reserva marina
ES04	Reserva natural
ES05	Reserva Natural de Fauna Salvaje
ES06	Reserva Natural Parcial
ES07	Reserva Integral Natural
ES08	Parque Nacional
ES09	Parque Nacional (Red Estatal)
ES10	Parque Natural
ES11	Parque Regional
ES12	Parque
ES13	Paraje Natural
ES14	Paraje Natural de Interés Nacional
ES15	Paraje Natural de la Comunidad Valenciana
ES16	Sitio Natural de Interés Nacional
ES17	Area Natural de Especial Interés
ES18	Enclave Natural
ES19	Monumento Natural
ES20	Monumento Natural de Interés Nacional
ES21	Paisaje Protegido
ES31	Reserva privada

## FRANCE

<b>FR01</b>	Parc National (zone centrale)
<b>FR02</b>	Parc National (réserve intégrale)
<b>FR03</b>	Réserve Naturelle (par décret)
<b>FR04</b>	Réserve Naturelle volontaire
<b>FR05</b>	Arrêté Préfectoral de protection de biotope
<b>FR06</b>	Réserve Biologique Domaniale intégrale
<b>FR07</b>	Réserve Biologique Domaniale dirigée
<b>FR08</b>	Réserve Biologique forestière
<b>FR11</b>	Forêt de protection
<b>FR12</b>	Site/Monument inscrit
<b>FR13</b>	Site/Monument classé
<b>FR14</b>	Site acquis par le Conservatoire de L'espace Littoral et des Rivages Lacustres
<b>FR15</b>	Parc Naturel Régional
<b>FR16</b>	Parc National (zone périphérique)
<b>FR17</b>	Réserve Nationale de chasse
<b>FR18</b>	Réserve de chasse du Domaine Public maritime
<b>FR19</b>	Réserve de chasse du Domaine Public fluvial
<b>FR20</b>	Réserve de chasse approuvée
<b>FR21</b>	Réserve de pêche du Domaine Public fluvial
<b>FR22</b>	Réserve conventionnelle
<b>FR23</b>	Forêt Domaniale
<b>FR24</b>	Forêt Communale bénéficiant du régime forestier
<b>FR31</b>	Site acquis par un Conservatoire des Sites
<b>FR32</b>	Site acquis par le Département
<b>FR33</b>	Réserve libre (à caractère privé)

## ITALY

<b>IT01</b>	Parco Nazionale
<b>IT02</b>	Riserva naturale statale
<b>IT03</b>	Parco naturale interregionale
<b>IT04</b>	Parco naturale regionale
<b>IT05</b>	Riserva naturale regionale
<b>IT06</b>	Monumenti naturali
<b>IT07</b>	Oasi di protezione della fauna
<b>IT11</b>	Bellezze naturali
<b>IT12</b>	Aree di verde urbano
<b>IT13</b>	Vincoli idrogeologici
<b>IT14</b>	Aree di protezione di sorgenti d'acqua
<b>IT21</b>	Oasi di protezione costituite da soggetti privati
<b>IT22</b>	Fondi Chiusi

## PORTUGAL

<b>PT01</b>	Reserva Integral
<b>PT02</b>	Refúgio Ornitológico
<b>PT03</b>	Reserva Botânica
<b>PT04</b>	Reserva Zoológica
<b>PT05</b>	Area Ornitológica a Recuperar
<b>PT06</b>	Parque Nacional
<b>PT07</b>	Reserva Natural

<b>PT08</b>	Parque Natural
<b>PT09</b>	Monumento Natural
<b>PT10</b>	Sítio Classificado
<b>PT11</b>	Paisagem Protegida
<b>PT12</b>	Reserva Partial
<b>PT21</b>	Reserva Ecológica Nacional
<b>PT22</b>	Domínio Público Hídrico
<b>PT23</b>	Reserva Agrícola Nacional
<b>PT24</b>	Mata Nacional
<b>PT25</b>	Reserva Florestal Natural Integral
<b>PT26</b>	Reserva Florestal Natural Parcial
<b>PT27</b>	Reserva Florestal de Recreio
<b>PT28</b>	Zona de Caça Proibida
<b>PT29</b>	Reserva de Caça
<b>PT30</b>	Zona de Caça Nacional
<b>PT31</b>	Zona de Pesca Proibida
<b>PT32</b>	Zona de Pesca Reservada
<b>PT33</b>	Zona de Defesa e Controlo Urbano
<b>PT34</b>	Zona de Caça Associativa
<b>PT35</b>	Domínio Público Marítimo
<b>PT36</b>	Zona de Concessao de Pesca
<b>PT37</b>	Zona de Caça Social
<b>PT38</b>	Zona de Caça Turística
<b>PT41</b>	Sítio de Interesse Biológico

## INTERNATIONAL LEVEL

For all Mediterranean countries

<b>INR1</b>	Ramsar Convention site
<b>ING1</b>	Council of Europe Biogenetic Reserve
<b>INE1</b>	Council of Europe Diploma site
<b>INB1</b>	Barcelona Convention site (Mediterranean SPA)
<b>INF1</b>	UNESCO Biosphere Reserve
<b>INH1</b>	UNESCO World Heritage site
<b>INC1</b>	Special Area for Conservation (EU Habitats Directive)
<b>IND1</b>	Special Protection Area (EU Birds Directive)
<b>INO1</b>	Other international designation



## Ramsar Criteria

The list of Ramsar criteria was approved in 1990 by the Fourth Meeting Conference of the Contracting Parties (Montreux, Switzerland) in order to identify wetlands of international importance. A wetland is identified as being of international importance if it meets at least one of the criteria set out below:

### 1. Criteria for representative or unique wetlands:

*a wetland should be considered internationally important if:*

- 1a. it is a particularly good representative example of a natural or near-natural wetland, characteristic of the appropriate biogeographical region, **or**
- 1b. it is a particularly good representative example of a natural or near-natural wetland, common to more than one biogeographical region, **or**
- 1c. it is a particularly good representative example of a wetland which plays a substantial hydrological, biological or ecological role in the natural functioning of a major river basin or coastal system, especially where it is located in a trans-border position, **or**
- 1d. it is an example of a specific type of wetland, rare or unusual in the appropriate biogeographical region.

### 2. General criteria based on plants or animals

*a wetland should be considered internationally important if:*

- 2a. it supports an appreciable assemblage of rare, vulnerable or endangered species **or** subspecies of plant or animal, or an appreciable number of individuals of any one **or** more of these species, **or**
- 2b. it is of special value for maintaining the genetic and ecological diversity of a region because of the quality and peculiarities of its flora and fauna, **or**
- 2c. it is of special value as the habitat of plants or animals at a critical stage of their biological cycle, **or**
- 2d. it is of special value for one or more endemic plant or animal species or communities.

### 3. Specific criteria based on waterfowl

*a wetland should be considered internationally important if:*

- 3a. it regularly supports 20,000 waterfowl, **or**
- 3b. it regularly supports substantial numbers of individuals from particular groups of waterfowl, indicative of wetland values, productivity or diversity, **or**
- 3c. where data on populations are available, it regularly supports 1% of the individuals in a population of one species or subspecies of waterfowl.

### 4. Specific criteria based on fish

*a wetland could be considered of international importance under Criterion if:*

- 4a. it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity, **or**
- 4b. it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

## Guidelines for Application of the Criteria

- (a) A wetland could be considered of international importance under Criterion 1 if, because of its outstanding role in natural, biological, ecological or hydrological systems, it is of substantial value in supporting human communities dependent on the wetland. In this context, such support would include:
- provision of food, fibre or fuel;
  - or maintenance of cultural values;
  - or support of food chains, water quality, flood control or climatic stability. The support, in all its aspects, should remain within the framework of sustainable use and habitat conservation, and should not change the ecological character of the wetland.
- or-
- (b) A wetland could be considered of international importance under Criterion 1, 2 or 3 if it conforms to additional guidelines developed at regional (e.g. Scandinavian or West African) or national level. Elaboration of such regional or national guidelines may be especially appropriate:
- where particular groups of animals (other than waterfowl) or plants are considered more suitable as a basis for evaluation;
  - or where waterfowl and other animals do not occur in large concentrations (particularly in northern latitudes)
  - or where collection of data is difficult (particularly in very large countries).
- or-
- (c) The "particular groups of waterfowl, indicative of wetland values, productivity or diversity" in Criterion 3 (b) include any of the following:
- loons or divers: Gaviidae;
  - grebes: Podicipedidae;
  - cormorants: Phalacrocoracidae
  - pelicans: Pelicanidae
  - herons, bitterns, storks, ibises & spoonbills: Ciconiiformes;
  - swans, geese and ducks (wildfowl): Anatidae;
  - wetland related raptors: Accipitriformes and Falconiformes
  - cranes: Gruidae
  - shorebirds or waders: Charadrii; and
  - terns: Sternidae.
- or-
- (d) The specific criteria based on waterfowl numbers will apply to wetlands of varying size in different Contracting Parties. While it is impossible to give precise guidance on the size of an area in which these numbers may occur, wetlands identified as being of international importance under Criterion 3 should form an ecological unit, and may thus be made up of one big area or a group of smaller wetlands. Consideration may also be given to turnover of waterfowl at migration periods, so that a cumulative total is reached, if such data are available.



- (e) A wetland could be considered of international importance under Criterion 4a if:
1. Fishes are the most abundant vertebrates associated with wetlands. Worldwide, over 18,000 species of fishes are resident for all or part of their life cycles in wetlands as defined by the Ramsar Convention.
  2. The importance of Criterion 4(a) is that a wetland can be designated as internationally important if it has a high diversity of fishes and shellfishes even if it does not fulfil the requirements of the other criteria. Furthermore, this criterion emphasizes the different forms that diversity might take, including the number of subspecies, species and families, different life-history stages, species interactions, and the complexity of interactions between the above taxa and the external environment. Fish diversity therefore includes diversity within species, between species and between ecosystems. It also includes the diversity of genetically similar intraspecific ecological units, for instance, salmon runs or the different geographical races of marine fishes that have been identified in many regional seas around the world. Species counts alone are not sufficient to assess the importance of a particular wetland.
  3. In addition, the concept of the "niche" needs to be considered, i.e. the different ecological roles that species may play at different stages in their life cycles. This point is especially relevant to animals that have a marked metamorphosis in their life cycle, such as corals, barnacles, many aquatic insects, amphibians, fishes with larvae or leptocephali and birds with naked young, e.g. passerines, some birds of prey, and egrets.
  4. Implicit in this understanding of diversity is the importance of high levels of endemism and of biodisparity. "Endemic species" are species that are unique to one region, often within one country or continent, and are found nowhere else. Many wetlands are characterized by the highly endemic nature of their fish faunas.
  5. Some measure of the level of endemism should be used to distinguish sites of international importance. If at least 10% of the ichthyofauna is endemic to a wetland, or to wetlands in a natural grouping, that site should be recognized as internationally important, but the absence of endemic fishes from a site should not disqualify it if it has other qualifying characteristics. In some wetlands, such as the African Great Lakes, Lake Baikal in Russia, Lake Titicaca in Peru/Bolivia, sinkholes and cave lakes in arid regions, and lakes on islands, endemism levels as high as 90-100% may be reached, but 10% is a practical figure for worldwide application. In areas with no endemic fish species the endemism of genetically-distinct infraspecific categories, such as geographical races, should be used.
  6. Over 977 species of fishes are threatened with extinction worldwide and at least 28 fish species have recently become extinct (Groombridge 1993). The occurrence of rare or threatened fish species in a wetland is an important attribute but is catered for in Criterion 2.
  7. The concepts of indicator, flagship and keystone species are also important. The presence of "indicator" species is a useful measure of good wetland quality. "Flagship" species have high symbolic value in the conservation movement (e.g. Siberian crane, flamingo, desert pupfish, sturgeon) whereas "keystone" species play vital ecological roles. The recognition of the important ecological role of keystone species, which are often abundant and widespread, and the need for their conservation, are perhaps foreign to the traditional conservation ethic, but deserve serious consideration. Wetlands with significant populations of indicator, flagship and/or keystone species would merit consideration as sites of international importance.



8. An important component of biodiversity is biodisparity, i.e. the range of morphologies and reproductive styles in a community. The biodisparity of a wetland community will be determined by the diversity and predictability of its habitats in time and space, i.e. the more heterogeneous and unpredictable the habitats, the greater the biodisparity of the fish fauna.
  9. For example, Lake Malawi, a stable, ancient lake, has over 600 fish species of which 92% are maternal mouthbrooding cichlids, but only a few fish families. In contrast, the Okavango Swamps, a palustrine floodplain that fluctuates between wet and dry phases, has only 60 fish species but a wider variety of morphologies and reproductive styles, and many fish families, and therefore has a greater biodisparity (Bruton & Merron 1990).
  10. Measures of both biodiversity and biodisparity should be used to assess the international status of a wetland.
  11. The problem of invasive aquatic animals also needs to be considered. Fishes (finfishes and shellfishes) have been widely distributed, accidentally or purposely, by humankind from one catchment, ocean or continent to another, with sometimes disastrous consequences for the local fauna and ecology. In some cases, as in the Laurentian Great Lakes in North America, the indigenous fauna of the lakes has been dramatically altered even though the total species count has not declined significantly. In Suisun Marsh in the Sacramento-San Joaquin estuary in the USA, the introduction of alien species has doubled the species count in the wetland. In other cases, as in Lake Victoria in Africa, alien species, combined with overfishing and pollution, have caused a major decline in the diversity of indigenous species. Measures of biodiversity and biodisparity should only take into account representative assemblages of indigenous species if the true intrinsic worth of the system is to be measured.
  12. The situation is not simple, however, as many high altitude lakes that formed since the last glaciation contain only introduced fish species. Throughout the world important commercial, recreational and subsistence fisheries are based on introduced species, especially trout, carp, salmon, bass and tilapia. Furthermore, some alien species, for instance those used for biological control, have had beneficial effects on wetlands. In general, the introduction of alien species of fishes and shellfishes which may have adverse impacts on the diversity of indigenous species or for which there are insufficient data available to make a reliable judgement should be discouraged.
- or-**
- (e)** A wetland could be considered of international importance under Criterion 4a if:
1. Many fishes (including shellfishes) have complex life histories with the spawning, nursery and feeding grounds widely separated and long migrations necessary between them. It is important to conserve all those areas that are essential for the completion of a fish's life cycle if the fish species or stock is to be maintained. The productive, shallow habitats offered by coastal wetlands (including coastal lagoons, estuaries, salt marshes, inshore rocky reefs and sandy slopes) are extensively used as feeding and spawning grounds and nurseries by fishes with openwater adult stages. These wetlands therefore support essential ecological processes for fish stocks, even if they do not necessarily harbour large adult fish populations themselves.
  2. Furthermore, many fishes in rivers, swamps or lakes spawn in one part of the ecosystem but spend their adult lives in another inland water or in the sea. It is common for fishes in lakes to migrate up rivers to spawn, or fishes in rivers to migrate downstream

to a lake or estuary, or beyond the estuary to the sea, to spawn. Many swamp fishes migrate from deeper, more permanent waters to shallow, temporarily inundated areas for spawning. Wetlands, even apparently insignificant ones, in one part of a river system may therefore be vital for the proper functioning of extensive river reaches up- or downstream of the wetland.

3. The adoption of this criterion for the identification of wetlands of international importance is for guidance only and does not interfere with the rights of Contracting Parties to regulate fisheries within specific wetlands and/or elsewhere.

### References

- Bruton, M. N. & G. S. Merron 1990. "The proportion of different eco-ethological sections of reproductive guilds of fishes in some African inland waters," *Env. Biol. Fish* 28: 179-187.
- Groombridge, B. (ed.) 1993. *1994 IUCN red list of threatened animals*. IUCN, Gland. 286 pp.

## Wetland Values

<i>Code</i>	<i>Values</i>
<b>FUNCTIONS</b>	
101	Ground water recharge
102	Ground water discharge
103	Flood control
104	Sediment/toxicant retention
105	Nutrient retention
106	Shoreline stabilisation
107	Storm protection/windbreak
108	Water transport
109	Food chain support
110	Wildlife habitat
111	Active recreation
<b>PRODUCTS</b>	
201	Wildlife resources
202	Fisheries
203	Forage resources
204	Agricultural resources
205	Water supply
206	Forest resources
<b>ATTRIBUTES</b>	
301	Biological diversity
302	Uniqueness to culture/heritage



### MedWet habitat code

The *Habitat Description System* was developed to describe Mediterranean wetland habitats and to facilitate the mapping of these habitats. It has been adapted from the *Classification of Wetlands and Deepwater Habitats of the United States*, (Cowardin *et al.*, 1979). It has been tested in Portugal and Greece.

This system is hierarchical and structured around a combination of ecological, biological, hydrological and substrate characteristics which permits it to be used across the Mediterranean region. The description code of each habitat includes the appropriate series of letters representing the System, Subsystem, Class, Subclass, Water regime, Salinity, Artificial Modifier and Dominance Type.

The way in which the code of each habitat is built is shown in the two following examples:

#### Example A

Level 1	System:	E	Estuarine
Level 2	Subsystem:	-	
Level 3	Class:	E	Emergent
Level 4	Subclass:	P	Persistent
Level 5	Water regime:	R	Regularly flooded
Level 6	Water salinity:	B	Mixohaline
Level 7	Artificial modifier	-	
Level D	Dominance Type	S	<i>Spartina</i> sp.
Level C, C	Counter*		

**MedWet Habitat code\***

E	-	E	P	R	B	-	S	-	-
---	---	---	---	---	---	---	---	---	---

  
Level 1 2 3 4 5 6 7 D C C

\* Counter = allows to distinction of two different patches with the same habitat description. It is useful to separate two areas with the same description which have different information relating to activities, flora and fauna.

#### Example B

Level 1	System:	L	Lacustrine
Level 2	Subsystem:	L	Littoral
Level 3	Class:	A	Aquatic Bed
Level 4	Subclass:	F	Floating Vascular
Level 5	Water regime:	S	Seasonally flooded
Level 6	Water salinity:	F	Fresh
Level 7	Artificial modifier	D	Diked/Impounded
Level D	Dominance Type	-	
Level C, C	Counter*	-	

**MedWet Habitat code\***

L	L	A	F	S	F	D	-	-	-
---	---	---	---	---	---	---	---	---	---

  
Level 1 2 3 4 5 6 7 D C C

## WETLAND LEGEND

Should be used in conjunction with Volume III. *Habitat Description System*

LEVEL 1 SYSTEMS		LEVEL 2 SUBSYSTEMS	
M	Marine	-	No Subsystem
E	Estuarine	-	No Subsystem
R	Riverine	T	Tidal
		W	Lower Perennial
		U	Upper Perennial
		E	Intermittent
		K	Unknown Perennial (1)
L	Lacustrine	M	Limnetic
		L	Littoral
P	Palustrine	-	No Subsystem
U	Non-wetland (2)		

(1) Not included in the MedWet habitat description system. Created only for mapping purposes.

(2) May include wetlands that could not be inventoried because of procedure used or due to mapping conventions.

LEVEL 3 CLASSES		LEVEL 4 SUBCLASSES	
O	Water Surface	R	Rock
		C	Cobble/Gravel
		S	Sand
		M	Mud
		O	Organic
		A	Salt crust
		K	Unknown Bottom (1)
S	Non-vegetated	R	Rock
		C	Cobble/Gravel
		S	Sand
		M	Mud
		O	Organic
		A	Salt crust
		V	Vegetated Pioneer
A	Aquatic Bed	A	Algal
		M	Aquatic Moss
		F	Floating Vascular
		L	Floating-leaved
		R	Rooted Vascular
		Z	Unknown Submergent (1)
		X	Unknown Surface (1)

<b>R</b>	Reef	<b>C</b>	Coral
		<b>M</b>	Mollusc
		<b>W</b>	Worm
<b>M</b>	Moss-Lichen	<b>M</b>	Moss
		<b>L</b>	Lichen
<b>E</b>	Emergent	<b>P</b>	Persistent
		<b>N</b>	Non-persistent
<b>U</b>	Scrub-Shrub	<b>D</b>	Deciduous
		<b>E</b>	Evergreen
		<b>A</b>	Dead
<b>F</b>	Forested	<b>D</b>	Deciduous
		<b>E</b>	Evergreen
		<b>A</b>	Dead

**LEVEL 5  
WATER REGIME**

**MARINE and ESTUARINE**

- P** Permanently flooded
- S** Subtidal
- A** Irregularly exposed
- R** Regularly flooded
- G** Irregularly flooded
- U** Saturated

**RIVERINE, LACUSTRINE and PALUSTRINE**

- P** Permanently flooded
- L** Semi-permanently flooded
- S** Seasonally flooded
- T** Temporarily flooded
- I** Intermittently flooded
- U** Saturated

**Tidal areas**  
*(Riverine and Palustrine)*

- F** Permanently flooded-tidal
- Y** Semi-permanently flooded-tidal
- R** Regularly flooded
- E** Seasonally flooded-tidal
- M** Temporarily flooded-tidal

**Artificially flooded areas**

- A** Artificially flooded

**MARINE, ESTUARINE, RIVERINE, LACUSTRINE and PALUSTRINE**

- K** Unknown (1)





**LEVEL 6  
WATER SALINITY**

**COASTAL HALINITY**

- F** Fresh
- O** Oligohaline
- M** Mesohaline
- P** Polyhaline
- B** Mixohaline (Brackish)
- S** Euhaline
- H** Hyperhaline

**INLAND SALINITY**

- F** Fresh
- M** Mixosaline
- E** Eusaline
- Y** Hypersaline

**LEVEL 7  
ARTIFICIAL MODIFIER**

- F** Farmed
- A** Artificial substrate
- S** Spoil
- E** Excavated
- D** Diked/Impounded
- P** Partially Drained/Ditched
- B** Farmed-Diked/Impounded
- C** Artificial - Excavated
- G** Artificial - Diked/Impounded
- H** Artificial - Excavated - Diked/Impounded
- J** Spoil - Excavated
- L** Spoil - Diked/Impounded
- M** Spoil - Excavated - Diked/Impounded
- N** Excavated - Diked/Impounded

**LEVEL D  
DOMINANCE TYPE**

For example, if an area has been classified in the Forested class, the Type is labelled by the Latin name of the dominant specie or by the combination of species (maximum three codominant species). The lists of Dominance Types will evolve as detailed wetland inventory work proceeds.

**LEVEL C + C  
COUNTER**

## Activity Codes

The following is the list of activities influencing the conservation status of the site, used for the Natura 2000 network.

<b>00</b>	<b>Management for conservation</b>
010	Habitat conservation
020	Resource conservation
030	Species conservation
040	Land restoration
090	Other conservation activities
<b>10</b>	<b>Agriculture, forestry and animal breeding</b>
100	Cultivation
101	modification of cultivation practices
102	mowing/cutting
110	Use of pesticides
120	Fertilisation
130	Irrigation
140	Grazing
141	abandonment of pastoral systems
150	Restructuring agricultural land holding
151	removal of hedges and copses
160	General forestry management
161	forest planting
162	artificial planting
163	forest replanting
164	forestry clearance
165	removal of undergrowth
166	removal of dead and dying trees
167	forest exploitation without replanting
170	Animal breeding
171	stock feeding
180	Burning
190	Agriculture and forestry activities not referred to above
<b>20</b>	<b>Fishing, hunting and collecting</b>
200	Fish and shellfish aquaculture
210	Professional fishing
211	fixed location fishing
212	trawling
213	drift-net fishing
220	Leisure fishing
221	bait digging
230	Hunting
240	Taking/removal of fauna, general
241	collection (insects, reptiles, amphibians,...)
242	taking from nest (e.g. falcons)
243	trapping, poisoning, poaching
244	other forms of taking fauna
250	Taking/removal of flora, general
251	pillaging of floristic stations
290	Hunting, fishing or collecting activities other not referred to above

<b>30</b>	<b>Mining and extraction of materials</b>
<hr/>	
300	Sand and gravel extraction
301	quarries
302	removal of beach materials
310	Peat extraction
311	hand cutting of peat
312	mechanical removal of peat
320	Exploration and extraction of oil or gas
330	Mines
331	open cast mining
332	underground mining
340	Salt works
390	Mining and extraction activities not referred to above
<b>40</b>	<b>Urbanisation, industrialisation and similar activities</b>
<hr/>	
400	Urbanised areas, human habitation
401	continuous urbanisation
402	discontinuous urbanisation
403	dispersed habitation
409	other patterns of habitation
410	Industrial or commercial areas
411	factory
412	industrial stockage
419	other industrial/commercial areas
420	Discharges
421	disposal of household waste
422	disposal of industrial waste
423	disposal of inert materials
424	other discharges
430	Agricultural structure
440	Storage of materials
490	Other urbanisation, industrial and similar activities
<b>50</b>	<b>Transportation and communication</b>
<hr/>	
500	Communication networks
501	paths, tracks, cycling tracks
502	roads, motorways
503	railway lines, TGV
504	port areas
505	airport
506	aerodrome, heliport
507	bridge, viaduct
508	tunnel
509	other communication networks
510	Energy transport
511	electricity lines
512	pipe lines
513	other forms of energy transport
520	Shipping
530	Improved access to site
590	Other forms of transportation and communication
<b>60</b>	<b>Leisure and tourism</b>
<hr/>	
600	Sport and leisure structures



601	golf course
602	skiing complex
603	stadium
604	circuit, track
605	hippodrome
606	attraction park
607	sports pitch
608	camping and caravans
609	other sport/tourism complexes
610	Interpretative centres
620	Outdoor sports and leisure activities
621	nautical sports
622	walking, horse-riding and non-motorised vehicles
623	motorised vehicles
624	mountaineering, rock climbing, speleology
625	gliding, delta plane, paragliding, ballooning
626	skiing, off-piste
629	other outdoor sports and leisure activities
690	Other leisure and tourism impacts not referred to above
<b>70</b>	<b>Pollution and other human impacts/activities</b>
700	Pollution
701	water pollution
702	air pollution
703	soil pollution
709	other forms or mixed forms of pollution
710	Noise nuisance
720	Trampling, overuse
730	Military manoeuvres
740	Vandalism
750	Other pollution or human impacts/activities
<b>80</b>	<b>Human induced changes in hydraulic conditions</b>
800	Landfill, land reclamation and drying out, general
801	polderisation
802	reclamation of land from sea, estuary or marsh
803	infilling of ditches, dykes, ponds, pools, marshes or pits
810	Drainage
811	management of aquatic and bank vegetation for drainage purposes
820	Removal of sediments (e.g. mud, etc.)
830	Canalisation
840	Flooding
850	Modification of hydrographic functioning, general
851	modification of marine currents
852	modifying structures of inland water courses
853	management of water levels
860	Dumping, depositing of dredged deposits
870	Dykes, embankments, artificial beaches, general
871	sea defence or coast protection works
890	Other human induced changes in hydraulic conditions
<b>90</b>	<b>Natural processes (biotic and abiotic)</b>
900	Erosion

910	Silting up
920	Drying out
930	Submersion
940	Natural catastrophes
941	inundation
942	avalanche
943	collapse of terrain, landslide
944	storm, cyclone
945	volcanic activity
946	earthquake
947	tidal wave
948	fire (natural)
949	other natural catastrophes
950	Biocenotic evolution
951	drying out/accumulation of organic material
952	eutrophication
953	acidification
954	invasion by a species
960	Interspecific faunal relations
961	competition (e.g. gull/tern)
962	parasitism
963	introduction of disease
964	genetic pollution
965	predation
966	antagonism arising from introduction of species
967	antagonism with domestic animals
969	other forms or mixed form of interspecific faunal competition
970	Interspecific floral relations
971	competition
972	parasitism
973	introduction of disease
974	genetic pollution
975	lack of pollinating agents
976	damage by game species
979	other forms or mixed forms of interspecific floral competition
990	Other natural processes
<hr/>	
XX	Negligible or nil activity or impact

## Impact Codes

<b>A</b>	<b>Loss of Aesthetic Value(s)</b>
AN-	Increased noised
AS-	Loss of scenic value
<b>E</b>	<b>Enhancement</b>
EA-	Increased transport capability
EB-	Increased aesthetic qualities
ED-	Increased sediment removal/retention
EE-	Increased Economic Potential
EF-	Increased Protection from Natural Forces
EI-	Increased in other socio-economic Value(s)
EO-	Increased Potential for Natural Products
EP-	Reduction of Salt Intrusion Potential
ER-	Increased in Flow Regulation
ES-	Increased in Water Supply
ET-	Increased Toxicant Removal/Retention
EU-	Increased Tourist/Recreation Potential
EW-	Increased in Wilderness Values
<b>F</b>	<b>Faunal Changes</b>
FA-	Change in Age composition of a Faunal Species
FB-	Disruption of Natural Balance/Interaction Between Faunal Species
FC-	Change in Faunal Species Composition
FCD	Loss of Faunal diversity
FCP	Introduction of Animal Pests
FF-	Disruption of Natural Cycles/Functions of Faunal Species
FFB	Disruption of Breeding
FFO	Disruption of faunal Cycle/Function other than breeding
FP-	Decrease in Population of Faunal Species
FPX	Local extinction of faunal species
<b>H</b>	<b>Habitat Degradation</b>
HC-	Loss of Wildlife Corridor(s)
HF-	Habitat Fragmentation
HL-	Habitat Loss
<b>L</b>	<b>Decrease in Wetland Benefits</b>
LA-	Decrease in Transport Capability
LD-	Decrease in Sediment Removal/Retention
LE-	Decrease in Economic Potential
LF-	Decrease in Protection from Natural Forces
LI-	Decrease in other Socio-Economic Value(s)
LO-	Decrease in Natural Product Potential
LP-	Decrease in Prevention of Salt Intrusion
LR-	Decrease in Flow Regulation
LS-	Decrease in Water Supply
LT-	Decrease in Toxicant Removal/Retention
LU-	Decrease in Tourist/Recreation Potential
LW-	Decrease in Wilderness/wildlife Values



<b>P</b>	<b>Pollution</b>
<b>PC-</b>	Chemical Pollution
<b>PCA</b>	Chemical Pollution as an Accident/Event
<b>PCC</b>	Chronic Chemical Pollution
<b>PCO</b>	Chemical Pollution of unknown severity/duration
<b>PF-</b>	Fertiliser/Excess Nutrient Pollution
<b>PFA</b>	Fertiliser/Excess Nutrient Pollution as an Accident/Event
<b>PFC</b>	Chronic Fertiliser/Excess Nutrient Pollution
<b>PFO</b>	Fertiliser/Excess Nutrient Pollution of an unknown severity/duration
<b>PH-</b>	Increase of pH
<b>PHA</b>	Increase of pH as an Accident/Event
<b>PHC</b>	Chronic Increase of pH
<b>PHO</b>	Increase of pH of unknown severity/duration
<b>PI-</b>	Temperature Increase
<b>PIA</b>	Temperature Increase as an Accident/Event
<b>PIC</b>	Chronic Temperature Increase
<b>PIO</b>	Temperature Increase of an unknown severity/duration
<b>PJ-</b>	Decrease of pH
<b>PJA</b>	Decrease of pH as an Accident/Event
<b>PJC</b>	Chronic Decrease of pH
<b>PJO</b>	Decrease of pH of an unknown severity/duration
<b>PM-</b>	Heavy Metal Pollution
<b>PMA</b>	Heavy Metal Pollution as an Accident/Event
<b>PMC</b>	Chronic Heavy Metal Pollution
<b>PMO</b>	Heavy Metal Pollution of an unknown severity/duration
<b>PO-</b>	Oil Pollution
<b>POA</b>	Oil Pollution as an Accident/Event
<b>POC</b>	Chronic Oil Pollution
<b>POO</b>	Oil Pollution of an unknown severity/duration
<b>PP-</b>	Pesticide Pollution
<b>PPA</b>	Pesticide Pollution as an Accident/Event
<b>PPC</b>	Chronic Pesticide Pollution
<b>PPO</b>	Pesticide Pollution of an unknown severity/duration
<b>PR-</b>	Radioactive Pollution
<b>PRA</b>	Radioactive Pollution as an Accident/Event
<b>PRC</b>	Chronic Radioactive Pollution
<b>PRO</b>	Radioactive Pollution of an unknown severity/duration
<b>PS-</b>	Sewage Pollution
<b>PSA</b>	Sewage Pollution as an Accident/Event
<b>PSC</b>	Chronic Sewage Pollution
<b>PSO</b>	Sewage Pollution of an unknown severity/duration
<b>PT-</b>	Temperature Decrease
<b>PTA</b>	Temperature Decrease as an Accident/Event
<b>PTC</b>	Chronic Temperature Decrease
<b>PTO</b>	Temperature Decrease of an unknown severity/duration
<b>PU-</b>	Increased Turbidity
<b>PUA</b>	Increased Turbidity as an Accident/Event
<b>PUC</b>	Chronic Increased Turbidity
<b>PUO</b>	Increased Turbidity of an unknown severity/duration
<b>PV-</b>	Decreased Dissolved Oxygen
<b>PVA</b>	Decreased Dissolved Oxygen as an Accident/Event
<b>PVC</b>	Chronic Decreased Dissolved Oxygen
<b>PVO</b>	Decreased Dissolved Oxygen of unknown severity/duration

<b>S</b>	<b>Soil/Land Impacts</b>
SA-	Accretion/Deposition
SC-	Soil Leaching
SE-	Increased Erosion
SEH	Increased Water Erosion
SEW	Increased Wind Erosion
SI	Soil acidification
SK-	Peat Shrinkage
SL-	Precipitation of Landslides
SP-	Soil Compaction
SS-	Siltation
<b>V</b>	<b>Vegetation Degradation</b>
VA-	Change in Age Composition of a Floral Species
VC-	Change in Vegetative Species Composition
VCD	Loss of Floral Diversity
VCX	Introduction of Exotic Floral Species
VP	Decrease in population of floral species
VS-	Change in Vegetative Structure
<b>W</b>	<b>Hydrological Impacts</b>
WD-	Diversion of Flowing Water
WF-	Increase in Flooding
WG-	Drainage/Reduction of Water Level
WGL	Drainage of Standing Water
WGS	Drainage of Swampland
WGT	Lowering of Water Table
WR-	Altered Flow Regime
WS-	Salt Water Intrusion
WSG	Salt Water Intrusion of Ground Water
WSL	Salt Water Intrusion of Land
WSR	Salt Water Intrusion of Surface Water
WT-	Altered Tidal Regime





Catchment area code

Site code

Name of the catchment/sub-catchment area:

Usual name of the wetland:

*This page can be used to compile the number of sheets used to describe each site*

# Wetland Inventory Data Sheets

## HABITAT

Number of sheets



## FLORA

Number of sheets



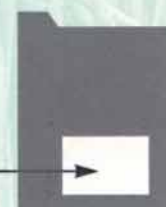
## FAUNA

Number of sheets



## ACTIVITIES & IMPACTS

Number of sheets



## METEOROLOGICAL DATA

Number of sheets



## REFERENCES

Number of sheets

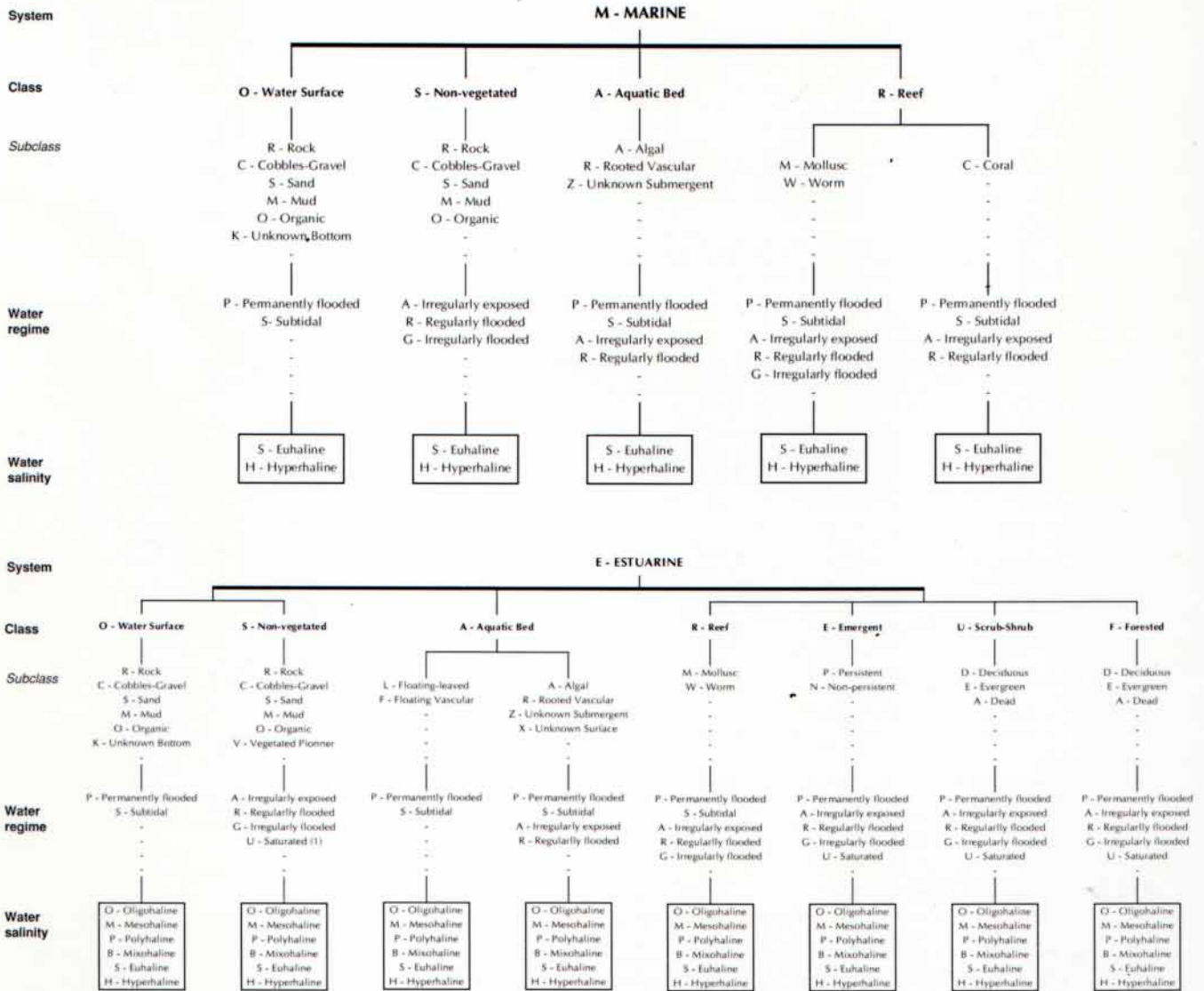


MedWet

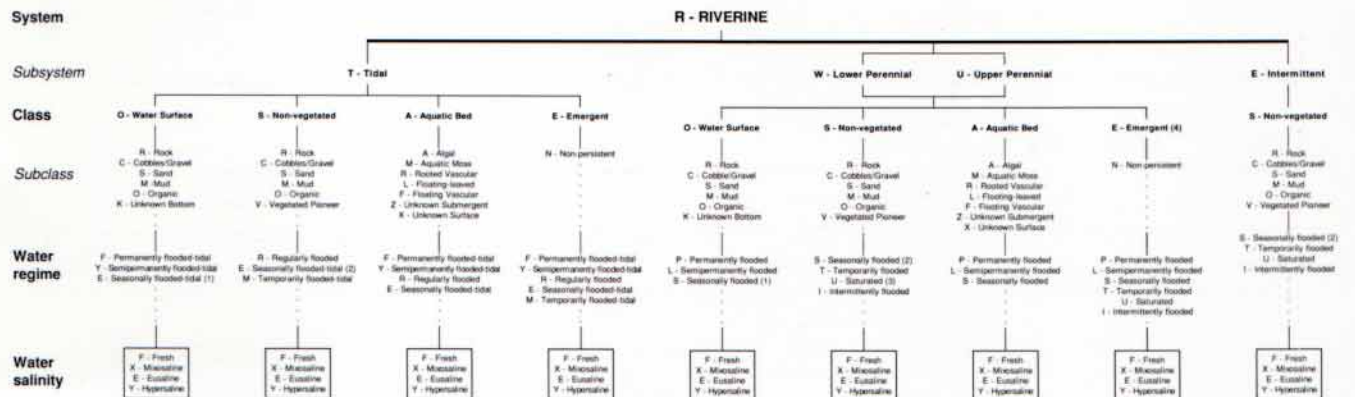


# MedWet Habitat Description System

Wetland habitats should be labelled using the letter code listed in the wetland legend. The habitat description code of each mapped unit should include the appropriate System, Subsystem, Class, Subclass, Water Regime, Salinity, Artificial Modifier and Dominance Type.

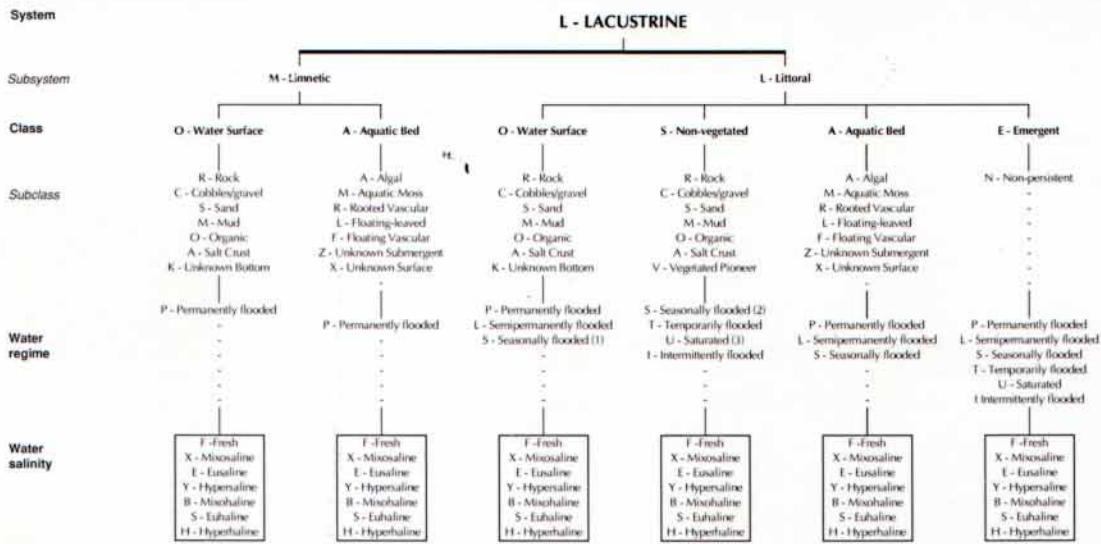


(1) The Rock and Cobbles/gravel Subclasses are not included

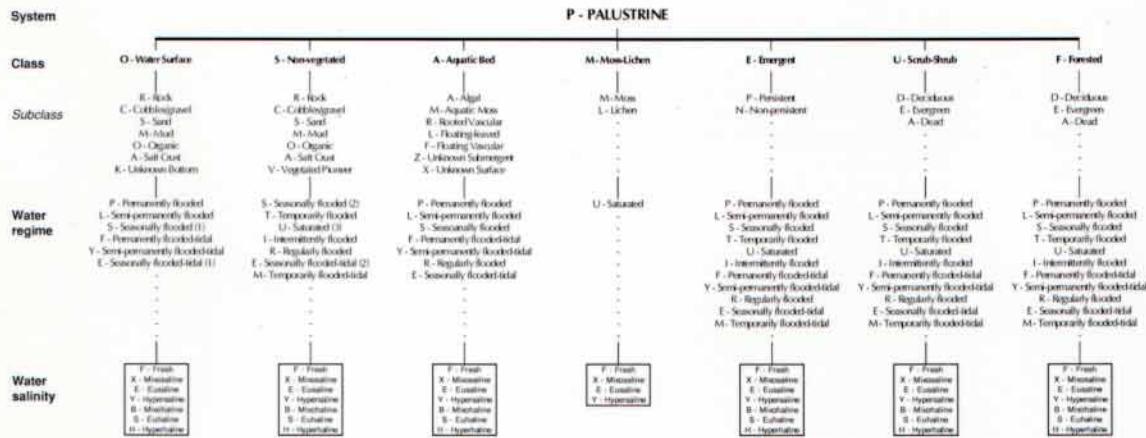


- (1) Wetlands that are covered by water for more than half of the growing season.
- (2) Wetlands that are uncovered by water for more than half of the growing season.
- (3) The Rock and Cobbles/gravel Subclasses are not included.
- (4) Are only found in the Lower Perennial Ecological Subsystem.





- (1) Wetlands that are covered by water more than half of the growing season.  
 (2) Wetlands that are uncovered by water for more than half of the growing season.  
 (3) The Rock and Cobble/gravel Subclasses are not included.



- (1) Wetlands that are covered by water more than half of the growing season.  
 (2) Wetlands that are uncovered by water for more than half of the growing season.  
 (3) The Rock and Cobbles/gravel Subclasses are not included.

## ARTIFICIAL MODIFIERS

<b>F</b> Farmed	<b>B</b> Farmed - Diked/Impounded
<b>A</b> Artificial substrate	<b>C</b> Artificial - Excavated
<b>S</b> Spoil	<b>G</b> Artificial - Diked/Impounded
<b>E</b> Excavated	<b>H</b> Artificial - Excavated - Diked/Impounded
<b>D</b> Diked/Impounded	<b>J</b> Spoil - Excavated
<b>P</b> Partially Drained/Ditched	<b>L</b> Spoil - Diked/Impounded
	<b>M</b> Spoil - Excavated - Diked/Impounded
	<b>N</b> Excavated - Diked/Impounded

## DOMINANCE TYPE

For example, if an area has been classified in the Forested class, the Dominance Type is labelled by the Latin name of the dominant species or by the combination of species (maximum three co-dominant species). The lists of Dominance Types will evolve as detailed wetland inventory work proceeds.

### Example:

System code:

**P-EPSFD/P--**

**System:** Palustrine; **No Subsystem;** **Class:** Emergent; **Subclass:** Persistent; **Water Regime:** Seasonally flooded; **Water Salinity:** Fresh; **Special Modifier:** Diked/Impounded; **Dominance Type:** *Phragmites australis*.

Country\*:

Compiler's name\*:

Address\*:

Date \* (DDMMYY):

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Catchment area code\*  
(or sub-catchment)

C	C	S	S

Name\* of the catchment/sub-catchment area:

## 1. LOCATION

Latitude\*

between

				N
--	--	--	--	---

and

				N
--	--	--	--	---

Longitude\*

between

--	--	--	--

and

--	--	--	--

Altitude (m)

Minimum:

Maximum:

## 2. PHYSIOGRAPHICAL INFORMATION

Area\* (Km<sup>2</sup>):

River Length (Km):

## CLIMATE

Rainfall (mm)

Minimum:

Maximum:

Climate remarks:

Temperature (°C)

Minimum:

Maximum:

Period of recording (years)

from:

to:

Dominant bioclimates

cover (%)

1.		
2.		
3.		
4.		
5.		

(add extra sheets if necessary)

## HYDROLOGY

Flow (Hm<sup>3</sup>/ year):

(add extra sheets if necessary)

## GEOLOGY/GEOMORPHOLOGY

---

(add extra sheets if necessary)

### 3. POPULATION, LANDCOVER AND IMPACTS

#### POPULATION

---

Number of villages/towns of

< 1,000 hab.	<input type="text"/>
1,000-10,000 hab.	<input type="text"/>
10,000-100,000 hab.	<input type="text"/>
>100,000 hab.	<input type="text"/>
Year of recording:	<input type="text"/>

*Population remarks*  
(human population, density and seasonality):

#### CORINE LandCover types

---

Percentage (%) of area devoted to

artificial surface	<input type="text"/>
agricultural areas	<input type="text"/>
forest/semi-natural areas	<input type="text"/>
wetlands	<input type="text"/>
water bodies	<input type="text"/>

*LandCover remarks:*

#### GLOBAL IMPACTS AND THREATS

---

(add extra sheets if necessary)





Country\*: \_\_\_\_\_

Sheet number: \_\_\_\_\_

Compiler's name\*: \_\_\_\_\_

Address\*: \_\_\_\_\_

Date \* (DDMMYY):

1. IDENTIFICATION

Site code\*

Usual name of the wetland\*: \_\_\_\_\_

Other names: \_\_\_\_\_

Other codes:

Natura 2000	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
CORINE Biotopes	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ramsar	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Med. SPA (Barcelona Conv.)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

IWC	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
IBA	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<sup>1</sup> Give the name of the inventory

2. LOCATION

Geographical coordinates\* ° ′ ″ N ° ′ ″

UTM

(10X10 km)

Altitude (m) Minimum: \_\_\_\_\_ Maximum: \_\_\_\_\_ Average: \_\_\_\_\_

Administrative divisions

Codes*	cover(%)	Subdivision(s)
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Location remarks\* (nearest town, major river, etc.): \_\_\_\_\_

(add separate sheets if necessary)

Catchment area code\*        
(or sub-catchment) C C S S

Name \* of the catchment/sub-catchment area: \_\_\_\_\_

Part of a complex?\* (Y/N)

If yes, name of the complex\*: \_\_\_\_\_

Geographical coordinates of the complex ° ′ ″ N ° ′ ″

### 3. DESCRIPTION

Wetland area\* (ha): \_\_\_\_\_

Length (m): \_\_\_\_\_

General site description\*:

(add separate sheets if necessary)

#### 3.1. PHYSIOGRAPHICAL INFORMATION

##### • CLIMATE

Bioclimate: \_\_\_\_\_

Meteorological station

Distance (Km)

Code

Name

Other


Climate remarks:

##### • WATER REGIME

Inflow<sup>1</sup>

a	b	a	b	a	b

Outflow<sup>2</sup>

--	--

<sup>1</sup> Inflow: First character (a: type): **1** - Sea/Ocean; **2** - River; **3** - Flood water; **4** - Ground water; **5** - Spring; **6** - Rain only; **7** - Artificial.

Second character (b: permanency scale): **1** - Permanent; **2** - Non-permanent.

<sup>2</sup> Outflow: **0** - None (evaporation only); **1** - Permanent; **2** - Intermittent; **3** - Artificial.

Inflow/Outflow remarks:

(add separate sheets if necessary)

##### Presence of water

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
a	b	a	b	a	b	a	b	a	b	a	b

First character (a: spatial scale): **1** - Totally dry; **2** - Partially flooded; **3** - Totally flooded.

Second character (b: permanency scale): **1** - Never flooded; **2** - Exceptionally flooded; **3** - Regularly flooded; **4** - Permanently flooded.

Hydrology remarks:

##### • GEOLOGY/GEOMORPHOLOGY

(add separate sheets if necessary)

Geology/geomorphology and other physical characteristics:

(add separate sheets if necessary)









Site code\*

Classification<sup>1</sup> / Habitat code\*  /

and/or

MedWet Habitat code\*

Level 1 2 3 4 5 6 7 D

Water permanency<sup>2</sup>\*

Water salinity<sup>3</sup>\*

Area\*(ha):

Maximum depth(m):

Condition<sup>4</sup>

Artificiality<sup>5</sup>

pH<sup>6</sup>

General description:

Classification<sup>1</sup> / Habitat code\*  /

and/or

MedWet Habitat code\*

Level 1 2 3 4 5 6 7 D

Water permanency<sup>2</sup>\*

Water salinity<sup>3</sup>\*

Area\*(ha):

Maximum depth(m):

Condition<sup>4</sup>

Artificiality<sup>5</sup>

pH<sup>6</sup>

General description:

Classification<sup>1</sup> / Habitat code\*  /

and/or

MedWet Habitat code\*

Level 1 2 3 4 5 6 7 D

Water permanency<sup>2</sup>\*

Water salinity<sup>3</sup>\*

Area\*(ha):

Maximum depth(m):

Condition<sup>4</sup>

Artificiality<sup>5</sup>

pH<sup>6</sup>

General description:

Classification<sup>1</sup> / Habitat code\*  /

and/or

MedWet Habitat code\*

Level 1 2 3 4 5 6 7 D

Water permanency<sup>2</sup>\*

Water salinity<sup>3</sup>\*

Area\*(ha):

Maximum depth(m):

Condition<sup>4</sup>

Artificiality<sup>5</sup>

pH<sup>6</sup>

General description:

(If necessary attach extra forms for more Habitats)

- <sup>1</sup> Classification: 1 - CORINE Biotopes Habitat type; 2 - Ramsar wetland type.
- <sup>2</sup> Water permanency: 1 - Permanent; 2 - Seasonal; 3 - Temporary/Intermittent.
- <sup>3</sup> Water salinity: 1 - Fresh (< 0.5 g/l); 2 - Fresh/Brackish (0.5 - 5.0 g/l); 3 - Brackish (5.0 - 18.0 g/l); 4 - Brackish/Salt (18.0 - 30.0 g/l); 5 - Salt (> 30.0 g/l).
- <sup>4</sup> Condition: 0 - Unknown; 1 - Untouched. No signs of man/made changes; 2 - Original vegetation / landform still predominant (>50%); 3 - Original vegetation/landform partially modified (10 - 50% untouched); 4 - Vegetation/landform highly modified (<10% untouched); 5 - Original vegetation/landform totally changed.
- <sup>5</sup> Artificiality: 0 - Unknown; 1 - Naturally flooded; 2 - Partially controlled; 3 - Heavily controlled.
- <sup>6</sup> pH: 0 - Unknown; 1 - Acid (pH<5.5); 2 - Circumneutral (pH 5.5- 7.4); 3 s - Alkaline (pH>7.4).















Sheet number:

Catchment code\*

or

Site code\*

### Bibliography

Reference* <i>(list the references in the format: authors, year, title, publisher/journal, location)</i>	Biblio. no
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### Bibliography numbers


*(add separate sheets if necessary)*

## Key contacts

(Please include organisation, address, telephone and fax, and field of expertise)

(add separate sheets if necessary)

### Maps

Title:		Scale: 1: <u>    </u> 000	Year:
Source:	Type:	Projection:	
Title:		Scale: 1: <u>    </u> 000	Year:
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Source:	Type:	Projection:	
Title:		Scale: 1: <u>    </u> 000	Year:
Source:	Type:	Projection:	

(add separate sheets if necessary)

### Aerial photographs

Title:		Scale: 1: <u>    </u> 000	Year:
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Source:	Type:		
Title:		Scale: 1: <u>    </u> 000	Year:
Source:	Type:		
Title:		Scale: 1: <u>    </u> 000	Year:
Source:	Type:		

(add separate sheets if necessary)

ICN



Instituto da Conservação da Natureza

WETLANDS

INTERNATIONAL







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of the European Commission