Annex V - Freshwater habitat Group

Annex to the Input Document for the Second Mediterranean Natura 2000 Seminar 14 – 16 November 2017, Limassol, Cyprus

Contents_Toc497380705

3150 Natural eutrophic lakes with *Magnopotamion* and *Hydrocharition*-type vegetation

	Selected for first round of Biogeographical Seminar
X	Selected using “Low hanging fruit” approach

Habitat summary

The assessments of four countries (Greece, Spain, Italy, and Portugal) led to the overall conservation status in the Mediterranean region being unfavourable-inadequate. In the Mediterranean biogeographical region the habitat is widespread in Spain and Italy; it also occurs in Portugal, France, Greece, and Cyprus. Around 47 % of the habitat area is located in Spain.

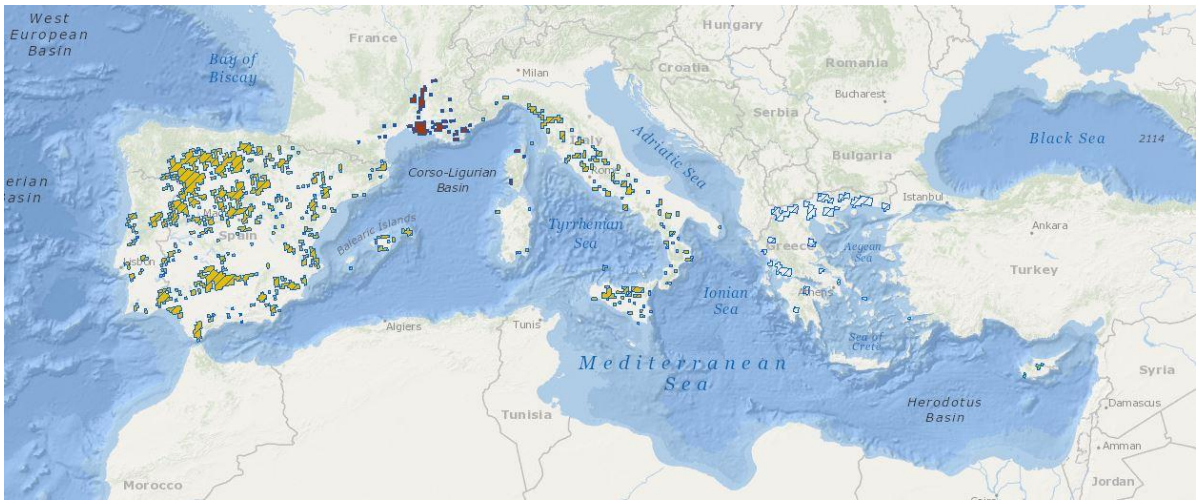
For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure in Italy is sufficient. Further improvement could be reached by improving habitat structure in Italy and Portugal, and increasing the habitat area by habitat restoration in Greece, Spain, and Italy. The main measures should include restoration or improvement of the water quality and hydrological regime, but this is a fairly demanding task because of the complexity of these issues. Measures for the reduction of water pollution from agriculture (fertilisation, use of biocides) are important; measures for urban and industrial waste management and water abstraction reduction are also relevant. Other proposed measures are establishment of protected sites and legal protection of habitat. Better information about habitat structure and functioning is needed in Spain.

Habitat description

Lakes and ponds with mostly dirty grey to blue-green, more or less turbid waters, particularly rich in dissolved bases (pH usually > 7), with free-floating surface communities of the *Hydrocharition* or, in deep, open waters, with associations of large pondweeds (*Magnopotamion*).

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain and Italy. It also occurs in Portugal, France, Greece, and Cyprus. The overall representation of the habitat in Natura 2000 sites seems to be high; the calculation is influenced by the probably overestimated habitat area in Spain. In Cyprus the entire national habitat area is located in Natura 2000 sites; in Italy this is 96 %, and in Spain and France 67 %.



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
Cyprus	0.05	100	1
France	38	67	26
Greece	0	0	29
Italy	200	96	153
Portugal	0	N/A	28
Spain	328	127	254
Total	**566**	**104**	491

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographical region ('coverage') as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The assessments of four countries (Greece, Spain, Italy, and Portugal) led to the overall conservation status of this habitat type in the Mediterranean biogeographical region being unfavourable-inadequate. France reported unfavourable-bad conservation status; Cyprus indicated favourable status. At the biogeographical region level, three parameters (Range; Area; Future prospects) were assessed as unfavourable-inadequate, and one (Structure and functions) as unknown. The overall conservation status for the region has changed from the previous reporting from unknown to unfavourable-inadequate. This change is not genuine, but is due to the use of different methods (Spain, France, and Italy), and better data or improved knowledge (Cyprus).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
CY	3	0	0	≈3	0.05	0	0	≈0.05	FV	FV	FV		XX	b1
GR	21.10	0	0	>21.10	21.10	3.9	0	>21.10	FV	U1	U1	N/A	U1	
ES	85853	45.4	+	>85853	258	47.4	x	>258	XX	U1	U1	=	XX	c1
FR	11300	6	0	≈11300	56.70	10.4	0	≈56.70	U1	U2	U2	-	U1	c1
IT	71200	37.6	0	>71200	208.63	38.3	0	>208.63	U1	U1	U1	-	FV	c1
PT	20900	11	0	≈20900	N/A	N/A	x	≈	U1	FV	U1	=	FV	e

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	189277	1	+	>189277	544	2GD	x	>544	2GD	2GD	MTX	-	XX	no	C	-

Legend: MS – Member State; Overall asses – Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole biogeographical region; Ref. – reference value; Struct & func. – Structure and functions; Future prosp. – Future prospects; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1 – target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable-inadequate	U2	Unfavourable-bad	XX	Unknown

Trend	0 = stable; + = increase; - = decrease; x = unknown
Qualifier	= stable; + positive; - negative; x unknown
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomical review; c1 – due to different methods to measure or evaluate; c2 – due to use of different thresholds; d – no information about nature of change; e – due to less accurate or absent data; nc – no change
Target 1 contribution	A – favourable assessments; B – improved assess.; C – deteriorated assessments; D – unfavourable and unknown assessments that did not change; E – assessments that became unknown.

Pressures, threats and proposed measures

The Member Countries reported a broad range of pressures; the most important are pollution to surface waters, invasive non-native species, fertilisation, and modification of hydrographic functioning. Other important pressures include drying out, human induced changes in hydraulic conditions, soil pollution and solid waste, and use of biocides, hormones and chemicals.

Code	Pressure name	CY	ES	FR	IT	PT
A01	Cultivation		M			
A02	Modification of cultivation practices		M			
A04	Grazing		L			
A05	Livestock farming and animal breeding (without grazing)		L			
A07	Use of biocides, hormones and chemicals			M	M	
A08	Fertilisation		M	H	M	
A09	Irrigation		M			
A10	Restructuring agricultural land holding		M			
D01	Roads, paths and railroads		M			
D03	Shipping lanes, ports, marine constructions			L		
E03	Discharges				M	
F01	Marine and Freshwater Aquaculture			L		
F02.03	Leisure fishing		M			
G05.01	Trampling, overuse		M			
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	M	H	H	M	
H01.01	Pollution to surface waters by industrial plants					L
H01.05	Diffuse pollution to surface waters due to agricultural and forestry activities					M
H01.08	Diffuse pollution to surface waters due to household sewage and waste waters					L
H02	Pollution to groundwater (point sources and diffuse sources)		M			
H05	Soil pollution and solid waste (excluding discharges)				H	
H07	Other forms of pollution		M			
I01	Invasive non-native species		M	H		H
J02	Human induced changes in hydraulic conditions	L		H		
J02.01.03	Infilling of ditches, dykes, ponds, pools, marshes or pits				M	
J02.03.02	Canalisation				M	
J02.04	Flooding modifications	L				
J02.05	Modification of hydrographic functioning, general	L	H			L
J02.05.02	Modifying structures of inland water courses				M	
J02.07	Water abstractions from groundwater				M	
J02.15	Other human induced changes in hydraulic conditions				M	
K01	Abiotic (slow) natural processes			L		
K01.01	Erosion		M			
K01.02	Silting up		M			
K01.03	Drying out		H			
K02	Biocenotic evolution, succession		M	L		
K03	Interspecific faunal relations			L		
K04	Interspecific floral relations			M		
K05	Reduced fecundity/ genetic depression		M			

Legend: **L** Low intensity **M** Medium intensity H High intensity

The establishment of protected areas/sites and legal protection of habitats and species are the most important proposed measures. Other important measures are restoring/improving water quality, and restoring/improving the hydrological regime.

Code	Measure name	CY	ES	FR	IT	PT
1.2	Measures needed, but not implemented					NA
1.3	No measure known/ impossible to carry out specific measures			M		
2.0	Other agriculture-related measures		L			
2.2	Adapting crop production			M		
4.0	Other wetland-related measures		L			
4.1	Restoring/improving water quality		L	M	H	
4.2	Restoring/improving the hydrological regime		L	M	H	
4.3	Managing water abstraction		L			
4.4	Restoring coastal areas		L			
6.1	Establish protected areas/sites	H	H		H	
6.3	Legal protection of habitats and species	H	H		H	
6.4	Manage landscape features		L			
8.1	Urban and industrial waste management	M	L			

Legend: **L** Low importance **M** Medium importance **H** High importance

Reason for selection as "Low Hanging Fruit" (LHF) habitat in the Mediterranean region

Applying the methodology to identify LHF habitats in the Mediterranean region, habitat 3150 reached an LHF score of 8.58. This habitat type was classified as LHF because to achieve improvement, it is sufficient to change from a decreasing to a stable trend in the category U1 (unfavourable-inadequate). It is normally much easier to improve a trend than to achieve a change in category. Other reasons for including the habitat type as LHF are its significant representation in Natura 2000 sites and the fact that the trend of only one parameter (Structure & functions) in one country (Italy) needs to be changed in order to achieve overall improvement.

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure in Italy is sufficient. Further improvement could be achieved by improving habitat structure in Italy and Portugal, and increasing the habitat area by habitat restoration in Greece, Spain, and Italy. The main measures should include restoration or improvement of the water quality and hydrological regime, but this is a fairly demanding task because of the complexity of these issues. Measures for reduction of water pollution from agriculture (fertilisation, use of biocides) are important; and measures for urban and industrial waste management and water abstraction reduction are also relevant. Other proposed measures are establishment of protected sites and legal protection of habitat. Better information about habitat structure and functioning is needed in Spain.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3150&region=MED

3170 Mediterranean temporary ponds

X	Selected for first round of Biogeographical Seminar
	Selected using “Low hanging fruit” approach

Habitat summary

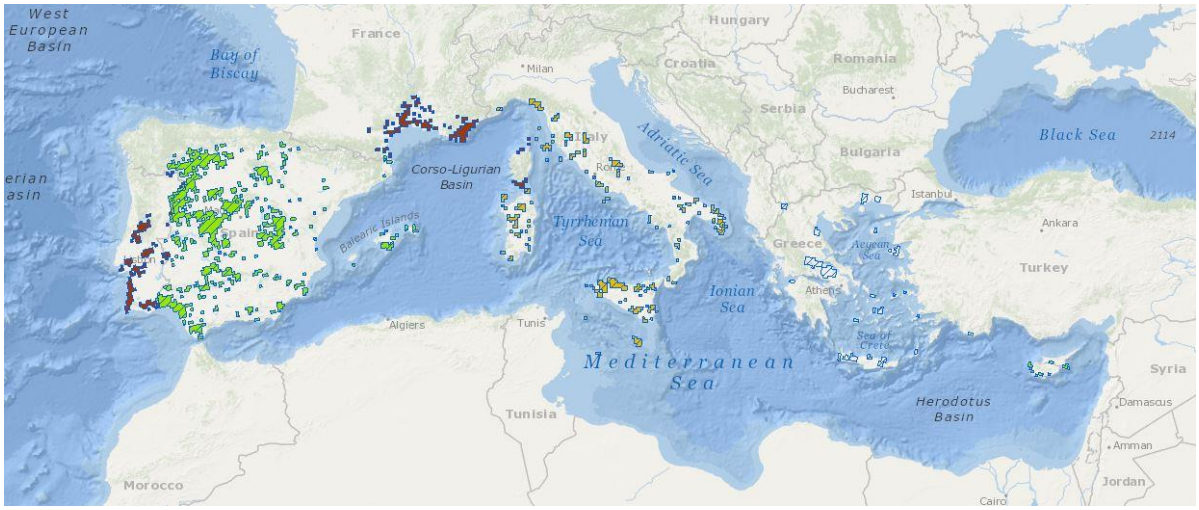
The overall conservation status in the Mediterranean region is unfavourable - inadequate due to the assessments of Italy and Malta. In the Mediterranean biogeographic region, the habitat is widespread in Spain, it also occurs in Portugal, France, Italy, Malta, Greece, and Cyprus. Around 77% of the habitat area is located in Spain. Improvement of habitat structure in four countries (France, Italy, Malta, and Portugal) and increase of the habitat area by habitat restoration in three countries (France, Italy, and Portugal) are needed. Better information about habitat area is needed in Spain.
Temporary ponds show a high degree of variability and their management must be adapted to the specific conditions of each. The conservation management usually includes adequate grazing management, control of agricultural activities in the surrounding catchment area and control of invasive alien species. The countries identified legal protection of habitats and species, and establishing protected sites as the most important measures. Other important measures are maintenance of open habitats, adaptation of forest management, management of landscape features, regulation/management of hunting and taking, specific management of traffic and energy transport systems. Management recommendations are to be made at the level of the hydrological unit of the pond: to maintain hydrological functioning and maintain a regime of (non-intensive) disturbance through grazing where possible.

Habitat description

Small, very shallow temporary ponds (a few centimetres deep), which undergo a periodic cycle of flooding and drought – they exist only in winter or late spring. This alternation promotes a very characteristic and particular fauna and flora. The flora is mainly composed of Mediterranean therophytic and geophytic species belonging to the alliances *Isoëtion, Nanocyperion flavescentis, Preslion cervinae, Agrostion salmanticae, Heleochloion* and *Lythrion tribracteati*. Small crustaceans that have a very short life cycle are a typical component of the fauna, with some species living exclusively in these ponds.

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain, it also occurs in Portugal, France, Italy, Malta, Greece and Cyprus. The representation of the habitat in Natura 2000 sites is quite high (ca 59%). In France 100% of the national habitat area is located in Natura 2000, large parts also in Italy (97%) and Malta (73%).



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
Cyprus	0	52.0	4
France	55	100.0	64
Greece	0	0.0	34
Italy	26	97.0	145
Malta	62	73.0	9
Portugal	0	N/A	41
Spain	283	51.0	241
Total	426	59	538

The table shows size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographic region ("coverage") as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The overall conservation status of this habitat type in the Mediterranean biogeographical region is unfavourable - inadequate due to assessments of Italy and Malta. This conclusion was reached despite the favourable status in three countries (Cyprus, Greece, and Spain). France and Portugal reported an unfavourable – bad conservation status. On the biogeographical level, three parameters (Range; Structure and Functions; Future prospect) were assessed as unfavourable - inadequate, the last one (Area) as unknown. The overall conservation status for the region has been changed since the previous reporting from unknown to unfavourable – inadequate. This change is considered not genuine, because it is due to better data, different methods and threshold used. Only Portugal indicated genuine change (from unfavourable – inadequate to unfavourable – bad).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
CY	15.50	0	+	15.50	0.03	0	+	0.03	FV	FV	FV		U1+	b1
GR	1.02	0	0	1.02	1.02	0.1	0	1.02	FV	XX	FV		FV	
ES	74897	40.5	+	x	560	76.9	x	x	FV	FV	FV		XX	c1
FR	15900	8.6	0	>15900	55	7.6	-	>55	U1	U2	U2	-	U2	nc
IT	64300	34.8	-	>64300	26.83	3.7	-	>26.83	U1	U1	U1	=	FV	c1
MT	107	0.1	0	≈107	85	11.7	0	≈85	U1	U1	U1	=	U1	c2
PT	29700	16.1	0	≈29700	N/A	N/A	-	>	U2	U1	U2	=	U1	a

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	184921	1	x	>184921	728	2GD	x	x	2GD	2GD	MTX	=	XX	no	D	=

Legend: MS – Member State; Overall asses- Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole Biogeographical Region; Ref. – reference value; Struct & func. - structure and functions; Future prosp. – future prospect; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1: - target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable - inadequate	U2	Unfavourable - bad	XX	Unknown

Trend	0 = stable; + = increase; - = decrease; x = unknown
Qualifier	= stable; + positive; - negative; x unknown
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomic review; c1 – due to different methods to measure or evaluate; c2 - due to different thresholds use; d - no information about nature of change; e - due to less accurate or absent data; nc - no change
Target 1 contribution	A - favourable assessments; B - improved assess.; C - deteriorated assessments; D - unfavourable and unknown assessments that did not change; E - assessments that became unknown.

Pressures, threats and proposed measures

The countries reported several pressures with high or medium intensity. The most important seems to be human induced changes in hydraulic conditions. To other important pressures belong pollution to surface waters and groundwater, water abstractions from surface waters and groundwater, infilling of ditches, dykes, ponds, pools, marshes or pits, intensive grazing, roads, paths and railroads, urbanised areas, human settlement.

Code	Pressure name	CY	ES	FR	IT	MT	PT
A01	Cultivation		M	L			
A02	modification of cultivation practices			L			
A04	grazing		M	M			
A04.01	intensive grazing						H
A05	livestock farming and animal breeding (without grazing)		M				
A07	use of biocides, hormones and chemicals		M		M		
A08	Fertilisation		M	M	L		
A09	Irrigation			M			
B01	forest planting on open ground						M
C01	Mining and quarrying			M		M	
D01	Roads, paths and railroads			H			
D01.01	paths, tracks, cycling tracks	L					
D01.02	roads, motorways					M	
D02	Utility and service lines			M			
D05	Improved access to site					M	
E01	Urbanised areas, human habitation	M	M	M			
E02	Industrial or commercial areas			M			
E03	Discharges		M			M	
E04	Structures, buildings in the landscape			M			
G01	Outdoor sports and leisure activities, recreational activities	L		M			
G02	Sport and leisure structures			M			
G05	Other human intrusions and disturbances		L			M	
G05.01	Trampling, overuse	L					H
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)		M	M	L	M	
H01.05	diffuse pollution to surface waters due to agricultural and forestry activities						M
H02	Pollution to groundwater (point sources and diffuse sources)		H	M			
H05	Soil pollution and solid waste (excluding discharges)			M	M		
H07	Other forms of pollution		H				
I01	invasive non-native species	L	M	M			
J01	fire and fire suppression			M			
J02	human induced changes in hydraulic conditions		H	H			
J02.01	Landfill, land reclamation and drying out, general				M		
J02.01.03	infilling of ditches, dykes, ponds, pools, marshes or pits						H
J02.02.01	dredging/ removal of limnic sediments						L
J02.05.02	modifying structures of inland water courses				H		M
J02.06	Water abstractions from surface waters						H
J02.07	Water abstractions from groundwater				L		H
J02.11.01	Dumping, depositing of dredged deposits					M	
K01	abiotic (slow) natural processes		M	M		M	
K01.03	Drying out	M					
K02	Biocenotic evolution, succession		M			M	
K02.01	species composition change (succession)						M
L05	collapse of terrain, landslide		L				

Legend: L Low intensity M Medium intensity H High intensity

The legal protection of habitats and species, establishing protected areas and sites, are the most important measures proposed by almost all member countries. Other important measures are maintaining grasslands and other open habitats, adaptation of forest management, management of landscape features, regulation/management of hunting and taking, specific management of traffic and energy transport systems.

Code	Measure name	CY	ES	FR	IT	MT	PT
1.2	Measures needed, but not implemented						NA
1.3	No measure known/ impossible to carry out specific measures			M			
2.0	Other agriculture-related measures		L				L
2.1	Maintaining grasslands and other open habitats			M	H		M
2.2	Adapting crop production			M			
3.0	Other forestry-related measures		L				
3.1	Restoring/improving forest habitats				H		
3.2	Adapt forest management		H				M
4.0	Other wetland-related measures			M			M
4.1	Restoring/improving water quality		M	M			
4.2	Restoring/improving the hydrological regime		H	M			
4.3	Managing water abstraction						H
6.0	Other spatial measures		L				
6.1	Establish protected areas/sites	H	H		H	H	
6.3	Legal protection of habitats and species	H	H		M	H	
6.4	Manage landscape features		M			H	
7.0	Other species management measures		M				
7.1	Regulation/ Management of hunting and taking					H	
8.2	Specific management of traffic and energy transport systems		H				

Legend: L Low importance M Medium importance H High importance

Reason of selection for the first Mediterranean seminar

The habitat type was selected for the first Mediterranean seminar because of its high value of the Priority index. The habitat reached score 63 because of high values for criterion A. The habitat occurs in 7 countries (criterion A). The unfavourable - bad overall conservation status reported two countries (France and Portugal) and unfavourable - inadequate status two countries. Countries also reported negative trends in three cases.

The Priority Index was calculated using information from the reports of Member States based on requirements of the Article 17 of the Habitats Directive for period 2001-2006. It is based on three parameters: A) Number of Member States where habitat type is present; B) Unfavourable conservation status of the habitat type (U2 – 2 points; U1 & XX – 1 point each), and C) Trend information: number of negative trends for parameters “Area of the habitat type” and qualifiers for “Structure & functions”. The index is then calculated using formula: A*(B+C).

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure in four countries (France, Italy, Malta, and Portugal) and increase of the habitat area by habitat restoration in three countries (France, Italy, and Portugal) are needed. Better information about habitat area is needed in Spain.

Temporary ponds show a high degree of variability and their management must be adapted to the specific conditions of each. Detailed site specific analysis of each pond should be carried out to determine the precise management measures required. The conservation management usually includes adequate grazing management, control of agricultural activities in the surrounding catchment

area and control of invasive alien species (Ruiz 2008). The main measures identified as important are legal protection of habitats and species, and establishing protected sites. Other important measures are maintenance of open habitats, adaptation of forest management, management of landscape features, regulation/management of hunting and taking, specific management of traffic and energy transport systems.

Management recommendations are to be made at the level of the hydrological unit of the pond: to maintain hydrological functioning and maintain a regime of disturbance through grazing where possible. The alternation of a dry phase and an aquatic phase is a key element in conserving the heritage value of temporary marshes. When it still exists, this alternation must be preserved: if the water regime is controlled by humans, management objectives must be defined since the dates and duration of flooding determine the plant communities obtained (INPN).

Grazing by sheep of low intensity should be encouraged. Grazing can facilitate the maintenance of this habitat by limiting the progression of woody and perennial herbaceous plants. It must remain moderate because overexploitation could modify the habitat structure. Historically, sheep grazing has been replaced by cattle grazing, the consequences for this type of habitat are unknown (INPN).

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3170&region=MED

ICNB: 3170 Charcos temporários mediterrânicos* - http://www.icnf.pt/portal/pn/biodiversidade/rn2000/resource/docs/rn-plan-set/hab/hab-3170

INPN: 3170 Mares temporaires méditerranéennes* - https://inpn.mnhn.fr/site/natura2000/habitat/3170/cahiers-habitats

Ruiz E., 2008: Management of Natura 2000 habitats. 3170 *Mediterranean temporary ponds. - European Commission (DG ENV B2), Brussels, 23 pp.

3230 Alpine rivers and their ligneous vegetation with *Myricaria germanica*

	Selected for first round of Biogeographical Seminar
X	Selected using “Low hanging fruit” approach

Habitat summary

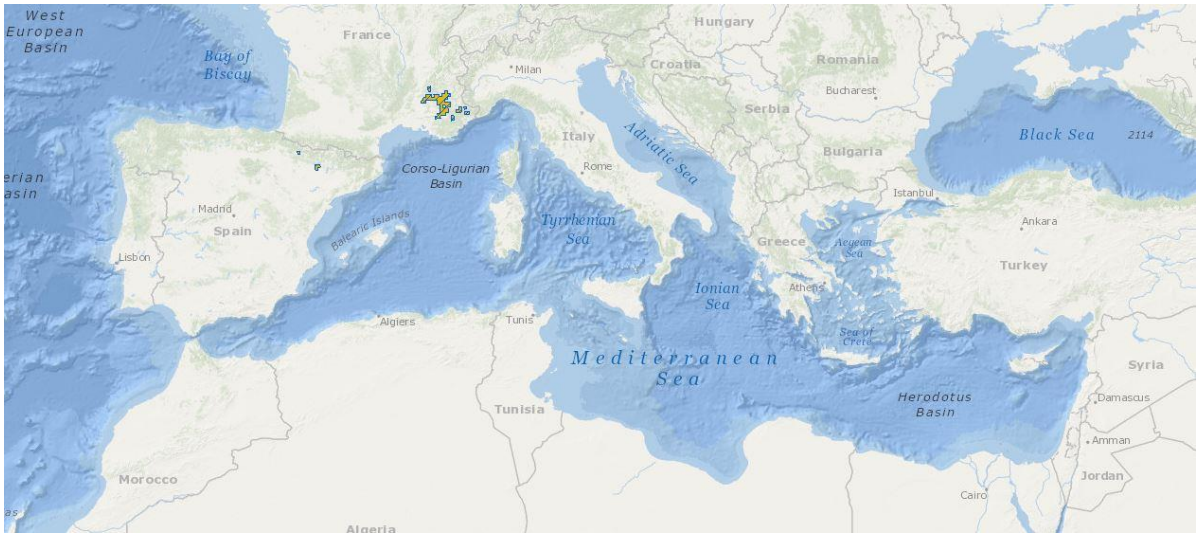
The assessments of Spain and France led to the overall conservation status in the Mediterranean region being unfavourable-inadequate. The habitat occurs in the Mediterranean biogeographical region in France and Spain. Around 78 % of the habitat area is located in France.
Improvement of the habitat structure and functioning in both France and Spain is needed. The main measures should be focused on maintenance of natural dynamics and natural hydrological regime and its restoration where changed as well as on control of gravel extraction. Relevant measures are exclusion of channel regulation, removal of dykes, embankments, weirs and other structures modifying water regime, and strict control of water abstraction. The regulation of natural resources exploitation is necessary, especially control or elimination of gravel extraction - including in upstream areas. The habitat restoration is needed in Spain, which reported a smaller habitat area than the reference value. Better information about habitat range is needed in Spain.

Habitat description

Communities of low shrubby pioneers invading the herbaceous formations of 24.221 (Boreo-alpine stream gravel communities) and 24.222 (Montane river gravel communities) on gravel deposits rich in fine silt, of mountain and northern boreal streams with an alpine, summer-high, flow regime. *Myricaria germanica* and *Salix* spp. are characteristic (*Salici-Myricarietum*).

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type occurs in France and Spain. The overall representation of the habitat in Natura 2000 sites is high (ca 92 %) because in Spain the entire national habitat area is located in Natura 2000 sites; in France a large part (92 %) of the national habitat area is located in Natura 2000 sites.



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
France	7	92	7
Spain	2.13	100	9
Total	**9**	**92**	16

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographical region ('coverage') as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The assessments of both Spain and France led to the overall conservation status of this habitat type in the Mediterranean biogeographical region being unfavourable–inadequate. All parameters (Range; Area; Structure and functions; Future prospects) were assessed as unfavourable-inadequate at the biogeographical region level. The overall conservation status for the region has changed from the previous reporting from unfavourable-bad to unfavourable-inadequate. This change is not genuine, but is due to better data (France) and the use of different methods (Spain).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
ES	400	3.4	x	>400	2.13	21.9	-	>2.13	U1	U1	U1	x	XX	c1
FR	11200	96.6	0	≈11200	7.60	78.1	0	≈7.60	U1	U1	U1	-	U2	b1

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	11600	1	x	>11600	9.733	1	-	>9.733	0	0	MTX	-	U2	no	C	-

Legend: MS – Member State; Overall asses – Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole biogeographical region; Ref. – reference value; Struct & func. – Structure and functions; Future prosp. – Future prospects; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1 – target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable-inadequate	U2	Unfavourable-bad	XX	Unknown
Trend	0 = stable; + = increase; - = decrease; x = unknown							
Qualifier	= stable; + positive; - negative; x unknown							
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomical review; c1 – due to different methods to measure or evaluate; c2 – due to use of different thresholds; d – no information about nature of change; e – due to less accurate or absent data; nc – no change							
Target 1 contribution	A – favourable assessments; B – improved assess.; C – deteriorated assessments; D – unfavourable and unknown assessments that did not change; E – assessments that became unknown.							

Pressures, threats and proposed measures

Spain and France reported some pressures; important pressures reported by both countries are pollution to surface waters and invasive non-native species. Other important pressures are mining and quarrying, sand and gravel extraction, human induced changes in hydraulic conditions, canalisation and water deviation, modification of hydrographic functioning, fertilisation, roads, paths and railroads, and flooding modifications.

Code	Pressure name	ES	FR
A04	Grazing		L
A08	Fertilisation		M

Code	Pressure name	ES	FR
C01	Mining and quarrying		H
C01.01	Sand and gravel extraction	H	
D01	Roads, paths and railroads	M	
D05	Improved access to site	L	
E01	Urbanised areas, human habitation		M
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	L	M
I01	Invasive non-native species	M	M
J02	Human induced changes in hydraulic conditions		H
J02.03	Canalisation & water deviation	H	
J02.04	Flooding modifications	M	
J02.05	Modification of hydrographic functioning, general	H	
J02.11	Siltation rate changes, dumping, depositing of dredged deposits	L	
M01	Changes in abiotic conditions		L

Legend: L Low intensity M Medium intensity H High intensity

The countries did not report specific measures to be implemented.

Code	Measure name	ES	FR
1.2	Measures needed, but not implemented	NA	
1.3	No measure known/ impossible to carry out specific measures		M

Legend: L Low importance M Medium importance H High importance

Reason for selection as "Low Hanging Fruit" (LHF) habitat in the Mediterranean region

Applying the methodology to identify LHF habitats in the Mediterranean region, habitat 3230 reached an LHF score of 4.26. This habitat type was classified as LHF because to achieve improvement it is sufficient to change from a decreasing to a stable trend in the category U1 (unfavourable-inadequate). It is normally much easier to improve a trend than to achieve a change in category. Other reasons for including the habitat type as LHF were its significant representation in Natura 2000 sites and the fact that the trend of only one parameter (Structure & functions) in one country (France) needs to be improved in order to achieve overall improvement.

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure and functioning in both France and Spain is needed. The main measures should be focused on maintenance of natural dynamics and natural hydrological regime and its restoration where changed as well as on control of gravel extraction. Relevant measures are: exclusion of channel regulation, removal of dykes, embankments, weirs and other structures modifying water regime, and strict control of water abstraction. The regulation of natural resources exploitation is necessary, especially control or elimination of gravel extraction - including in upstream areas. Habitat restoration is needed in Spain, which reported a smaller habitat area than the reference value. Better information about habitat range is needed in Spain.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3230&region=MED

3240 Alpine rivers and their ligneous vegetation with *Salix elaeagnos*

	Selected for first round of Biogeographical Seminar
X	Selected using “Low hanging fruit” approach

Habitat summary

The assessments of Spain and France led to the overall conservation status in the Mediterranean region being unfavourable-inadequate. The habitat is widespread in the Mediterranean biogeographical region in Spain and France; it also occurs in Italy and Greece. Around 58 % of the habitat area is located in France.

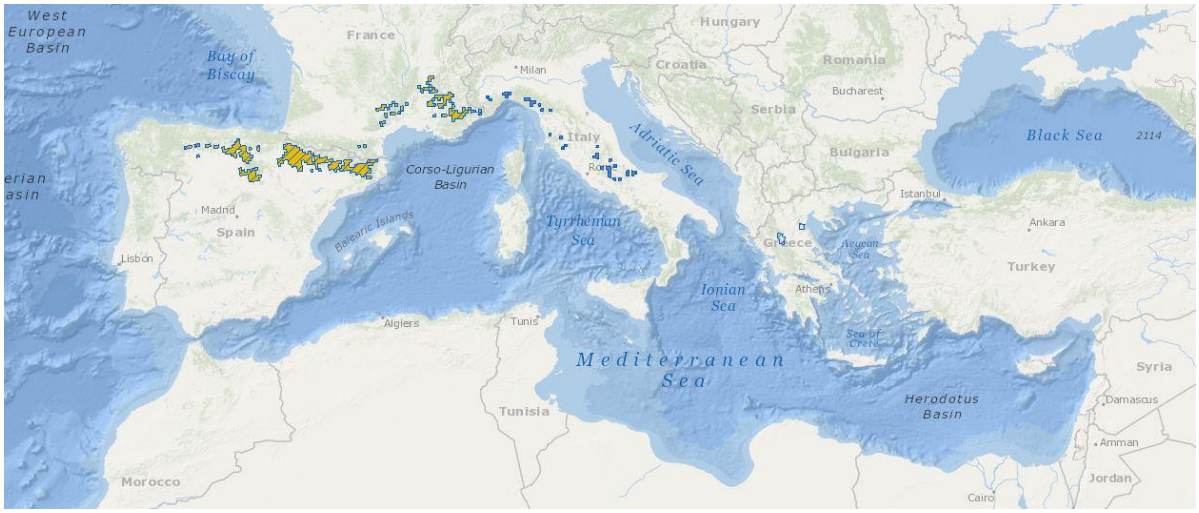
Improvement of habitat structure and functioning in Spain is needed. The main measures should include restoration or improvement of the hydrological regime and water quality, managing water abstraction, restoring coastal areas, and legal protection of habitat. Better information about habitat structure and functioning is needed in Spain and Italy.

Habitat description

Thickets or woods of, among others, *Salix* spp., *Hippophae rhamnoides*, *Alnus* spp., *Betula* spp., on stream gravels of mountain and northern boreal streams with an alpine, summer-high, flow regime. Formations of *Salix elaeagnos*, *Salix purpurea* ssp. *gracilis*, *Salix daphnoides*, *Salix nigricans* and *Hippophae rhamnoides* of higher gravel shoals in Alpine and peri-Alpine valleys.

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain and France. It also occurs in Italy and Greece. The overall representation of the habitat in Natura 2000 sites is not very high (ca 45 %). This is mainly due to the area of this habitat in Natura 2000 sites in France (27–36 %) and Greece. The national habitat area located in Natura 2000 sites is larger in Italy (70 %) and Spain (63 %).



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
France	12-16	27-36	35
Greece	0	0	3
Italy	1.57	70	18
Spain	19	63	74
Total	**33-37**	**45**	130

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographical region (‘coverage’) as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The assessments of Spain and France led to the overall conservation status of this habitat type in the Mediterranean biogeographical region being unfavourable-inadequate. Greece reported favourable and Italy unknown conservation status. There is insufficient information on habitat structure and functioning from Spain and Italy; both countries reported this parameter as unknown. At the biogeographical region level, two parameters (Range; Area) were assessed as favourable; Future prospects was assessed as unfavourable-inadequate; and Structure and functions as unknown. The overall conservation status for the region has changed from the previous reporting from unknown to unfavourable-inadequate. This change is not genuine, but is due to the use of different methods (Spain), and better data (France).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
GR	0.47	0	0	0.47	0.47	0.6	0	0.47	FV	XX	FV		FV	
ES	41781	56.8	+	≈41781	30	38.6	0	≈30	XX	U1	U1	=	XX	c1
FR	24400	33.2	0	≈24400	45	57.9	0	≈45	FV	U1	U1	=	FV	b1
IT	7400	10.1	0	≈7400	2.23	2.9	0	≈2.23	XX	XX	XX		FV	d

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	73581	0	+	73581	78	0	0	78	2XA	2XA	MTX	=	XX	no	D	=

Legend: MS – Member State; Overall asses – Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole biogeographical region; Ref. – reference value; Struct & func. – Structure and functions; Future prosp. – Future prospects; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1 – target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable-inadequate	U2	Unfavourable-bad	XX	Unknown

Trend	0 = stable; + = increase; - = decrease; x = unknown
Qualifier	= stable; + positive; - negative; x unknown
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomical review; c1 – due to different methods to measure or evaluate; c2 – due to use of different thresholds; d – no information about nature of change; e – due to less accurate or absent data; nc – no change
Target 1 contribution	A – favourable assessments; B – improved assess.; C – deteriorated assessments; D – unfavourable and unknown assessments that did not change; E – assessments that became unknown.

Pressures, threats and proposed measures

The Member Countries reported several pressures, the most important are invasive non-native species, irrigation, sand and gravel extraction, renewable abiotic energy use, human induced changes in hydraulic conditions, and canalisation and water deviation. Other important pressures include pollution to surface waters, roads, paths and railroads, urbanised areas, human habitation, cultivation, fertilisation, and use of biocides, hormones and chemicals.

Code	Pressure name	ES	FR	IT
A01	Cultivation	M		
A07	Use of biocides, hormones and chemicals	M		
A08	Fertilisation	M		
A09	Irrigation	H		
A10	Restructuring agricultural land holding	M		
B01	Forest planting on open ground	M		
C01	Mining and quarrying		M	

Code	Pressure name	ES	FR	IT
C01.01	Sand and gravel extraction	H		
C03	Renewable abiotic energy use		H	
D01	Roads, paths and railroads	M	M	
D01.04	Railway lines, TGV			M
D02	Utility and service lines		M	
D05	Improved access to site	M		
E01	Urbanised areas, human habitation	M	L	
E02	Industrial or commercial areas		L	
F02.03	Leisure fishing	M		
G01	Outdoor sports and leisure activities, recreational activities		M	
G01.02	Walking, horseriding and non-motorised vehicles			L
G02	Sport and leisure structures	M		
G02.08	Camping and caravans	M		
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	M	M	
I01	Invasive non-native species	L	H	
J02	Human induced changes in hydraulic conditions		H	
J02.03	Canalisation & water deviation	H		
J02.04	Flooding modifications	M		
J02.05	Modification of hydrographic functioning, general	M		
J02.11	Siltation rate changes, dumping, depositing of dredged deposits	M		
K01.01	Erosion	M		
K02	Biocenotic evolution, succession		M	
M01	Changes in abiotic conditions		M	

Legend: L Low intensity M Medium intensity H High intensity

Spain, France, and Italy consider other wetland-related measures to be important. According to Italy, legal protection of habitats and species is the most important proposed measure. Other important measures are managing water abstraction, restoring coastal areas, restoring/improving the hydrological regime and water quality, and other spatial measures.

Code	Measure name	ES	FR	IT
4.0	Other wetland-related measures	L	M	M
4.1	Restoring/improving water quality	L		
4.2	Restoring/improving the hydrological regime	L		
4.3	Managing water abstraction	L		
4.4	Restoring coastal areas	L		
6.0	Other spatial measures			M
6.3	Legal protection of habitats and species			H
7.2	Regulation/ Management of fishery in limnic systems	L		
7.4	Specific single species or species group management measures	L		
8.1	Urban and industrial waste management	L		

Legend: L Low importance M Medium importance H High importance

Reason for selection as "Low Hanging Fruit" (LHF) habitat in the Mediterranean region

Applying the methodology to identify LHF habitats in the Mediterranean region, habitat 3240 reached an LHF score of 4.45. This habitat type was classified as LHF because to achieve improvement it is sufficient to change from a stable to an improving trend in the category U1 (unfavourable-inadequate). It is normally much easier to improve a trend than to achieve a change in category. Another reason for including the habitat type as LHF is that the trend of only one parameter (Structure & functions) in one country (Spain) needs to be improved in order to achieve overall improvement.

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure and functioning in Spain is needed. The main measures should include restoration or improvement of the hydrological regime and water quality, managing water abstraction, and restoring coastal areas. Because of the complexity of these issues, this task is quite demanding – it includes measures such as control of water abstraction or irrigation, elimination of water deviation, removal of the flow regulating structures, control of grazing, fertilisation, and chemicals use in agriculture. The removal of invasive species, removal and prevention of waste disposal, and the regulation of sport and recreational activities are other supporting measures. The legal protection of habitat is in this respect helpful, facilitating and supporting all of the measures mentioned. Better information about habitat structure and functioning is needed in Spain and Italy.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3240&region=MED

3250 Constantly flowing Mediterranean rivers with *Glaucium flavum*

	Selected for first round of Biogeographical Seminar
X	Selected using “Low hanging fruit” approach

Habitat summary

The assessments of Spain, France, and Italy led to the overall conservation status in the Mediterranean region being unfavourable-inadequate. The habitat is widespread in the Mediterranean biogeographical region in Spain and Italy; it also occurs in Portugal, France, and Greece. Around 44 % of the habitat area is located in Italy, and around 43 % in Spain.

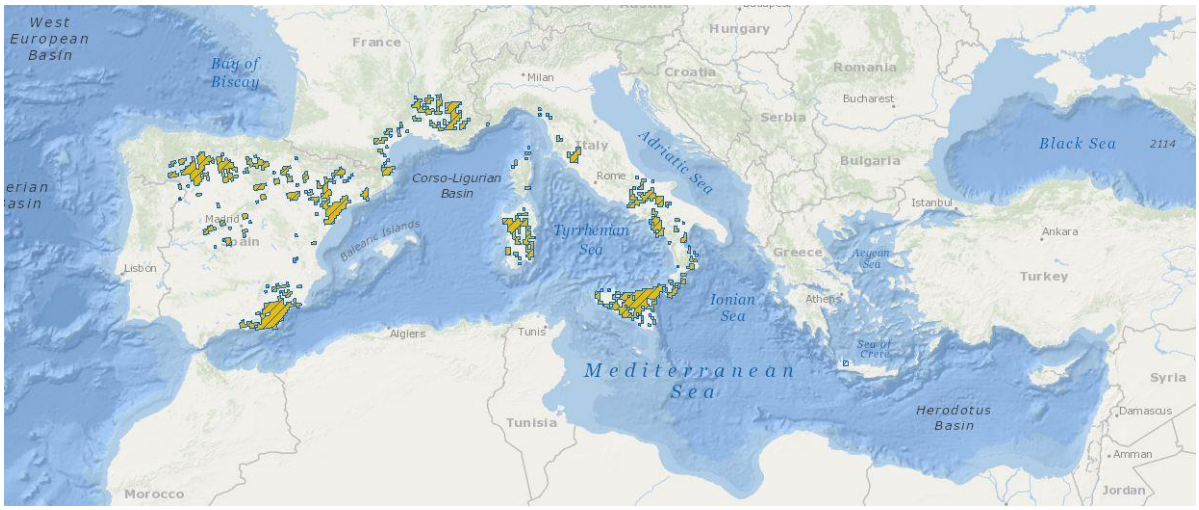
Improvement of the habitat structure in Italy is needed. Further improvement could be achieved by improving structure and functioning in Portugal, Spain, and France. The main measures should include establishment of protected sites, legal protection of habitat, restoration or improvement of the hydrological regime, and regulating exploitation of natural resources. Habitat restoration is needed in Spain and France, which both reported a smaller habitat area than the reference value. Better information about habitat range and area is needed in Portugal.

Habitat description

Communities colonising gravel deposits of rivers with a Mediterranean, summer-low regime, with formations of the *Glaucion flavi*. The habitat is characterised by the alternation of flooding and marked summer dryness.

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain and Italy. It also occurs in Portugal, France, and Greece. The overall representation of the habitat in Natura 2000 sites is ca 64 %. The entire national habitat area is located in Natura 2000 sites in France; this is also the case for a large part in Spain (68 %).



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
France	59	100	27
Greece	0	0	1
Italy	93	47	51
Portugal	5.6	N/A	3
Spain	130	68	141
Total	**287**	**64**	223

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographical region (‘coverage’ as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The assessments of Spain, France, and Italy led to the overall conservation status of this habitat type in the Mediterranean biogeographical region being unfavourable-inadequate. Portugal reported unfavourable-bad and Greece favourable conservation status. The knowledge of the habitat range and area is not sufficient in Portugal. At the biogeographical region level, the parameter Range was assessed as favourable, while the other three parameters (Area; Structure and functions; Future prospects) were assessed as unfavourable-inadequate. The overall conservation status for the region has changed from the previous reporting from unknown to unfavourable-inadequate. This change is not genuine, but is due to the use of different methods (Spain and Italy).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
GR	0.09	0	0	0.09	0.09	0	0	0.09	FV	XX	FV		FV	
ES	96933	50.6	+	≈96933	190	42.6	0	>190	U1	U1	U1	=	XX	c1
FR	14500	7.6	0	≈14500	58.60	13.1	0	>58.60	U1	U1	U1	=	U1	nc
IT	80100	41.8	0	≈80100	197.55	44.3	0	≈197.55	U1	U1	U1	-	FV	c1
PT	100	0.1	0	x	N/A	N/A	0	x	U2	XX	U2	=	U2	nc

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	191633	1	+	191533	446	1	0	>446	2XA	2XA	MTX	-	XX	no	C	-

Legend: MS – Member State; Overall asses – Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole biogeographical region; Ref. – reference value; Struct & func. – Structure and functions; Future prosp. – Future prospects; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1 – target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable-inadequate	U2	Unfavourable-bad	XX	Unknown

Trend	0 = stable; + = increase; - = decrease; x = unknown
Qualifier	= stable; + positive; - negative; x unknown
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomical review; c1 – due to different methods to measure or evaluate; c2 – due to use of different thresholds; d – no information about nature of change; e – due to less accurate or absent data; nc – no change
Target 1 contribution	A – favourable assessments; B – improved assess.; C – deteriorated assessments; D – unfavourable and unknown assessments that did not change; E – assessments that became unknown.

Pressures, threats and proposed measures

The Member Countries reported a broad range of pressures. Three countries highlighted sand and gravel extraction as the most important one. Other highly important pressures include urbanised areas, human habitation, mining and quarrying, renewable abiotic energy use, soil pollution and solid waste (excluding discharges), human induced changes in hydraulic conditions, and canalisation and water deviation.

Code	Pressure name	ES	FR	IT	PT
A01	Cultivation	M			
A07	Use of biocides, hormones and chemicals	M		M	
A08	Fertilisation	M		M	
B02	Forest and Plantation management & use		L		
C01	Mining and quarrying		H		
C01.01	Sand and gravel extraction	H		M	H

Code	Pressure name	ES	FR	IT	PT
C03	Renewable abiotic energy use		H		
D01	Roads, paths and railroads	M			M
D02	Utility and service lines		L		
D05	Improved access to site	M			
E01	Urbanised areas, human habitation	H		M	
E03	Discharges		L	M	
E05	Storage of materials		M		
F02.03	Leisure fishing	M			
G01	Outdoor sports and leisure activities, recreational activities				L
G01.03	Motorised vehicles				M
G02	Sport and leisure structures	M			
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	M		M	
H05	Soil pollution and solid waste (excluding discharges)			H	
I01	Invasive non-native species	M	M		
J02	Human induced changes in hydraulic conditions		H		
J02.02.01	Dredging/ removal of limnic sediments	M			
J02.03	Canalisation & water deviation	H			
J02.04	Flooding modifications	M			
J02.05	Modification of hydrographic functioning, general	M		M	
J02.05.02	Modifying structures of inland water courses				M
J02.11	Siltation rate changes, dumping, depositing of dredged deposits	M			
K01.01	Erosion	M			
K02	Biocenotic evolution, succession		M		

Legend: L Low intensity M Medium intensity H High intensity

The establishment of protected areas/sites, and legal protection of habitats and species are the most important proposed measures. Other important measures are restoring/improving the hydrological regime, other spatial measures, and regulating/management exploitation of natural resources on land.

Code	Measure name	ES	FR	IT	PT
1.2	Measures needed, but not implemented				NA
1.3	No measure known/ impossible to carry out specific measures		M		
2.2	Adapting crop production	M			
3.1	Restoring/improving forest habitats	L			
4.0	Other wetland-related measures	M			
4.1	Restoring/improving water quality	M	M		
4.2	Restoring/improving the hydrological regime	H	M		
4.3	Managing water abstraction	L			
4.4	Restoring coastal areas	L			
6.0	Other spatial measures	M		H	
6.1	Establish protected areas/sites	H		H	
6.3	Legal protection of habitats and species	H		H	
6.4	Manage landscape features	M			
7.0	Other species management measures	M			
7.4	Specific single species or species group management measures	M			
8.1	Urban and industrial waste management	M			
9.1	Regulating/Management exploitation of natural resources on land	M			H

Legend: L Low importance M Medium importance H High importance

Reason for selection as “Low Hanging Fruit” (LHF) habitat in the Mediterranean region

Applying the methodology to identify LHF habitats in the Mediterranean region, habitat 3250 reached an LHF score of 16.18. This habitat type was classified as LHF because to achieve improvement it is sufficient to change from a declining to a stable trend in the category U1 (unfavourable-inadequate). It is normally much easier to improve a trend than to achieve a change in category. Other reasons for including the habitat type as LHF are its quite significant representation in Natura 2000 sites and the fact that the trend of only one parameter (Structure & functions) in one country (Italy) needs to be improved in order to achieve overall improvement.

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure in Italy is needed. Further improvement could be achieved by improving structure and functioning in Portugal, Spain, and France. The main measures should include establishment of protected sites, legal protection of habitat, restoration or improvement of the hydrological regime, and regulating exploitation of natural resources. The habitat is strongly linked to the torrential dynamics, and the protection of the hydrosystem and its dynamics is crucial; it is important to avoid watercourse regulation. In case of exploitation in neighbouring riparian forests, all necessary precautions should be taken to avoid deterioration of this habitat. Habitat restoration is needed in Spain and France, both of which reported a smaller habitat area than the reference value. For residual, linear habitats, possible restoration work can be undertaken by reconstructing the habitat behind the habitat line, by taking plant material in situ. Better information about habitat range and area is needed in Portugal.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3250&region=MED

Anonymous: Végétation pionnière des rivières méditerranéennes à Glaucière jaune et Scrophulaire des chiens. https://inpn.mnhn.fr/site/natura2000/habitat/3250/cahiers-habitats

3280 Constantly flowing Mediterranean rivers with *Paspalo-Agrostidion* species and hanging curtains of *Salix* and *Populus alba*

	Selected for first round of Biogeographical Seminar
X	Selected using “Low hanging fruit” approach

Habitat summary

Spain’s assessment led to the overall conservation status in the Mediterranean region being unfavourable-inadequate. The habitat is widespread in the Mediterranean biogeographical region in Spain and Italy; it also occurs in Portugal, France, and Greece. Around 65 % of the habitat area is located in Spain.

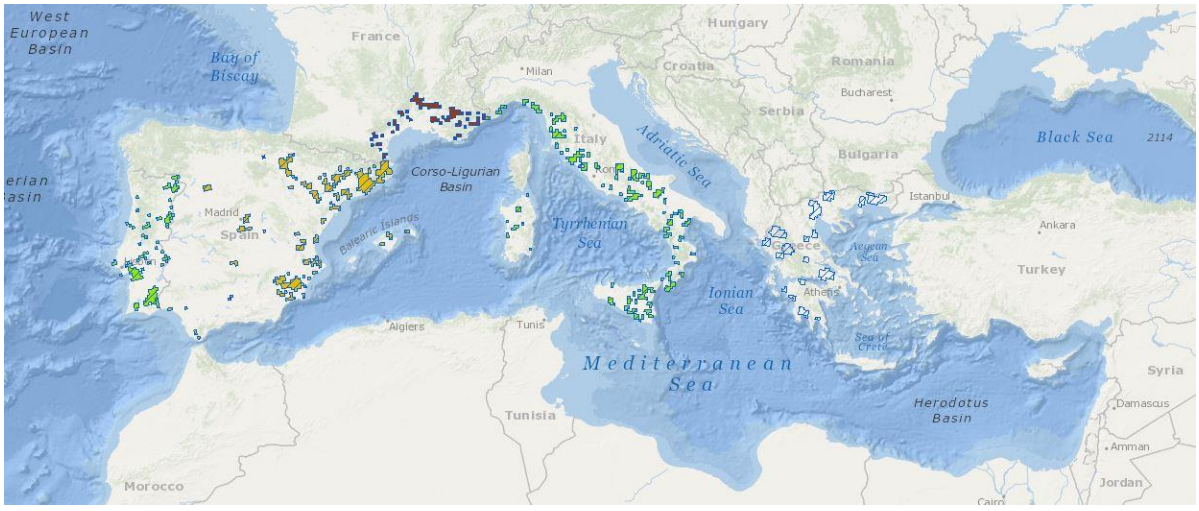
Improvement of the habitat structure in France and Spain is needed. The main measures should include establishment of protected sites, legal protection of habitat, restoring or improving the water quality and hydrological regime, and other wetland-related measures. The objective should be to maintain natural dynamics of the water course and to regulate/remove any human activity changing these dynamics. The reduction of the pollutant load of the water courses should be achieved mainly through the reinforcement of the treatment of domestic and agro-livestock effluents and the adoption of good agricultural practices, in particular as regards the use of fertilisers. The maintenance of extensive agricultural and pastoral practices, the control of ecological succession, and the removal of invasive species are important measures as well. Better information about habitat area is needed in Spain.

Habitat description

Nitrophilous annual and perennial grass and sedge formations of the alluvial banks of large Mediterranean rivers, with *Paspalum paspaloides*, *P. vaginatum*, *Polypogon viridis* (= *Agrostis semiverticillata*), *Cyperus fuscus*, and hanging curtains of *Salix* spp. and *Populus alba*.

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain and Italy. It also occurs in Portugal, France, and Greece. The habitat’s overall fairly low representation in Natura 2000 sites (ca 44 %) is due to the low area of this habitat in Natura 2000 sites in Spain (29 %) and the absence of data from Portugal. In France, the entire national habitat area is located in Natura 2000 sites; this is also the case for a large part in Italy.



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
France	16	100	26
Greece	0	0	20
Italy	66	96	128
Portugal	13	N/A	27
Spain	70	29	102
Total	**165**	**44**	**303**

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographical region ('coverage') as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The assessment of Spain led to the overall conservation status of this habitat type in the Mediterranean biogeographical region being unfavourable - inadequate. This conclusion was reached despite favourable status in Greece, Italy, and Portugal. France reported unfavourable-bad conservation status. The habitat area is insufficiently known in Spain. At the biogeographical region level, Range was assessed as favourable, two parameters (Structure and functions; Future prospects) as unfavourable-inadequate, and Area as unknown. The overall conservation status for the region has not changed from the previous reporting.

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
GR	44.30	0	0	44.30	44.30	11.9	0	44.30	FV	XX	FV		FV	
ES	58988	32.2	+	≈58988	242	65.2	x	≈242	U1	U1	U1	=	XX	c1
FR	16800	9.2	0	≈16800	16.10	4.3	0	≈16.10	U1	U2	U2	-	U1	b1
IT	73500	40.1	0	≈73500	68.89	18.6	0	≈68.89	FV	FV	FV		FV	
PT	34000	18.5	0	≈34000	N/A	N/A	+	<	FV	FV	FV		FV	

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	183332	0	+	≈183332	371	2GD	+		2GD	2GD	MTX	-	U1	nc	C	-

Legend: MS – Member State; Overall asses – Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole biogeographical region; Ref. – reference value; Struct & func. – Structure and functions; Future prosp. – Future prospects; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1 – target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable-inadequate	U2	Unfavourable-bad	XX	Unknown

Trend	0 = stable; + = increase; - = decrease; x = unknown
Qualifier	= stable; + positive; - negative; x unknown
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomical review; c1 – due to different methods to measure or evaluate; c2 – due to use of different thresholds; d – no information about nature of change; e – due to less accurate or absent data; nc – no change
Target 1 contribution	A – favourable assessments; B – improved assess.; C – deteriorated assessments; D – unfavourable and unknown assessments that did not change; E – assessments that became unknown.

Pressures, threats and proposed measures

The Member Countries reported a broad range of pressures, the most important being sand and gravel extraction, invasive non-native species, urbanised areas, human habitation, other urbanisation, industrial and similar activities, soil pollution and solid waste, and water abstractions from surface

waters. Other important pressures include use of biocides, hormones and chemicals, fertilisation, discharges, pollution to surface waters, modification of hydrographic functioning, and erosion.

Code	Pressure name	ES	FR	IT	PT
A01	Cultivation	M			
A04	Grazing	M			
A04.01	Intensive grazing				M
A07	Use of biocides, hormones and chemicals	M		M	
A08	Fertilisation	M		M	
A09	Irrigation	M			
A10	Restructuring agricultural land holding	M			
B01.02	Artificial planting on open ground (non-native trees)			M	
C01	Mining and quarrying		M		
C01.01	Sand and gravel extraction	H		M	
C03	Renewable abiotic energy use		M		
D01	Roads, paths and railroads	M			
D01.02	Roads, motorways			M	
D01.05	Bridge, viaduct			M	
D02	Utility and service lines	M			
D05	Improved access to site	M			
E01	Urbanised areas, human habitation	H			
E01.02	Discontinuous urbanisation			M	
E03	Discharges		M	M	
E05	Storage of materials		L		
E06	Other urbanisation, industrial and similar activities		H		
F02.03	Leisure fishing	M			
G02	Sport and leisure structures	M			
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	M		M	
H05	Soil pollution and solid waste (excluding discharges)			H	
I01	Invasive non-native species		H	M	
J02	Human induced changes in hydraulic conditions		H		
J02.03	Canalisation & water deviation	H			
J02.03.02	Canalisation			M	
J02.04	Flooding modifications	M			L
J02.05	Modification of hydrographic functioning, general	M		M	L
J02.05.02	Modifying structures of inland water courses			M	
J02.06	Water abstractions from surface waters	H			
J02.11	Siltation rate changes, dumping, depositing of dredged deposits	M			
K01.01	Erosion	M		M	
K02.01	Species composition change (succession)				M
K04	Interspecific floral relations		L		

Legend: L Low intensity M Medium intensity H High intensity

The establishment of protected areas/sites, and legal protection of habitats and species are the most important proposed measures. Other important measures are management of landscape features, restoring/improving water quality, restoring/improving the hydrological regime, and other wetland-related measures.

Code	Measure name	ES	FR	IT	PT
1.2	Measures needed, but not implemented				NA
2.2	Adapting crop production	M			
3.0	Other forestry-related measures	L			
3.1	Restoring/improving forest habitats	M			
4.0	Other wetland-related measures	M		M	H

Code	Measure name	ES	FR	IT	PT
4.1	Restoring/improving water quality	H	M		
4.2	Restoring/improving the hydrological regime	H	M		
4.3	Managing water abstraction	M			
4.4	Restoring coastal areas	L			
6.0	Other spatial measures	M		M	
6.1	Establish protected areas/sites	H		H	
6.3	Legal protection of habitats and species	H		H	
6.4	Manage landscape features	H			
7.0	Other species management measures	M			
7.2	Regulation/ Management of fishery in limnic systems	L			
7.4	Specific single species or species group management measures	M			
8.1	Urban and industrial waste management	M			
9.1	Regulating/Management exploitation of natural resources on land	M			

Legend: L Low importance M Medium importance H High importance

Reason for selection as "Low Hanging Fruit" (LHF) habitat in the Mediterranean region

Applying the methodology to identify LHF habitats in the Mediterranean region, habitat 3280 reached an LHF score of 5.97. This habitat type was classified as LHF because to achieve improvement it is sufficient to change from a decreasing to a stable trend in the category U1 (unfavourable-inadequate). It is normally much easier to improve a trend than to achieve a change in category. Another reason for including the habitat type as LHF is that the trend of only one parameter (Structure & functions) in one country (France) needs to be improved in order to achieve overall improvement.

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure in France and Spain is needed. The main measures should include establishment of protected sites, legal protection of habitat, restoring or improving the water quality and hydrological regime, and other wetland-related measures. The objective should be to maintain natural dynamics of the water course and to regulate/remove any human activity changing these dynamics. The reduction of the pollutant load of the water courses should be achieved mainly through the reinforcement of the treatment of domestic and agro-livestock effluents and the adoption of good agricultural practices, in particular as regards the use of fertilisers. The maintenance of extensive agricultural and pastoral practices, the control of ecological succession, and the removal of invasive species are important measures as well. Better information about habitat area is needed in Spain.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3280&region=MED

Anonymous: Rivières permanentes méditerranéennes du *Paspalo-Agrostidion* avec rideaux boisés riverains à Salix et Populus alba. https://inpn.mnhn.fr/site/natura2000/habitat/3280/cahiers-habitats

3290 Intermittently flowing Mediterranean rivers of the *Paspalo-Agrostidion*

X	Selected for first round of Biogeographical Seminar
	Selected using “Low hanging fruit” approach

Habitat summary

The overall conservation status in the Mediterranean region is unfavourable - inadequate due to the assessment of Spain and France. Four other countries reported a favourable conservation status. In the Mediterranean biogeographic region, the habitat is widespread in Portugal; it also occurs in Spain, France, Italy, Cyprus and Greece. Around 49% of the habitat area is located in Italy.
Improvement of habitat structure in Spain and France and increase of the habitat area by restoration in France are needed. The main measures should include legal protection of habitats and species and establishing of protected sites. Other important measures are urban and industrial waste management and other wetland-related measures. Better information about habitat area is needed in Spain.

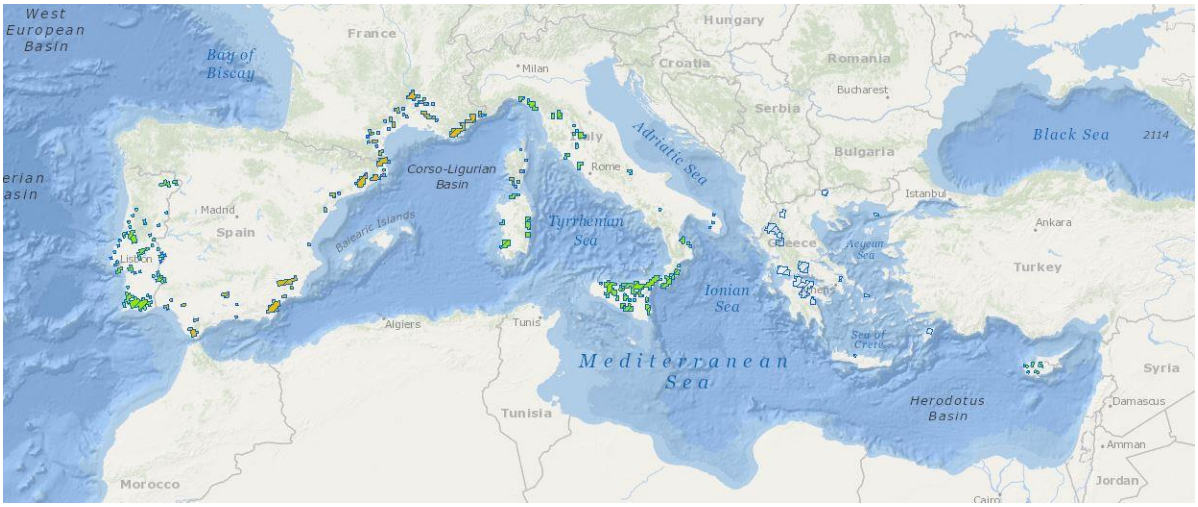
The water flow should be maintained or restored and water pumping avoided. It is important to preserve a buffer zone along the streams (banks, uncultivated area near the banks, fences to avoid trampling, erosion of banks and eutrophication by animals), to reduce pollutants. It is also important to strengthen the treatment of domestic and agro-livestock effluents and the adoption of good agricultural practices, in particular with regard to the use of fertilizers. The maintenance of extensive agricultural and pastoral practices, limitation of the flocks concentration, and control of ecological succession are other measures that are needed.

Habitat description

Intermittently flowing Mediterranean rivers with *Paspalo-Agrostidion* communities. They correspond to river type 24.53 (Mediterranean river mud communities), but with the particularity of an interrupted flow and a dry bed during a part of the year. The bed of the river can be completely dry or left with some pools.

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Portugal. It also occurs in Spain, France, Italy, Cyprus and Greece. The overall representation of the habitat in Natura 2000 sites is high. The entire national habitat area is located in Natura 2000 sites in Cyprus and France, large parts also in Italy and Spain. The more than 100% overall coverage is caused by absence of habitat area in the Article 17 reporting of Portugal.



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
Cyprus	0.15	100.0	9
France	16	100.0	32
Greece	0	0.0	92
Italy	27	84.0	99
Portugal	48	N/A	28
Spain	7.24	80.0	34
Total	98	127	294

The table shows size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographic region ("coverage") as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The overall conservation status of this habitat type in Mediterranean biogeographical region is unfavourable - inadequate due to assessments of Spain and France. This conclusion was reached despite the favourable status in the four other countries (Cyprus, Greece, Italy, and Portugal). The habitat area was assessed as unknown by Spain. On the level of biogeographic region, all four parameters (Range; Area; Structure and Functions; Future prospect) were assessed as unfavourable – inadequate. The overall conservation status for the region has been changed against previous reporting from unknown to unfavourable - inadequate. This change is considered not genuine as it is due by better data and different methods used.

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
CY	19	0	0	≈19	0.15	0.2	0	≈0.15	FV	FV	FV		U1+	b1
GR	20	0	0	20	20	25.9	0	20	FV	XX	FV		FV	
ES	18021	17.1	-	>18021	9	11.7	x	x	U1	U1	U1	-	XX	c1
FR	15100	14.3	0	≈15100	15.70	20.3	0	>15.70	U1	U1	U1	=	U2	b1
IT	37100	35.1	0	≈37100	32.31	41.9	0	≈32.31	FV	FV	FV		FV	
PT	35300	33.4	0	≈35300	N/A	N/A	+	<	FV	FV	FV		FV	

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	105560	1	0	>105560	77	2GD	+		2GD	2GD	MTX	-	XX	no	C	-

Legend: MS – Member State; Overall asses- Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole Biogeographical Region; Ref. – reference value; Struct & func. - structure and functions; Future prosp. – future prospect; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1: - target 1 of the EU 2020 Biodiversity Strategy.

Conservation status	FV	Favourable	U1	Unfavourable - inadequate	U2	Unfavourable - bad	XX	Unknown

Trend	0 = stable; + = increase; - = decrease; x = unknown
Qualifier	= stable; + positive; - negative; x unknown
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomic review; c1 – due to different methods to measure or evaluate; c2 - due to different thresholds use; d - no information about nature of change; e - due to less accurate or absent data; nc - no change
Target 1 contribution	A - favourable assessments; B - improved assess.; C - deteriorated assessments; D - unfavourable and unknown assessments that did not change; E - assessments that became unknown.

Pressures, threats and proposed measures

The countries reported several pressures with high or medium intensity. The most important are human induced changes in hydraulic conditions. To other important pressures belong sand and gravel extraction, soil pollution and solid waste, canalisation and water deviation, modifying structures of inland water courses, reduction or loss of specific habitat features, use of biocides, hormones and chemicals, and fertilisation.

Code	Pressure name	CY	ES	FR	IT	PT
A04	grazing		M			
A04.01	intensive grazing					M
A07	use of biocides, hormones and chemicals			M	M	
A08	Fertilisation			M	M	
A09	Irrigation			M		
B01.02	artificial planting on open ground (non-native trees)				M	
B02.01	forest replanting	M				
B07	Forestry activities not referred to above	H				
C01	Mining and quarrying			L		
C01.01	Sand and gravel extraction				H	
D01.02	roads, motorways	H				
E01	Urbanised areas, human habitation			M		
E01.02	discontinuous urbanisation				M	
E03	Discharges			M	M	
E05	Storage of materials			M		
E06	Other urbanisation, industrial and similar activities			M		
F02.03	Leisure fishing				L	
G01	Outdoor sports and leisure activities, recreational activities			L		
G02	Sport and leisure structures			M		
G05	Other human intrusions and disturbances		L			
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)		M		M	
H05	Soil pollution and solid waste (excluding discharges)				H	
I01	invasive non-native species			M	M	
J02	human induced changes in hydraulic conditions		H	H		
J02.03	Canalisation & water deviation	H				
J02.04	Flooding modifications					L
J02.05	Modification of hydrographic functioning, general	M				L
J02.05.02	modifying structures of inland water courses				H	
J02.15	Other human induced changes in hydraulic conditions				M	
J03.01	reduction or loss of specific habitat features	H				
K01	abiotic (slow) natural processes			L		
K01.01	Erosion				M	
K02.01	species composition change (succession)					M
K04	Interspecific floral relations			M		

Legend: L Low intensity M Medium intensity H High intensity

The legal protection of habitats and species, establishing protected areas and sites are the most important proposed measures. Other important measures are other wetland-related measures, urban and industrial waste management.

Code	Measure name	CY	ES	FR	IT	PT
1.2	Measures needed, but not implemented					NA
1.3	No measure known/ impossible to carry out specific measures			M		
4.0	Other wetland-related measures		L		M	H
4.1	Restoring/improving water quality		L	M		

Code	Measure name	CY	ES	FR	IT	PT
4.2	Restoring/improving the hydrological regime		L	M		
4.3	Managing water abstraction		L			
4.4	Restoring coastal areas		L			
6.0	Other spatial measures				M	
6.1	Establish protected areas/sites	H			H	
6.3	Legal protection of habitats and species	H			H	
8.1	Urban and industrial waste management	H	L			

Legend: L Low importance M Medium importance H High importance

Reason of selection for the first Mediterranean seminar

The habitat type was selected for the first Mediterranean seminar by agreement of Member States despite having a lower value of the Priority index. The habitat reached score 30 because of a high value for criterion A and a medium value for criterion B. The habitat occurs in 6 countries (criterion A). The unfavourable - inadequate overall conservation status was reported by two countries (Spain and France). One country also reported a negative trend.

The Priority Index was calculated using information from the reports of Member States based on requirements of the Article 17 of the Habitats Directive for period 2001-2006. It is based on three parameters: A) Number of Member States where habitat type is present; B) Unfavourable conservation status of the habitat type (U2 – 2 points; U1 & XX – 1 point each), and C) Trend information: number of negative trends for parameters "Area of the habitat type" and qualifiers for "Structure & functions". The index is then calculated using formula: A*(B+C).

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the habitat structure in Spain and France and increase of the habitat area by restoration in France are needed. The main measures should include legal protection of habitats and species and establishing of protected sites. Other important measures are urban and industrial waste management and other wetland-related measures. Better information about habitat area is needed in Spain.

The water flow should be maintained or restored and water pumping should be avoided. It is important to preserve a buffer zone along the streams (banks, uncultivated area near the banks, fences to avoid trampling, erosion of banks and eutrophication by animals), to reduce pollutants also by strengthening the treatment of domestic and agro-livestock effluents and the adoption of good agricultural practices, in particular with regard to the use of fertilizers. The maintenance of extensive agricultural and pastoral practices, limitation of the flock concentration, and control of ecological succession are other measures needed.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Freshwater+habitats&subject=3290&region=MED

ICNB: 3290 Cursos de água mediterrânicos intermitentes da *Paspalo-Agrostidion* - http://www.icnf.pt/portal/pn/biodiversidade/rn2000/resource/docs/rn-plan-set/hab/hab-3290

INPN: 329 Rivières intermittentes méditerranéennes du Paspalo-Agrostidion - https://inpn.mnhn.fr/site/natura2000/habitat/3290/cahiers-habitats

92D0 Southern riparian galleries and thickets (*Nerio-Tamaricetea* and *Securinegion tinctoriae*)

X	Selected for first round of Biogeographical Seminar
	Selected using “Low hanging fruit” approach

Habitat summary

The overall conservation status in the Mediterranean region is unfavourable - inadequate due to the assessment of four countries (Spain, Italy, Malta and Portugal). In the Mediterranean biogeographic region, the habitat is widespread in Spain and at the Italian islands; it occurs also in Portugal, France, Malta, and Cyprus. Around 71% of the habitat area is located in Spain.

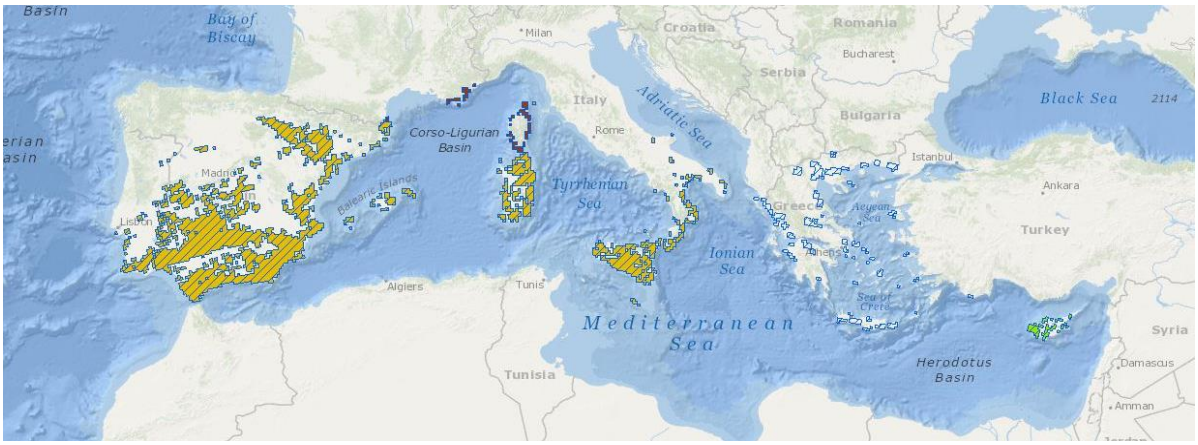
Improvement of the trend for habitat structure is needed in Spain, France, Italy and Malta. Further improvement could be reached by improvement of the habitat structure and increase of the habitat area in France. Habitat restoration is also needed in other countries that reported a smaller habitat area than the reference value: Spain, Malta, and Portugal. Better information about the habitat range is needed in Portugal. The main measures should include restoration or improvement of forest habitat, establishment of protected areas and legal protection of habitat. Other measures should focus on restoration of the hydrologic regime, reduction of water pollution and invasive species removal. Interventions that influence the upstream water regimes of the rivers should not be allowed for this habitat. The habitat has a great capacity for regeneration if the hydrological dynamics are not affected. The quality of urban, agricultural and industrial effluents should be increased and the discharge of untreated effluents should be controlled. Adaptation of the forest management should address unsustainable practices like forest exploitation without replanting, natural regrowth or artificial planting using non-native trees. The majority of riparian species reproduce almost exclusively vegetatively, so it is important to preserve all the spots that still survive, even for isolated individuals. The measures for elimination or reduction of impacts from surrounding areas should address fertilisation, grazing and urbanisation. They should include establishment of minimum margins that must be respected for the development of riparian vegetation.

Habitat description

Tamarisk, oleander, and chaste tree galleries and thickets and similar low ligneous formations of permanent or temporary streams and wetlands of the thermo-Mediterranean zone and south-western Iberia, and of the most hygromorphic locations within the Saharo-Mediterranean and Saharo-Sindian zones. Includes formations of *Tamarix smyrnensis* (syn. *Tamarix ramosissima*) of stream sides and coastal localities of the Pontic and Steppic regions of western Eurasia.

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain and at Italian islands. It also occurs in Portugal, France, Malta, and Cyprus. The overall representation of the habitat in Natura 2000 sites is quite high (ca 53%). Large parts of the national habitat is located in Natura 2000 sites in Malta (75%) and Spain (67%).



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
Cyprus	4.1	62.0	26
France	0.1-1	5-50	43
Greece	0	0.0	76
Italy	44	22.0	167
Malta	15	75.0	7
Portugal	0	N/A	25
Spain	549	67.0	450
Total	**613-614**	**53**	**794**

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographic region ("coverage") as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The overall conservation status of this habitat type in the Mediterranean biogeographical region is unfavourable - inadequate due to assessments of Spain, Italy, Malta and Portugal. This conclusion was reached despite the favourable status in Cyprus and Greece. France reported an unfavourable – bad conservation status. On the biogeographical level, one parameter (Range) was assessed as favourable, the other three (Area; Structure and Functions; Future prospect) as unfavourable – inadequate. The overall conservation status for the region has been changed since the previous reporting from unknown to unfavourable – inadequate. This change is considered not genuine, it is due to better data (Cyprus) and different methods to measure or evaluate (Spain and Italy).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
CY	113	0	0	≈113	6.60	0.6	0	≈6.60	FV	FV	FV		XX	b1
GR	100.30	0	0	100.30	100.30	8.7	0	100.30	FV	FV	FV		FV	
ES	262334	75	0	≈262334	814	71	x	>814	U1	U1	U1	-	XX	c1
FR	11900	3.4	0	≈11900	2	0.2	-	>>2	U2	U2	U2	-	U2	nc
IT	52500	15	0	≈52500	204.27	17.8	0	≈204.27	U1	U1	U1	-	FV	c1
MT	20	0	0	>20	20	1.7	0	>20	U1	U1	U1	-	U1	nc
PT	22900	6.5	0	x	N/A	N/A	-	>	FV	XX	U1	-	U1	nc

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	349867	2GD	0		1147	2GD	x		2GD	2GD	MTX	-	XX	no	C	-

Legend: MS – Member State; Overall asses- Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole Biogeographical Region; Ref. – reference value; Struct & func. - structure and functions; Future prosp. – future prospect; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1: - target 1 of the EU 2020 Biodiversity Strategy.								
Conservation status	FV	Favourable	U1	Unfavourable - inadequate	U2	Unfavourable - bad	XX	Unknown
Trend	0 = stable; + = increase; - = decrease; x = unknown							
Qualifier	= stable; + positive; - negative; x unknown							
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomic review; c1 – due to different methods to measure or evaluate; c2 - due to different thresholds use; d - no information about nature of change; e - due to less accurate or absent data; nc - no change							
Target 1 contribution	A - favourable assessments; B - improved assess.; C - deteriorated assessments; D - unfavourable and unknown assessments that did not change; E - assessments that became unknown.							

Pressures, threats and proposed measures

Countries reported a high number of different pressures. The main pressures are human induced changes in hydraulic conditions, pollution to surface waters, invasive non-native species, urbanised areas and human settlement. Other important pressures are cultivation, fertilisation, forest exploitation without replanting or natural regrowth and modification of inland water courses.

Code	Pressure name	CY	ES	FR	IT	MT	PT
A01	Cultivation		H				
A02	modification of cultivation practices		M				
A02.01	agricultural intensification	L					
A02.03	grassland removal for arable land	M					
A04	grazing		M				L
A04.01	intensive grazing	L					
A07	use of biocides, hormones and chemicals		M		M		
A08	Fertilisation	M	M		M	M	
A09	Irrigation		L				
B01	forest planting on open ground		M			L	
B01.02	artificial planting on open ground (non-native trees)				M		
B02	Forest and Plantation management & use		M				
B03	forest exploitation without replanting or natural regrowth		M	H			
B07	Forestry activities not referred to above		L				
C01	Mining and quarrying		L				
C01.01	Sand and gravel extraction				M		
D01	Roads, paths and railroads			L			
D01.02	roads, motorways	L			M		
E01	Urbanised areas, human habitation		L	H	M		L
E01.02	discontinuous urbanisation				M		
E02	Industrial or commercial areas			M	M		
E03	Discharges		L	M	M		
E03.01	disposal of household / recreational facility waste	L					
E04	Structures, buildings in the landscape						M
F01.01	intensive fish farming, intensification						M
F03	Hunting and collection of wild animals (terrestrial)		M				
G01	Outdoor sports and leisure activities, recreational activities		L				
G01.03	motorised vehicles				M		L
G02	Sport and leisure structures						M
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)			M	H		M
H01.01	pollution to surface waters by industrial plants	M					L
H01.05	diffuse pollution to surface waters due to agricultural and forestry activities						M

Code	Pressure name	CY	ES	FR	IT	MT	PT
H01.08	diffuse pollution to surface waters due to household sewage and waste waters						L
H05	Soil pollution and solid waste (excluding discharges)			M	H		
H05.01	garbage and solid waste						L
I01	invasive non-native species	L	L	H	M	M	
J01	fire and fire suppression		M	M			
J01.01	burning down				M		
J02	human induced changes in hydraulic conditions		H	H			
J02.01	Landfill, land reclamation and drying out, general	L					
J02.05	Modification of hydrographic functioning, general					M	
J02.05.02	modifying structures of inland water courses				M		H
J02.07	Water abstractions from groundwater	L					
J02.07.01	groundwater abstractions for agriculture					M	
J02.10	management of aquatic and bank vegetation for drainage purposes						L
J03.02	anthropogenic reduction of habitat connectivity	M					
K01	abiotic (slow) natural processes		M				
K01.01	Erosion				M		
L08	inundation (natural processes)			L			
M01	Changes in abiotic conditions		M				

Legend: L Low intensity M Medium intensity H High intensity

Almost all countries reported restoration or improvement of forest habitats as a highly important proposed measure. A high number of countries indicated establishment of protected areas, legal protection of habitat and other spatial measures as highly needed. Also some other measures were proposed: urban and industrial waste management, regulation of hunting and taking, other forestry-related and water-related measures.

Code	Measure name	CY	ES	FR	IT	MT	PT
1.2	Measures needed, but not implemented						NA
2.0	Other agriculture-related measures		L				
2.2	Adapting crop production		L				
3.0	Other forestry-related measures		L			H	
3.1	Restoring/improving forest habitats		L	M	H	H	M
4.0	Other wetland-related measures		L				M
4.1	Restoring/improving water quality		L				
4.2	Restoring/improving the hydrological regime		L	M			
4.3	Managing water abstraction		L				
6.0	Other spatial measures		M				H
6.1	Establish protected areas/sites	H	M			H	
6.3	Legal protection of habitats and species	H	M			H	
6.4	Manage landscape features		M			M	
7.0	Other species management measures		L				
7.1	Regulation/ Management of hunting and taking					H	
7.2	Regulation/ Management of fishery in limnic systems		L				
7.4	Specific single species or species group management measures		L				
8.1	Urban and industrial waste management	H	L				

Legend: L Low importance M Medium importance H High importance

Reason of selection for the first Mediterranean seminar

The habitat type was selected for the first Mediterranean seminar because of its high value on the Priority index. The habitat reached score 56 because of high values for criteria A and B. The habitat occurs in seven countries (criterion A). An unfavourable - bad overall conservation status was reported by one country (France) and an unfavourable - inadequate status by four countries. Negative trends were reported in two cases.

The Priority Index was calculated using information from the reports of Member States based on requirements of the Article 17 of the Habitats Directive for period 2001-2006. It is based on three parameters: A) Number of Member States where habitat type is present; B) Unfavourable conservation status of the habitat type (U2 – 2 points; U1 & XX – 1 point each), and C) Trend information: number of negative trends for parameters “Area of the habitat type” and qualifiers for “Structure & functions”. The index is then calculated using formula: A*(B+C).

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the trend in habitat structure is needed in Spain, France, Italy and Malta. Further improvement could be reached by improvement of the habitat structure and increase of the habitat area in France. Besides France, habitat restoration is needed also in other countries that reported a smaller habitat area than the reference value: Spain, Malta and Portugal. Better information about habitat range is needed in Portugal. The main measures should include restoration or improvement of forest habitat, establishment of protected areas and legal protection of habitat.

Other measures should focus on restoration of hydrologic regime, reduction of water pollution and invasive species removal. The integrated management of water bodies should be promoted. No intervention on the water regimes of the rivers concerned should be allowed upstream of this habitat, either directly (catchments, containments, retention ponds) or indirectly (opening of roads, tracks, trenches, fire in the catchment of the watercourse) (INPN). The existence, at least temporarily throughout the year, of a minimum flow (surface or underground) with an adequate dynamic is essential for this habitat. The habitat has a great capacity for regeneration, provided that the main factor, the hydrological dynamics, are not affected in an intense way. If this condition is met, the maintenance and even the spontaneous re-establishment of these communities would be obtained in the short or medium term (Salinas et Cueto 2009). The quality and extension of treatment of urban, agricultural and industrial effluents should be improved and the discharge of untreated effluents controlled.

Adaptation of the forest management should address unsustainable practices like forest exploitation without replanting or natural regrowth or artificial planting using non-native trees. The majority of riparian species reproduce almost exclusively vegetatively, so it is important to preserve all the spots that still survive, even for isolated individuals, as they act as natural propagation centres and are the only guarantee of future recovery of this ecosystem. Any type of repopulation that is undertaken must start from the native plant material as these plants are the result of centuries of adaptation to local environmental conditions. Special attention should be paid to ecotypes of *Populus alba* that are very well adapted to semi-arid environments, substrates and saline waters.

The measures for elimination or reducing of impacts from surrounding areas should address fertilisation, grazing and urbanisation. Minimum margins that must be respected for the development of riparian vegetation should be used. Rigorous rules of use and exploitation of this habitat should be established, starting with control and limitation of grazing and hunting. Installation of farms at the edge of water courses should be avoided.

Links

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Forests&subject=92D0&region=MED

ICNB: 92D0 Galerias e matos ribeirinhos meridionais (*Nerio-Tamaricetea* e *Securinegion tinctoriae*). - http://www.icnf.pt/portal/pn/biodiversidade/rn2000/resource/docs/rn-plan-set/hab/hab-92D0

INPN: 92D0 Galeries et fourrés riverains méridionaux (Nerio-Tamaricetea et Securinegion tinctoriae). - https://inpn.mnhn.fr/site/natura2000/habitat/92D0/cahiers-habitats

Salinas, M.J., Cueto, M., 2009: 92D0 Galerías y matorrales ribereños termomediterráneos (*Nerio-Tamaricetea* y *Fluegeion tintorisas*). - In: VV.AA., Bases ecológicas preliminares para la conservación de los tipos de hábitat de interés comunitario en España. Madrid: Ministerio de Medio Ambiente, y Medio Rural y Marino. 86 pp.

92A0 Salix alba and Populus alba galleries

X	Selected for first round of Biogeographical Seminar
	Selected using “Low hanging fruit” approach

Habitat summary

The overall conservation status in the Mediterranean region is unfavourable - inadequate due to the assessment of four countries (Spain, France, Italy and Malta). The habitat is in the Mediterranean biogeographic region widespread in Spain, France, and Italy; it also occurs in Portugal, Cyprus, Greece and Malta. Around 43% of the habitat area is located in France.

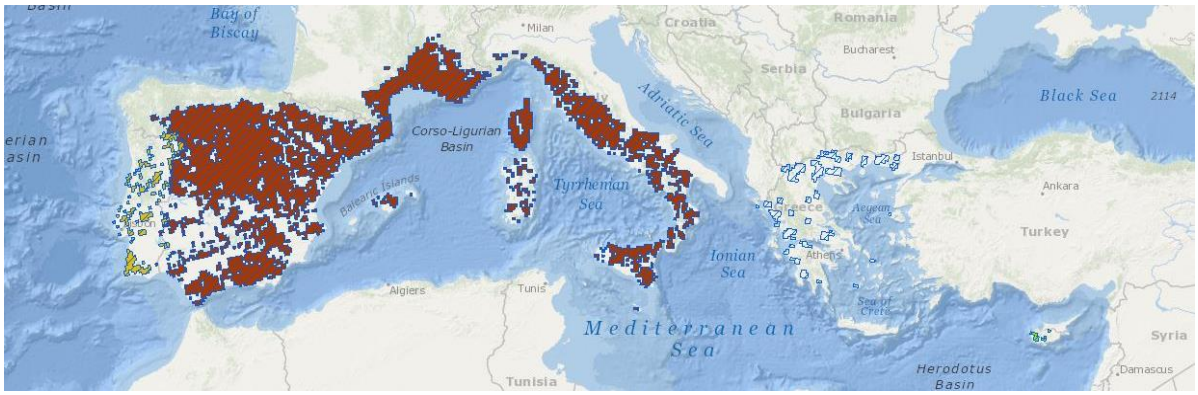
Improvement of the trend for habitat structure from decreasing to stable is needed in Italy. Further improvement could be reached by improving this parameter also in Spain and Malta. Habitat restoration is needed in all countries that reported a smaller habitat area than the reference value: Greece, Spain, France and Malta, but restoration or improvement of the forest habitats was reported highly needed in all countries. The main measures should include establishment of protected areas, legal protection of the habitat, adaptation of forest management, and restoration of the hydrological regime. The adaptation of the forest management should address pressures like artificial planting of non-native trees, forest exploitation without replanting or natural regrowth, forestry clearance. The diversification of stand structure could be achieved by cutting out not indigenous trees, but leaving laying wood; small-scale selective, gap or shelterwood cutting. Cutting of native tress should be prohibited, maintenance of spontaneous species (poplar, ash, alder) and protection of alluvial stands with relic populations of *Populus nigra* is important. The measures against water pollution and preservation of watercourses and their dynamics should be applied. The mechanical cleaning of water lines with heavy machinery in the habitat area should be forbidden. It is also necessary to regulate agricultural activities and avoid transformation of this land into orchards, monocultures (dry or irrigated) or meadows. The removal of invasive species is needed.

Habitat description

Riparian forests of the Mediterranean and Black Sea basins dominated by *Salix alba, Salix fragilis* or their relatives (44.141 - Mediterranean white willow galleries). Mediterranean and Central Eurasian multi-layered riverine forests with *Populus* spp., *Ulmus* spp., *Salix* spp., *Alnus* spp., *Acer* spp., *Tamarix* spp., *Juglans regia*, *Quercus robur, Quercus pedunculiflora, Fraxinus angustifolia, Fraxinus pallisiae*, lianas. Tall poplars, *Populus alba*, *Populus caspica*, *Populus euphratica* (*Populus diversifolia*), are usually dominant in height; they may be absent or sparse in some associations which are then dominated by species of the genera listed above (44.6 - Mediterraneo-Turanian riverine forests).

Distribution in the Mediterranean region and coverage by Natura 2000 network

The habitat type is widespread in Spain, France and Italy. It also occurs in Portugal, Cyprus, Greece, and Malta. A relatively high proportion of the habitat area is located in Natura 2000 sites (ca 64%). The entire national habitat area is located in Natura 2000 sites in Malta, for a large part also in Cyprus and Spain, but in Spain the habitat area in Natura 2000 sites is probably overestimated. France reported a broad range of habitat area in Natura 2000 sites.



Natura 2000 sites in the Mediterranean region			
Country	**Habitat area /km²/**	**Coverage /%/**	**Number of sites**
Cyprus	0.26	87.0	9
France	200-1,000	18-91	105
Greece	0	0.0	41
Italy	285	38.0	311
Malta	9	100.0	2
Portugal	0	N/A	45
Spain	748	111.0	504
Total	**1,242-2,042**	**64**	**1,017**

The table shows the size of the habitat area in Natura 2000 sites and its proportion compared to habitat area in the whole biogeographic region ("coverage") as reported by MS in the 2013 Article 17 report. The number of sites was extracted from the 2016 Natura 2000 database.

Biogeographical conservation status assessment

The overall conservation status of this habitat type in the Mediterranean biogeographical region is unfavourable - bad due to assessments of Spain, France, Italy, and Malta. Cyprus reported a favourable status and two countries (Greece and Portugal) indicated unfavourable – inadequate conservation status. On the biogeographical level, one parameter (Range) was assessed as favourable, Area was assessed as unfavourable - inadequate, and two parameters (Structure and Functions; Future prospect) as unfavourable – bad. The overall conservation status for the region has been changed since the previous reporting from unknown to unfavourable – inadequate. This change is considered not genuine, it is due to better data (Cyprus) and different methods to measure or evaluate (Spain, Italy, and Portugal).

Treated data from Member States reports

MS	Range (km²)				Area				Struct & func.	Future prosp.	Overall asses.			
	Surface	% MS	Trend	Ref.	Surface	% MS	Trend	Ref.			Curr. CS	Qualifier	Prev. CS	Nat. of ch.
CY	13.26	0	+	13.26	0.30	0	+	0.30	FV	FV	FV		U1+	b1
GR	37.47	0	-	>37.47	37.47	1.5	-	>37.47	FV	U1	U1	N/A	U1	
ES	396258	60.7	0	≈396258	676	26.3	0	>676	U2	U1	U2	=	XX	c1
FR	72700	11.1	0	≈72700	1100	42.7	-	>1100	U1	U2	U2	=	U2	nc
IT	120400	18.5	-	≈120400	751.88	29.2	-	≈751.88	U2	U2	U2	-	FV	c1
MT	9	0	0	>9	9	0.3	0	>9	U2	U2	U2	=	U2	nc
PT	63100	9.7	0	≈63100	N/A	N/A	0	≈	U1	XX	U1	=	FV	c1

EU Biogeographical assessment and proposed corrections

MS/EU27	Surface	Range Concl.	Trend	Ref.	Surface	Area Concl.	Trend	Ref.	Struct. func.	Future prosp.	Curr. CS Concl.	Qualifier	Prev. CS Concl.	Nat. of ch.	Target 1	
															Contrib.	Type
EU27	652518	1	0	≈652518	2575	2GD	-		2GD	2GD	MTX	-	XX	no	C	-

Legend: MS – Member State; Overall asses- Overall assessment; % MS – percentage of the surface area in the respective Member State compared to whole Biogeographical Region; Ref. – reference value; Struct & func. - structure and functions; Future prosp. – future prospect; Curr. CS – current conservation status; Prev. CS – previous conservation status; Nat. of ch. – nature of change; EU27: assessment on the level of all EU Member Countries; Concl. – conclusion; Target 1: - target 1 of the EU 2020 Biodiversity Strategy.							
Conservation status	FV	Favourable	U1	Unfavourable - inadequate	U2	Unfavourable - bad	XX	Unknown
Trend	0 = stable; + = increase; - = decrease; x = unknown						
Qualifier	= stable; + positive; - negative; x unknown						
Nature of change	a – genuine change; b – change due to better data or improved knowledge; b2 – due to taxonomic review; c1 – due to different methods to measure or evaluate; c2 - due to different thresholds use; d - no information about nature of change; e - due to less accurate or absent data; nc - no change						
Target 1 contribution	A - favourable assessments; B - improved assess.; C - deteriorated assessments; D - unfavourable and unknown assessments that did not change; E - assessments that became unknown.						

Pressures, threats and proposed measures

The countries reported a broad range of pressures - invasive non-native species and human induced changes in hydraulic conditions are the most important ones. To other important pressures belong pollution to surface waters, soil pollutions and solid waste, fertilisation and changes in abiotic conditions.

Code	Pressure name	CY	ES	FR	IT	MT	PT
A01	Cultivation		M	M			
A02	modification of cultivation practices			L			
A04	grazing		L		M		
A07	use of biocides, hormones and chemicals			M			
A08	Fertilisation			H		L	
A09	Irrigation			M			
A10	Restructuring agricultural land holding			L			
B01	forest planting on open ground		M				
B01.02	artificial planting on open ground (non-native trees)				M		
B02	Forest and Plantation management & use					M	
B02.02	forestry clearance				M		M
B02.03	removal of forest undergrowth				L		
B02.06	thinning of tree layer						M
B03	forest exploitation without replanting or natural regrowth		M	M	M		
C01	Mining and quarrying		L	L			
C01.01	Sand and gravel extraction				M		
D01	Roads, paths and railroads			M			
D01.02	roads, motorways				M		
D02	Utility and service lines		L				
E01	Urbanised areas, human habitation		M	L	M		
E01.02	discontinuous urbanisation				M		
E02	Industrial or commercial areas			L	M		
E03	Discharges		M	M	M	M	
E04.01	Agricultural structures, buildings in the landscape				M		
E06	Other urbanisation, industrial and similar activities		M				
F03	Hunting and collection of wild animals (terrestrial)			M			
G01	Outdoor sports and leisure activities, recreational activities		L	M			
G01.03	motorised vehicles				M		
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)		M	H	M		
H02	Pollution to groundwater (point sources and diffuse sources)		M				
H05	Soil pollution and solid waste (excluding discharges)			H	M		
I01	invasive non-native species		M	H		H	
J01.01	burning down				M	M	
J02	human induced changes in hydraulic conditions		H	M		H	

Code	Pressure name	CY	ES	FR	IT	MT	PT
J02.05.02	modifying structures of inland water courses	M			M		
J02.10	management of aquatic and bank vegetation for drainage purposes						M
J02.15	Other human induced changes in hydraulic conditions				M		
K01.01	Erosion				M		
K01.03	Drying out	M					
K02	Biocenotic evolution, succession		L				
K04	Interspecific floral relations		L				
L07	storm, cyclone					M	
M01	Changes in abiotic conditions			H			

Legend: L Low intensity M Medium intensity H High intensity

The legal protection of habitats and species, establishing protected areas, adapting forest management and restoring the hydrological regime are the most important proposed measures. All countries reported restoring or improving forest habitats as highly needed. Also other measures were proposed as needed: regulation of hunting and extraction, other forestry-related and wetland-related measures. Only France reported that there is no measure needed for conservation of the habitat.

Code	Measure name	CY	ES	FR	IT	MT	PT
1.1	No measures needed for the conservation of the habitat/species			M			
2.0	Other agriculture-related measures		M				
3.0	Other forestry-related measures		M			H	
3.1	Restoring/improving forest habitats		L	M	M	H	M
3.2	Adapt forest management		L	H	H		M
4.0	Other wetland-related measures		L				M
4.1	Restoring/improving water quality		M				
4.2	Restoring/improving the hydrological regime		M	H			H
4.3	Managing water abstraction		L				
6.0	Other spatial measures		L		M		
6.1	Establish protected areas/sites	H	M		M	H	
6.3	Legal protection of habitats and species	H	H		M	H	
6.4	Manage landscape features		L				
7.0	Other species management measures		L				
7.1	Regulation/ Management of hunting and taking					H	
7.2	Regulation/ Management of fishery in limnic systems		L				
7.4	Specific single species or species group management measures		L				
8.1	Urban and industrial waste management		L				
9.0	Other resource use measures		L				

Legend: L Low importance M Medium importance H High importance

Reason of selection for the first Mediterranean seminar

The habitat type was selected for the first Mediterranean seminar because of its high value on the Priority index. The habitat reached score 70 because of high values in two criteria (A and B). The habitat occurs in seven countries (criterion A). The unfavourable - bad overall conservation status was reported by four countries (Spain, France, Italy and Malta) and unfavourable - inadequate status by two countries. Countries also reported negative trends in three cases.

The Priority Index was calculated using information from the reports of Member States based on requirements of the Article 17 of the Habitats Directive for period 2001-2006. It is based on three parameters: A) Number of Member States where habitat type is present; B) Unfavourable conservation status of the habitat type (U2 – 2 points; U1 & XX – 1 point each), and C) Trend information: number of negative trends for parameters “Area of the habitat type” and qualifiers for “Structure & functions”. The index is then calculated using formula: A*(B+C).

Priority conservation measures needed

For the improvement of the overall conservation status in the Mediterranean biogeographical region, improvement of the trend for habitat structure from decreasing to stable is needed in Italy. Further improvement could be reached by improving this parameter also in Spain and Malta. The habitat restoration is needed in all countries that reported a smaller habitat area than the reference value: Greece, Spain, France, and Malta, but restoration or improvement of the forest habitats was reported by all countries as highly needed.

The main measures should include establishment of protected areas, legal protection of the habitat, adaptation of forest management, and restoration of the hydrological regime. The adaptation of the forest management should address pressures like artificial planting (non-native trees), forest

exploitation without replanting or natural regrowth, forestry clearance. They should contribute to diversifying of stand structure by cutting out not indigenous trees or their groups, but leaving laying wood; small-scale selective, gap or shelterwood cutting securing continuous forest cover can be applied. The cutting of indigenous tress should be prohibited, maintenance of spontaneous species (poplar, ash, alder) and protection of alluvial stands with relic populations of *Populus nigra* is important. It is preferable to limit the cuts of individual adults in order to maximize sexual reproduction in addition to vegetative propagation. Transformations are strongly discouraged: resources must be oriented primarily to maintaining the alluvial character of these forests, in particular by ensuring the sustainability of the vegetation formations of the habitat. In some cases, trees can be treated and regenerated in coppice (Calleja 2009; INPN).

Measures against water pollution and human-induced changes in hydrological conditions are also needed. Calleja (2009) proposed to establish a National Hydrological Plan that not only contemplates the water demands of the different human activities but also the ecological demands of the riparian habitats. It is necessary to preserve the watercourses and their dynamics by considering the whole watershed and avoid activities that create risks of changes in the water regime and floods. The mechanical cleaning of water lines with heavy machinery in the habitat area should become forbidden. If it is considered convenient, manual cleaning is possible, whilst avoiding disturbances to the river channel and to the water circulation. In order to conserve and recover riparian communities, it is necessary to regulate also agricultural activities and avoid transformation of this land into orchards, monocultures (dry or irrigated) or meadows (Calleja 2009). The removal of invasive species is needed - the expansion of introduced plant species should be limited as much as possible.

Links

Calleja, J.A., 2009: 92A0 Alamedas, olmedas y saucedas de las regiones Atlántica, Alpina, Mediterránea y Macaronésica. - In: VV.AA., Bases ecológicas preliminares para la conservación de los tipos de hábitat de interés comunitario en España. Madrid: Ministerio de Medio Ambiente, y Medio Rural y Marino. 101 pp.

ICNB: 92A0 - Florestas-galeria de *Salix alba* e *Populus alba*. - http://www.icnf.pt/portal/pn/biodiversidade/rn2000/resource/docs/rn-plan-set/hab/hab-92A0

INPN: 92A0 - Forêts-galeries à *Salix alba* et *Populus alba*. - https://inpn.mnhn.fr/site/natura2000/habitat/92A0/cahiers-habitats

https://bd.eionet.europa.eu/article17/reports2012/habitat/summary/?period=3&group=Forests&subject=92A0&region=MED