

Technical paper N° 2/2017

## Additional fact sheets on

## Mediterranean anadromous fish species

Dominique Richard, Jérôme Bailly Maitre

and Laura-Patricia Gavilan

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#### Authors' affiliation:

Dominique Richard, Muséum national d'Histoire naturelle (FR) Jérôme Bailly Maitre, Muséum national d'Histoire naturelle (FR) Laura-Patricia Gavilan, Muséum national d'Histoire naturelle (FR)

#### **EEA project manager:**

Eleni Tryfon

#### **ETC/BD** production support:

Muriel Vincent, Muséum national d'Histoire naturelle (FR)

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## Introduction

### Background

The attached fact sheets, which focus on the six anadromous fish species occurring in the Mediterranean region complement the descriptive fact sheets on the 8 habitat-types reported as present in the marine Mediterranean region under Article 17 reporting, as well as on 21 priority species (see document "Fact sheets on Mediterranean marine habitats and species").

Under Art 17 reporting, in order to avoid a double reporting for anadromous species, Member States were required to report only under the corresponding terrestrial biogeographic region and, in addition, to indicate, when relevant, the pressures and threats occurring in the marine environment.

The assessment of conservation status is based on the reporting of the EU Member Countries based on requirements of the Habitats Directive Article 17 for period 2007-2012 (further "Article 17 Reporting"), as available from <a href="http://art17.eionet.europa.eu/article17/reports2012/">http://art17.eionet.europa.eu/article17/reports2012/</a>. For this assessment the following categories are used:



The conservation status is not provided for Croatia, because Croatia joined the European Union in 2014, after the reporting period for Article 17. For Greece two types of assessments are provided:

L

- 1) in the synthetic table which provides comparative information on conservation status for each MS concerned, the information reported for Greece corresponds to the 2001-2006 reporting round because no report had been submitted by this country in 2013;
- 2) in a separate table is shown the assessment for the 2007-2012 reporting period as provided by Greece in 2015.

The information concerning SCIs proposed for these species reflects submissions by Member States until February 2017.

Out of the six anadromous species occurring in Mediterranean, only three (1095, 1099 and 1103) are regularly observed in the marine part of their distribution range. This is why only these three species have been considered as part of the marine biogeographical seminar held in Malta in September 20916 to assess sufficiency of SCI designation in the Mediterranean region.

## 1095 Sea lamprey (Petromyzon marinus)

(Annexes II and IV)

The Sea lamprey is an anadromous species that is very rare in the Baltic region, widely distributed in the Atlantic and Continental regions, and in the western and central Mediterranean basin. Adults migrate into rivers during the spawning season.

The conservation status in the Mediterranean region is 'unfavourable-bad' and deteriorating mainly due to barriers to migration and removal of sediments. However, its status in Spain is 'unknown'.

The species is classified by IUCN as 'least concern' (<u>http://www.iucnredlist.org/details/16781/0</u>).

#### Map of species distribution and conservation status



Conservation status	MED	MED					
parameters	ES	FR	GR	IT*	PT	EU27	
Range	U2	U2	N/A	U2	ХХ	U2	
Population	U2	U2	N/A	U2	ХХ	U2	
Habitat for species	U1	ХХ	N/A	U1	FV	U1	
Future prospects	U2	U1	N/A	ХХ	U1	U2	
Overall							
conservation status	U2	U2	N/A	U2	U1	U2	

## Species conservation status at the Member State and EU levels in MED

Conservation status		
parameters	GR	
Range	XX	
Population	ХХ	
Habitat for species	XX	
Future prospects	ХХ	
Overall conservation status	хх	
Greek assessm	ent	from
2015		

### Proportion of pressures reported by MS as 'Highly important' in MMED

No information on pressures reported in the marine Mediterranean region.

	NUMBER OF SCIs		NUMBER OF SCIs Of which number (insignificant provided the second		
MS	Terrestrial	Marine	Terrestrial	Marine	
ES <sup>1</sup>	11	3	2	0	
FR	3	5	1	0	
GR	0	0	0	0	
HR	1	2	0	0	
IT	10	12	7	6	

# 1099 River lamprey (Lampetra fluvialis)

(Annexes II and IV)

The River Lamprey is an anadromous fish living in coastal waters and estuaries and spawning in strong-current rivers and streams; there are several landlocked populations.

Its conservation status in the Mediterranean region is 'unfavourable-bad'; Portugal reported the species was present in the lower reaches of the Tagus and Sorraia rivers, while IUCN indicates the species is 'probably extinct'. France indicated an 'uncertain presence': IUCN indicates that populations along the Mediterranean coast of France and Italy are probably extinct. (http://www.iucnredlist.org/details/11206/0, consulted on 23 April 2014)

Main pressures are water pollution, removal of sediments, reduction of habitat connectivity and barriers to migration, and professional passive fishing.

The species is classified by IUCN as 'least concern' (<u>http://www.iucnredlist.org/details/11206/0</u>, consulted on 23 April 2014).

#### Map of species distribution and conservation status



Species conservation status at the Member State and EU levels in MED

Conservation status	MED					
parameters	FR	IT*	PT	EU27		
Range	U2	U2	U1	U1		
Population	U2	U2	ХХ	XX		
Habitat for species	ХХ	U1	U1	U1		
Future prospects	U2	xx	U2	U2		
Overall						
conservation status	U2	U2	U2	U2		

No information on pressures reported in the marine Mediterranean region.

	NUMBER	OF SCIs	Of which num (insignificant	
MS	Terrestrial	Marine	Terrestrial	Marine
ES	1	0	1	0
FR	4	3	3	0
IT	6	2	2	1

## 1100 Adriatic sturgeon (Acipenser naccarii)

#### (Annexes II and IV)

This species has been reported by Italy under the Continental biogeographic region and by Greece under the Mediterranean biogeographic region.

The Adriatic Sturgeon has had a large decline in Italian waters during the last decades due to over fishing, construction of dams that block the rivers where sturgeons spawn, water pollution and habitat destruction. It is listed as "critically endangered" in the Lista Rossa dei Vertebrati Italiani (IUCN, 2013) and in the IUCN Red List (Version 2013.2).

The species is present, at sea, at very shallow depths and is considered by some authors, as being capable of carrying out its entire biological cycle in freshwaters. This seems to be the case in Italian rivers of the continental region where individuals of this species are still observed. During the last years the national authorities have been working in improving the connectivity of the river systems; a fish bypass is namely planned for the Isola Serafini Dam. There are no recent observations of this species in marine waters and reintroduction activities have been carried out in the Parco del Delta del Po.

Its conservation status in the Continental region is 'unfavourable-bad' and deteriorating.

In the Mediterranean region its status is 'unknown'. The Greek report (from 2001-2006) does not contain any data nor maps leading to the assessment of this species. The Adriatic Sturgeon is reported from old bibliography as being potentially present in the area of Corfu but no recent information is available. Considering the species' critically endangered status, its endemicity to the Adriatic, and the fact that a population is still hypothesized to exist in nearby Albanian sites, it is crucial that range, population and distribution data be collected in the future, in order to fully ascertain, without doubt, its actual presence and conservation status in Greece.



#### Map of species distribution and conservation status

# Species conservation status at the Member State and EU levels in CON and MED

Conservation status	MED	CON
parameters	GR	т
Range	N/A	U2
Population	N/A	U2
Habitat for species	N/A	U1
Future prospects	N/A	U1
Overall		
conservation status	N/A	U2

### Proportion of pressures reported by MS as 'Highly important' in MMED

No information on pressures reported in the marine Mediterranean region.

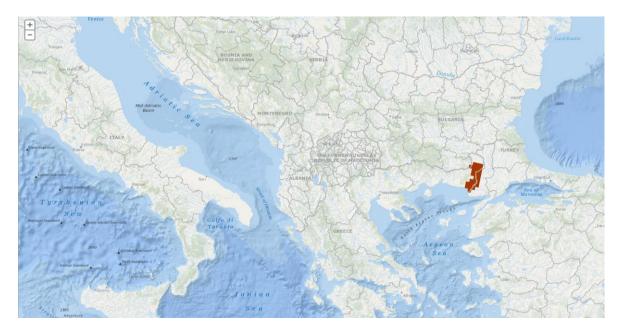
Number of SCIs designated for this species per Member State	Number of SCIs	designated for	this species	per Member State
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	NUMBER OF SCIs		Of which numl (insignificant	
MS	Terrestrial	Marine	Terrestrial	Marine
GR				
IT	32	6	10	2

## 1101 Atlantic sturgeon (Acipenser sturio)

#### (Annexes II and IV)

The natural population of the atlantic sturgeon *Acipenser sturio* in the river Evros (Mariza) in Greece is maybe the last one in the Mediterranean. This fish was previously believed to have been extinct from the Evros river but was rediscovered in the 2000s (Koutrakis et al 2011). The riversystem is shared by three countries, Greece, Bulgaria and Turkey. Assessment is only available from Greece which represents 6.3 % of the drainage area. Assessment is only available for the previous period 2001-2006. Range and habitat for the species is considered "unfavorable inadequate" while population and future prospect is "unfavorable bad" resulting in an overall status of Unfavorable bad. Irrigation, professional fishing, water pollution, other human induced changes in hydraulic conditions and drying out is listed as threats in the 2001-2006 assessment.



#### Map of species distribution and conservation status

#### Species conservation status at the Member State and EU levels in MED

Conservation status	MED		
parameters	GR	ES	EU27
Range	U1	ХХ	U1
Population	U2	ХХ	U2
Habitat for species	U1	ХХ	U1
Future prospects	U2	хх	U2
Overall conservation status	U2	хх	U2

Conservation status	MED
parameters	GR
Range	ХХ
Population	хх
Habitat for species	U2
Future prospects	U2
Overall	
conservation status	U2

No information on pressures reported in the marine Mediterranean region.

	NUMBER OF SCIS		Of which numb	er of 'D' sites	
			(insignificant population)		
MS	Terrestrial	Marine	Terrestrial	Marine	
ES	4	1	1	0	
GR	1	0	0	0	

## 1102 Alish Shad (Alosa alosa)

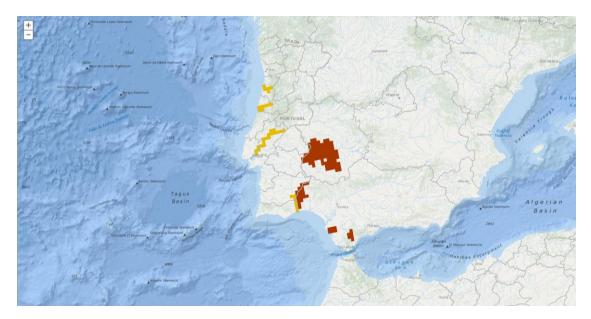
(Annexes II and IV)

The Allis Shad is a migratory fish found in major rivers, open waters and along the coast of the Atlantic (Ireland, Great Britain, France, Spain, Portugal and Morocco), Baltic, and north and western Mediterranean Seas.

Its conservation status in the Mediterranean region is 'unfavourable-bad' and deteriorating with declining populations. There are several landlocked populations in the lakes of dams, namely on the Mondego, lower Tagus and Guadiana. Main pressures are pelagic trawling, canalisation, loss of spawning habitat (dredging), water abstraction and obstacles to migration (dams).

The species is classified by IUCN as 'least concern' (<u>http://www.iucnredlist.org/details/903/0</u>, consulted 17 April 2014).

#### Map of species distribution and conservation status



Species conservation status at the Member State and EU levels in MED<sup>2</sup>

Conservation status	MED			
parameters	ES	РТ	EU27	
Range	U1	FV	U2	
Population	U2	ХХ	U2	
Habitat for species	U2	U1	U2	
Future prospects	U2	U1	U2	
Overall			U2	
conservation status	U2	U1		

<sup>&</sup>lt;sup>2</sup> This species was not reported under Art 17 by France in the Mediterranean region, although 2 Natura 2000 sites have been designated.

No information on pressures reported in the marine Mediterranean region.

	NUMBER OF SCIs		Of which number of 'D' sites		
			(insignificant population)		
MS	Terrestrial	Marine	Terrestrial	Marine	
ES	16	2	5	2	
FR	1	1	0	0	

# 1103 Twaid Shad (Alosa fallax)

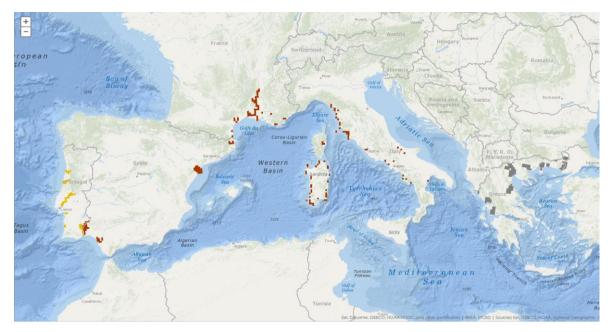
(Annexes II and IV)

The Twaite Shad is a migratory fish found in major rivers and in open waters along the coasts of the Atlantic (Ireland and Scotland to Morocco), southern Baltic, North and Mediterranean Seas.

Its conservation status in the Mediterranean region is 'unfavourable-bad' but improving; however, its status in Portugal is 'unfavourable-inadequate'; in France and Italy there are improvements despite the 'unfavourable-bad' status. Main pressures are fishing (including pelagic trawling), water pollution and abstraction, and building of dams, inbreeding, and invasive alien species.

The species is classified by IUCN as 'least concern' (<u>http://www.iucnredlist.org/details/904/0</u>, consulted 17 April 2014).

## Map of species distribution and conservation status



#### Species conservation status at the Member State and EU levels in MMED

Conservation	MED						
status parameters	ES	FR	GR	ІТ	МТ	РТ	EU27
Range	U2	U1	ХХ	U2	N/A	FV	U2
Population	U2	U1	ХХ	U2	N/A	XX	U2
Habitat for species	U1	U2	ХХ	U1	N/A	U1	U1
Future prospects	U2	U1	FV	U1	N/A	U1	U1
Overall conservation status	U2	U2	хх	U2	N/A	U1	U2

parameters	00		
	GR		
Range	XX		
Population	xx		
Habitat for species	U2		
Future prospects	U2		
Overall conservation status	U2		

No information on pressures reported in the marine Mediterranean region.

	NUMBER	OF SCIs	Of which number of 'D' sites (insignificant population)		
MS	Terrestrial	Marine	Terrestrial	Marine	
ES	10	3	3	0	
FR	15	6	4	0	
GR	5	0	0	0	
HR	1	1	0	0	
IT	14	33			
MT	0	0	0	0	