

Acipenser naccarii

Taxonomic Authority: Bonaparte, 1836

Synonyms:

Region: 1

Common Names:

cobice Italian
Adriatic sturgeon English

Order: Acipenseriformes

Family: Acipenseridae

Notes on taxonomy:

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

Endemic to the Adriatic basin. Its presence is confirmed in Italy where it survives as one small natural population with historical spawning grounds at the confluence of Ticino & Po rivers (Bianco pers comm). It is now considered as regionally extinct in Croatia, Albania and Montenegro. There have been conflicting opinions regarding its presence in Spain where it is now confirmed to be regionally extinct. The presence of the species in NW Greece still remains undocumented (Economidis et al. 2000). It was re-introduced to Greece (Pascos et al. 2003) but there is no evidence that it has established a viable population.

Habitat and Ecology Information:

Lives in large rivers where past reproduction occurred from May to July. It is a long-lived species. The remaining population is landlocked and the only remaining spawning area is at the confluence between the Ticino and Po rivers.

Conservation Measures:

Listed in the Annexes II, IV and V of the Habitats Directive of EU. It is also listed in the Appendix II of the Bern Convention.

Threats:

It is a commercial species threatened by past overfishing and with a current risk of accidental capture and destruction of its habitat. Dams and any obstacles fragmenting its distribution will have a negative impact.

Species population information:

Artificial reproduction in fish farm is now effective and successful and the species is continuously stocked in Italy. However, there is no evidence to confirm continuing reproduction in the wild.

Country Distribution	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Albania	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Croatia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Italy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serbia and Montenegro	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Upper Level Habitat Preferences

Score

Lower Level Habitat Preferences

Score

- 5.1 Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls) 1
- 5.5 Wetlands (inland) - Permanent Freshwater Lakes (over 8ha) 2

Major threats

Conservation Measures

Code	Description of threat	Past	Present	Future	Code	Conservation measures	In place	Needed
1	Habitat Loss/Degradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	Policy-based actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.3	Extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2	Legislation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.3.2	Fisheries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.2.1	Development	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.3.2.2	Artisinal/small-scale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.2.1.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.3.6	Groundwater extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1.2	National level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Harvesting (hunting/gathering)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2	Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.1	Food	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.1.1	Subsistence use/local trade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2.2	National level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.1.2	Sub-national/national trade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	Research actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.1.3	Regional/international trade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.1	Taxonomy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Pollution (affecting habitat and/or species)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.2	Population numbers and range	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.3	Water pollution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.3	Biology and Ecology	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.3.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.4	Habitat status	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.3.2	Domestic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.5	Threats	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.3.8	Sewage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.6	Uses and harvest levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Intrinsic factors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.9	Trends/Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.1	Limited dispersal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4	Habitat and site-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.2	Poor recruitment/reproduction/regeneration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.2	Restoration	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.5	Low densities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4.4	Protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.7	Slow growth rates	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5	Species-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.9	Restricted range	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5.1	Re-introductions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
					5.3	Sustainable use	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.3.1	Harvest management	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.3.2	Trade management	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.4	Recovery management	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Utilisation of Species

Purpose/Type of Use	Subsistence	National	International	Other purpose:		
1. Food - human	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Primary forms removed from the wild	100%	>75%	51-75%	26-50%	<25%	Other forms removed from the wild:
Source of specimens in commercial trade	100%	>75%	51-75%	26-50%	<25%	Other source of specimens:
Trend in wild offtake/harvest in relation to total wild population numbers over last five years:	Decreasing					
Trend in offtake/harvest produced through domestication/cultivation over last five years:	Increasing					
CITES:	Appendix II					

Red Listing

Red List Assessment: Critically Endangered (CR) Possibly Extinct

Red List Criteria: A2abc; B2ab(i,ii,iii,iv,v)

Rationale for the Red List Assessment: The species is extinct throughout a large part of its former range and would probably be totally extinct if the fish farm rearing of this species had not been successful in Italy. Without continuous restocking the maintenance of the species is doubtful as continued successful reproduction in the wild can no longer be confirmed. The species is assessed as Critically Endangered under both Criterion A, on the basis of an observed population decline of greater than 80% and a decline in EOO, and Criterion B, as the remaining suitable spawning grounds are restricted to a single area at the confluence of the Ticino and Po rivers (AOO estimated at 2.5 km²) and there is a continuing decline in habitat quality in the upper catchment.

Current Population Trend: Decreasing

Date of Assessment: 31/10/2004

Assessor(s): A.J. Crivelli

Evaluator: Kottelat, M., Bianco, G. & Freyhoff, J

Notes on Red listing: This species is waiting to be evaluated by the Sturgeon Specialist Group.

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