



The status of shads in Portugal







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Session 3 : Other examples of shads management in the world

Bergerac 14-15 octobre 2015



Guadia

8°0'0"W

Available habitat Unavailable habitat

10*0'0"W

9°0'0"W

N-0.0-62

N..0.0.8E

37"0

Alqueva dam

25

7°0'0"W

75

6°0'0"W

Allis shad (*Alosa alosa*) PT Red List: ENDANGERED

★ Landlocked populations

Allis shad

Commercial coastal fishery landings in **River Minho** (1914-2012) (Mota, 2014)



Main conservation concerns:

- i. Habitat loss and fragmentation;
- ii. Fishing mortality (target and bycatch);
- iii. Other anthropogenic impacts (e.g. pollution, industrial pumping);

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iv. Reduction of genetic diversity.

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Allis shad

Commercial coastal fishery landings – areas adjacent to the major Portuguese rivers (1986-2015)





42-0'0"

Allis shad

Commercial inland fishery (freshwater + estuary) – estimated catches from surveys – **River Mondego** *versus* **rivers Tejo and Vouga**



Allis shad

Commercial inland fishery – River Mondego

Estimated catches from surveys vs Video counts (fishway – Açude-Ponte dam in Coimbra)

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Twaite shad (*Alosa fallax*) PT Red List: VULNERABLE





Twaite shad

Commercial coastal fishery landings – areas adjacent to the major Portuguese rivers (1986-2015)





HABITAT RESTORATION FOR DIADROMOUS FISH IN RIVER MONDEGO: Construction of 6 fish passages + removal 1 small weir (http://www.rhpdm.uevora.pt/)





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Formoselha weir (low flow condition / Sep2015)



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Açude-Ponte dam



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Palheiros weir (low flow condition / Sep2015)









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Louredo weir (low flow condition / Sep2015)



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Reconquinho weir (low flow condition / Sep2015)



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Penacova weir (low flow condition / Sep2015)





Annual meetings with commercial fishermen

Some restrictions imposed on fisheries regulations have decreased the fishing effort in estuaries and rivers.

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Intermediate closed fishing period: 2013 – 10 days; 2014 – 10 days; 2015 – 5 days; 2016 – 5 days + substantial reduction of the fishing season.

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Number of shads counted at the Açude-Ponte dam fishway (River Mondego, Coimbra) during the 2014 spawning season.



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MAIN DIFFICULTIES

Even though there has been great effort to restore habitat connectivity there are still a number of difficulties encountered by researchers, namely:

- i. Lack of political and public awareness;
- ii. Lack of coordination between administrative organs, between different parts of the river basins, and between river, estuarine and marine jurisdictions;
- iii. Lack of fishermen declarations in rivers, or false declarations (maritime and estuaries);
- iv. Lack of knowledge on habitat use and requirements particularly during the marine stage of the life cycle of these anadromous species;
- v. Low or lack of efficiency of fishways (attractiveness, improve and adjust monitoring, improve hydraulic conditions).

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- i. The imminent collapse of the allis shad population in Portugal, following what happened in France, requires urgent actions to recover this population, by drastically reducing the fishery catches in coastal areas;
- ii. Urgent measures are needed to irradicate illegal glass eel fishery which causes massive mortality of shads' juveniles;
- iii. Efforts should continue to increase the available habitat for these species, through the construction of fish passages, and/or weir removal;
- iv. Develop methodologies and collect data to calculate management targets and limits with coordination between conservation and fisheries objectives (e.g. fish passages monitoring);

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SUBMITTED OCT15

LIFE AGUEDA – ACTIONS FOR THE CONSERVATION AND MANAGEMENT OF MIGRATORY FISH IN VOUGA RIVER BASIN



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