



"Sturgeon 2020" - a strategy for sturgeon revival in the Danube River Basin and their sustainable exploitation

Dr. Cristina Sandu - Institute of Biology Bucharest, Romanian Academy; - International Association for Danube Research (IAD)





Why sturgeon conservation ?



Excellent indicators of water/sediment quality

Unique value for EU biodiversity - 6 native species in Danube Basin (1 extinct, 1 near extinction, 3 critically endangered, 1 vuln.)

High scientific value - "living fossils", over 200 million years old;

High economic value - for fishing communities/ hatchery owners



Vienna, December 2009



River and Habitat Continuity Interruption - Current Situation (2009)



Map source: www.icpdr.org, modified by Ralf Reinartz





Conservation attempts

Action Plan for the Conservation of Sturgeon (Acipenseridae) in the Danube River Basin

Adopted in 2006, under the Bern Convention, ratified by all Danube countries

Aim: Through national action and international cooperation, to secure viable populations of all Danube sturgeon species and forms by sustainable management and by restoration of their natural habitats and migratory movements





Results

- Temporary bans on sturgeon fisheries in Romania, Serbia, Bulgaria
- → ICPDR fundraising for Iron Gates fish pass
- → EU Strategy for Danube Region considers sturgeon conservation
- → CITES, TRAFFIC, IAD, WWF, WSCS efforts

... but large parts of Sturgeon Action Plan not tackled, threats remain (e.g. navigation) and more coordination needed!





EU Strategy for the Danube Region

4 pillars: connectivity, protecting the environment, building prosperity and strengthening the Danube Region

The environment pillar:

PA 4. To restore and maintain the quality of watersPA 5. To manage environmental risksPA 6. To preserve biodiversity, landscapes and the quality of air and soils

Action included in the AP of the EU-SDR: "Secure viable populations of Danube sturgeon species and other indigenous fish species by 2020."



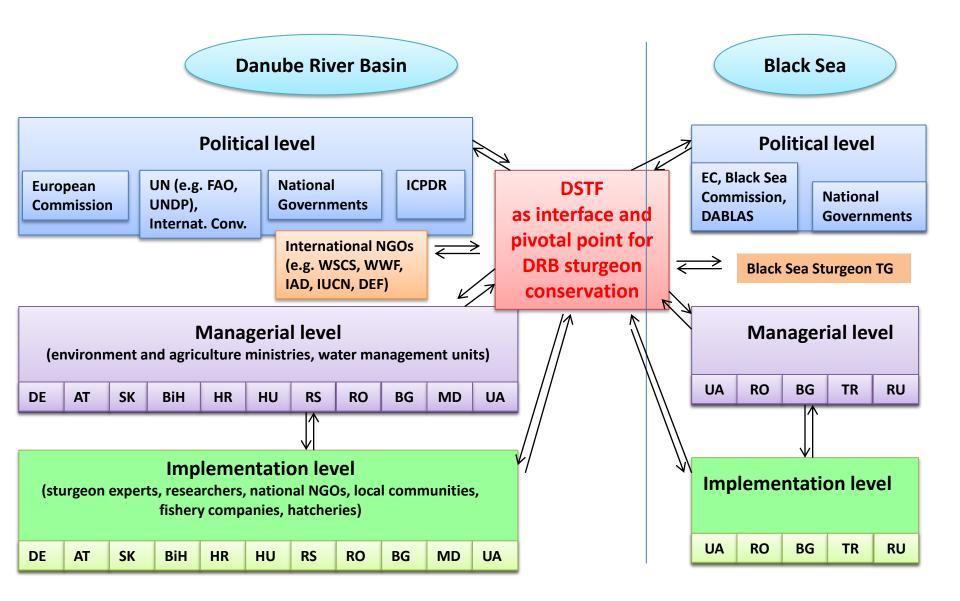


Danube Sturgeon Task Force

DSTF - established Jan. 2012, Vienna - ICPDR + EUSDR PA6 support

 DSTF - a platform to join synergies between relevant organizations in the Danube River Basin and the adjacent Black Sea to foster sturgeon conservation

Danube Sturgeon Task Force







DSTF – "Sturgeon 2020" program

Based on Sturgeon Action Plan

Focus:

- Networking and gaining political support
- •Research in natural environment (in situ)
- •Sturgeon conservation measures (*ex situ*)
- •Socio-economic measures to reduce illegal fishing
- Law enforcement and competence building
- Targeted communication activities





Networking and gaining political support

- •ICPDR include measures targeting sturgeon protection in the next DRBMP
- •EU Strategy for the Danube Region and Black Sea Region linked with Sturgeon 2020.
- •Special attention to stakeholders with major influence on sturgeon conservation:

Navigation – cumulative impact of navigation projects for long distance migratory fish species

Hydropower – ICPDR guidelines should include a "sturgeon check" in the EIA for new hydropower projects in river/stretches known as former sturgeon habitats

Fishery policy – harmonization with the EU Fishery policy, especially in the Black Sea; sturgeon fishery ban in UA





Research in natural environment

In situ research - should focus on the identification of key issues for the conservation strategy in the different Danube regions

Investigations of sturgeon populations and life-cycle of different species -harmonized methodology aiming to:

- (i) identify and describe,
- (ii) conserve and protect,
- (iii) restore key habitats

River continuity - access to habitats is crucial - detailed investigations on habitats quality and availability must be developed simultaneously to conducting research in the life cycle

New pressures (e.g. climate change, invasive alien species) - harmonized with the Danube River Basin Management Plan and European Union strategies.





Ex situ conservation measures

The species nearly extinct (e.g. *A. nudiventris*) require a special rescue program.

Inventory of existing broodstock in captivity and existing facilities

New hatcheries designed exclusively for conservation -restocking the natural rivers (e.g. Garonne River, France); -scientific supervision to control the quality of the off-springs -include areas for gradual adaptation to the natural habitat conditions in order to increase the chances of the juveniles to survive in the wild after restocking.

The hatcheries for caviar market and commercial purpose should be run separately by the private sector

Harmonization of the existent databases



Socio-economic measures



Strengthen CITES requirements - incentives, regulation, control, strengthening fishery associations - the revival of sturgeon populations will bring benefit to fishery communities as well

Licensing system for legal sturgeon fishery (eco-label) - prepared for introduction once the stocks have recovered and fishing can be reintroduced

Creation of alternative income sources at local level to reduce illegal fishing ecotourism, sport fishing, park rangers, ecological education, increase revenues for local fishermen, create a market for local products

The local communities - supported to develop own business - may outcompete investors from outside, driven by short-term gains only. Introduce "community control" concept in the Lower Danube

Raising consumers awareness on sturgeon threats - increase demand for aquaculture caviar and farmed fish products to reduce the pressure on wild population



Law enforcement + competence building



Weak implementation of international conventions, i.e. the Bern Convention and the related Danube Sturgeon Action Plan

EU Directives - possible tools to support implementation of the existing conventions and action plans

Harmonization of international and national legislation still needed: national laws and regulations = tools for implementing international agreements

The legislation on international level is in place; enforcement required, especially at the administrative level

To prevent/reduce illegal fishing, key organizations should be involved, such as: Black Sea Fisheries, Black Sea Commission

Capacity building is required in jurisdiction, enforcement agencies, fishermen community, NGOs, management agencies - training and knowledge exchange based on the existing expertise in different Danube countries and other river basins is envisaged.





Targeted communication activities

The communication concept should address the priorities identified in the DSTF strategy

According to the current pressures in the Lower Danube, the following priorities have been identified: -navigation and hydropower -fishermen communities -general audience

Possibility - devote Danube Day (ICPDR) to Sturgeons – under discussion for 2013

Permanent dialogue with governmental organizations

Other channels to reach public support - defined after establishing the overall communication strategy



Sturgeon 2020 & EUSDR



