Sturgeons as common natural resource for Black Sea and Lower Danube countries

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Anadromous fish species



Beluga sturgeon (*Huso huso*) migrated till Ulm in Germany





European project

- Evaluation of survival and distribution in the Black Sea of young sturgeons stocked experimentally in the Lower Danube", Romania (2013-2015)
- University of Galati
- Participants: Romania, Ukraine, Bulgaria, Turkey, Georgia, Serbia



Salinity of the Black Sea and sturgeons distribution in the Black Sea





Ex-situ survey to preserve sturgeon genetic diversity in the Middle and Lower Danube (STURGENE)

Duration: 1.04.2015 - 31.03.2016

Partners:

- International Association for Danube Research (IAD), AT
- University of Natural Resources and Life Sciences (BOKU), AT
- International Commission for the Protection of the Danube River, AT
- Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences (IBER ó BAS), BG
- Institute for Multidisciplinary Research (IMR), RS
- Danube Delta National Institute for Research and Development, RO





EUSDR START Project STURGENE

Objectives:

- an overview of existing ex-situ facilities in Middle and Lower Danube area
- support of local stakeholders and fishery authorities for sturgeon conservation
- Develop a roadmap for future actions in ex-situ conservation



EUSDR START Project STURGENE

- > A1. Explore ex-situ opportunities
- - An inventory of existing facilities, brood stock and expertise
- Field surveys in selected hatcheries and discussions with hatchery stakeholders
- A workshop with national stakeholders
- > A2. Mobilize political support for ex-situ conservation
- Discuss the conclusions of the field visits with the DSTF experts
- Elaborate a roadmap of future actions and disseminate in a high-level event to raise the support of the decision makers
- Dissemination activities for the wide public and local stakeholders



Fish behaviour preparatory study at Iron Gate Hydropower dams and reservoirs, financed by EIB



Objectives of projects

- 3D bathymetric survey downstream Iron Gate II dam
- Acoustic telemetry equipment testing and setup optimised for Iron Gate conditions
- Capturing, tagging and tracking movements of long range migratory sturgeons
- Molecular genetic analysis of captured and tagged sturgeons



The Danube Gorges - Mesolithic and Early Neolithic



One might easily imagine that in the eyes of the inhabitants of the Gorges, these were the only animals that were £oming backq repeating their journey year after year

Large quantities of fish bones from Lepenski Vir belong to Acipenserids, notably to beluga sturgeon (*Huso huso*)





It is striking that the majority of whirlpool fishing spots which were used in XIX century overlap with the locations of Mesolithic-Neolithic sites in the Gorges





Sturgeon 2020 & EUSDR





Sturgeon 2020 program



Transdisciplinary and transboundary investigation

- Researchers (biologists, ecologists, hydrologists, civil engineers)
- Govermental agencies
- Local authorties
- Hydropower managers
- NGO's

