

MEASURES

Managing And Restoring Aquatic Ecological Corridors For Migratory Fish Species In The Danube River Basin





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- 3 years Interreg project (01.06.2018 31.5.2021)
- project lead: BOKU Univ. Prof. Dr. Thomas Hein
- 12 Project Partners (PP) across the Danube region
 + 12 Associated Strategic Partners (ASP)
- contributes to programme priority SO 2.3:



Foster the restoration and management of ecological corridors



overall budget: ca. 2.5 million € ERDF & IPA contribution: ca. 2.1 million €



Project partners:

Austria - University of Natural Resources and Life Sciences, Vienna

Bulgaria - WWF Bulgaria, Institute of Biodiversity and Ecosystem Research - Bulgarian Academy of Sciences

Croatia - Karlovac University of Applied Sciences

Hungary - National Agricultural Research and Innovation Centre, Research Institute for Fisheries

Romania - Institute of Biology Bucharest, Romanian Academy Danube Delta National Institute for Research and Development Ministry of Waters and Forests, WWF-Romania

Serbia - Institute for Multidisciplinary Research, University of Belgrade

Slovakia - Trnava University in Trnava, Faculty of Education

Slovenia - Institute for Ichthyological and Ecological Research REVIVO

Associated strategic partners:

Austria - International Commission for the Protection of the Danube River, Austrian Federal Ministry for Sustainability and Tourism, Danube River Network of Protected Areas

Germany - Bavarian State Ministry of the Environment and Consumer Protection, German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Leibniz-Institute of Freshwater Ecology and Inland Fisheries - a member of the Research Association Berlin e.V.

Netherlands - World Fish Migration Foundation,

Romania - Ministry of Environment, Biodiversity Directorate, River Administration of the Lower Danube Galati,

Hungary: Ministry of Foreign Affairs and Trade, Ministry of Agriculture, Department of Angling and Fisheries Management, Duna-Drava National Park Directorate





Specific objectives of MEASURES

• (1) Identification & mapping of migratory fish habitats.

- (2) Provision of a strategy to conserve Danube sturgeon species, including an appropriate design of broodstock facilities.
- (3) Development of a harmonised & improved strategy (including prioritisation) for the re-connection of migratory fish habitats to secure and re-establish vital ecological corridors in the DRB to be implemented into policy and management plans.







WP T1 - Infosystem Eco-Corridors

MEASURES Information System (MIS)

database compatible with ICPDR requirements



Network building for eco-corridors

- stakeholder list
- 3 rounds of workshops
- aim: improving transnational conservation management

IBRA

- inform and start a dialogue
- compile existing information





WP T2 - Mapping the Corridor Output: Habitat Mapping Training



took place Sept. 2018 23 participants

Aim

knowledge transfer and harmonization

Content

lectures and field work on

- sturgeon behaviour
- habitat preferences
- detection methods
- tagging and monitoring







WP T2 - Mapping the Corridor Activity: Habitat Mapping

Mapping activities are underway at

- Danube (RO, BG, SRB, SK)
- Jiu (RO)
- Siret (RO)
- Hron (SK)
- Váh (SK)
- Mura (SLO, CRO)
- Sava (SLO, CRO)
- Drava (CRO)

- potential habitats are identified by studying maps and researching historical data
- verified by on site measurements and fishing activities











WP T2 - Mapping the Corridor Output: Habitat Mapping Manual



Danube Transnational Programme MEASURES

> Migratory Fish -Habitat Mapping Manual



Content

- migratory fish in the Danube region
 - description, threats, identification, historical information and distribution
- habitat types and drivers
- detection of potential habitats
- verification of habitats
- data gaps





WP T3 - Strengthen Migratory Fish

Pilot restocking of Russian sturgeon and sterlet

- two restockings per species
 - Hungary: A. ruthenus (sterlet)
 → April 11, 2019: 3,000 individuals
 - Romania: *A. gueldenstaedtii* (Russian sturgeon)
 - \rightarrow April 23, 2019: 1,000 individuals
- second round in autumn
- planned as a public event
- production of a short promotion video



NAIK-HAKI





WP T3 - Strengthen Migratory Fish

- ex-situ gene stocking of Danube sturgeons cooperation with LIFE Sterlet
 - facility in Vienna will also house Russian sturgeon

- genetic conservation manual
- design of two pilot ex-situ gene conservation sites



Danube Transnational Programme MEASURES

> Genetic Conservation Manual – Danube Sturgeons





WP T3 - Strengthen Migratory Fish

Method for detecting the presence of rare Danube sturgeons

- together with the Joint Danube Survey, an eDNA based detection method will be developed
- tissue and water samples are currently being processed in the lab



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WP T4 Securing the Eco-Corridor

Strategy for the Danube ecological corridor

current activity screening of habitat and corridor status in existing management plans and processes



Lessons learnt manual



Stakeholder training workshop

BOKU

- based on the strategy and the lessons learnt
- taking place at the final conference 2021



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THANK YOU!

