



Bundesministerium Land- und Forstwirtschaft, Regionen und Wasserwirtschaft































Fischereirevierverband I Fischereirevierverband II Fischereirevier Donau C













# **Background**

- Sturgeons are the most threatened group of animals
- Two of six Danubian species are regionally extinct, three are critically endangered, one is endangered
- Without captive living genebanks in *ex situ* facilities chances are high that the genetic diversity continues to decline towards extinction (extinction debt)
- Successful conservation requires basin-wide management & monitoring of captive & wild stocks





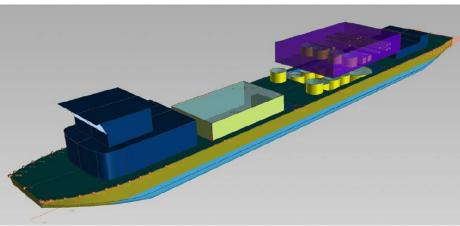






# **LIFE-Boat 4 Sturgeon**

- Volume € ~11.822.000
- 10 partners, 8 countries
- 2022-2030
- Builds upon methods & results from LIFE-Sterlet
- Based upon Pan-European Action Plan for Sturgeons
- Embedded within the Networks of WSCS, DSTF & IUCN











# Establish genetically diverse captive broodstocks of mature animals and necessary infrastructure in at least two locations (AT and HU)

"LIFE Boat 4 Sturgeon" – floating rearing station (AT)

- Adaptation of ponds near Szavas (HU)
- Establish genetically diverse captive broodstock of four species in AT and HU
  - At least 50 A. gueldenstaedtii
  - At least 20 Huso huso
  - At least 200 A. ruthenus
  - At least 50 A. stellatus

#### Artificially reproduce broodstock and rear offspring in specialized infrastucture

- LIFE-Sterlet hatchery container & LIFE Boat
- Juvenile rearing system at the Körös River (HU)
- Sturgeon hatchery at the Mura (SI)



## **Excursus Broodstock & Reproduction**

Institut für Hydrobiologie und Gewässermanagement

- Proven genetic origin
- Genetic diversity
- Pedigree based mating schemes
- Suitable infrastructure, risk reduction, failsafe mechanisms
- Principles for fish welfare
- State of the Art reproduction techniques, minimal invasive
- Exchange of data, gametes and animals between entities









Release at least 1.6 Mio genetically sound and diverse juveniles to the Danube catchment

- 300.000 beluga sturgeon LD
- 300.000 Russian sturgeon LD
- 300.000 stellate sturgeon LD
- 200.000 sterlets Mura, Drava
- 200.000 sterlets MD, Körös, Tisza
- 300.000 sterlets UD, Morava

Provide a long-term database and manual for *ex situ* actions and monitoring in sturgeon conservation for the whole Danube Region and other European catchments

- Design & implement a blockchain database with genetic & biotic data of the broodstock as base for a genetic breeding plan and assignments of recapture
- Assess genetic diversity within remnant populations using genetic data
- Develop a standardized methodology for ex situ sturgeon conservation to harmonize efforts within the EU



#### **Excursus Juvenile Rearing & Release**







- Use of river water for Homing behaviour
- Rearing & Feeding schemes to increase fitness for survival (Natural diets, flow, variations in turbidity, temperature, other stimuli)
- Targeted release strategies (Size, number, location, tagging, genetic variation)
- Principles for fish welfare
- Standardized coordinated monitoring of released animals













Implement standardized monitoring of population development in AT, SK, HU, SI, BG, RO

- eDNA assessments
- Standardized capture-recapture

Coordinate with fishing authorities and communities along the LD and Black Sea to reduce IUU fishing in RO, BG and UA

- At least 20 control missions with law enforcement
- Reaching out & educating at least 750 fishermen

Raise awareness of the broad public and relevant stakeholders

- Reaching out to at least 3 million people
- Website, social media accounts, project films
- Radio features, media releases, events, tours through facilities



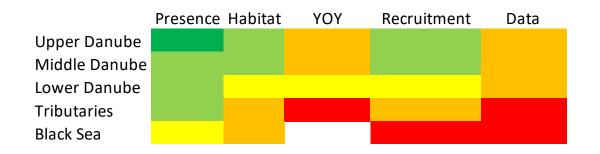
#### **Excursus Population Monitoring**



#### **Objectives:**

#### Monitor population trends and determine the potential bottlenecks to population recovery

- to stop or mitigate negative impacts
- to implement effective restoration actions
- to implement sustainable managment strategies
- A question to be answered and clearly defined objectives
- Applicability and cost effectiveness
- Replicability & standardization
- Comparability and data exchange among range states
- Fish welfare













#### Raise awareness of the broad public and relevant stakeholders

- Reaching out to at least 3 million people
- Website, social media accounts, project films
- Radio features, media releases, events, tours through facilities

Guarantee long-term sustainability of project actions & provide access for stakeholders to genetically proven Danubian sturgeon broodstock and juveniles for conservation issues in the DRB

Development of a sustainability strategy and AFTER-LIFE plan



# **Excursus Dissemination & Networking**













Strasbourg, 30 November 20

T-PVS/Inf(2018)6

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

Standing Committe

38th meeting Streehourg, 27, 30 November 201

#### PAN-EUROPEAN ACTION PLAN FOR STURGEONS





Document prepared by he World Sturgeon Conservation Society and WWF

This document will not be distributed at the meeting. Please bring this copy.

Ce document ne sera plus distribute en réunion. Priètre de vous munir de cet exemplaire.

