TRAP AND TRANSPORT AS AN OPTION AT THE IRON GATE?

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TRAP & TRANSPORT - THE SETTING

- "Catching fish/sturgeon and transporting them over an obstacle, usually by trucks"
- Done in some areas in North America especially with Lake Sturgeon (Acipenser fulvescens)
- North American rivers:
 - Depth: <3m
 - Q: $50-85 \text{ m}^3/\text{s}$
 - large sturgeon populations in limited volumes of water
- Danube:
 - Depth: 8-24 m
 - Q: ~5000 m³/s
 - sparse populations



PROBLEMS WITH TRAP & TRANSPORT AT THE IRON GATE

- Capturing of sturgeon
 - Danube wide and deep
 - Even if some sturgeon are tagged **never the whole spawning run** exact locating of single fish is hard and time consuming
 - Handling of sturgeon during spawning migration highly stressful
 - Capture & transport
 - 75% of Lake Sturgeon transported dropped back without reproducing
 - Sturgeon have to be removed from the river and transported (usually by trucks)
- Downstream migration
 - Sturgeon migrate back to the Black Sea after spawning
 - Downstream migration of juveniles not considered
 - → High risk of turbine passage and mortalities & injuries!
- Constant effort and costs necessary → Solution not sustainable



WRAP-UP OF ASSESSMENT OF THE IMPACT OF T&T

- High costs and constant effort necessary
- Only a small part of the spawning run can be captured (if at all)
- Massive risk through handling during the spawning run (abortion of spawning run due to stress)
- Downstream migration not considered for neither adult nor juvenile sturgeon
 - High risk of turbine passage and mortalities!
- → Trap and transport is inefficient
- →Only a solution where sturgeon can bypass an obstacle independently is cheaper in the long run



Summary of DSTF Position

- Trapping and transporting at the Iron gate dams of sturgeons would be counterproductive and entail a significant risk of abortion of spawning behaviour.
- For downstream migration, trapping and transport at the Iron Gate dams would also not be a
 viable option in the context of the Danube and the Iron Gates (extended duration of the
 downstream migration period, depth and size of the Iron Gate 1 reservoir) and would lead to
 significant perpetual operating costs.
- Trapping and transporting would disregard all species other than targeted sturgeon and can not serve as a functional fish passage solution designed to benefit multiple migratory species.
- It can be concluded that trap and transport is unsustainable and cannot be considered a solution, neither for sturgeon migration at the Iron Gate for upstream or downstream migration of sturgeons, nor for other migratory species.
- DSTF therefore opposes implementation of trap and transport as a solution for sturgeon migration at the Iron Gate dams.
- This does not exclude experimental set ups of transporting a strictly limited and controlled number of fish across dams to optimise further details of planning fish pass solutions such as the location of fish pass entrances.

THANK YOU FOR YOUR ATTENTION!

