

**Migrácie rýb v Dunaji z európskej perspektívy |**  
*Fish migration in the Danube from the European  
perspective*

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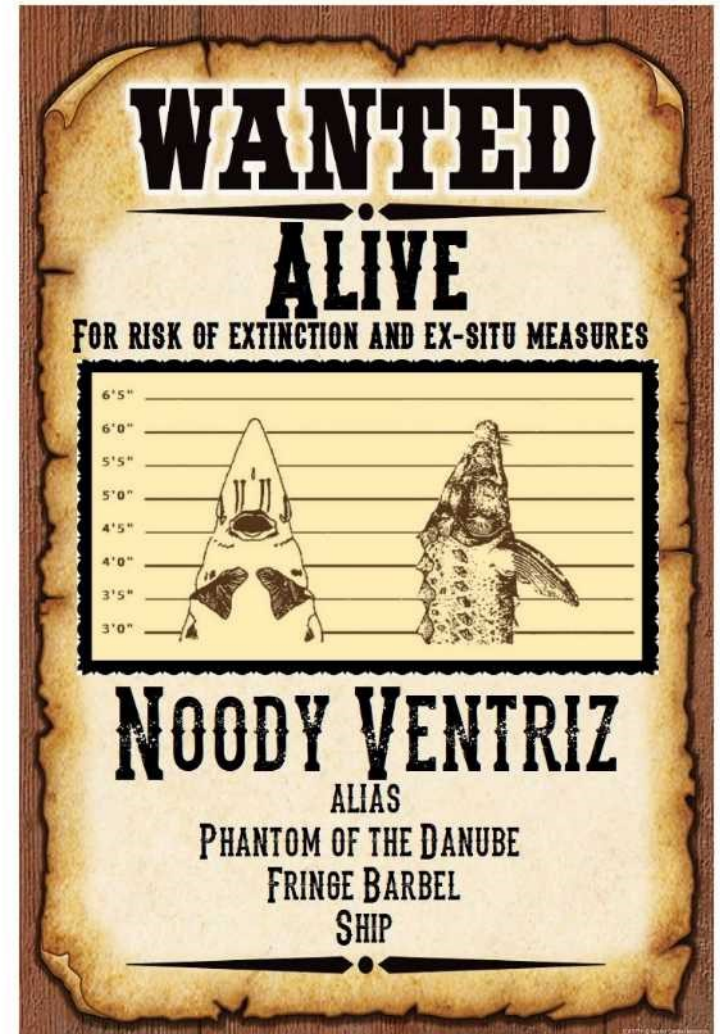
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# Dunaj

- Najmedzinárodnejšia rieka na svete
- Preteká krajinami Európskej únie, ako aj krajinami mimo EÚ
- Problémy na Dunaji je potrebné riešiť koordinovane a v spolupráci s viacerými krajinami
- = ochrana Dunaja je príliš zložitá

# Ochota ľudí chrániť svoje okolie

- Ochrana dažďového pralesa vs. ochrana slovenských lesov
- Ochrana Amazonky vs. ochrana Dunaja
- Vyhynutie nosorožca vs. vyhynutie jesetera hladkého (*Acipenser nudiiventris*) v Dunaji



# Jesetery ako vlajkové druhy Dunaja

- **Regionálne vyhubený (RE)**
- *Acipenser sturio* – jeseter veľký
- **Kriticky ohrozený (CR)**
- *Acipenser nudiventris* – jeseter hladký
- *Acipenser gueldenstaedtii* – jeseter ruský
- *Huso huso* – vyza veľká
- *Acipenser stellatus* – jeseter hviezdnatý
- **Ohrozený (VU)**
- *Acipenser ruthenus* – jeseter malý



# Výskyt v Dunaji

	Horný Dunaj	Stredný Dunaj	Dolný Dunaj
<i>Acipenser sturio</i>	Výskyt v minulosti náhodný, v súčasnosti sa nevyskytuje		
<i>Acipenser nudiiventris</i>	?	Ojedinelé nálezy	?
<i>Acipenser gueldenstadtii</i>	Migrácie až do nemeckého úseku	Bežné migrácie v minulosti	Výrazný pokles
<i>Huso huso</i>	Migrácie až do nemeckého úseku	Bežné migrácie v minulosti	Stavy neustále klesajú
<i>Acipenser stellatus</i>	Ojedinelý výskyt	Zriedkavý v minulosti	Najbežnejší druh
<i>Acipenser ruthenus</i>	1 populácia na rakúsko-nemeckých hraniciach	Relatívne bežný, stavy klesajú	Relatívne bežný, stavy klesajú

# Dunajská stratégia



PA 1A

Waterways Mobility



PA 1B

Rail-Road-Air Mobility



PA 2

Sustainable Energy



PA 3

Culture & Tourism



PA 4

Water Quality



PA 5

Environmental Risks



PA 6

Biodiversity & Landscapes



PA 7

Knowledge Society



PA 8

Competitiveness of Enterprises



PA 9

People & Skills



PA 10

Institutional Capacity & Cooperation



PA 11

Security

# Prioritná oblasť 6 – Biodiverzita a krajina

1. By 2020 strengthen the work on halting the deterioration in the status of all species and habitats covered by EU nature legislation in order to achieve a significant and measurable improvement, adapted to the special needs of the respective species and habitats in the Danube Region.
2. Enhance the work on establishing green infrastructure and the process of restoration of at least 15% of degraded ecosystems, including soil, in order to maintain and enhance ecosystems and their services by 2020 in the Danube Region and to improve air quality.
3. Encourage achieving significant progress in identification and prioritization of Invasive Alien Species and their pathways in order to control or eradicate priority species, to manage pathways and to prevent the introduction and establishment of new Invasive Alien Species in the Danube Region by 2020.
- 4. Continue the ongoing work and efforts to securing viable populations of Danube sturgeon species and other indigenous fish species by 2020.**

# Sturgeon Action Plan

- Plán na záchranu dunajských jeseterov
- Od vzniku sa dosiahol len málo z akčného plánu, Slovensko jednou z najmenej aktívnych krajín
- Vytvorenie národného plánu pre SR?

**Action Plan for the conservation of Sturgeons (*Acipenseridae*) in the Danube River Basin**

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**Final Version**  
**12<sup>th</sup> December 2005**



# Proces napĺňania SAP

Strasbourg, 7 November 2017  
[Inf22e\_2016.docx]

T-PVS/Inf (2017) 22

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE  
AND NATURAL HABITATS

**Standing Committee**

37<sup>th</sup> meeting  
Strasbourg, 5-8 December 2017

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## **STATUS OF IMPLEMENTATION OF THE ACTION PLAN FOR THE CONSERVATION OF STURGEONS (*ACIPENSERIDAE*) IN THE DANUBE RIVER BASIN**

"The Standing Committee took note with concern of the reports on the state of implementation of the Action Plan for the conservation and restoration of sturgeons in the Danube River Basin and the recommendations made by the Danube Sturgeon Task Force to prevent further extinctions.

The Standing Committee encourages the Danube River Basin States to scale up the implementation of the Action Plan for the conservation and restoration of Danube sturgeons and to report on progress at the 39th meeting of the SC to the Bern Convention in 2019".

# Úlohy vyplývající ze správy

Action 9.1 Conduct feasibility studies for upstream and downstream fish passage at Iron Gates dams I & II.

Action 9.2 Plan and design fish passage facilities for Iron Gates dams I & II.

Action 9.3 Implement final design and construction of fish passage facilities at Iron Gates dams I & II and ensure that their performance is effectively monitored and evaluated.

**Action 9.4 Conduct feasibility study for fish passage at Gabčíkovo dam.**

**Action 9.5 Plan and design fish passage facilities at Gabčíkovo dam.**

**Action 9.6 Implement final design and construction of fish passage facilities at Gabčíkovo dam and ensure that its performance is effectively monitored and evaluated.**

Action 9.7 Identify and assess barriers to sturgeon migration on Danube branches and tributaries, and in the Black Sea coastal zone (Note: completion of Actions 9.1 to 9.6 not dependent on completion of this assessment, since major adverse impacts of Iron Gates and Gabčíkovo already known).

Action 9.8 Prioritise mitigation measures for barriers to sturgeon migration and initiate planning, design, construction and monitoring/evaluation of fish passage facilities. (Note: action to mitigate known significant barriers should not be delayed while Action 9.7 is undertaken)

Action 9.9 Prevent mortality of young sturgeons at water withdrawal sites.

# Medzinárodná komisia pre ochranu povodia Dunaja (ICPDR)



## DANUBE DECLARATION

adopted at the  
ICPDR Ministerial Meeting  
9 February 2016

Water Management in the Danube River Basin:  
Integration and Solidarity in the most international  
river basin of the world



# Medzinárodná komisia pre ochranu povodia Dunaja (ICPDR)

ministerská deklarácia  
uznala jeseterov ako  
prírodné dedičstvo  
povodia Dunaja

## Danube Sturgeons – the flagship species of the Danube River Basin

(35) *recognize* that the Danube sturgeons are “living fossils” representing a natural heritage of the Danube River Basin once existing all over the basin whereas today only some critically endangered or vulnerable species are left, living in particular in the lower Danube River Basin, but with regard to the sterlet and ship sturgeon also in the middle Danube River Basin and with regard to the sterlet in the upper Danube River Basin.

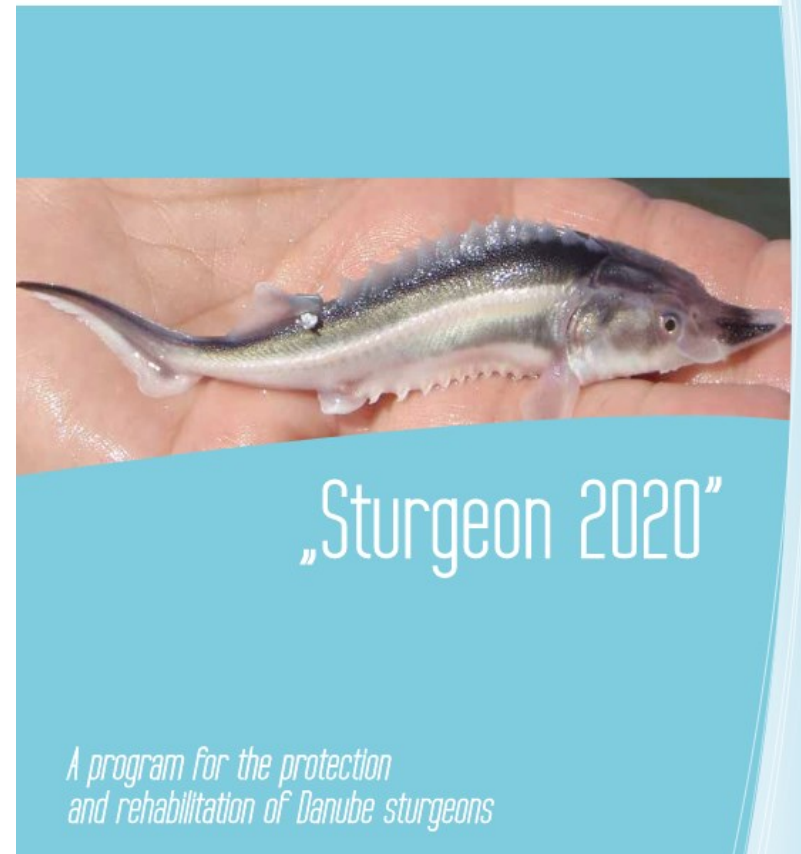
(36) bearing in mind the manifold pressures from different sectors which need to be addressed through an integrated water resources management in the Danube River Basin and considering that sturgeons are a suitable indicator for a variety of pressures while at the same time recalling progress made in other river basins by designating a flagship species we *reaffirm* our intention to establish the Danube Sturgeon as the flagship species for the Danube River Basin hereby desiring to advance broad public awareness and political commitment for the Danube sturgeons and the ecosystem of the Danube River Basin as a whole.

(37) *welcome and support* the progress made on sturgeon issues in the framework of the EUSDR, in particular the Program “Sturgeon 2020” elaborated by the Danube Sturgeon Task Force, as well as the sturgeon fishery bans being in force in Bulgaria, Romania, Serbia and Austria and *offer* further coordination with the ICPDR in those areas where the ICPDR is holding key competences. We *welcome* as well the fact that the World Sturgeon Conservation Society will hold its 8<sup>th</sup> International Symposium on Sturgeons in 2017 in Vienna and *ask* the ICPDR to present its relevant activities at the conference.

(38) *appreciate* the progress made with regard to a feasibility study analyzing the options to establish fish migration at the Iron Gate Dams and *reaffirm* our support for the next steps identified in the project “Towards a Healthy Danube – Fish Migration Iron Gates I & II” as well as for the envisaged follow up actions further upstream in case of positive results at the Iron Gates.

# Danube Sturgeon Task Force (DSTF) a Sturgeon 2020

- Danube Sturgeon Task Force (DSTF) založená v januári 2012
- Stratégia na záchranu dunajských jeseterov prijatá v roku 2013
- Postup pri napíňaní je stále pomalý



# VD Gabčíkovo

- Železné vráta sú v štádiu riešenia a chystá sa štúdia uskutočniteľnosti
- Namiesto realizácie spriechodnenia VD Gabčíkovo sa plánuje budovať systém prehradení v starom koryte Dunaja

FISH MIGRATION AT THE GABČÍKOVO DAM

EUROPEAN INVESTMENT BANK (EIB)



2<sup>nd</sup> of September 2015  
Final report  
C01041.000234



# Projekt MEASURES

- InterReg Danube Transnational Program - Managing and restoring aquatic Ecological corridors for migratory fish species in the Danube River basin
- Koordinovaný postup pre znovuotvorenie ekologických koridorov pre ryby v Dunaji
- Vytvorenie platformy všetkých zainteresovaných subjektov
- Pomocou dvoch pilotných aktivít podporiť medzinárodnú spoluprácu



## PERSPECTIVES

### ECOLOGY

# 1000 dams down and counting

Dam removals are reconnecting rivers in the United States

By J. E. O'Connor,<sup>1</sup> J. J. Duda,<sup>2</sup>  
G. E. Grant<sup>3</sup>

Forty years ago, the demolition of large dams was mostly fiction, notably plotted in Edward Abbey's novel *The Monkey Wrench Gang*. Its 1975 publication roughly coincided with the end of large-dam construction in the United States. Since then, dams have been taken down in increasing numbers as they have filled with sediment, become unsafe or inefficient, or otherwise outlived their usefulness (1) (see the figure, panel A). Last year's removals of the 64-m-high Glines Canyon Dam and the 32-m-high Elwha Dam in northwestern Washington State were among the largest yet, releasing over 10 million cubic meters of stored sediment. Published studies conducted in conjunction with about 100 U.S. dam removals and at least 26 removals outside the United States are now providing detailed insights into how rivers respond (2, 3).

A major finding is that rivers are resilient, with many responding quickly to dam removal. Most river channels stabilize within months or years, not decades (4), particularly when dams are removed rapidly; phased or incremental removals typically have longer response times. The rapid physical response is driven by the strong upstream/downstream coupling intrinsic to river systems. Reservoir erosion commonly begins at knickpoints, or short steep



**Goodbye to a large dam.** Elwha River passing through the remains of Glines Canyon Dam on 21 February 2015. The former Lake Mills can be seen in the background.

Downloaded from on March 29, 2016

PHOTO: JOHN GUESMAN/GUESMANVIDEOPRODUCTIONS.COM