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How "We Pass" is Opening the Iron Gates to Danube Migratory Fish Species

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A recent report (Deinet et al. 2020) found populations of migratory freshwater fish species to have declined on a global scale by 76% since 1970 – and the highest of those drops has been experienced in Europe. In order for migratory fish such as shad, barbel, and others to reproduce, they have to travel further upstream in rivers such as the Danube – the only such paths to their ancient spawning grounds. However, this important aspect of their life-cycle has been and continues to be hindered across the world. While dams along the Danube River certainly provide vital infrastructure and renewable energy sources for the region and citizens, their establishment presents a major blockage to the migratory routes of many Danube fish species. Sturgeons – the flagship fish species for the Danube – are also one such species of migratory fish, already long endangered before Danube dams blocked essential migration routes due to overfishing.

The We Pass project is an initiative aiming to facilitate fish migration in the Danube River Basin, set up in 2019 by the ICPDR, Jaroslav Černí Institute, DDNI, CDM SMITH | OAK Consultants, and the Norwegian Institute for Nature Research. The focus is on the preservation of habitat and reestablishment of migration routes for fish at the Iron Gates stretching over the river between Serbia and Romania. While sturgeons are by no means the only fish species impacted – though they are considered to be among the most endangered groups globally according to the IUCN Red List of Threatened Species – they are also a flagship species for the ICPDR. With concerted study and efforts such as We Pass though, these iconic fish can not only be saved from completely disappearing, but can have

their numbers brought back up to healthy levels all along the Danube.

Efforts to raise awareness were highlighted at the We Pass kick-off event held on 9 April 2019 in Kladovo (Serbia) and included a site visit at the Iron Gates I Đerdap Hydroelectric Power Station. In attendance were project partners, stakeholders, representatives of the Đerdap Hydroelectric Power Station, and members of the public.



Figure 1: View of the Iron Gates gorge, Serbia-Romania border

The precise form of the solution We Pass will seek for the Iron Gates impasse is still under review. Initial studies are still ongoing, establishing the most effective and least disruptive way to get Danube fish migrating once again.

We Pass is combining its efforts with the similar and complementary programmes already in place across the region, addressing sturgeon migration, a key piece of the overall Danube conservation puzzle. Getting the sturgeon over this single set of obstacles will truly help them to rec-

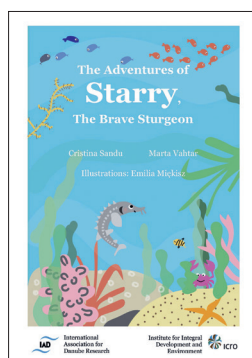
upy their former home upriver and to again become an expected and iconic sight all along the Danube.

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News and Notes

New children's book on sturgeons released by IAD



As an active network, the International Association for Danube Research (IAD) wants to go beyond the development of scientific core topics on environmental issues. The IAD scientists know how important near-natural rivers and associated wetlands are for human well-being. The role of healthy river landscapes such as the

Danube, which connects 10 countries in Europe, has become increasingly important in recent decades. In order to increase awareness of the conservation of aquatic habitats and their animal and plant species, the IAD has published an e-book for children in cooperation with the Institute for Integral Development and Environment, Slovenia. It tells the adventures of a small sturgeon in the river and sea and the

challenges it faces in its habitats. "The Adventures of Starry, the Brave Sturgeon" is suited for children aged 8-13 years. A coloring book was also designed for children aged 4-7.

The e-book and the coloring book were written in English and translated into nine languages of the Danube region: Bulgarian, German, Croatian, Romanian, Serbian, Slovak, Slovenian, Hungarian and Ukrainian.

The e-books, pdfs as well as the coloring book are available free of charge under this link: https://www.danube-iad.eu/index.php?item=educational_issues

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Gertrud Haidvogel

Obituary Univ.-Prof. Dr. Elsa Leonore Kusel-Fetzmann

The "Grande Dame" of Austria's Hydrobotany, Univ. Prof. Dr. Elsa Leonore Kusel-Fetzmann has passed away on 16 April 2020. We sadly have to accept this ultimate incident of her long life.

Prof. Kusel began her studies at the University Vienna in 1950 and finished her doctoral thesis entitled 'Contributions to Algal Sociology' in June 1956. This study already sparked her interest on floodplain waters of the River Danube as well as on biomass estimates of algal abundances and algal cultivation (Fetzmann 1956). In the same year she was employed at the Institute for Plant Physiology, University Vienna, by her doctor-father and head of the Institute, Prof. Karl Höfler. In the following years, Kusel published physiological lab work on algae as well as studies in the field (e.g. Fetzmann 1958). Together with Höfler, she published a pioneering work on Neusiedler See in 1959 (Höfler & Fetzmann 1959) and participated in the SIL-con-

gress held in Austria with a paper on algal sociology of Danube floodplain lakes (Fetzmann 1961a). Latest at the congress if not earlier, she met Prof. Heinz Löffler and Prof. Reinhard Liepolt, both crucial for her career. Her Habilitation described the algal vegetation in floodplain lakes of the River Danube (Fetzmann 1963). The 'Kardinal-Innitzer Award' was granted to her for this study and she acquired the 'venia legendi' for Plant Physiology, Ecology and Hydrobotany. A year later, 1964 she married Dr. Hermann Kusel, a schoolteacher and marine algologist. Her publication oeuvre from that time is multifaceted including articles with physiological, ecological or systematic content. Besides her continuous interest in peat bogs throughout her career (e.g. Fetzmann 1961b), her opus contains marine work (e.g. together with her later husband, Fetzmann & Kusel 1962), studies on macrophytes (e.g. Kusel-Fetzmann & Lew 1972) as well as investigations on special habitats