INTERREG (Austria – Czech Republic) project "Malsemuschel":

Support of the natural environment of the freshwater pearl mussel (*Margaritifera margaritifera*) and its occurrence in the upper Malše River catchment (Austria / Czech Republic)

Jitka Horáčková[1,2], Věra Kladivová[1], Ondřej P. Simon[1,2], Zuzana Hořická[1], and others*

[1] T. G. Masaryk Water Research Institute, Podbabská 30, CZ-160 00 Prague 6, Czech Republic, jitka.horackova@vuv.cz, vera.kladivova@vuv.cz, ondrej.simon@vuv.cz, zuzana.horicka@vuv.cz;
[2] Faculty of Environmental Sciences, Czech University of Life Sciences Prague, Kamýcká 129, CZ-165 21 Prague 6, Czech Republic

The Malše River



Why?

It had been known that the critically endangered freshwater pearl mussel (*Margaritifera margaritifera*) still occurs somewhere in the upper parts of the Malše River in South Bohemia, on the border between the Czech Republic and Austria. The fact that the Malše forms a state border here was hampering a detailed biological survey for a long time, and thus the knowledge about the pearl mussel population and its condition has been incomplete. For that reason, an Austrian-Czech INTERREG project was started in 2017 to enhance and support the freshwater pearl mussel population in the upper Malše River catchment.

When and what?

The main objectives of the project (2017–2020) are:

(i) to find out the recent state of the pearl mussel population,
(ii) to strengthen the population by reintroduction of indigenous semi-naturally bred juveniles into the river,
(iii) to describe the reasons why the species can not reproduce here,
(iv) to prepare materials for improving the water quality and reducing erosion throughout the international river basin, in cooperation with Austrian project partners.



juveniles

What stages of life?

We have already found around 300 freshwater pearl mussels in all the three stages of life in 2017-2018.



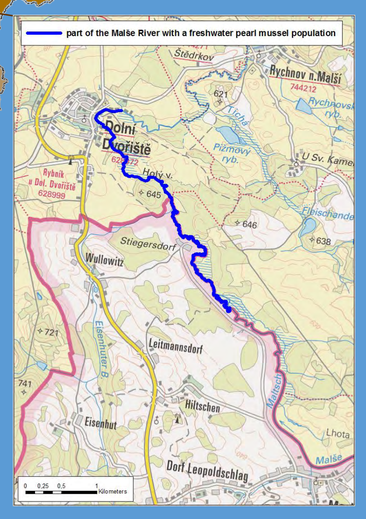
subadults



adults

Where?





What can the project help us with?

- Semi-natural breeding of freshwater pearl mussel juveniles
- Reintroduction of juveniles into the upper Malše River
- *In-situ* bioindication – testing sites suitable for reintroduction
- Genetic study of pearl mussel and its natural fish host – brown trout (*Salmo trutta*)
- Strengthening the population of brown trout
- Identification of optimal freshwater pearl mussel habitats and bottom substrates
- Evaluation of the current state of the upper Malše River
- Long-term monitoring of the water quality in the international river basin
- Improving the water quality in the river basin
- Identification of problems with: erosion, eutrophication, inappropriate management practices in the river basin
- Suggestions for improvement of hydromorphological conditions
- We need to be visible through popularization in the region...

INTERREG ATCZ37 Malsemuschel (2017–2021)
Podpora přirozeného prostředí a výskytu perlorodky říční (*Margaritifera margaritifera*) v povodí Malše / Förderung der natürlichen Umwelt und des Vorkommens der Flussperlmuschel (*Margaritifera margaritifera*) im Maltsch-Einzugsgebiet.

* **Project partners:** Ministry of the Environment of the Czech Republic; Amt der Oberösterreichischen Landesregierung; Nature Conservation Agency of the Czech Republic; South Bohemia Region