Fakulta rybářství a ochrany vod
Faculty of Fisheries and Protection of Waters

Jihočeská univerzita v Českých Budějovicích
University of South Bohemia in České Budějovice
Czech Republic

GAČR
CZECH SCIENCE FOUNDATION

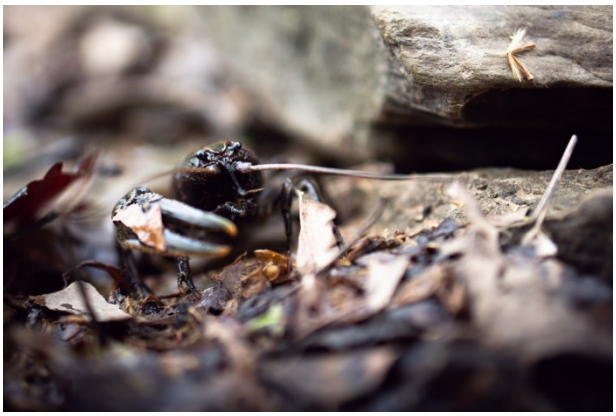
Temperature driven changes in interactions and ecological roles of prominent crayfish invaders

Project name	Temperature driven changes in interactions and ecological roles of prominent crayfish invaders
Registration number	GA19-04431S
Realization date	1. 1. 2019 — 31. 12. 2021
Recipient	University of South Bohemia in České Budějovice Faculty of Fisheries and Protection of Waters
Grant program	Czech Science Foundation
Responsible solver	Dipl.-Ing. Antonín Kouba, Ph.D.

PROJECT ANNOTATION

The project focuses on a combination of laboratory approaches and field studies to evaluate the effect of temperature on the interactions and ecological roles of the most important invasive crayfish species, which is essential for understanding ongoing and predicting future changes in freshwater ecosystems.

PROJECT GOALS



Many freshwater crayfish (Decapoda: Astacidea) are globally successful invaders. Indigenous crayfish species (ICS) become gradually replaced by non-indigenous crayfish species (NICS), often leading to extended and irreversible changes of entire ecosystems. To explain these replacements, previous studies have mainly focused on various aspects of single species, or on comparisons between two species (either ICS and NICS, or less often two NICS). However, populations of NICS are appearing in new, previously unexpected, ecosystems or species combinations. Also, the role of temperature as a key environmental factor has remained almost exclusively overlooked in this context. By combining robust laboratory approaches and field studies, the proposed project investigates the effects of temperature on interactions between and ecological roles of the most important crayfish invaders (Pacifastacus leniusculus, Faxonius limosus, Procambarus clarkii and P. virginalis), which is necessary for understanding of ongoing and predicting future changes in freshwater ecosystems.

PROJECT BUDGET

	Amount CZK
Total approved costs	6 555 thou. CZK
Public financial support	6 030 thou. CZK
Other public sources	525 thou. CZK
Non-public and foreign sources	0 thou. CZK

CONTACT

Dipl.- Ing. Antonín Kouba Ph.D./ **Responsible solver**

Phone +420 38777 4745, mob. +420 607 622 137, Email: akouba@frov.jcu.cz