

DOKTORSKÝ STUDIJNÍ PROGRAM/DOCTORAL STUDY PROGRAM

VYPSÁNÍ TÉMATU/LISTING OF TOPIC

Studijní program/*Study Program*: **Life Sciences**

Studijní obor/*Branch of Study*: **program without field**

Katedra/*Department of*: **Zoology and Fisheries**

Školitel, email/*Supervisor, email*: **doc. Ing. Pavel Horký, Ph.D., horky@af.czu.cz**

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Forma studia/*Form of Study*: **Full_time**

Typ tématu/*Type of Theme*: **disposable**

Téma/Topic: Advanced analysis of telemetry data as a powerful tool to gain more insight in behaviour of aquatic organisms

Hypotézy/Hypotheses: Applicability of methods used to analyse telemetry data differ between marine and freshwater ecosystems

Anotace/Summary: Telemetry methods developed from their onset during the second half of the 20th century up to date as a standard tool to study behaviour and spatial ecology of wild animals in their natural environments. Recent technological advances allow to track as small organisms as insects for several weeks using active telemetry techniques. Accordingly, automated tracking systems can be applied, resulting in the thousands or even hundredths of thousands of raw data. Telemetry tags can be also enhanced with various sensors, from environmental to physiological ones, leading to a further extension of obtained data across various taxa and environments. A big deal is how to reasonably utilize the increasing amounts of telemetry data. The aim of the present topic is to evaluate the cross-applicability of various tools used to analyse telemetry data in different environments. We will focus on cross-applicability between terrestrial and aquatic environments with emphasis on possible differences between marine and freshwater ecosystems. Primary as well as secondary telemetry data obtained during tracking of various aquatic organisms will be used for this purpose.

Zdroje financování práce/Funding Sources: European Regional Development Fund-Project (No. CZ.02.1.01/0.0/0.0/16_019/0000845). Other European project (LIFE) focused on telemetry of aquatic organisms is currently submitted.

V/In Prague

dne/Date: 31.10.2022

Podpis/Signature:

