

Modelling of freshwater fisheries

A workshop of Climefish freshwater sector



Wednesday 21-Thursday 22 Sept, 2016

Institute of Hydrobiology, Biology Centre AS CR
Na Sádkách 7, České Budějovice, Czech Republic
<https://www.google.com/maps/@48.9751842,14.4567857,18z?hl=en>

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Tentative agenda:

Session 1: Climate scenarios and limnological models – discussion of climate model scenarios (available global and regional projections) and their translation into water temperature and other relevant limnological changes via limnological models (e.g., simple models of water column temperature development, air-water temperature models);

Session 2: Structured models of fish populations – presentation and discussion of modelling approaches to structured population dynamics; identification of key demographic and interaction processes that are affected by climate change (e.g., water temperature-growth relationships), including summary of relevant recent theories; identification of possibilities to use other taxa/ecosystems to fill in any knowledge gaps;

Session 3: Model implementation and pilot runs - discussion of suitable functional forms of key processes identified in Session 2 to be implemented in the model assumptions; parameterization and *outputs* relevant to our Project; demonstration of pilot runs using the available IBM model (to introduce the R implementation) based on the existing charr and whitefish parameterizations; discussion on parameterizations for species relevant to other Climefish case studies;

Session 4: Ecosystem models - discussion of available and/or envisioned food web/community models and approaches to address climate warming impact on lakes; brief introduction to the Madingley model.

Session 5: ad hoc agenda and discussions

Session 6: Step-by-step tutorial in R on IBM model parameterization and running

About the venue: České Budějovice is medium-sized town with numerous accommodation possibilities (e.g. via booking.com). As a budget value option, we offer to book bed-and-breakfast accommodation very close to the Institute (Šípková and U stromovky streets, cca 20 Eur/night) - contact Jan Kubečka (tick as appropriate in the registration form).