

Effects of re-oligotrophication and invasive species on fish – zooplankton interactions

P3: Auswirkungen von Reoligotrophierung, Klimawandel und Fischerei-Management auf Fisch-Zooplankton Interaktionen und die Populationsdynamik der Felchen

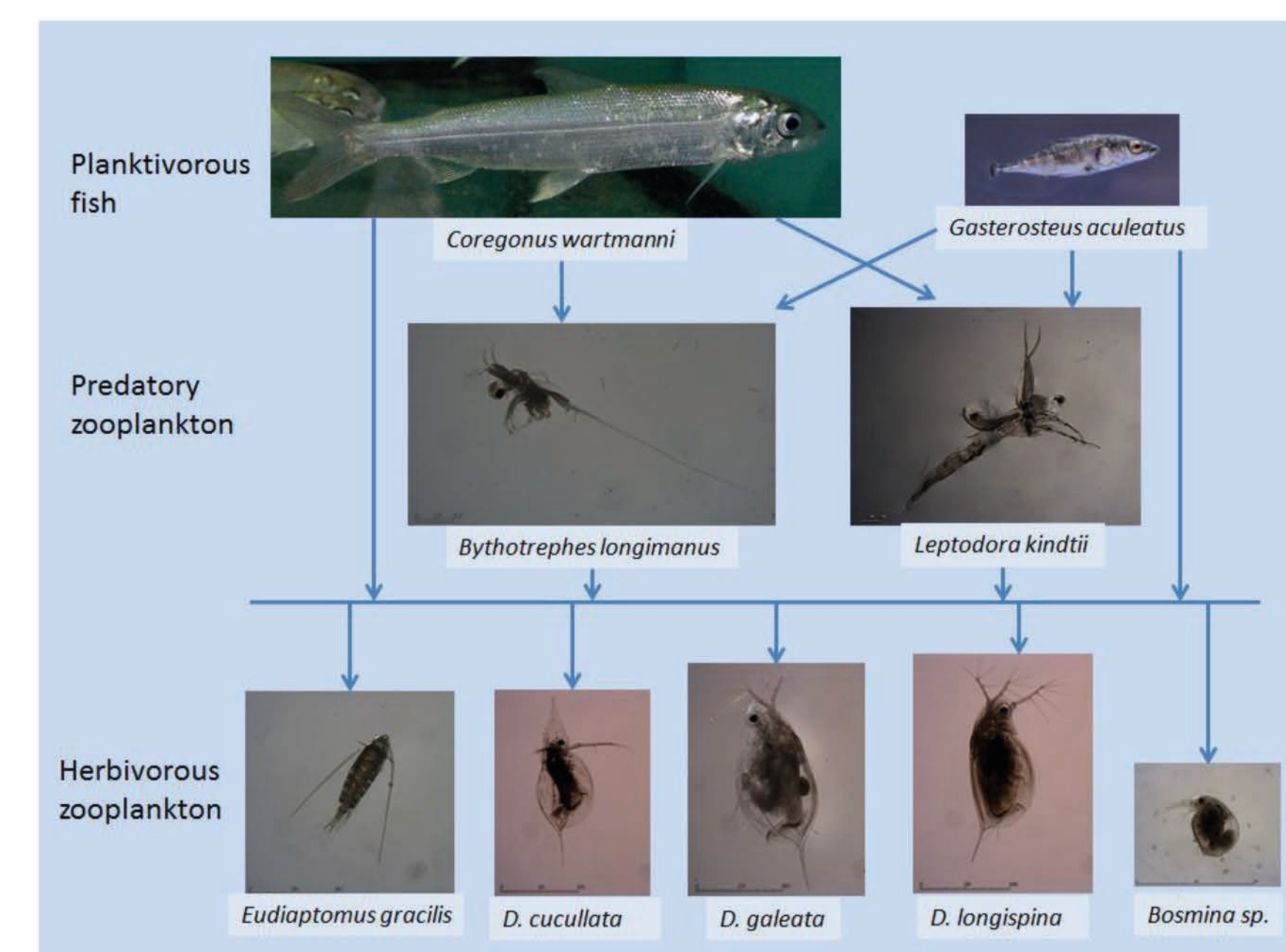


SeeWandel

Leben im Bodensee – gestern, heute und morgen

Project description

Whitefish (*Coregonus lavaretus wartmanni*) is a dominant planktivore fish species in Lake Constance. With the recent spread of sticklebacks (*Gasterosteus aculeatus*) into the pelagic zone possibly an important competitor of whitefish emerged. This spread most likely enhanced oligotrophication-driven food limitation of whitefish. Competitive effects of sticklebacks on whitefish and vice versa can only be understood and predicted via analysing the effects of both species on the population dynamics and community structure of zooplankton.

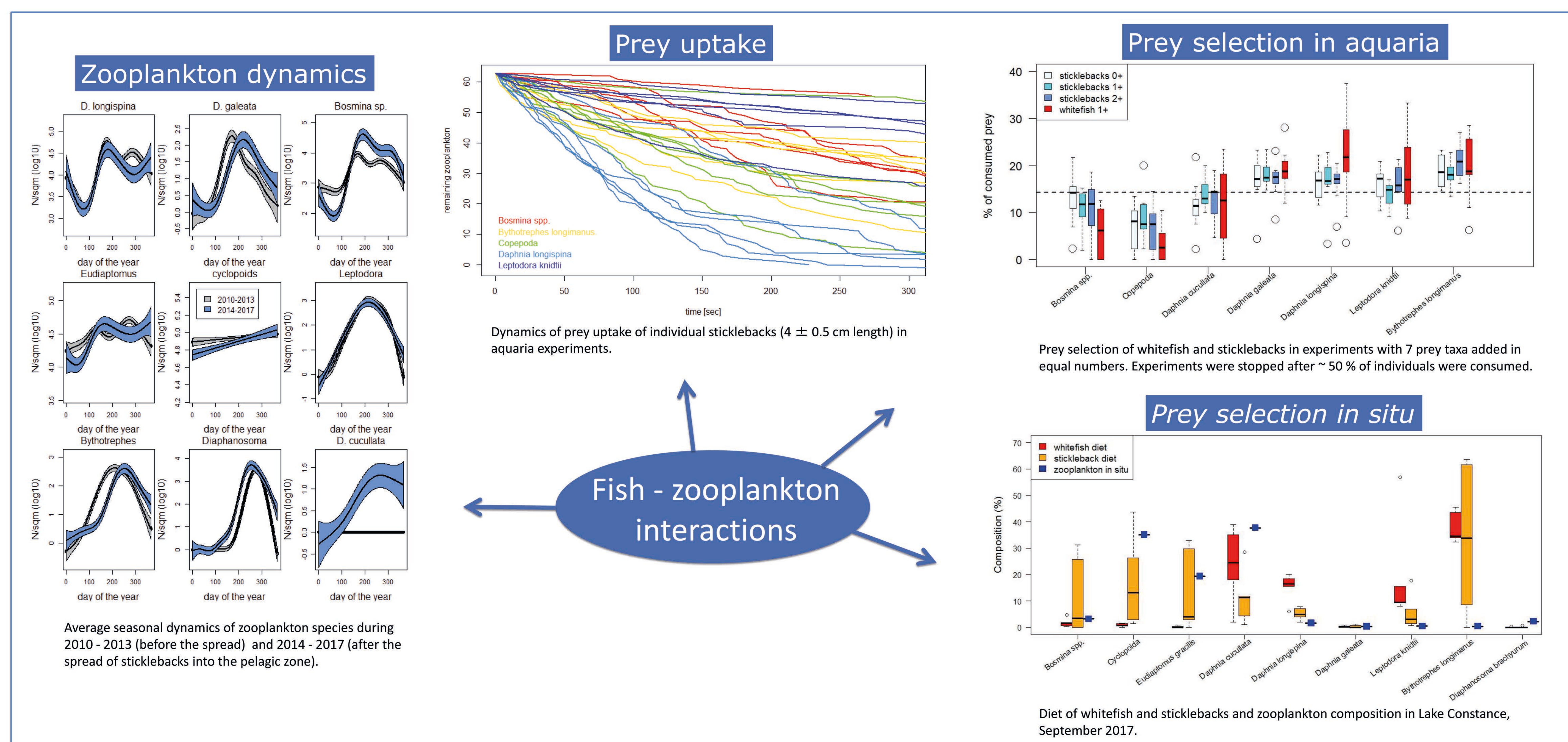


Fish – zooplankton interactions in the pelagic food web in Lake of Constance.

Aims of the project

The project aims for a mechanistic understanding of whitefish and stickleback competition and of the influence of both species on zooplankton population dynamics.

To achieve this understanding we will study and combine analyses of a) diet composition of whitefish and sticklebacks, b) prey uptake (functional responses) and c) prey selection of whitefish and sticklebacks, as well as d) *in situ* population dynamics and distribution of zooplankton.



Persons

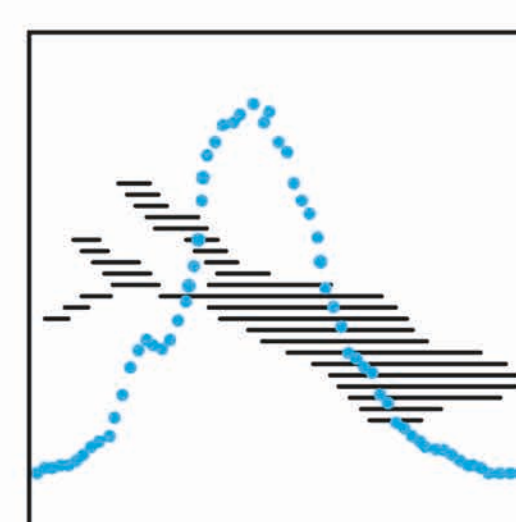
- Žiga Ogorelec, PhD Student of University of Konstanz
- Dietmar Straile, University of Konstanz
- Alexander Brinker, Fisheries Research Station of Baden-Württemberg
- Jasminca Behrmann-Godel, University of Konstanz
- Lars Gosta Rudstam, Cornell University, US



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