Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Department of Aquatic Resources

2017-09-25

Master project (examensarbete) in Ecology (30-45 credits)

Feeding overlap between cod and flounder in the Baltic Sea

Feeding is a key aspect in the ecology of fish species. Feeding interactions, driven by mechanisms such as predation and competition for the same prey, are key factors shaping animal communities and ecosystems.

In many areas of the Baltic Sea the abundance of flatfish, especially flounder, has increased during the past 15 years. One of the hypotheses that have been formulated to explain this increase is the decreased abundance of cod. It is known that large cod predate on flounder, but the two species could also compete for benthic resources especially when their availability is scarce for example due to lack of oxygen in the deep waters. The currently large abundance of flounder could in turn be one of the factors hindering the recovery of the cod population.

The project has the aim to quantify for the first time the feeding overlap between cod and flounder of different sizes, using samples collected simultaneously in different areas and depths of the Baltic Sea. The project will provide important information about the feeding ecology of the two species and their ecological interactions, contributing to explain the changes in their populations.
The project will make use of diet data already available and will offer the possibility to join the offshore scientific surveys that SLU Aqua performs every year in the Baltic Sea.

Requirements: good skills in spoken and written English, statistical skills (familiarity with multivariate analyses is an advantage)

Work location: Lysekil, Sweden

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Atlantic cod & European flounder (photos: Pauline Snoeijs Leijonmalm)

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