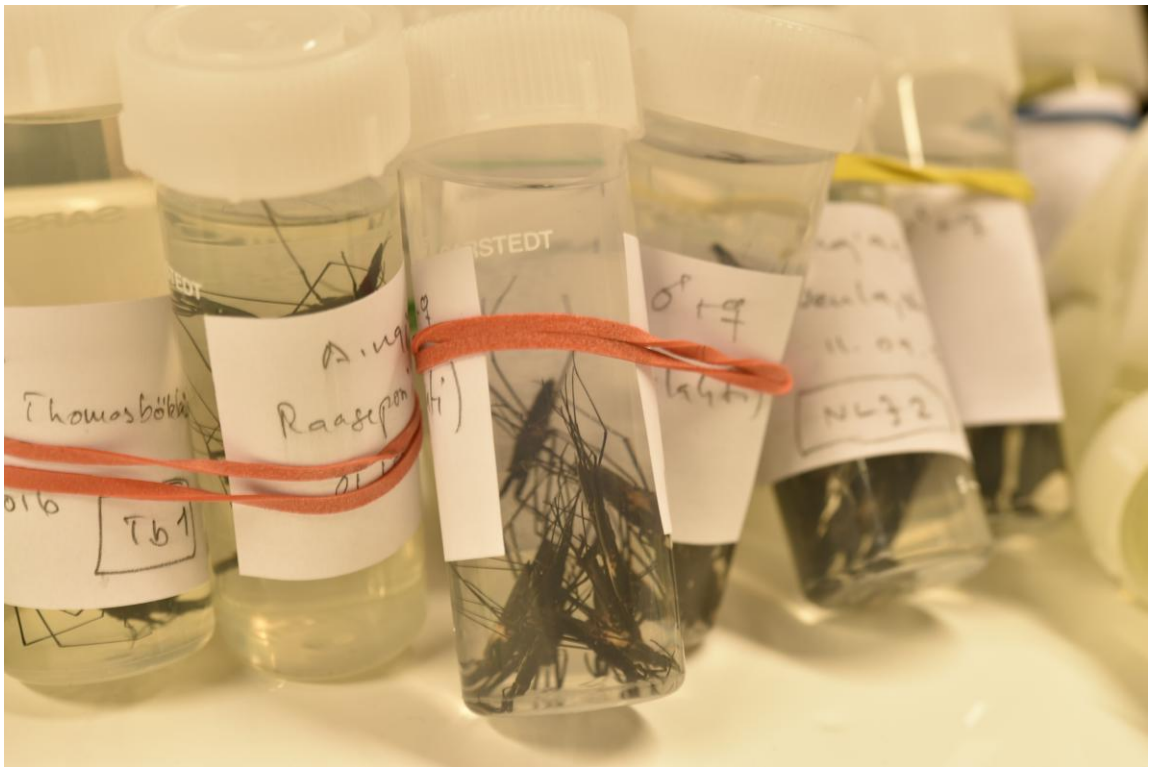
Master's Thesis Projects (30/45/60 credits): Comparative Life- History Analysis in Gerridae

Are you interested in evolutionary biology, insect ecology, or comparative life-history strategies?

We invite motivated students to join our research group for a thesis project (can be adapted to 30, 45 or 60 hp) exploring developmental and morphological variation across the insect family Gerridae (water striders).



© Arild Husby

Project Overview

Water striders (Hemiptera: Gerridae) provide an excellent model system for studying how life-history traits evolve in relation to habitat, phylogeny, and environmental constraints. This project investigates four central traits: developmental time, fecundity, wing length/morph frequency, and body size.

Student Responsibilities

- Collect and curate trait data (in spring 2026), published studies or already available lab datasets.

- Conduct statistical and comparative analyses.

- Produce visualizations and interpret results in an evolutionary context.

What You Will Learn

- Insect collection, rearing and handling
- Comparative methods and statistical modelling.
- Data synthesis across species.
- Insect morphology and life-history evolution.
- Scientific writing and presentation skills.

Who Should Apply?

Ideal for students interested in behavioral ecology, evolutionary biology, insect ecology, life-history theory, or quantitative analysis. Experience with R is helpful but not required.

How to Apply

Please send a short statement of interest to arild.husby@ebc.uu.se.