

Workshop Announcement

Quantifying demographic resilience of animal populations

May 28th - 30th 2024

LECTURERS

Julie Louvrier, Viktoriia Radchuk, Adam Clark
Leibniz Institute for Zoo and Wildlife Research, Berlin, Germany
Institute of Biology, University of Graz, Graz, Austria

CONTENT

Resilience is a central concept in **ecological theory**, and diverse approaches have been developed to quantify it on **empirically-collected data**. Quantifying demographic resilience, a recently formally defined concept, is at least as important because many **management actions** target the population level of organization.

In this course, after briefly learning about the historical development of **stability concepts** in the field of community ecology, participants will be introduced to the **demographic resilience framework** and the **different metrics** that are used to quantify it. We will first demonstrate the use of the currently prevalent **time-invariant** approach and next present the R package we have developed for applying the **time-varying** approach.

Our **workshop** aims at **students and early-career scientists** (PhDs, early-career post-docs) who work in the field of population ecology and are interested in quantifying population stability. The workshop will be organised in lecture sessions, practical walk-throughs and hands-on exercises in R. The workshop also includes group work, based on the data brought by participants or supplied by us.

REQUIREMENTS

The participants are expected to have background in **population ecology** (e.g. relevant Bachelor or Master level). The method for quantifying demographic resilience builds on **matrix population models** (MPM) and therefore previous background on MPM and experience working with them in R is required. Basic knowledge and experience working with **R** is a prerequisite. We strongly encourage participants to use RStudio.

DETAILS AND REGISTRATION

Number of participants: 15

Where: The course will be offered in person at:
Leibniz Institute for Zoo and Wildlife Research
Alfred-Kowalke-Straße 17, 10315 Berlin

Costs: The workshop is **free of charge!** We will provide coffee and snacks for the coffee breaks and lunch. Accommodation, travel costs and other food expenses must be covered by participants.

We offer **funding support** to cover travel (up to 300 EUR per person) and accommodation expenses (up to four nights) for a limited number of participants. To apply for this funding please send us a short (max. 1 page) **motivation letter** explaining why you require financial support.

To register:

- ➔ Please send an email to akademie@izw-berlin.de by **March 18th 2024** with a **brief explanation** (max. 300 words) of why you would like to join.
- ➔ If you are also applying for funding support for travel and accommodation, please also attach **your motivation letter** (max. 1 page, see above) to the email.

You will be informed of your participation in the workshop in the week of the 25th of March, latest by the 29th of March. **Please check your emails regularly within this period as we expect you to confirm your participation within the three working days after receiving the note of participation.**

If you have any questions, do not hesitate to contact us.

Contact:

Leibniz Institute for Zoo and Wildlife Research (IZW)
Alfred-Kowalke-Str. 17
10315 Berlin
E-Mail: akademie@izw-berlin.de