Uriah Daugaard, M.Sc.

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https://duriah.github.io/

in DaugaardUriah

duriah

Education

2020 - · · · · > Ph.D. in Ecology.

University of Zurich.

Thesis title: Biological drivers of ecological forecast skill (working title).

2018 – 2020 **M.Sc. in Biostatistics**.

University of Zurich. **GPA**: 5.8/6.

Thesis title: Analysis of behaviors affecting predation success in a ciliate predator-prey system.

2015 – 2018 » B.Sc. in Biology (major) and Environmental Sciences (minor).
 University of Zurich. GPA: 5.2/6.

Research Publications

§ indicates joint first authorship (equal contributions).

Journal Articles

- **W. Daugaard**, S. Merkli, E. Merz, F. Pomati and O. L. Petchey, "The dependence of forecasts on sampling frequency as a guide to optimizing monitoring in community ecology", *Ecosphere*, vol. 15, no. 2, e4786.
- **>> R.** Limberger, **U. Daugaard**, A. Gupta and others, "Functional diversity can facilitate the collapse of an undesirable ecosystem state", *Ecology Letters*, vol. 26, no. 6, pp. 883–895.
- >> U. Daugaard, S. Munch, D. Inauen, F. Pennekamp and O. Petchey, "Forecasting in the face of ecological complexity: Number and strength of species interactions determines forecast skill in ecological communities", *Ecology Letters*. vol. 25, no. 9, pp. 1974–85.
 - >> M. Suleiman, **U. Daugaard**, Y. Choffat, X. Zheng and O. L. Petchey, "Predicting the effects of multiple global change drivers on microbial communities remains challenging", *Global Change Biology*, vol. 28, no. 18, pp. 5575–5586.
- M. Suleiman, Y. Choffat, **U. Daugaard** and O. L. Petchey, "Large and interacting effects of temperature and nutrient addition on stratified microbial ecosystems in a small, replicated, and liquid-dominated Winogradsky column approach", *MicrobiologyOpen*, vol. 10, no. 3, e1189.
- **W. Daugaard**, O. L. Petchey and F. Pennekamp, "Warming can destabilize predator–prey interactions by shifting the functional response from type III to type II", *Journal of Animal Ecology*, vol. 88, no. 10, pp. 1575–1586.

Preprints

- » R. Limberger[§], **U. Daugaard**[§], Y. Choffat andothers, "Biodiversity increases the forecastability of species abundances in changing environments", *bioRxiv*, pp. 2024–04.
- **W. Daugaard**, R. Furrer and O. L. Petchey, "Prey speed up, predators slow down: Non-consumptive effects on movement behavior of a ciliate predator-prey pair", bioRxiv, pp. 2021–11.

Teaching Experience

Lecturer

BIO 144, Data analysis in biology, University of Zurich, spring semester, 4 lectures. Data visualization and processing, hypothesis testing, linear regression, ANOVA, etc.

Teaching Assistant (TA)

- BIO 144, Data analysis in biology, University of Zurich, spring semester, head TA.
 Assisted students with exercises (methods and coding) and organized practical sessions.
 - 2022 **X4All**. An Introduction to the Basics of R.

Research Experience

>>> Research assistant (80%). University of Zurich. Department of Evolutionary Biology and Environmental Studies. Work on a scientific publication with Prof. Owen Petchey.

Presentations

Contributed Talks

- **W. Daugaard**, S. Merkli, E. Merz, F. Pomati and O. L. Petchey. "The dependence of forecasts on sampling frequency as a guide to optimizing monitoring in community ecology".
 - **Society** of DE, AT and CH, Sept., Leipzig, Germany.
- >> U. Daugaard, S. Munch, D. Inauen, F. Pennekamp and O. L. Petchey. "Forecasting in the face of ecological complexity: number and strength of species interactions determine forecast skill in ecological communities".
 - **Biology**: Swiss conference on organismic biology, Feb., Basel, Switzerland.
 - >> SFE² GFÖ EEF: International Conference on Ecological Sciences, Nov., Metz, France.
- **W. Daugaard**, R. Furrer and O. L. Petchey. "Non-consumptive and resource-availability effects in a ciliate predator-prey pair".
 - **ESA**: meeting of the Ecological Society of America, Aug., virtual.
- **U. Daugaard**, O. L. Petchey and F. Pennekamp,. "Warming can destabilize predator–prey interactions by shifting the functional response from Type III to Type II".
 - **>> BES**: meeting of the British Ecological Society, Dec., virtual.

Posters

- >> U. Daugaard, S. Munch, D. Inauen, F. Pennekamp and O. L. Petchey. "Forecasting in the face of ecological complexity: number and strength of species interactions determine forecast skill in ecological communities".
 - >> INTECOL: 13th International Congress of Ecology, Aug., Geneva, Switzerland. Selected for a flash talk during the opening plenary.
 - **Ecology Symposium** by the Life Science Zurich Graduate School, Oct., Zurich, Switzerland.

Funding and Awards

Funding

2022 – 2024
 Travel grant, awarded by the department of Evolutionary Biology and Environmental Studies, University of Zurich (ca. 1000.- CHF each year).

Funding and Awards (continued)

Awards

2019

>> BES Elton Prize. Awarded by the British Ecological Society each year for the best research paper in Journal of Animal Ecology written by an early career author at the start of their research career.

Peer Review

2024 **>>** Ecology.

2022 >> Journal of Animal Ecology.

2021 >> Ecology Letters; PeerJ; Journal of Animal Ecology.

2019 **>>>** Protist.

Skills

Languages

» Native speaker: German and Italian; Fluent: English; Basic: French.

Coding

Primarily in R, with version control (Git)
I have worked with Python, Matlab, Java, and C++ in the past.

Markup

>> Latex (including Sweave and knitr), Markdown, Quarto.

Soft Skills

>> Project and time management; Problem solving and critical thinking; Collaboration and adaptability; Teaching, training and consultation; Independence; (Academic) research and communication; Data analysis; Ability to learn quickly.

References

Available on Request.