

Faculty of Science and Engineering

Profile report: Ecologist

- Discipline: Ecology
- Level: Tenure-track assistant professor with research profile
- Fte: 0.8 – 1.0 fte

1. Scientific discipline

Ecology aims at understanding the abundance, distribution and functioning of organisms in interaction with their abiotic as well as their biotic environment. Ecology is a broad discipline that can be studied at different levels, from individual adaptive responses, population dynamics, food-web interactions to ecosystem functioning. There is an increasing need for ecologists as natural ecosystems are under pressure around the globe, threatening biodiversity and ecosystem services. Ecology is ideally studied *in situ*, and connects fundamental research with sustainability and nature conservation.

2. Vacancy

This position is opened by the Board of the Faculty of Science and Engineering in the context of the sector plan Biology and will be embedded in the Groningen Institute for Evolutionary Life Sciences ([GELIFES](#)). The position falls within the attractive framework of '[Career Paths in Science and Engineering](#)', which outlines the criteria and timeline for promotion, up to full professor (see link below). As the focus domain of the position is research, the criteria of the career path with a focus on research apply. Please see the link for the criteria and conditions.

3. Selection committee (BAC)

- Prof. dr. Rampal Etienne (Scientific director GELIFES, Professor Theoretical and Evolutionary Community Ecology)
- Prof. dr. Eddy van der Zee (Education director GELIFES, Professor Neurobiology of Learning and Memory)
- Dr. Laura Govers (Assistant Professor Marine Conservation Ecology, GELIFES)
- Prof. dr. Christiaan Both (Professor Animal Ecology, GELIFES)
- Prof. dr. Simon Verhulst (Professor Evolutionary Biology, GELIFES)

- Prof. dr. Judy Shamoun-Baranes (Professor Animal Movement Ecology, External, University of Amsterdam)
- student member

4. Area of expertise

Under the current, severe threats to global biodiversity, there is an urgent need for ecological insights into ecosystem function, species persistence and ecosystem restoration.

The University of Groningen has a long history of ecological research in one of the most natural ecosystems in northwestern Europe, the Wadden Sea, including long-term studies of individuals and populations, resource utilization and competition in food-webs, as well as molecular and big-data-analysis techniques. There is an ongoing close collaboration with the NIOZ Royal Netherlands Institute for Sea Research.

We aim to appoint a field ecologist to strengthen the specific priority area in the Dutch Sector Plan in Biology at the University of Groningen entitled “Adaptive and Sustainable Coastal Ecosystems; from ecosystem processes to biodiversity”. To this end, the successful applicant will develop a research line that combines fundamental research with an applied angle in an interdisciplinary context. Specifically, the successful applicant will conduct empirical research on ecology of (in)vertebrates, plants and food-webs in a natural setting in the Wadden Sea, and ideally, also the bordering terrestrial areas as (may be better: as) an integrated landscape approach. We especially welcome candidates studying (migratory) birds, for which the Wadden Sea ecosystem is of great international importance.

5. Embedding: institute (and expertise group)

GELIFES aims to enhance the understanding of processes enabling adaptation to changing environments across all levels of biological organization (from molecules and genes to individuals and ecosystems), to inform society and contribute solutions to societal problems. It coordinates master programs in evolution and ecology, biology, marine biology and in medical and behavioural neuroscience.

GELIFES is organized in a non-hierarchical manner, and staff associate with one (or more) informal expertise groups. GELIFES has seven expertise groups, each consisting of several principal investigators with their groups:

1. BPE: Behavioural and Physiological Ecology
2. CONSECO: Conservation Ecology
3. EGDB: Evolutionary Genetics, Development and Behaviour
4. GREEN: Genomics Research in Ecology & Evolution in Nature

5. MB: Marine Biology
6. Neurobiology
7. TRES: Theoretical Research in Evolutionary Life Sciences

The successful applicant will have access to GELIFES' excellent facilities, including unique animal and lab facilities, and field station "De Herdershut" on Schiermonnikoog.

6. Local and (inter)national position

Local:

Ongoing projects in the Wadden Sea include Waddenmozaiek (on biodiversity of the subtidal areas), Swimway (on fish ecology, also in connection with the mainland), seagrass ecology and restoration, natural coastal protection, and long-term population studies on birds (such as Eurasian spoonbill, oystercatcher, red knot, sanderling, and bar-tailed godwit) often in relation to food abundance. This work is not restricted to the Netherlands, and reference areas in other parts of the world are included. Close collaborations with Mauritania and Guinea-Bissau exist. Collaborations with (empirical) research groups affiliated with the institute, such as the BirdEyes Center of Excellence in Leeuwarden or external entities, such as the Bernoulli Institute (e.g. Artificial Intelligence, Data Science) exist and are encouraged. Within the University of Groningen there are also connections with the Agricola School for Sustainable Society.

National:

GELIFES has a strong reputation in research and education in ecology, evolution, marine biology, behaviour and neurobiology. GELIFES specifically aims at integrating the study of "how and why" questions, i.e. understanding both causes and consequences of variation at different levels. Nationally, we are recognized as a center of gravity for research and education in (evolutionary) ecology, with important contributions towards research several societal challenges (anthropogenic change, sustainability, health). Strong collaborations exist with other universities and research institutes in The Netherlands in the field of ecology and conservation, especially with the NIOZ Royal Netherlands Institute for Sea Research, the Netherlands Institute of Ecology, Naturalis Biodiversity Center, and the universities of Nijmegen, Amsterdam, Wageningen, and Utrecht. Connections with major National nature conservancies are important, such as the Society for the Preservation of Nature Areas in the Netherlands (Vereniging tot Behoud van Natuurmonumenten), Wadden Sea Council (Waddenvereniging), BirdLife Netherlands (Vogelbescherming Nederland).

International:

The University of Groningen is globally recognized as one of the leading centers in ecology, of birds in particular. This is expressed in, for example, a large number of international collaborations around the globe. The University of Groningen features in the top 100 of universities worldwide in various ranking lists.

7. Teaching

The successful applicant will contribute to the Bachelor's programme in Biology, and to the Master programme in Ecology and Evolution, including supervision of research projects of individual bachelor (see also below) and master students. We aim to increase education in field ecology and species identification skills, as this knowledge is highly needed for the new generation of ecologists, but also has been declining.

Potential courses to which the successful applicant could contribute include for example Ecological Interactions, Biodiversity and Conservation, Research Skills in Ecology & Evolution, Bachelor Research Projects, and the MSc course Ecological Research Skills.

Time allocation to teaching is expected to be 30% in the first five years, and 40% thereafter. The successful applicant will be expected to acquire the "[University Teaching Qualification](#)".

8. Research

The successful applicant is expected to develop an independent line of research of high quality that is internationally recognized and strengthens the international position of GELIFES. The expertise areas and skills of the successful applicant should be complementary to that of the staff at the institute.

Core tasks also include supervision of PhD students and the acquisition of external funds.

Time allocation to research is expected to be 60% in the first five years, and 40% thereafter.

9. Contributions to the organization

All staff members are expected to contribute to management and organization, for example by participating in working groups and committees within the institute, faculty or University. The new staff member will participate in relevant national and international organizations, and contribute to the dissemination of scientific knowledge to society through outreach activities and collaboration with non-academic societal partners (companies, governmental and non-governmental organizations).

Time allocation to organizational tasks is expected to be 10% in the first five years and 20% thereafter.