

# Norwegian University of Life Sciences

Jobbnorge-ID: 133151 Søknadsfrist: Closed

Nettside: Omfang: Varighet:

## Postdoctoral Research Position in Ecology - ref.no. 17/00533

The Faculty of Environmental Sciences and Natural Resource Management (MINA) at the Norwegian University of Life Sciences (NMBU) has a vacant three-year postdoctoral position. The position is funded by the Research Council of Norway's Klimaforsk program. The postdoctoral researcher will work in the project 'Trapped in a cold-adapted body: the causes and consequences of phenotypic change in a rapidly warming Arctic' led by Prof. Leif Egil Loe.

The postdoctoral researcher will work in close collaboration with researchers at Hutton institute, Scotland (Prof. Steve Albon), Norwegian Institute of Nature Research (Dr. Audun Stien), the University Centre in Svalbard (Prof. Mads Forchhammer) and University Claude Bernard, Lyon, France (Dr. CNRS Christophe Bonenfant).

The Faculty of Environmental Sciences and Natural Resource Management (MINA) has about 180 employees and undertakes teaching, research and dissemination within the fields of geology, soil science, environmental chemistry, forestry, biology and ecology, natural resource management, renewable energy, nature based tourism. The faculty has ca. 600 students, and approximately 90 PhD-students. The employees of the faculty are significant participants in their respective fields of expertise, both nationally and internationally and have a high level of scientific production. For more information: <a href="https://www.nmbu.no/fakultet/mina">https://www.nmbu.no/fakultet/mina</a>

## Research project

The Arctic is warming rapidly with profound consequences for the dynamics of ecosystems and the species living within them. Therefore, it is a good place to study climate change impacts. This project will link technological developments in physiological monitoring and landscape scale telemetry, with advances in population modelling. It will build on a long-term individual-based study of wild reindeer on Svalbard - a keystone species in High Arctic terrestrial ecosystems. In this system we have a sound understanding of the direct and indirect effects of weather variability on reindeer population dynamics. This model system will provide a test of the extent to which the recently observed 'shrinking' in body size of successive cohorts born each year, allows reindeer to adapt to climate warming. Using statistical models and direct measurements of physiology, behavioral responses and life-history consequences, we will 1) test whether the species ability to adapt to climate change occurs through environmental plasticity and/or evolution; 2) explore the eco-physiological mechanisms driving phenotypic plasticity, and 3) predict the population consequences given future climate scenarios. This will add novel understanding about the resilience of nature, and new knowledge to inform land use management, with particular relevance for reindeer pastoralism.

For this position, we are looking for an individual with strong quantitative skills, relevant to modelling life history strategies, adaptation and population dynamics. The successful candidate is likely to also be involved in the ecophysiological and behavioural ecology parts of the project. This will depend on the scientific interests of the candidate.

The starting date for the positions will ideally be August 1, 2017, but is negotiable.

#### Main tasks

As part of the project, the postdoctoral researcher is expected to:

- Build and analyse mark-recapture and integral projection models, including handling the complexities in the ecological and observation processes that yielded the data.
- Use the long-term dataset on fecundity, reproductive success and survival to test for evidence of adaptive phenotypic plasticity
- Use life table response experiments to investigate how demographic and trait transition functions affect population growth and body
  mass distributions, including investigating the relative role of evolution and environmental plasticity
- Write articles for publication in peer-reviewed scientific journals
- Present research findings at scientific conferences.
- Collaborate with other team members (master's students, researchers, prospective PhDs).
- Take part in field work in the high Arctic Svalbard to obtain understanding of the study system

## Academic qualifications

The successful applicant must hold a PhD degree within a relevant scientific area (ecology, evolution, wildlife biology, biometry, or similar fields). The applicant must document strong quantitative skills, as well as good oral and written skills in English

Preferred candidates will also have several of the following:

- Experience with complex statistical and mathematical modelling of population and/or evolutionary processes.
- Proficiency using the statistical programing language R.
- Proven scientific writing skills

Applicants will be evaluated according to the aforementioned criteria, based on information provided in the online application form and up to 3 written examples (published articles, reports, and/or PhD thesis) submitted with the application.

#### Desired personal qualities

- Motivation to work as part of a team.
- Strong willingness to work primarily analytically for the duration of the postdoctoral project. There will be opportunities for field work in Svalbard, but this is not a main part of the position.
- · Interest in climate change effects on ecology and evolution.

#### NMBU offers:

- An academic institution with a strong focus on natural resource management and dedication to professional development, dissemination and competence.
- An interdisciplinary and inclusive environment that offers exciting research- and development opportunities.
- · An attractive benefits package and welfare schemes.
- Attractive combination of rural surrounding and proximity to Norway's capital city, Oslo.
- Opportunities for outdoor activities with access to excellent hiking areas around Oslo and proximity to the Oslofjord.

#### Remuneration

The position is placed in government pay scale position code 1352 Postdoctoral Fellow, wage framework 24 (salary grade 57-65), depending on qualifications. Seniority Promotion in position.

For especially well-qualified applicants, alternative salary placement could be considered.

#### **Further information**

For further information, please contact prof. Leif Egil Loe (project leader, e-mail: leif.eqil.loe@nmbu.no).

#### Application

To apply online for this vacancy, please click on the 'Apply for this job' button above. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

## Application deadline: 1st March 2017

Printed material which cannot be sent electronically should be sent by regular mail to the Norwegian University of Life Sciences, Department of Ecology and Natural Resource Management P.O. Box 5003, NO-1432 Ås, by 20 May 2016. Please quote reference number 17/00533.

A compulsory contribution of 2 % is made to the Norwegian Public Service Pension Fund. A good working environment is characterized by diversity. We encourage qualified candidates to apply, irrespective of gender, physical ability or cultural background. The workplace will if necessary be facilitated for persons with disabilities.

According to the Freedom of Information Act § 25 the list of applicants for this position may be made public irrespective of whether the applicant has requested that his/her name be withheld.

## Tilleggsinformasjon

## Arbeidssted: