

Postdoc in muskox energetics and population modelling

Aarhus University's Department of Ecoscience invites applications for a 2-year postdoc to co-develop a spatially-explicit individual-based dynamic energy budget model (DEB-IBM) for high-Arctic muskoxen roaming the Zackenberg region in Northeast Greenland. The position will explore how movement and energetics shape population dynamics under climate change and harvest scenarios, working with an international team across Greenland, Canada, and Alaska.

Expected start date and duration of employment

This is a 2-year, full time position starting on 1 April 2026 or as soon possible thereafter.

Job description

The position is ideally suited for candidates with interests in Arctic ecology, movement ecology, population dynamics, and ecological modelling.

As part of the position, you will be:

- co-developing a spatially explicit process-based ecological model (DEB-IBM) for muskoxen in the high-Arctic through the analyses of long-term GPS and acceleration data.
- using the model to estimate the (cumulative) impacts of hunting, climate and habitat change on movement and population dynamics of muskoxen.
- working in close collaboration with colleagues at Aarhus University but also with project partners based in Winnipeg (Canada), Fairbanks (Alaska) and Nuuk (Greenland).

Your profile

Applicants should hold a PhD in Ecology or related field. Moreover, we are looking for candidates with the following qualifications:

- Strong background in individual- /agent-based modelling
- Experience with modelling of animal energetics
- Strong R and Netlogo skills
- Good understanding of movement & population ecology
- Experience in publishing scientific results in high-quality international journals
- Extensive collaboration and teamwork skills
- Good English communication skills

Who we are

The Department of Ecoscience is engaged in research programs and advisory work covering the major biological subdisciplines. We conduct world-class research within biology and ecology, biodiversity, conservation biology, wildlife management, particularly in arctic regions. The Department currently employs approximately 275 academic and technical staff, as well as many PhD students.

The successful candidate will work in a collaborative and internationally engaged scientific environment at the Section for Arctic Ecosystem Ecology (for more information see: <https://ecos.au.dk/en/researchconsultancy/research-areas/arctic-ecosystem-ecology>).

The department is, and wishes to continue to be, an active, diverse and inspiring workplace with exciting challenges, enthusiastic colleagues and academic opportunities for development. The department wishes to support employees in creating a good balance between their work and home lives and to maintain and attract skilled and committed staff, where freedom, creativity and respect for the long-term perspective are core values. For more information on the Department see: <http://ecos.au.dk/en/>

Application Deadline:
09 January 2026

Institute/Faculty:
Department of
Ecoscience

Faculty:
Faculty of Technical
Sciences

Academic contact person:
Floris van Beest
Seniorforsker,
fungerende
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Vacant positions:
1

Number of months:
24

Hours per week:
37

Expected date of accession:
01/05/2026

What we offer

The department offers:

- a well-developed research infrastructure
- an exciting interdisciplinary environment with many national, and international collaborators,
- collaboration within a strong research team with extensive experience in wildlife ecology, population ecology and modelling,
- a workplace characterised by professionalism, equality, and a healthy work-life balance

Place of work and area of employment

The place of work is Aarhus University, Frederiksborgvej 399, 4000 Roskilde (close to Copenhagen) with research stays at University of Winnipeg, Canada, and/or the University of Fairbanks, Alaska, to work on model development, and at the Greenland Institute for Natural Science, Nuuk, Greenland to work on hunting scenarios and contribute to workshops. The affiliation will be with the Department of Ecoscience.

Contact information

For further information, please contact: Head of Section Dr. Floris M. van Beest, flbe@ecos.au.dk/+4587158568, or Deputy Head of Department Professor Niels Martin Schmidt, nms@ecos.au.dk/+4587158683

Application procedure

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee chairman, and the appointment committee if necessary, – the head of department selects the candidates to be evaluated. All applicants will be notified whether or not their applications have been sent to an expert assessment committee for evaluation. The selected applicants will be informed about the composition of the committee, and each applicant is given the opportunity to comment on the part of the assessment that concerns him/her self. Once the recruitment process is completed a final letter of rejection is sent to the deselected applicants.

Letter of reference

If you want a referee to upload a letter of reference on your behalf, please state the referee's contact information when you submit your application. We strongly recommend that you make an agreement with the person in question before you enter the referee's contact information, and that you ensure that the referee has enough time to write the letter of reference before the application deadline.

Unfortunately, it is not possible to ensure that letters of reference received after the application deadline will be taken into consideration.

If you wish to add a referee **after** you have submitted your application, you must send this person's details (name, job title, place of work, and email address) as well as the name of the position you have applied for to: HR.Nattech@au.dk

Formalities and salary range

Technical Sciences refers to the [Ministerial Order on the Appointment of Academic Staff at Danish Universities under the Danish Ministry of Science, Technology and Innovation](#).

The application must be in English and include a curriculum vitae, degree certificate, a complete list of publications, a statement of future research plans and information about research activities, teaching portfolio and verified information on previous teaching experience (if any). Guidelines for applicants can be found [here](#).

Appointment shall be in accordance with the collective labour agreement between the Danish Ministry of Taxation and the Danish Confederation of Professional Associations. Further information on qualification requirements and job content may be found in the [Memorandum on Job Structure for Academic Staff at Danish Universities](#).

Salary depends on seniority as agreed between the Danish Ministry of Taxation and the Confederation of Professional Associations.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

Aarhus University offers a broad variety of services for international researchers and accompanying families, including relocation service and career counselling to expat partners. Read more [here](#). Please find more information about entering and working in Denmark [here](#).

Aarhus University also offers a Junior Researcher Development Programme targeted at career development for postdocs at AU. You can read more about it [here](#).

The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/