



Norwegian University of
Science and Technology

The Department of Natural History has a vacancy for a

PhD Position in Biodiversity and Land-Use change

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This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 42,000 students work to create knowledge for a better world.

You will find more information about working at NTNU and the application process [here](#).

Research Collaboration in Sustainability

In 2015, the 2030 agenda with the 17 sustainability goals was adopted by all UN member states. The sustainability goals see the environment, economy and social development in context. The time horizon for necessary changes is short, and it is

challenging to combine different considerations without conflicts of objectives and unintended consequences of measures.

NTNU is now announcing 43 individual PhD positions that will contribute to a greater understanding of system effects, societal changes and conflicts of interest related to the sustainability challenges. These positions are divided into 9 interdisciplinary projects with mainly 4-7 PhD positions in each project.

In this position, the candidate is expected to cooperate with the other PhD students in the project Nature-based solutions for land use transitions towards more sustainable societies.

About the position

The position is fully funded and will be a part of a larger multidisciplinary project "Nature-based solutions for land use transitions towards more sustainable societies", funded by the NTNU Sustainability call. The project has following main objectives:

- To quantify how land use changes affect local and regional biodiversity, and to assess the societal costs of such biodiversity losses
- To provide an in-depth understanding of the societal aspects related to land use change and biodiversity loss and identify the roles and rights of stakeholders in defining biodiversity and nature
- To develop tools to implement compensation and restoration of societal and biodiversity costs into practical planning in order to reach the aims of the UN Sustainability Development Goals (SDG).

The project involves a collaboration between the following departments at NTNU: Department of Biology, Department of Geography, Department of Natural History, and Department of Industrial Economics and Technology Management.

This position is at the NTNU Department of Natural History. The NTNU University Museum is a museum of natural history and archaeology and a leading institution for collecting, preserving, studying and exhibiting artefacts from Norway and across the globe. The Department of Natural History conducts research

in biogeography, biosystematics and ecology, with an emphasis on conservation biology. The department is responsible for building and maintaining the museum's natural history collections, including 1,400,000 plant and animal specimens.

This PhD will focus on understanding how past land-uses and land-use changes have impacted current and past biodiversity. This is vital in order to assess baselines for biodiversity changes, and to forecast how current and future changes in land-cover will alter biodiversity dynamics. Human activity has a long history of driving land-cover changes across Norway. The successful candidate will use a range of data types including natural history collections (specimens and digitized metadata), spatially explicit land-cover and remote-sensed data and species occurrence records, across decadal to centurial timescales to investigate how past land-use changes have influenced past and present biodiversity patterns within the county of Trøndelag in Norway.

The PhD project will:

- Develop a regional-scale, spatially explicit history of biodiversity change with a focus on the county of Trøndelag.
- Investigate what land-cover transitions are most closely associated with different elements of biodiversity loss
- Develop predictions of how ongoing and future changes in land-use will alter biodiversity.

The PhD will be a part of the NTNU Sustainability project "Nature-based solutions for land use transitions towards more sustainable societies" and the candidate will be in close contact with PhD-candidates from other departments at NTNU. The project will also be included as a part of the proposed Gjørevoll centre for biological diversity and green transitions.

Full PhD education will be provided. The period of employment is 3 years with the possibility of 1 year duty work upon agreement. For a position as a PhD Candidate, the goal is a completed doctoral education up to an obtained doctoral degree. Publication of the project results in peer-reviewed journals is expected.

You will report to lead supervisor Associate Professor James D. M. Speed and Head of Department Ingrid E. Mathisen.

Duties of the position

- Formulate detailed research questions together with supervisors and collaborators
- Collect and collate relevant data, and analyse with relevant tools
- Disseminate results in scientific literature, general public and relevant stakeholders

Required selection criteria

- You must have a professionally relevant background with a master's degree in ecology or biodiversity. Specializations in biogeography, macroecology, historical ecology or community ecology are particularly relevant.
- Your education must correspond to a five-year Norwegian degree programme, where 120 credits are obtained at master's level
- You must have a strong academic background from your previous studies and an average grade from the master's degree program, or equivalent education, which is equal to B or better compared with NTNU's grading scale. If you do not have letter grades from previous studies, you must have an equally good academic basis. If you have a weaker grade background, you may be assessed if you can document that you are particularly suitable for a PhD education.
- You must meet the requirements for admission to the faculty's doctoral program
- Strong quantitative analytical skills
- Excellent written and oral English language skills

The appointment is to be made in accordance with the regulations in force concerning State Employees and Civil Servants and Regulations concerning the degrees of Philosophiae Doctor (PhD) and Philosodophiae Doctor (PhD) in artistic research national guidelines for appointment as PhD, post doctor and research assistant

Preferred selection criteria

- Experience with relevant scripting languages (e.g. R) for handling and analysing large datasets
- Experience with geographic information systems (GIS) and spatial analytical skills
- Understanding of the values and challenges in working with natural history collections and/or species occurrence data
- Working knowledge of relevant boreal ecosystems
- Passion for communicating science to a range of audiences
- Strong written and oral Norwegian language skills

Personal characteristics

- Enthusiasm for interdisciplinary research
- Self-motivated and enthusiastic
- Strongly collaborative
- Solutions-orientated

We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and inclusive work environment with dedicated colleagues
- favourable terms in the Norwegian Public Service Pension Fund
- employee benefits

Salary and conditions

PhD candidates are remunerated in code 1017, and are normally remunerated at gross from NOK 491 200 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The period of employment is 3 years with the possibility of 1 year duty work upon agreement.

Appointment to a PhD position requires that you are admitted to the PhD programme in biology within three months of employment, and that you participate in an organized PhD programme during the employment period.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants, and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment to NTNU. After the appointment you must assume that there may be changes in the area of work.

It is a prerequisite you can be present at and accessible to the institution daily.

About the application

The application and supporting documentation to be used as the basis for the assessment must be in English.

Publications and other scientific work must follow the application. Please note that applications are only evaluated based on the information available on the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above.

The application must include:

- CV, certificates and diplomas
- transcripts and diplomas for bachelor's and master's degrees. If you have not completed the master's degree, you must submit a confirmation that the master's thesis has been submitted.
- A copy of the master's thesis. If you recently have submitted your master's thesis, you can attach a draft of the thesis. Documentation of a completed master's degree must be presented before taking up the position.

- Application letter setting out your motivation and suitability for the position
- Name and address of three referees
- Publications or other relevant research work if relevant

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education, both bachelor's and master's education, in addition to other higher education. Description of the documentation required can be found [here](#). If you already have a statement from NOKUT, please attach this as well.

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal and interpersonal qualities. Motivation, ambitions, and potential will also count in the assessment of the candidates.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

General information

Working at NTNU

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background.

The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great

opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

In accordance with The Public Information Act (Offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact James D. M. Speed, telephone +47 73592251, email james.speed@ntnu.no. If you have any questions about the recruitment process, please contact HR-manager Christen Torvik, e-mail: christen.torvik@ntnu.no.

Please submit your application electronically via jobbnorge.no with your CV, diplomas and certificates. Applications submitted elsewhere will not be considered. Diploma Supplement is required to attach for European Master Diplomas outside Norway. Chinese applicants are required to provide confirmation of Master Diploma from China Credentials Verification (CHSI).

If you are invited for interview you must include certified copies of transcripts and reference letters. Please refer to the application number 2021/58014 when applying.

Application deadline: 07.01.2022.



NTNU - knowledge for a better world

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The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

Department of Natural History

We conduct research in biogeography, biosystematics, evolutionary biology and ecology with a focus on biodiversity. The Department is responsible for developing and maintaining the Museum's natural history collections, including the botanical garden at Ringve in Trondheim. The Department of Natural History is one of two departments at the NTNU University Museum

[Apply for this job](#)

Deadline

7th January 2022

Employer

NTNU - Norwegian University of Science and Technology

Municipality

Trondheim

Scope

Fulltime

Duration

Engagement

Place of service

Trondheim