

Programme syllabus

Conservation and Management of Fish and Wildlife (MSc)

Skötsel av vilt- och fisk populationer

120.0 hp

Programme code: SM009

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Programme board

The programme board for education in forestry

SLU ID

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Revised

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Revised by

The programme board for education in forestry

Entry requirements

To be admitted to the Master's Programme in Conservation and Management of Fish and Wildlife, the following criteria must be met:

general entry requirements: first-cycle (Bachelor's) qualification comprising a minimum 180 credits or equivalent degree from a higher education institution abroad;

specific entry requirements: a minimum of 60 credits from specialist study within one of the following subjects or main fields of study:

- Biology
- Forestry Science
- Forest Management
- Forest Science
- Environmental Science
- Natural Resources Governance.

And 15 credits in Ecology

In addition, knowledge equivalent to the Swedish upper secondary course English 6 is required. This requirement is met by those holding a Degree of Bachelor (180 credits) from a Swedish higher education institution. There are specific rules for applicants from certain English-speaking countries.

The specific entry requirements stated above can also be met by someone who has obtained equivalent knowledge through a corresponding qualification from abroad, or in some other way.

There are specific entry requirements for each course included in the programme. These are described in the relevant course syllabus.

Objectives

General objectives

The general learning outcomes for first- and second-cycle courses and programmes are specified in the Higher Education Act (Chapter 1, Sections 8–9).

Objectives for a Degree of Master (120 credits)

In accordance with the annex to the Ordinance for the Swedish University of Agricultural Sciences, for a Degree of Master (120 credits), the student shall have:

Knowledge and understanding

- demonstrated knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrated specialised methodological knowledge in the main field of study.

Competence and skills

- demonstrated the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information,
- demonstrated the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake specialised tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work,
- demonstrated the ability in speech and writing both nationally and internationally to report clearly and discuss their conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrated the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach

- demonstrated the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical considerations and also to demonstrate awareness of ethical aspects of research and development work,
- demonstrated insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrated the ability to identify the personal need for further knowledge and take responsibility for their ongoing learning.

Degree

Degree awarded upon completion of the programme

The Master's (120 credits) programme Conservation and Management of Fish and Wildlife leads to a Master of Science with biology as the main field of study. A Degree of Master is a general qualification.

Students who fulfil the qualification requirements for a Degree of Master (120 credits) in the main field of study will be issued a degree certificate on request. The degree certificate will specify the qualification as Degree of Master of Science (120 credits) with a major in Biology.

Other qualifications may be awarded provided that the requirements for them are fulfilled. See SLU's system of qualifications.

The programme contains courses which, depending on choice of courses and combination with previous studies in forestry at first-cycle level, may enable students to fulfil the requirements for the professional qualification Degree of Master of Science in Forestry, 300 credits. The outcomes for a Degree of Master of Science in Forestry are stipulated in the Ordinance for the Swedish University of Agricultural Sciences. The requirements for a Degree of Master of Science in Forestry are defined in SLU's system of qualifications.

Degree requirements

The Degree of Master of Science with biology as the main field of study will be awarded once 120 credits have been obtained, of which 90 must be from second cycle courses that meet the following requirements:

- a minimum of 30 credits with biology as the main field of study (A1N; A1F);
- a minimum of 30 credits from an independent project (degree project) with biology as the main field of study (A2E).

Additionally, students must have successfully completed a Degree of Bachelor, a professional qualification comprising a minimum of 180 credits, or have an equivalent qualification from abroad.

The Degree of Master of Science (120 credits) may contain a maximum of 30 credits from first-cycle courses, provided these credits were not included in a Degree of Bachelor or its equivalent. All courses included in a degree must be at university level, have been successfully completed and may not overlap/have similar content.

Content

Programme description

The programme aims to provide students with a Bachelor's degree in biology or related subject field with the opportunity to specialise in biology focusing on the conservation and management of animal populations. Students who successfully complete the programme will be awarded a Master's degree that can be used in an academic or professional career in the biology fields offered as specialisation.

During the first year, students will take a number of profile courses totalling 60 credits. These courses provide students with broad knowledge and understanding of the conservation and management of wild animal populations. Great emphasis is placed on advanced knowledge of inventorying methods, population ecology models, principles of biodiversity

conservation, social science methods and other conservation models. Exercises and project work conducted during the first year will also give students the chance for in-depth study in their choice of area.

Students will then choose advanced courses with the possibility of specialising in one of the sub-disciplines of biology. Students are offered courses with focus on restoring ecosystems and habitats. Depending on their previous knowledge, they may also be able to take courses in biodiversity conservation and/or applied population genetics. Students will complete an independent project worth a minimum of 30 credits.

Skills and abilities are developed through regularly practising formulating problems, collecting data and performing analyses; by being able to solve problems linked to real-life matters relating to ecology and society and by being able to communicate information about management plans and scientific information in a national and international context in seminars and presentations.

To practise their judgement and approach, students are regularly asked to confront ethical matters relating to utilising resources such as in hunting and fishing, and ethical questions relating to how wild animals are managed and the conflicts between humans and animals. During the first year of study, the social aspects of how humans use of wildlife and fish populations form a recurring theme. Great emphasis is placed on the conflict between society's needs for administrative plans and managing uncertainty due to a lack of data.

In accordance with the SLU guidelines for equal opportunities, a well-functioning study environment is characterised by openness, equality and inclusiveness. This promotes a climate that draws upon the diverse backgrounds, lives, and skills of students and staff.

SLU's profile focuses on knowledge of biological natural resources. Societal challenges such as the supply of raw materials, water and energy, and climate change tie in with our areas of responsibility. These challenges, and humankind's use and management of biological natural resources, form some of the UN goals for sustainable development.

The programme is taught in English.

Programme courses

Main fields of study: BI = Biology, SV = Forestry Science, NE = Economics

Course (main field of study, level)

Year 1

Census Methods for Biodiversity, 15 credits (BI, A1N)

Applied Population Ecology, 15 credits (BI, A1N)

Human Dimensions of Natural Resource Management, 15 credits (NE, GIF)

Fish and Wildlife Management, 15 credits (BI, A1F)

Year 2

Ecosystem Restoration and Rewilding, 15 credits (BI/SV, A1F)

Forest Conservation Science, 15 credits (BI/SV, A1N)

Conservation Genetics, 15 credits (BI, A1F)

Project-based advanced course in biology, 15 credits (BI, A1F)

Degree project, 30 or 60 credits, (BI, A2E)

The courses offered may change during the programme. This may result in a new version of the programme syllabus containing transitional provisions. Decisions on the courses offered are taken well in advance of the next academic year.

Each course on the programme has its own syllabus that describes the course content and other specifics. Information on when the courses are offered is available on the SLU student web.

During certain study periods (parts of a semester), SLU offers several programme courses from which the student can choose. Students are guaranteed a place on one of these courses, provided they meet the admission requirements and have applied before the deadline.

Additional information about the programme

General regulations for first- and second-cycle courses and programmes

For more information about semester dates, examination, credit transfer and admissions to the latter part of programmes, see the Education Planning and Administration Handbook on the SLU student web.

Possibilities for further study

Students who complete the Master's programme in Conservation Management of Fish and Wildlife and are awarded a degree have the opportunity to continue their studies at doctoral level.