



SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES

Department of Wildlife, Fish, & Environmental Studies

Syllabus

Ecosystem Restoration and Rewilding ***Ekosystemrestaurering och rewilding***

15.0 Credits

Code: B11446

Finalized by: Ordföranden för programnämnden för utbildning inom skog (PN-S), 2023-12-22

Valid from: Autumn semester 2024 (2024-09-02)

Level within study regulation: Second cycle

Grading scale: TH Four-grade scale, digits

Main field of study with advanced study: BIA Biology - A1F Second cycle, has second-cycle course/s as entry requirements

SBV Forestry Science - A1F Second cycle, has second-cycle course/s as entry requirements

Programme board

PN-S The programme board for education in forestry

Language

ENG English

Biology area

EKOL Ecology

Forestry science sub-area

Natural processes 15 credits

Entry requirements

Knowledge equivalent to 120 credits

60 credits in one of the following subjects:

- Biology
- Forestry Science
- Natural Resource Management
- Environmental Sciences

15 credits Ecology

And courses on advanced level equivalent to:

15 credits Forestry Science and 15 credits Biology

alternatively

30 credits Biology including 15 credits ecology

English 6

Objectives

The aim of the course is to give the student a deeper understanding of the need for restoration and reintroduction of wild animals, as well as how such measures can be implemented with regard to different targets and goal conflicts. The course focuses on forested systems and adjacent semi-aquatic and aquatic environments, with a particular focus on boreal systems. International perspectives on other ecosystems are also included. The student will be able to apply the theoretical knowledge to create restoration plans and monitoring schemes, and critically discuss and assess the needs, benefits and possible conflicting objectives of restoration and rewilding in ecosystems.

After completing the course, the student should be able to

- identify the need for restoration or rewilding in different ecosystems
- describe the aims of restoration and rewilding in different ecosystems.
- suggest appropriate methods, extent and locations for restoration and rewilding.
- describe the process of practical restoration work for making restoration plans
- plan the monitoring of restoration and rewilding with appropriate organisms to monitor.
- critically evaluate the needs, costs, benefits and conflicting goals of restoration and rewilding in different cases.

Content

Subject-related content:

The course is about ecosystem restoration and rewilding of species, ecosystems and ecosystem services in forests, wetlands, grasslands and aquatic systems. The course covers the foundational concepts of restoration and rewilding to give the students a solid theoretical background for practical restoration work. The students learn to identify the need for restoration and rewilding and appropriate methods to conduct practical restoration work. The planning and assessment of practical restoration and rewilding has a strong focus in the course. The course covers scales from individuals and populations to landscape scale restoration and rewilding (for example inoculation of fungi on trees to re-introducing megaherbivores).

*Teaching formats:**

Through course literature, physical and online lectures, group works, discussions, case studies, and field excursions, the student will gain knowledge on restoration and rewilding of forests, grasslands, wetlands and peatlands and aquatic systems.

The course focuses on the following generic competencies:*

Synthesis and oral presentation.

Field excursions and examinations are obligatory

Examination formats

Home assignments, group work and final seminar