

Global perspectives on adaptive wildlife management

Number of credits: 7.5 ECTS

Part of research school: ECOS, Ecology and Society

Education cycle: Third

Marking scale: Pass / Fail

Entry requirements: Students must be admitted to a doctoral program, ideally in a subject relevant to wildlife management. Each prospective student shall present a brief CV and a motivation of no more than 200 words outlining how this course will benefit their PhD studies. This information will be used to select students on the course, since the number of participants is limited. The applying student should also mention if she/he has participated in similar field courses in the past. Students will have to participate in all parts of the course in South Africa as well as in Umeå, but students can join course sections in Umeå via video link.

Scope: 5-week course, including a 16-day field trip to South Africa.

Purpose: To provide students with a broader, multidisciplinary, understanding of adaptive and sustainable wildlife management in northern and southern hemisphere systems. The main underlying objective is to train the students' critical, analytical and out-of-the-box thinking. To this end, we will discuss how certain paradigms (e.g. Euro-American) dominate natural science and natural resource management and how an increasing focus on more diverse perspectives may lead to alternative solutions for sustainable development. As a result, students should be better adapted to solving the world's future wildlife management issues.

Learning outcomes: Upon completion of the course, the student should be able to:

- Describe the principles of adaptive management and co-management
- Have a good understanding of some of the core concepts and theories underlying adaptive wildlife management (e.g. governance, conflict mitigation, population and behavioral ecology), originating from different disciplines, including political science and ecology
- Explain and contrast some of the main wildlife management issues in European and South African context
- Discuss and analyze adaptive wildlife management problems at a more general, conceptual level, and develop solutions for these issues beyond species-specific or systems-specific boundaries
- Reflect on the value of an interdisciplinary research approach
- Present & communicate their research at different levels of education (primary school, MSc-level, PhD level), in a multi-cultural setting and to different stakeholders (scientists, managers, and the general public)

Content: The course will have three mandatory parts; Part I will be at SLU in Umeå, Part II in South Africa, and Part III again at SLU in Umeå.

Part I will exist of one week during December. This will include a 1-day meeting in Umeå or via video link, where students will be informed about and prepared for the field trip. The remaining days of Part I, the students will focus on background reading for the course and on an exercise where they will contrast wildlife management in Europe and Africa. For this task,

we will create teams consisting of an African and a European student who will jointly work on this task online and prepare a co-presentation that they will give in South Africa.

Part II consists of a 16-day fieldtrip to South Africa planned for January 2021. This part of the course will be based at the Nsasani Trust educational camp (www.nsasani.co.za) in Skukuza, Kruger National Park. This camp combines housing for all students and lecturers with all the necessary educational facilities (lecture halls, library, lab facilities). Moreover, it is set in one of the world's most diverse wildlife systems, both in terms of species, but also in terms of management models (ranging from national park to privately protected areas and community-based conservation initiatives). It is also a region with clear conservation successes (e.g., rebuilding populations of large carnivores) as well as conservation challenges (e.g., widespread poverty in local communities, white rhino poaching). Due to this location, students will also be able to interact with a diversity of local scientists and managers that deal with adaptive wildlife management on a day-to-day basis. Finally, since this course is co-organized with the Nsasani Trust, the aim is to have a balanced representation of African and European students. This will create a particularly stimulating, innovative, and effective educational experience.

This part of the course will cover a series of themes, focused on comparing European and South African adaptive wildlife management approaches and issues; e.g., ungulate management (e.g., moose vs. elephant management), large carnivore management (e.g., wolf vs. jackal management), conflicts around land use and local communities (e.g., mining and land/green grabbing), and issues around illegal harvest or culling. Students will be able to learn about these themes in detail and critically analyze them through a series of lectures by the course organizers, local researchers and conservation managers, through diverse group exercises, through workshop-type interactions with local managers and scientists, and through field excursions to a diversity of wildlife systems. Exercises include: (1) presentation of own PhD work, (2) multiple day group exercise where students will critically analyze an adaptive management issue based on literature and interviews with local lecturers, managers and scientists, (3) present the outcome of this group work to scientists and managers (4) outreach activities aimed at presenting the importance of conservation and of science to primary school kids and tourists. Throughout all exercises, students will work in a diverse team of European and African students.

Part III takes place in Umeå and/or via video link. The students will be asked to reflect on the field trip and outline what they have learned from this course, in terms of generic skills, but also in terms of contrasting southern versus northern hemisphere adaptive management. Moreover, in groups of 4-5, students will develop and give a half-day teaching activity within the MSc course Human Dimensions of Fish and Wildlife Management (given at the Department of Wildlife, Fish and Environmental Studies). This should be in the form of interactive teaching and based on the group exercise that they did in South Africa. The students will have some additional preparation time for the teaching activity after the field trip.

Pedagogical form: The course will combine a wide range of pedagogical formats, including traditional lectures, flipped classroom activities, field excursions, workshops, self-study, and group works.

Time table: Part I consist of about 1 week of work during December 2020 and includes a 1-day meeting in Umeå or via video link on **December 7th, 2020**. Part II (the field trip to South Africa) takes place from **January 2nd-17th, 2021**. For the European students, this means leaving home on the 1st of January and coming back on the 18th of January. After returning the students will have to give their final presentation and teaching activity (Part III) during two assigned days within the MSc course Human Dimensions of Fish and Wildlife Management (**Feb 4th &**

5th, 2021). The total amount of course days will hence sum up to 5 weeks. Note that dates might change based on developments around the covid-19 pandemic.

Pass grade requirements: To pass the course students have to actively participate in all aspects of the course, which includes actively taking part in lectures, group work, workshops, field excursions, and discussion sessions. Each student will also be assessed based on the exercises described in the Content section.

Additional information: The responsible department reserves the right to cancel the course if there are no more than 5 students who have applied for the course. Students belonging to the ECOS research school have priority to the course.

There is no course fee but students are required to cover costs for travel + a contribution to costs of accommodation and food related to the South African part.

Responsible department: Department of Wildlife, Fish and Environmental Studies

Location: Umeå and South Africa