



AARHUS UNIVERSITY

## Structured Decision Making / Adaptive Management

Format: 5 day course, with c. 20 PhD students, 4 lecturers/instructors

When: 22.-27. June 2015

Venue: Sandbjerg (Aarhus University)

Responsible course leaders: Fred A. Johnson, USGS & Jesper Madsen, AU



Jesper Madsen (front) and Fred Johnson (behind) catching moulting geese.

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Course description: An understanding of animal ecology, no matter how thorough, is insufficient in itself to prescribe appropriate conservation actions. The goal of this course is to provide students with the background, training, and tools necessary to correctly frame decision problems in natural resource management. We will use a decision-analytic approach, which involves assessments and integration of resource values, management consequences, uncertainty, and risk. Topics to be covered include:

- What makes conservation decisions hard?
- The elements of decision analysis
- Framing a decision problem
- Understanding conservation objectives
- Designing decision alternatives
- Predicting consequences (modeling)
- Solving single-objective and multiple-objective problems
- Uncertainty and risk

- Dynamic decisions and adaptive management
- Engaging stakeholders and issues of governance
- Organizational dynamics: barriers and bridges to effective decision making

The course will be a combination of lectures, class exercises, group work on submitted conservation management problems which will be presented and discussed in a stepwise manner through a structured decision making process in the course of the week.

Evaluation: The evaluation of students will be based on their active participation; each student will have to make a presentation related to their conservation problem, and each group of students will have to produce a written material on their case study by the end of the course.

Prerequisites: Students in ecology and social and political science with interests in conservation practice.

Credits: 2½ ECTS