



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

# SLUkurs

## Syllabus

**PNS0007 Policy measures for biodiversity in forestry and agriculture,  
3.0 credits**

## Syllabus approved

2004-06-07

## Subjects

Biology/Economy/Landscape Planning

## Education cycle

Third cycle

## Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

## Language

Swedish

## Prior knowledge

None

## Objective, including learning outcomes

The aim of the course is to explain from an economic and social perspective why biodiversity can be threatened, and the role and potential of policy measures to

mitigate these problems. A student acquiring the course should:

- understand the mechanisms in society behind forest and agricultural biodiversity degradation,
- have insights in the role of policy measures in relation to other driving forces in a market economy,
- be able to explain different methods for how biodiversity goals can be weighted against other social goals and welfare concepts,
- have the proficiency to apply theories in environmental economics to actual environmental problems, local as well as regional or global,
- have fundamental knowledge about alternative policy measures and their feasibility for different biodiversity problems, and
- be able to carry out a simple policy measure analysis from economic and political assessment criteria.

## **Content**

The course proceeds in ten, linked steps:

- The biodiversity situation of Swedish forest and agricultural landscapes, short background as concerns populations, trends, threats, ecological conditions. What are the problems in biological terms?
- The biodiversity and the society. Policy objectives and social demands concerning the forestry and agricultural biodiversity. The importance and the uses of biodiversity. Environmental functions and benefits. Cultural patterns, attitudes and the public knowledge. Short background to policy. How important is the biodiversity?
- Explanatory model on what determines the biodiversity situation in forest respective agricultural landscapes. Does policy matter – or are other factors more important?
- Analysis of why environmental problems arise. External effects, public goods, insufficient information, transaction costs, distribution over time. Why do we need policy measures?
- Characterization of forest respective agriculture biodiversity problems by economic and policy concepts or causal types.  
Only one biodiversity problem with one solution, or ...?
- Alternative policy measures: which types of instruments exist, how can they be designed in various ways. What can we find in the tool-box?
- A survey of the present policy measures affecting forest and agricultural biodiversity. What are we doing?
- Criteria for environmental policy development and assessments. Goal attainment, efficiency concepts, security, control properties, costs, fairness, distributional impacts, etc. What is a good policy measure?
- Analyses of alternative policy designs. Theoretical approach as well as applied

to actual biodiversity problems. Which instruments are best for which kinds of environmental problems. Which design is appropriate, which level is adequate and where is it preferably applied. How to combine measures into batteries, a good policy. Some policy measures can be better than other!

- Conclusions and evaluation. Reconsidering the chain biodiversity problems – causes – policy objectives – explanations – policy options – policy proposals.

### **Requirements for examination**

Presence at lectures and seminars, approved exercises.

### **Additional information**

### **Responsible department**

Swedish Biodiversity Centre