

ECN 371: Exercise set 6

Exercise sets are not to be handed in. At the same time as exercises are put on the WEB page, so are the associated suggestions for answers.

1. Policies for managing biological diversity in forests

Setting: current regulations for biological diversity in the Nordic countries entail temporary forest management restrictions without full compensation to landowners. This has resulted in a situation where landowners are reluctant to reveal the existence of habitats that could have preservation value or warrant forestry restrictions. The counter move from regulators is more extensive use of temporary management restrictions while possible preservation values are investigated. Landowners have responded to this by clear cutting areas where there are possible preservation values, which in turn has led to regulators using temporary preservation even more frequently, leading to a large back log of areas to be surveyed. In some cases, temporary restrictions have lasted for several years.

- (a) Suggest regulations or regulatory regimes that meet the participation constraint (here that landowners freely reveal potential habitats that are important for biological diversity), that are informationally viable and efficient, and that provide the correct incentives for landowners to undertake the proper forestry practices if preservation values are established?
- (b) Suppose that a habitat that is important for biological diversity crosses property borders (i.e., several landowners are involved). Does this have any implications for the regulations you suggest, and if yes, what modifications would you propose?
- (c) Suppose that the habitat in question is unique. What implications, if any, does this have for your suggestion?

2. Policies for managing large predators

Setting: large predators, in particular wolves, are controversial. Owners of grazing animals and regulators disagree on the extent of the damages caused by predators. Animal owners' feel their concerns are not well taken care of, which has led to poaching (illegal hunting) and strong legal actions against persons who have killed predators. These legal actions entail large costs for society, both in terms of litigation costs and for the persons involved.

- (a) Suggest regulatory schemes that meet the participation constraint (here that animal owners) do not overstate losses to predators, and reduce poaching. These regulations must also be informationally viable and efficient, and provide the correct incentives. Keep in mind that many predators roam large areas, thereby having possible impacts on multiple animal owners.
- (b) In addition to animal owners, some people who live in rural areas feel that they have experienced a loss in their quality of life due to predators (fear of taking evening walks, concerns on children safety when going to evening activities or school, and reluctance to allow children to play in the forest, etc.). How does this impact regulatory regimes for managing large predators?