Resource Economics – Seminar 1

Thursday, September 10, 2015
Room HH201, 16:15-18:00

Problem 1 – Fish

Consider a fishery with an exogenous price p of the fish. In addition to the social surplus from the fishery, the government attaches a social value v per unit of the fish stock at any time.

a.) *Set up the social optimization problem for this case.*

b.) *Derive the long-run optimal values of the stock and harvesting of the fish.*

c.) *Assuming that costs are proportional to effort, derive the landing tax that will make the open access equilibrium equal to the social optimum.*

Problem 2 – Forest

Consider a privately owned forest. The owner has sold (and received the money for) the land the forest is on. However, the contract specifies that the new owner will not take over the land until the timber is harvested, and the old owner is free to chose the date of harvesting.

a.) *Derive the harvesting date that is optimal for the old owner.*

b.) *Compare this with the date that would be optimal if the land had not been sold.*