THE UNIVERSITY OF BRITISH COLUMBIA
Department of Economics

Economics 472: The Economics of Renewable Resources

Term 2, 2013/2014
Professor G.R. Munro
Office Hours: F, 9:00 – 10:30 and by appointment
Office: BuTo 998

READING LIST AND OUTLINE


Along with the text, there will be some additional readings. You will either be directed to these readings, or you find through Connect, http://elearning.ubc.ca/connect/

I. An Introduction to the Economics of Renewable Resources

(i) Natural resources defined: renewable vs. non-renewable
(ii) Natural resources as capital assets
(iii) Sustainability and dynamic considerations
(iv) Property rights, public and private, and the management problems created by the absence of such rights – “common pool” resources

Text: Chapters 1 and 2

II. The Economics of Fisheries: The Traditional Static Approach

(i) An overview of the Canadian fishing industry
(ii) Capture fisheries vs. aquaculture
(iii) Biological foundations of economic models of the fishery – the concept of bioeconomics
(iv) Capture fisheries as the quintessential “common pool” resource: Pure and Regulated Open Access
(v) Concepts of resource rent and Bionomic Equilibrium
(vi) Weaknesses in the static approach to fisheries economics

Text: Chapter 4

III. The Economics of Fisheries: Capital Theoretic Approaches

(i) A review of elementary capital theory and investment theory; the concept of the social rate of discount
(ii) Dynamic economic models of the fishery introduced: the fundamental equation of renewable resource exploitation; a dynamic perception of the “common pool” problem
(iii) The special issue of “existence value”

Text: Chapter 11

G. Munro, “Mathematical Bioeconomics and the Evolution of Modern Fisheries Economics”.

Ola Flaaten, *Fisheries Economics and Management*, Chapter 4, Chapter 5, Part 5.4

IV. Major Policy Issues in Fisheries Management

(i) Dealing with the consequences of the “common pool” characteristic of capture fisheries: Incentive Blocking vs. Incentive Adjusting approaches to resource management
(ii) The impact of the UN Third Conference on the Law of the Sea, and Extended Fisheries Jurisdiction
(iii) The special problem of internationally shared fishery resources
(iv) The issue of uncertainty

Text: Chapters 5 and 11

R. Arnason, “Property Rights in Fisheries: How Much Can Individual Transferable Quotas Accomplish?”

J. Wilen, J. Cancino and H. Uchida, “The Economics of Territorial Use Rights Fisheries, or TURFs”

both the Arnason and Wilen et al. articles to be found at:
http://reep.oxfordjournals.org/content/6/2.toc
V. The Basic Economics of Forest Management
   (i) Forestry in the Canadian and British Columbia economies
   (ii) Optimal management over the long run: the optimal stock and optimal period of rotation.
   Text: Chapter 10

P. Pearse, “Average Economic Yield Per Rotation: Douglas Fir”, go to Connect

VI. Further Issues in Forest Management
   (i) Problems of forest tenure
   (ii) Multiple Use of Forest Lands and Environmental Conflicts
   Text: Chapter 10

VII. The Economics of Environmental Quality
   (i) The environment as a “common pool” resource
   (ii) Static vs. dynamic approaches to the problems of pollution
   (iii) Means of control: quantitative controls vs. taxes
   Text: Chapter 6; Chapter 7, pp. 220-228, pp. 245-259.