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Environmental Economics – Benefits and Threats of Biodiversity

Block Seminar: 9 – 11 February 2009

Nationalparkzentrum Sächsische Schweiz, Bad Schandau

2 SWS, 3 ECTS

Participants:

This seminar is a facultative course for 3rd semester Global Change Ecology students as part of the C2 Module Ecological Services. The course is also open to other GCE students as well as to Geoecology students.

Maximum number of participants: 25

Required course work:

Each registered participant will write a seminar paper of about 25 pages on a selected topic, following the basic guidelines for authors of the journal Land Use Policy.

During the block seminar, each participant will give an oral presentation of 30 minutes on the seminar topic selected. We will discuss each topic; work on presentation skills, and practice moderation skills of students. Depending on the number of participants, some topics may be covered by two or several students.

Introduction to the course and assignment of topics:

23 October 2008, 16.00 s.t. – 18.00, room: **S110 (AI)**

Deadline for registration to the course:

6 November 2008

Deadline for submission of seminar papers:

22 January 2009





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Seminar topics

I. Basic environmental economic concepts

1. The provision of environmental goods and services: Private versus public goods and the role of property rights
2. Environmental policies: Coping with positive and negative externalities

II. Economic valuation of biodiversity and ecosystem services

3. Economic valuation of biodiversity and ecosystem services: An overview
4. Direct valuation of the benefits of biodiversity conservation: The contingent valuation method
5. Indirect valuation of nature conservation as a consumptive good: Travel cost and hedonic pricing method
6. Benefit-transfer as a tool for economic valuation of biodiversity
7. The benefit transfer and use estimating model toolkit (Loomis et al. 2008)
8. Who values nature's goods and services: Consumers or citizens?
9. Wetlands as a case study for ecosystem valuation

III. Costs, finances and policy instruments of biodiversity conservation

10. The costs of biodiversity conservation: A case study on species protection
11. Financing biodiversity conservation
12. Creating markets for biodiversity and ecosystem services
13. Payments for environmental services
14. Compensation payments in wildlife conservation
15. Biodiversity conservation and intergovernmental fiscal transfers
16. Biodiversity policies and equity

IV. International biodiversity policies

17. The Convention on Biological Diversity: Economic issues
18. Biosphere reserves as a model to integrate biodiversity conservation and economic development
19. Strategies and instruments to conserve tropical rainforests
20. Charging the use of global commons



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Introductory references:

- Barbier, Edward B.; Burgess, Joanne C.; Folke, Carl. 1994. *Paradise Lost? The Ecological Economics of Biodiversity*. Earthscan Publications, London.
- Barbier, Edward; Rauscher, Michael. 1995. Policies to control tropical deforestation: trade intervention versus transfers. In: Perrings, Charles; Mäler, Karl-Göran; Folke, Carl; Holling, C. S.; Jansson, Bengt-Owe. (eds.). *Biodiversity Loss*. Cambridge: Cambridge University Press, p. 260-282.
- Barbier, E.B.; Acreman, M.; Knowler, D. 1996. *Economic Valuation of Wetlands. A Guide for Policy Makers and Planners*, Gland (CH): Ramsar Convention Bureau.
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- Bizer, Kilian. 1997. *Marktanaloge Instrumente im Natur- und Landschaftsschutz*. Berlin: Analytica.
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- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit). 2007. *Nationale Strategie zur biologischen Vielfalt*. Berlin.
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- Degenhardt, Stefan; Hampicke, Ulrich; Holm-Müller, Karin; Jaedicke, Wolfgang; Pfeiffer, Christian. 1998. *Zahlungsbereitschaft für Naturschutzprogramme*. Hrsg. vom Bundesamt für Naturschutz. Bonn-Bad Godesberg.
- Field, Barry C.; Field, Martha K. 2001. *Environmental Economics. An Introduction*. 3rd ed., McGraw-Hill, New York.
- Geisendorf, Sylvie; Gronemann, Silke; Hampicke, Ulrich; Immler, Hans. 1998. *Die Bedeutung des Naturvermögens und der Biodiversität für eine nachhaltige Wirtschaftsweise*. Hrsg. vom Umweltbundesamt, Berichte Nr. 6/98. Erich Schmidt, Berlin.
- Getzner, Michael; Spash, Clive L., Stagl, Sigrid. 2005. *Alternatives for Environmental Valuation*. Routledge, London and New York.
- Hampicke, Ulrich. 1991. *Naturschutzökonomie*. Ulmer, Stuttgart.
- Hampicke, Ulrich; Horlitz, T.; Kiemstedt, H.; Tampe, K.; Timp, D.; Walters, M. 1991. *Kosten und Wertschätzung des Arten- und Biotopschutzes*. Berlin: Erich Schmidt. (UBA-Publikation)
- Hanley, Nick; Spash, Clive L. 1993. *Cost-Benefit Analysis and the Environment*. Edward Elgar, Aldershot.
- Hartje, Volkmar J. 1994. Naturschutzabgaben. In: Mackscheidt, Klaus; Ewringmann, Dieter; Gawel, Erik (Hrsg.). *Umweltpolitik mit hoheitlichen Zwangsabgaben?* Berlin: Duncker & Humblot, S. 331-347.
- Hofmann, Herbert; Rauh, Rudolf; Heißenhuber, Alois; Berg, Ernst. 1995. *Umweltleistungen in der Landwirtschaft*. B.G. Teubner, Leipzig.
- Landell-Mills, Natasha; Porras, Ina T. 2002. *Silver bullet or fools' gold? A global review of markets for forest environmental services and their impacts on the poor*. Instruments for sustainable private sector forestry series. International Institute for Environment and Development. London.
- Loomis, John; Kroeger, Timm; Richardson, Leslie; Casey, Frank. 2007. The Benefit Transfer and Use Estimating Model Toolkit. Department of Agricultural and Resource Economics, Colorado State University, Fort Collins. <http://dare.colostate.edu/tools/benefittransfer.aspx>, accessed 16.10.2008
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- Pearce, David; Moran, Dominic. 1994. *The Economic Value of Biodiversity*. Earthscan, London.
- Ring, Irene. 1994. Marktwirtschaftliche Umweltpolitik aus ökologischer Sicht – Möglichkeiten und Grenzen. Teubner, Stuttgart, Leipzig.
- Ring, Irene. 2008. Integrating local ecological services into intergovernmental fiscal transfers: the case of the ecological ICMS in Brazil. *Land use policy* 25(4), 485-497.
- Sagoff, Mark. 1998. Aggregation and deliberation in valuing environmental public goods: A look beyond contingent pricing. *Ecological Economics* 24/2-3, 213-230.
- Sen, Amartya K. 1995. Environmental Evaluation and Social Choice: Contingent Valuation and the Market Analogy. *The Japanese Economic Review* 46, 23-37.
- Schwerdtner, Kathleen; Gruber, Bernd. 2007. A conceptual framework for damage compensation schemes. *Biological Conservation* 134, 354-360.
- SRU (Der Rat von Sachverständigen für Umweltfragen) (Hrsg.). *Diverse Umweltgutachten und Sondergutachten*. Stuttgart: Metzler-Poeschel.
- Sterner, Thomas. 2003. *Policy Instruments for Environmental and Natural Resource Management*. Resources for the Future, Washington, D.C.
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- Vatn, Arild. 2005. *Institutions and the Environment*. Edward Elgar, Cheltenham.
- WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen/German Advisory Council on Global Change) (Hrsg.). 2000. *Welt im Wandel: Erhaltung und nachhaltige Nutzung der Biosphäre*. Jahresgutachten 1999. Springer, Berlin u.a.O.
- WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen) (Hrsg.). 2002. *Charging the use of global commons*. Special report 2002. Berlin.
- Whitehead, J.C. 1994. Economic Valuation of Wetland Resources: A Review of the Value Estimates, *Journal of Environmental Systems* 22/2, 151-161.

Biodiversity Economics Library of IUCN: <http://www.biodiversityeconomics.org/library/index.html>
Biodiversity Bibliography of Polasky et al.: <http://www.apec.umn.edu/faculty/spolasky/biobib.html>

Important journals:

Ambio
Biological Conservation
Conservation Biology
Ecological Applications
Ecological Economics
Ecology and Society (online journal)
Environment and Planning C
Environmental and Resource Economics
Environmental Conservation
Environmental Policy and Governance
(Formerly: European Environment)

GAIA
Global Environmental Change
Journal of Environmental Economics and Management
Land Use Policy
Natur und Landschaft
Naturschutz und Landschaftsplanung
Natur und Recht
Zeitschrift für angewandte Umweltforschung
Zeitschrift für Ökologie und Naturschutz
Zeitschrift für Umweltpolitik und Umweltrecht