

ENVIRONMENTAL CONSERVATION
Geography/IES 339- Spring 2008
Syllabus for SECOND HALF of the Course

Professor: Lisa Naughton
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Office hours: M 2:20 to 3:30, W 2:20-4, or by appt
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Description: In the 2nd half of the course we focus on environmental conservation in developing countries, where extraordinary biological diversity coincides with poverty. Conservation has vital importance for the poor, because they directly depend on the environment and suffer disproportionately from disease and hardship if it is degraded. Moreover, poverty itself can worsen environmental problems. Thus conservationists today strive to simultaneously protect the environment *and* alleviate poverty. By the end of the semester you will better understand the difficulty and urgency of ‘pro-poor’ conservation, and see how global policies and markets can support or undermine sustainable development. You will also hear about local citizens’ experiences with conservation in Uganda, Peru, Belize and other tropical countries.

We will first explore the causes and consequence of tropical deforestation, and then evaluate various conservation strategies, from national parks, to ecotourism, to ‘green’ marketing campaigns. Then we will turn to urban issues, and examine the growth of megacities in the tropics. These cities are centers of both economic growth and poverty, and thus they suffer varied environmental problems. Finally, we will examine Global South perspective on climate change, and explore the innovative and controversial N-S partnerships to store carbon in tropical forests.

Readings: Required readings for the 2nd half of the course include:

1. Seven chapters from the book: Breakfast of Biodiversity by J. Vandermeer and I. Perfecto, 2005. *Second Edition*. The book is available from Underground Textbooks (664 State St) for ~\$17. OR, you could buy the reader (see next) which includes photocopies of the seven chapters. OR you can read the chapters on-line, but they will only be available on-line during the week they are assigned.
2. Fifteen other readings. These are available in the reader from the L&S Copy Center (1650 Humanities Building). These fifteen readings will also be available online via MyWisc, and on reserve at the Geography Library, 2nd floor Science Hall.

The readings: Readings are assigned by week. Complete the readings before your discussion section. You will be tested on the readings in the exam. In your reading, focus on the author’s main arguments and the evidence s/he uses to support his/her arguments. Environmental issues are often controversial, so read critically.

Videos: Material from video clips shown in class will be included in the exam. I will provide study questions for each video. If you miss a video or want to view it a second time, videos will be available on reserve at the Learning Lab, Room 259, Van Hise. Ask for the video by name and refer to Geography 339.

Grading: Grades for the second half of the course will be determined on the basis of two in-class examinations (each 50 points) and discussion activities (75 points). Attendance at the discussion section is mandatory. The exams will cover lectures (including guest speakers), readings and discussion section activities from the second half of the course. THERE IS NO FINAL EXAM.

The exams: Students must take the exams at the scheduled times (Apr 18 and May 9). Make-up exams can only be arranged if Prof. Naughton is notified in person in advance and given a legitimate reason. Make-up exams will be composed entirely of essay questions.

LECTURE SCHEDULE AND READINGS

Week 1 Social and environmental change in developing countries

M Mar 24 Environmental histories of the U.S. and Third World: Commonalties and differences

W Mar 26 Population growth and ecological footprints.

F Mar 28 Tropical forests, biodiversity and ecosystem services

Readings: Cohen, 1998; Mitchell 1998, Vandermeer and Perfecto (V&P) Chap 1 and 2.

Week 2 **Quest for sustainability**

M Mar 31 Tropical agriculture: from slash and burn to industrial soy farming.

W Apr 2 Fair Trade Coffee: Guest lecture from Madison's "Just Coffee"

F Apr 4 National parks and community based conservation.

Readings: V & P 2005 Chaps 3-5 & 9, Diamond 1999.

Week 3 **Community-based efforts to conserve biodiversity.**

M Apr 7 Guest: Sustainable logging by communities in Bolivia. Guest: Mike Dockry, U.S. Forest Service.

W Apr 9 Conflict and compromise at Tambopata, Peru VIDEO: Return to Tambopata

F Apr 11 Conserving elephants in Africa: Parks vs. sustainable use

Readings: V & P 2005 Chap 6, Schwartzmann et al. 2000; Redford & Sanderson 2000, Sibanda & Omwega 1996

Week 4 **Market-based conservation efforts**

M Apr 14 Direct payments for ecosystem services

W Apr 16 Is the environment a security issue? Lessons from Rwanda.

F Apr 18 Exam I

Readings: Ferraro & Kiss 2002. Diamond 2005.

Week 5 **Economic Growth and the Environment.**

M Apr 21 Urbanization and the growth of megacities in the tropics

W Apr 23 Kuznet's curves, Brown vs. Green agendas

F Apr 25 VIDEO Debate: Is the Environmental Crisis Overblown?

Readings: WRI 1996-97 (Kuznet curves), Lomborg 2007, Dasgupta 2007

Week 6 **International strategies to ameliorate climate change**

M Apr 28 Global south perspectives on climate change. The precautionary principle

W Apr 30 Beyond Kyoto: How to slow emissions?

F May 2 Carbon sequestration: Using Belize's rainforests to recapture Wisconsin's CO₂

Readings: Baer et al. 2000, Oppenheimer 2005, Pacala & Socolow 2004, Patz & Olson 2006

Week 7 **Summary and synthesis**

M May 5 UW-Madison Energy Conservation Program. Guest: F. Vakili-Zadeh

W May 7 Catch-up and Review

F May 9 Exam II.

Exercise: Investigate UW's plans to reduce CO₂ emissions at www.conserve.wisc.edu/.

Sources for Readings:

Baer, P., et al. 2000. "Equity and Greenhouse Gas Responsibility." *Science* 289: 2287.

Cohen, J.E. 1998. "How Many People can the Earth Support?" *The New York Review* Oct. 8.

Dasgupta, P. 2007. "A Challenge to Kyoto" *Nature* 449: 143-144.

Diamond J. 1999. "Paradise and Oil." *Discover* 20(3): 94-102.

Diamond J. 2005. *Collapse: How Societies choose to Fail or Succeed*. New York: Viking.

Ferraro, P.J. & A. Kiss. 2002. "Direct Payments for Biodiversity Conservation." *Science* 298: 1718-1719.

Homer-Dixon, T. et al.. 1993. "Environmental Change and Violent Conflict." *Scientific American* 268(2): 38-45.

Lomborg, B. 2007. *Cool It: the Skeptical Environmentalist's Guide to Global Warming*. New York: A. Knopf.

Mitchell, J.D. 1998. "Before the Next Doubling." *World Watch* 11(1): 20-27.

Oppenheimer, M. 2005. "Defining Dangerous Anthropogenic Interference" *Risk Analysis* 25(6): 1399-1407.

Pacala, S. and R. Socolow. 2004. "Solving the Climate Problem for the Next 50 Years" *Science* 13 2004: 968 - 972

Patz, J.A. & S.H. Olson. 2006. "Malaria Risk and Temperature" *PNAS* 103: 5635-5636.

Redford, K.H. & S.E. Sanderson. 2000. "Extracting Humans from Nature." *Conservation Biology* 14(5): 1362-1364

Rice, R.& R.Gullison. 1997. "Can Sustainable Management Save Tropical Forests?" *Scientific Amer.*276: 44-49.

Schwartzman, S. et al.. 2000. "Rethinking Tropical Forest Conservation" *Conservation Biology* 14:1351-1357.

Sibanda, B.& A.Omwega.1996. "Conservation in Africa: Kenya vs. Zimbabwe." *SA J of Wildlife R.* 26:175-181.

Vandermeer,J.& I. Perfecto. 2005. *Breakfast of Biodiversity the Truth about R. Forest Destruction*.Oakland IFDP.

WRI. 1996-97. "Kuznet Curves: Cities and the Environment." World Resources Institute.