Human Dimensions of Wildlife Conservation
Anthro 368, Sec 001C/Env Stds 368, Sec 001C
Spring 2011

Instructor: **Dr. Stephanie Spehar**
Office hours: Wed. 9:00-11:00, Thurs. 3:00-4:00, or by appt.
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Class meetings: Tues & Thurs 11:30am-1:00pm
Classroom: Clow 26

Course description
This course will focus on the most central issue in the preservation of wildlife and biological diversity: people. Human beings are dependent on their natural environments, but they are also the major drivers of almost all threats to biodiversity. This class will examine how this "human dimension" integrates with the conservation of wildlife. We will explore the many ways that human culture and economic activities shape how we interact with the environment, the effect this has had on biodiversity worldwide, and how we can develop solutions that allow us to preserve biodiversity while promoting economic and social stability for human communities. We will focus mainly on international conservation issues, but I will also introduce issues or case studies from the United States to provide local parallels. Throughout, this course will integrate perspectives from conservation biology, which is the scientific study of the factors that affect the maintenance and loss of biological diversity, and environmental anthropology, which examines the interaction between human beings and their natural environments.

This course will be divided into three sections: 1) What is biological diversity, and why should we care about it? 2) What are the main threats to biodiversity, and what can be done to address these? and 3) An in-depth exploration and critique of some of the most important possible solutions to the "biodiversity crisis".

In the first part of the course, we will carefully examine what biodiversity is, and then examine different perspectives on the value of wildlife and other forms of biodiversity and why it should be preserved. I will also provide an introduction to the study of interactions between human culture and the environment, and theoretical frameworks for how we can integrate the needs of people, society, and the natural world.

In the second part of the course, we will closely examine human-generated threats to biodiversity, in particular the two that currently have the largest impact: 1) habitat destruction, in the form of deforestation, fragmentation, and resource extraction; and 2) overexploitation, in the form of hunting and the wildlife trade. We will also touch on other issues related to biodiversity threats, such as population growth, pollution, and resource extraction. For each threat, we will use both summaries and case studies to examine the conservation problem and how the culture and economy of people interact with these issues. Throughout we will examine how issues like

globalization and global and local power inequities play into the destruction and conservation of biological diversity.

In the final part of the course, we will carefully examine and critique some of the most important possible solutions to these threats, focusing particularly on community-based approaches, such as management by local communities and ecotourism. We will closely examine hot-button issues such as the right to self-determination by local people, the effectiveness of ecotourism, and the "parks vs. people" debate.

The concept of sustainability
A major, overarching theme of this course is the concept of sustainability. Sustainability is often defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." We often think of sustainability as pertaining only to the environment, but economic stability and social equality are also important parts of the equation- unless these issues are addressed, it will be impossible to protect biodiversity long-term. We will examine the concept of sustainability, and its applicability to biodiversity conservation, as we move through the issues presented in this class, and you will be asked to apply this concept as you think about conservation issues and possible solutions to conservation problems.

Required texts:
Townsend, Patricia K. 2009. *Environmental Anthropology: From Pigs to Policies, 2nd edition*. Waveland Press.

This book is available in the bookstore, or from online vendors such as Amazon.

Other readings have been selected from a variety of sources, and will be available on electronic reserve or on D2L.

Recommended texts:
Wilson, E.O. 2003. *The Future of Life*. Vintage Press.

You will be using this book a great deal in the course. It is available through Amazon and other online book vendors.

Course goals
My goals regarding the subject matter of this class are threefold: 1) that students develop a deeper understanding of the complexities and challenges of biodiversity conservation, 2) that students understand how human culture and the natural environment interact, and how this influences biodiversity conservation and strategies for integrating the cultural practices and needs of people into conservation solutions; and 3) that through the examination of conservation issues on an international and local scale, students will understand the concept of sustainability and how it this concept can be applied to better able to evaluate the sustainability of their own interactions with the environment.

An equally important goal of this class is to further your liberal arts education. The essence of a liberal arts education is the production of an informed citizen who is interested in growing and

learning throughout life and is adept at critical thinking. Therefore, I do not want students to take what they hear or read at face value; you will be encouraged to thoughtfully consider many perspectives and draw your own conclusions.

Course requirements

Attendance

Attendance in this class is required, and a record of attendance will be kept and used in assessing your final grade. If you must miss a class, please try to inform me beforehand that you will be absent. If you cannot inform me beforehand, it is still a good idea to email or call me and let me know why you will be absent. *More than two unexcused absences for the semester will result in a lowering of your attendance score.* An "unexcused absence" is any absence for which you cannot provide a note from a doctor, another professor, or some other documented explanation of your absence. If you simply cannot make a class, please contact me before the class meets; perhaps an arrangement can be made to ensure that you are not penalized for missing class for legitimate reasons.

Participation

*Your **active** participation in the class (and, by extension, your own learning) is the key to your success in this class, and to the success of this course as a whole.*

Participation in class will be an important part of your grade. This will mainly be evaluated through your participation in regular class discussions. However, I understand that some people are more comfortable than others speaking in front of groups, and therefore your participation grade will also be evaluated through your participation in small group work and through a variety of other means (e.g., contribution of questions for class discussion or other materials or ideas that I ask you to bring to class, in-class work, and other assignments). I hope, however, that we can work together to create a class environment where everyone feels comfortable and safe participating in class discussions.

Discussion and group work are tremendously useful tools for student learning, as they allow you to explore topics in-depth, and clarify and expand upon issues raised in class. Numerous studies show that students learn much better in classes where discussion and group work are a part of the curriculum. However, in order for discussion to be productive and effective, we must create an environment that is respectful and comfortable for all participants. While disagreements and differences of opinion are expected during discussion, please try to state your opinions or objections in a way that is respectful and considerate of the feelings and sensitivities of others.

Most of participatory activities (discussions, in-class work, etc.) will be based on the assigned readings or lecture topics, so always come to class prepared (**meaning that you have done the readings and brought those reading materials with you to class**!).

Readings

You need to do the readings for this class in order to participate fully. A couple important points about readings for this class:

1. You should complete the required readings for each class BEFORE coming to class. It is essential to the success of this class that students actually do the readings and come to class prepared. If I sense that students are not completing readings on time, I will begin to institute in-class or pre-class quizzes to ensure that students come to class prepared.

2. Always bring the relevant books or copy of the readings to class with you. If you do not do this, then you will not be able to participate fully in class discussions and activities, and your participation grade will suffer. I encourage you to bring your laptop to class to utilize PDFs of readings, so you do not have to print them out.

Reading responses

Reading responses are short responses (~1 page total) to questions posed about the readings for that week. These assignments are designed to ensure that students are doing the readings and thinking carefully about what they read. I require that students submit 5 out of 9 possible reading responses throughout the semester. The guiding questions for these reading responses will be posted on D2L by the Friday before the reading response is due. ***Make sure you bring your completed readings response to class on the day it is listed on the syllabus.***

Papers

In lieu of exams, I will require you to complete 3 "summary papers" examining issues covered in class throughout the semester. For these papers, which should be 4-5 pages in length, you will be required to address a set of questions or issues; you are expected to demonstrate your knowledge of information presented in class readings, lectures, and discussions and your ability to integrate diverse concepts and information related to the human dimensions of wildlife conservation. Information about these papers will be distributed and discussed when appropriate.

Research project

Each student will be required to write an 8-10 page research paper on an issue related to biodiversity conservation. I will not be assigning topics; you should choose a topic that interests you. Each student will also be required to complete a poster based on their research project, which will be displayed as part of UW Oshkosh's Earth Week from April 20-24. Additionally, students will also give a 10 minute presentation based on their research paper at the end of the semester. Details will be discussed during the semester.

Grading

Attendance and participation:	15%
Reading responses (5):	15%
Summary papers (3):	45%
Term project: (includes term paper, poster, presentation, and bibliography)	25%

Semester grades will be based on your percentage of the total points (weighted to correct for the different "values" of different assignments) possible in the class:

A = 93 - 100%	C = 73 - 77%
A- = 90 - 92%	C- = 70 - 72 %
B+ = 88 - 89%	D+ = 68 - 69%
B = 83 - 87%	D = 62 - 67%
B- = 80 - 82%	D- = 60 - 62
C+ = 78 - 79%	F = 0 - 59%

I reserve the right to lower one or more of these grade thresholds. Under no circumstance will I raise any of the thresholds.

Changes to the syllabus and course schedule

I will do my very best to adhere to the syllabus and course schedule; however, I reserve the right to change topic, dates, readings, etc. due to unforeseen circumstances! You will always be notified of these changes in class, and changes will also be posted on D2L. You are responsible for any changes to the syllabus or course schedule that are announced in class and are posted on D2L.

Course schedule

NOTE: PT= Patricia Townsend, *Environmental Anthropology: From Pigs to Policies*; RR=Reading response

CHANGES SOMETIMES OCCUR IN SCHEDULED LECTURE TOPICS, READINGS, ETC. I RECOMMEND THAT YOU REGULARLY CHECK THIS COURSE SCHEDULE ON D2L, RATHER THAN RELYING ON A PRINTED SYLLABUS.

Part 1: What is biodiversity, and why should we care about it? What is the human dimension?

Week 1: What is biodiversity?

Tuesday 2/1: Introduction to the course

Thursday 2/3: What is biodiversity? What is the biodiversity crisis?
Readings:

- Wilson, E.O. (2003). To the ends of the earth. In: *The Future of Life*. Vintage: New York. (carefully)
- Hoffman et al. (2010). The impact of conservation on the status of the world's vertebrates. *Science* 330: 1503-1509. (carefully; understand main points)
- Butchart et al. (2010). Global biodiversity: Indicators of recent declines. *Science* 328: 1164-1168. (carefully; understand main points)

Optional:

- Orians, G.H. (1997). Global biodiversity: patterns and processes. In: *Principles of Conservation Biology, 2nd Ed.* Sinauer: New York.

Week 2: What is the value of biodiversity? Why should we care?

Tuesday 2/8: Biodiversity case study: tropical forests.
Readings:

- Get started on readings for Thursday (2/10)
- Guiding questions for film (bring to class)

Film: *Planet Earth: Jungles*

Thursday 2/10: Putting a value on biodiversity: Instrumental and intrinsic arguments
Readings:

- Wilson, E.O. (2003). "How much is the biosphere worth?" and "For the love of life." In: *The Future of Life*. Vintage: New York. (carefully)
- Ehrenfeld, D. (1988). Why put a value on biodiversity? In *Biodiversity*. National Academy Press: New York. (carefully)
- PT, Chp. 10 (carefully)

Optional:

- Balmford, A. et al. (2002). Economic reasons for saving wild nature. *Science* 297: 950-953. (carefully)
- McCauley, D. (2006). Selling out on nature. *Nature.* (a more recent argument similar to Ehrenfeld's, above)

Due: RR1

Week 3: Environmental anthropology: studying the "human dimension"

Tuesday 2/15: Environmental Anthropology I: Humans as part of the environment
Readings:

- PT, Chp 1-Chp 3 (carefully)
- Moran, E.F. (2006). Chp 1: Human Agency and the State of the Earth, and Chp 2: A Reminder: How Things Were. In: *People and Nature: An Introduction to Human Ecological Relations*. Blackwell: Oxford. (carefully)

Thursday 2/17: Environmental Anthropology II: History of human interactions with the environment
Readings:

- PT, Chp 4-Chp 6 (carefully)
- Moran, E.F. (2006). Chp. 3: The Great Forgetting. In: *People and Nature: An Introduction to Human Ecological Relations*. Blackwell: Oxford. (carefully)
- Weisman, A. (2007). The Lost Menagerie. In: *The World Without Us*. St. Martin's Press: New York. (carefully)

Optional:

- McNeill, J.R. (2000). Prologue: Peculiarities of a Prodigal Century. In: *Something New Under the Sun: An Environmental History of the Twentieth-Century World*. W.W. Norton: New York. (skim)

Due: RR2

Week 4: Sustainability, and threats to biodiversity

Tuesday 2/22: Sustainability: How can we balance economic, social, and environmental needs? What does "need" mean, anyway?
Readings:

- Carefully examine the original statement on the concept of sustainable development in the Bruntland Report: http://www.un-documents.net/ocf-02.htm#I
- Fricker, A. (1998). Measuring up to sustainability. *Futures* 30. (carefully)
- Revkin, A. (2005). A new measure of well-being from a happy little kingdom. *The New York Times.* (http://www.nytimes.com/2005/10/04/science/04happ.html?pagewanted=all)

Optional:

- McKibben, B., (2007). Chp 3: All For One, Or One for All. In: *Deep Economy: The Wealth of Communities and the Durable Future*. Times Books: New York.

Due: RR3

Part 2: Humans and the major threats to biodiversity

Thursday 2/24: HIPPO: An introduction to the major threats to biodiversity
Readings:

- Wilson, E.O. (2003). Nature's last stand. In: *The Future of Life*. Vintage: New York. (carefully)
- Jenkins, M. (2003). Prospects for biodiversity. *Science* 302: 1175-1177. (carefully)
- Moulton, M.P. & Sanderson, J. (1999). The Evil Quartet. In: *Wildlife Issues in a Changing World*. Lewis Publishers: New York. (carefully)

Due: RR4

Week 5: Habitat Destruction and Fragmentation: Causes and Solutions

Tuesday 3/1: Habitat Destruction and Fragmentation I: Agriculture
Readings:

- Vandermeer, J. & Perfecto, Y. (2005). Chp 1: Slicing up the rainforest on your breakfast cereal, Chp 5: The multiple faces of agriculture in the modern world system, and Chp. 9: Biodiversity, agriculture, and rain forests. In: *Breakfast of Biodiversity: The Political Ecology of Rainforest Destruction*. Food First Books: Oakland.
- Philpott, S.M. & Dietsch, T. (2003). Coffee and conservation: a global context and the value of farmer involvement. *Conservation Biology* 17: 1844-1846

Optional:

- Perfecto et al. (1996). Shade coffee: A disappearing refuge for biodiversity. *Bioscience* 46: 598-608.
- Moulton, M.P. & Sanderson, J. (1999). Evil quartet 2: Habitat fragmentation and destruction. In: *Wildlife Issues in a Changing World*. Lewis Publishers: New York. (carefully)
- Laurance, W.F. (1999). Reflections on the tropical deforestation crisis. *Biological Conservation* 91:109-117. (carefully)

Thursday 3/3: Threatened biodiversity hotspots
Readings:

- Browse Indonesia's UN-REDD website, and focus on understanding what REDD is: http://www.un.or.id/redd
- Guiding questions (please bring to class)

Film: *The Burning Season*

Due: Paper #1 (Saturday, March 5)

Week 6: Habitat Destruction and Fragmentation & Overexploitation

Tuesday 3/8: Habitat Destruction and Fragmentation II: Logging and plantations
Readings:

- Vandermeer, J. & Perfecto, Y. (2005). Chp 6: The political ecology of logging and related activities. In: *Breakfast of Biodiversity: The Political Ecology of Rainforest Destruction*. Food First Books: Oakland. (carefully)
- White, M. (2008). Borneo's moment of truth. *National Geographic*. (or read online version, with color pictures: NG web version) (carefully)
- Belford, A. (2010). Indonesia agrees to curb commercial deforestation. *The New York Times*. http://www.nytimes.com/2010/05/28/world/asia/28indo.html (carefully)
- Belford, A. (2010). Indonesia's billion-dollar forest deal is at risk. *The New York Times*. http://www.nytimes.com/2010/11/29/world/asia/29iht-indo.html (skim)

Optional:

- Browse Indonesia's UN-REDD website, and focus on understanding what REDD is: http://www.un.or.id/redd
- Wilcove & Koh (2010). Addressing the threats to biodiversity from oil-palm agriculture. *Biodiversity Conservation*. (carefully; understand main points)
- Stoksad, E. (2008). A second chance for rainforest biodiversity. *Science* 320: 1436-1438.
- Browse the Forest Stewardship Council's website: http://www.fsc.org/about-fsc.html

Due: RR5

Thursday 3/10: Hunting

Readings:

- McRae, M. (1997). Road Kill in Cameroon. *Natural History*. (carefully)
- Milner-Gulland, E.J. & Bennett, E.L. (2003). Wild meat: the bigger picture. *Trends in Ecology & Evolution* 18: 351-357 (carefully)
- Bennett, E.L. & Robinson, J.G. (2000). Hunting for the Snark. In: *Hunting for Sustainability in Tropical Forests*. Columbia University Press: New York. (carefully)

Optional:

- Eves, H. & Ruggiero, R. 2000. Socioeconomics and sustainability of hunting in the forests of Northern Congo (Brazzaville). In: *Hunting for Sustainability in Tropical Forests*. Columbia University Press: New York. (skim)!

Week 7: Overexploitation continued

Tuesday 3/15: The Wildlife Trade

Readings:

- Webster, D. (1997). The looting and smuggling and fencing and hoarding of impossibly precious, feathered and scaly wild things. *The New York Times Magazine*, February 16, 1997. (carefully)
- Read about the mission of TRAFFIC, the wildlife trade monitoring network: http://www.traffic.org/trade/ (skim)
- Nowell & Ling (2007). Excerpts from "Taming the tiger trade". *TRAFFIC East Asia*. (carefully)

Due: RR6

Thursday 3/17: Overfishing

Readings:

- Montaigne, F. (2007). Still Waters: The Global Fish Crisis. *National Geographic*, April 2007. (carefully)
- Guiding questions for film (print out and bring to class)

Film: *A Fish Story*

Discussion with Dr. Vivian Foss, who grew up in a fishing community in Maine

DUE: Proposal for research project

Week 8: Spring Break (3/22 and 3/24)

Week 9: Invasive Species & Population

Tuesday 3/29: Invasive Species
Readings:

- Moulton, M.P. & Sanderson, J. (1999). Evil Quartet 3: Introduced Species. In *Wildlife Issues in a Changing World*. Lewis Publishers: New York. (carefully)
- Pimentel et al. (2005). Update on the environmental and economic costs associated with alien-invasive species in the United States. *Ecological Economics* 52: 273-288. (carefully)

Film clips: *Strange Days on Planet Earth: Invaders*

Thursday 3/31: Population: The root of the problem?
Readings:

- PT, Chp 10 (carefully)
- Wilson, E.O. (2002). The bottleneck. In: *The Future of Life*. Vintage: New York. (skim)
- Whitty, J. (2010). The last taboo. *Mother Jones*, May/June 2010. (carefully)

Optional:

- Cincotta et al. (2000). Human population in the biodiversity hotspots. *Nature* 404:990-992.

Week 10: Pollution

Tuesday 4/5: Resource extraction and indigenous communities in the developing world
Readings:

- PT, Chp 7 (carefully)
- Romero, S. & Krauss, C. (2009). In Ecuador, resentment of an oil company oozes. *New York Times*, May 14, 2009. (carefully)
- Romero, S. & Krauss, C. (2011). Ecuador judge orders Chevron to pay $9 billion. *New York Times*, Feb. 14, 2011. (carefully)
- Begin reading excerpts from Kane, J. (1995). *Savages*. Vintage: New York. (focus on effects of oil extraction in Huaorani)

- Guiding questions (bring to class)

Film: *Crude*

Thursday 4/7: Resource extraction and indigenous communities in the developing world, continued
Readings:

- Finish reading excerpts from Kane, J. (1995). *Savages*. Vintage: New York. (focus on effects of oil extraction in Huaorani)

Due: RR7

Due: Preliminary bibliography for research paper

Part 3: Exploring Conservation Solutions

Week 11: How should we do conservation?

Tuesday 4/12: Conservation: biological diversity vs. human rights?
Readings:

- PT, Chp. 12
- Fortwangler, C. (2002). The Winding Road: Incorporation of social justice and human rights into protected area policies. In *Contested Nature: Promoting International Biodiversity with Social Justice in the 21st Century*. SUNY: New York. (carefully)
- Terborgh, J. (1999). The Danger Within. In: *Requiem for Nature*. Shearwater: Washington, D.C. (carefully)
- Examine either Conservation International's OR WWF's Statement of Principles on Partnerships with Indigenous People

Optional:

- Adams, W.M. (2004). Chp 3: The Global Conservation Regime. In: *Against Extinction: The Story of Conservation.* Earthscan: London. (carefully)

Due: RR8

Thursday 4/14: Community-based conservation: community management approaches
Readings:

- Harrison, K. (1999). Roads where there have long been trails. *Terrain.org: A Journal of the Built & Natural Environments*, 3. (carefully; focus on identifying examples of main concepts)
- Gordon, J. (2006). The role of science in NGO mediated conservation: insights from a biodiversity hostpot in Mexico. *Environmental Science and Policy* 9: 547-554. (carefully; note the different perspectives and stakeholders discussed)
- Complete assignments and preparation for role-playing exercise given to you by instructor in previous class

Due: Poster for research project (for Earth Week)

Due: Paper #2 (Saturday, April 16)

Week 12: Community-based conservation cont.

Tuesday 4/19: Community-based conservation: The promises and pitfalls of ecotourism
Readings:

- Honey, M. (2008). "In Search of the Golden Toad" and "Tanzania: Whose Eden Is It?" In: *Ecotourism and Sustainable Development: Who Owns Paradise?* Island Press. (carefully)

Due: RR9

Thursday 4/21: Day of action for Earth Week

Week 13: Community-based approaches cont.

Tuesday 4/26: Case study: Ecotourism and community empowerment in Nicaragua
Readings:

- TBA

Guest speaker: Sarah Otterstrom of Paso Pacifico

Thursday 4/28: What is our role, as citizens and consumers?
Readings:

- Pt, Chp. 13
- Maniates, M.F. (2001). Individualization: Plant a tree, buy a bike, save the world? *Global Environmental Politics* 1:3. (carefully)

Week 14: Student presentations

Tuesday 5/3: Student presentations

Thursday 5/5: Student presentations

Due: Final paper for research projects

Week 15: Student presentations

Tuesday 5/10: Student presentations

Thursday 5/12: Student presentations

Due: Paper #3