# Nature, Wilderness, and Conservation: Examining Our Assumptions About the Natural World



## **WFC 198**

2 Units Winter Quarter 2014 Meeting Time: 3:10-4:00 on Tuesday and Thursday Room: Academic Surge 1064 (Tues), Academic Surge 1371 (Thurs)

> Instructor: Evan Eskew Office: Academic Surge 1059 Office Hours: By Appointment Email: eaeskew@ucdavis.edu

#### **Course Description:**

The aim of this course is to explore and critically assess attitudes and assumptions regarding nature conservation. I'll assume you have some basic knowledge of conservation biology and the primary stressors affecting biodiversity (i.e., habitat degradation/loss/fragmentation, overharvesting, invasive species, climate change, and disease). Within the scientific community, there is little debate that these factors contribute substantially to species endangerment, and therefore we will discuss them sparingly. With a focus on conservation in the United States, we will first investigate the people and ideas that have shaped our understanding of nature and its relation to humans. We will then use this knowledge base to engage with a variety of ongoing debates surrounding appropriate conservation practice. I hope this course will expose you to a wide variety of environmental thinkers, allow you to wrestle with important conservation practitioners must operate.

#### **Required Readings:**

Students are expected to read and be familiar with the writings and articles we will discuss in class as well as any background material needed on an individual basis to fully understand the course content. Specific readings are listed in the course schedule below. Readings are subject to change throughout the quarter.

#### **Course and Grading Policies:**

Grading for this course is on a Pass/Not Pass basis. Because the course is completely discussionbased, student evaluation for the quarter will be based on two major components: 1) performance as discussion leader and 2) daily participation in discussion. Specifically, individual students will be responsible for leading discussion twice during the quarter. Students will be assigned discussion topics at the first class meeting. Discussion leaders are expected to generate 6-8 quality discussion questions to help guide discussion during their session. These questions are to be submitted to me at the beginning of the relevant class period (hard or electronic copies are acceptable). Although I have chosen course topics and readings, discussion leaders are welcome to assign other short readings and/or present other materials if they will enhance discussion. If there are other materials you would like class members to review before your discussion session (e.g., other articles, videos, websites, etc.), get them to me at least three days prior to your discussion so I can send them out to the entire class. Finally, the discussion leader will give a short summary of the day's primary discussion points during the final two minutes of each class session. If needed, I can assist you in developing questions or aid in finding other resources. Any requests for help should be communicated to me at least five days prior to your discussion session. I expect everyone to participate during class by taking part in discussion, asking questions, and making meaningful comments. To receive a passing grade in the course, students will need to demonstrate substantive discussion participation in at least 75% of class sessions. I expect students to be on time to class so we can all begin a productive discussion on schedule. Tardiness and lack of attendance will be counted against discussion participation.

#### **Course Schedule:**

#### Meeting 1 - Jan 9 Course Introduction

No reading assignment

## Meeting 2 - Jan 14 Nature, an American Perspective - Part I

Emerson, R.W. 1836. Nature. Pages 5-31.

## Meeting 3 - Jan 16 Nature, an American Perspective - Part II

Muir, J. 1876. "God's First Temples."

Muir, J. 1912. "Hetch Hetchy Valley." http://www.sierraclub.org/john\_muir\_exhibit/writings/the\_yosemite/chapter\_16.aspx

Leopold, A. 1949. "The Ecological Conscience." <u>http://oregonstate.edu/instruction/phl201/modules/texts/text3/leopold.html</u>

## Meeting 4 - Jan 21 Questioning Our Conception of Nature

Cronon, W. 1995. The trouble with wilderness; or, getting back to the wrong nature. Pages 69-90 *in* W. Cronon, editor. Uncommon ground: rethinking the human place in nature. W. W. Norton & Co., New York, New York, USA.

## Meeting 5 - Jan 23 Environmentalism, Imperialism

Grove, R. 1990. The origins of environmentalism. Nature 345:11-14.

Guha, R. 2000. The paradox of global environmentalism. Current History 99:367-370.

## Meeting 6 - Jan 28 Were Natives Better for Nature?

Diamond, J. M. 1986. The environmentalist myth. Nature 324:19-20.

Hames, R. 2007. The ecologically noble savage debate. Annual Review of Anthropology **36**:177-190.

#### Meeting 7 - Jan 30 What Are We Trying to Get Back to? The Problem of Shifting Conservation Baselines

- Papworth, S. K., J. Rist, L. Coad, and E. J. Milner-Gulland. 2009. Evidence for shifting baseline syndrome in conservation. Conservation Letters **2**:93-100.
- Willis, K. J. and H. J. B. Birks. 2006. What is natural? The need for a long-term perspective in biodiversity conservation. Science **314**:1261-1265.

#### Meeting 8 - Feb 4 A Controversial Conservation Baseline: Pleistocene Re-wilding

- Donlan, J., H. W. Greene, J. Berger, C. E. Bock, J. H. Bock, D. A. Burney, J. A. Estes, D. Foreman, P. S. Martin, G. W. Roemer, F. A. Smith, and M. E. Soulé. 2005. Re-wilding North America. Nature 436:913-914.
- Caro, T. 2007. The Pleistocene re-wilding gambit. Trends in Ecology and Evolution 22:281-283.
- Oliveira-Santos, L. G. R. and F. A. S. Fernandez. 2010. Pleistocene rewilding, Frankenstein ecosystems, and an alternative conservation agenda. Conservation Biology **24**:4-5.
- Toledo, D., M. S. Agudelo, and A. L. Bentley. 2011. The shifting of ecological restoration benchmarks and their social impacts: digging deeper into Pleistocene re-wilding. Restoration Ecology 19:564-568.

#### Meeting 9 - Feb 6 Economic Valuation and Ecosystem Services: A Service to Nature?

Fullerton, D. and R. Stavins. 1998. How economists see the environment. Nature 395:433-434.

McCauley, D. J. 2006. Selling out on nature. Nature 443:27-28.

- Armsworth, P. R., K. M. A. Chan, G. C. Daily, P. R. Ehrlich, C. Kremen, T. H. Ricketts, and M. A. Sanjayan. 2007. Ecosystem-service science and the way forward for conservation. Conservation Biology 21:1383-1384.
- Mandel, J. T., C. J. Donlan, and J. Armstrong. 2010. A derivative approach to endangered species conservation. Frontiers in Ecology and the Environment **8**:44-49.

## Meeting 10 - Feb 11 Getting Our Priorities Straight

Nijhuis, M. 2013. "Conservation Triage." *Slate*. <u>http://www.slate.com/articles/health\_and\_science/animal\_forecast/2013/02/conservation\_triage\_which\_species\_should\_be\_saved.single.html</u>

- Jachowski, D. S. and D. C. Kesler. 2009. Allowing extinction: should we let species go? Trends in Ecology and Evolution **24**:180.
- Wilson, H. B., L. N. Joseph, A. L. Moore, and H. P. Possingham. 2011. When should we save the most endangered species? Ecology Letters **14**:886-890.

Article to skim:

Winter, M., V. Devictor, and O. Schweiger. 2013. Phylogenetic diversity and nature conservation: where are we? Trends in Ecology and Evolution **28**:199-204.

#### Meeting 11 - Feb 13 What's a Species Even Worth?

Sagoff, M. 2009. Intrinsic value: a reply to Justus et al. Trends in Ecology and Evolution 24:643.

- Justus, J., M. Colyvan, H. Regan, and L. Maguire. 2009. Response to Sagoff. Trends in Ecology and Evolution **24**:644.
- Sandler, R. 2009. The value of species and the ethical foundations of assisted colonization. Conservation Biology **24**:424-431.

#### Meeting 12 - Feb 18 Make Peace with the Aliens?

- Davis, M. A., M. K. Chew, R. J. Hobbs, A. E. Lugo, J. J. Ewel, G. J. Vermeij, J. H. Brown, M. L. Rosenzweig, M. R. Gardener, S. P. Carroll, K. Thompson, S. T. A. Pickett, J. C. Stromberg, P. D. Tredici, K. N. Suding, J. G. Ehrenfeld, J. P. Grime, J. Mascaro, and J. C. Briggs. 2011. Don't judge species on their origins. Nature 474:153-154.
- Raffles, H. 2011. "Mother Nature's Melting Pot." *The New York Times*. http://www.nytimes.com/2011/04/03/opinion/03Raffles.html?\_r=0

Read the four responses to Davis et al. 2011 from Nature 475:36-37.

- Lambertini, M., J. Leape, J. Marton-Lefèvre, R. A. Mittermeier, M. Rose, J. G. Robinson, S. N. Stuart, B. Waldman, and P. Genovesi. 2011. Invasives: a major conservation threat. Science 333:404-405.
- Larson, B. 2008. Friend, foe, wonder, peril: invasive species are all of these. Alternatives Journal **34**:14-17.

## Meeting 13 - Feb 20 A More Idealistic Form of Conservation

Child, M. F. 2009. The Thoreau ideal as a unifying thread in the conservation movement. Conservation Biology **23**:241-243.

- Fisher, B., K. Bolt, R. B. Bradbury, T. A. Gardner, J. M. H. Green, D. G. Hole, and R. Naidoo. 2009. Two cultures of conservation. Conservation Biology **23**:1069-1071.
- Woodlief, A. 1990. "Emerson and Thoreau as American Prophets of Eco-wisdom." <u>http://transcendentalism-legacy.tamu.edu/criticism/ecotran.html</u>

#### Meeting 14 - Feb 25 Conservation as a Personal Mission: The Case of Timothy Treadwell

Discussion of the film Grizzly Man

## Meeting 15 - Feb 27 Nature, Race, and Ethnicity

- Johnson, C. Y., J. M. Bowker, J. C. Bergstrom, and H. K. Cordell. 2004. Wilderness values in America: does immigrant status or ethnicity matter? Society and Natural Resources 17:611-628.
- Browse the website designed to accompany the 2004 article "Apartheid in the Great Outdoors: American advertising and the reproduction of a racialized outdoor leisure identity." <u>http://www.u.arizona.edu/~derekcmartin/</u>

### Meeting 16 - Mar 4 Having Faith: Religious Thought in Conservation

- Allendorf, F. W. 1997. The conservation biologist as Zen student. Conservation Biology **11**:1045-1046.
- Regosin, J. V. and M. Frankel. 2000. Conservation biology and western religious teachings. Conservation Biology 14:322-324.
- Orr, D. W. 2005. Armageddon versus extinction. Conservation Biology 19:290-292.
- Cobb, J. B., Jr. 2005. The responsibility of progressive Protestants. Conservation Biology **19**:294.
- Stuart, S. N., G. W. Archibald, J. Ball, R. J. Berry, S. D. Emmerich, D. M. Evans, J. R. Flenley, K. J. Gaston, D. R. Given, A. G. Gosler, P. Harris, J. Houghton, Sir, E. D. Lindquist, D. C. Mahan, M. D. Morecroft, D. C. Moyer, D. Murdiyarso, B. W. W. Musiti, C. Nicolson, A. Oteng-Yeboah, A. J. Plumptre, G. Prance, Sir, V. Ramachandra, J. B. Sale, J. K. Sheldon, S. Simiyu, R. Storey, L. G. Underhill, J. Vickery, and T. Whitten. 2005. Conservation theology for conservation biologists—a reply to David Orr. Conservation Biology 19:1689-1692.

#### Meeting 17 - Mar 6 Watching the World Burn

- Pergams, O. R. W. and P. A. Zaradic. 2008. Evidence for a fundamental and pervasive shift away from nature-based recreation. Proceedings of the National Academy of Sciences of the United States of America 105:2295-2300.
- Kareiva, P. 2008. Ominous trends in nature recreation. Proceedings of the National Academy of Sciences of the United States of America **105**:2757-2758.
- Jepson, P., S. Jennings, K. E. Jones, and T. Hodgetts. 2011. Entertainment value: should the media pay for nature conservation? Science **334**:1351-1352.
- Balmford, A., L. Clegg, T. Coulson, and J. Taylor. 2002. Why conservationists should heed Pokémon. Science **295**:2367.

### Meeting 18 - Mar 11 Humans Behaving Badly

Schultz, P. W. 2011. Conservation means behavior. Conservation Biology 25:1080-1083.

Fischer, J., R. Dyball, I. Fazey, C. Gross, S. Dovers, P. R. Ehrlich, R. J. Brulle, C. Christensen, and R. J. Borden. 2012. Human behavior and sustainability. Frontiers in Ecology and the Environment **10**:153-160.

## Meeting 19 - Mar 13 The Future of Conservation Biology

Kareiva, P., S. Watts, R. McDonald, and T. Boucher. 2007. Domesticated nature: shaping landscapes and ecosystems for human welfare. Science **316**:1866-1869.

Optional commentary on this article: The Nature Conservancy. 2010. "The End of the Wild?" http://www.nature.org/ourscience/ourscientists/the-end-of-the-wild.xml

- Forbes, P. 2011. Transforming conservation for the 21st century. Conservation Biology **25**:209-211.
- Sanderson, E. W. and A. Huron. 2011. Conservation in the city. Conservation Biology **25**:421-423.
- Caro, T., J. Darwin, T. Forrester, C. Ledoux-Bloom, and C. Wells. 2012. Conservation in the Anthropocene. Conservation Biology **26**:185-188.