

Syllabus

Management of Protected Lands

Environmental Studies, University of California at Santa Cruz
Course # 196A
Spring 2009
2-6 pm Tuesdays
Natural Sciences II Room 229

Your Instructor

Grey Hayes
(831) 728-8050
Please call only between 8 a.m. and 9 p.m., and only if very pressing
Email address: ghayes@ucsc.edu
Office: 485 Interdisciplinary Sciences Building
Office Hours: 10-12 Tuesdays

Course webpage:

http://www.elkhornsloughctp.org/reference/subissue_detail.php?SUBISSUE_ID=47

What's this course about?

This seminar, "Management of Protected Lands," has been designed to increase participants' knowledge about protected lands stewardship, illustrating the breadth of work necessary to sustain biological diversity on Planet Earth in deep time. Course format will be alternating seminar-style discussion and interviews with ecological management practitioners. The course is designed to be reading and writing intensive, befitting a senior undergraduate exit requirement for the Environmental Studies Department.

I hope that you'll gain from the course:

- Familiarity with the all major concepts concerning protected lands management as rooted in scientific theory and as applied by those affecting protected lands along California's central coast.
- Increased understanding of the diversity, types, and pros/cons of occupations in the protected lands management field.
- Increased skills in researching, reading, and critiquing diverse types of literature regarding protected lands management science and policy.

- Increased skills in writing and verbally communicating ideas drawn from literature reviews, interviews, and personal experiences.
- Increased familiarity with regional flora and fauna and the factors affecting the long term survival of species.

Expectations

Participants are expected to participate in the course in a professional manner. And so, they must:

- Complete all assigned reading and writing assignments on time.
- Be active participants in discussions as taking active roles in interviewing protected lands management practitioners.
- Be punctual. On-time arrival to the course meeting places is very important, as we will often be leaving immediately for the field or launching directly into lecture.
- Attend the full 4-hour time of class, 2-6 pm Tuesdays.
- Arrive at all of our field trips prepared for the out-of-doors, with correct clothing, any necessary food or medical supplies, etc

Ground rules

The course will involve lots of discussion between students and between students and professionals in the environmental management community. Participants are required to maintain courtesy and respect at all times. Seminar discussions will be moderated by the instructor, and discussion will be limited to one at a time comments, by acknowledgement of the moderator. Participants are encouraged to be as relevant as possible in their comments, to refer as much as possible to the background reading materials, and to listen to others.

Academic integrity

By enrolling at UCSC, students agree to adhere to University policies and regulations; for clarification see: <http://www2.ucsc.edu/judicial/handbook.shtml>. I cannot tolerate plagiarism or cheating, and will not award credit for any assignments where a breach of academic integrity is established. And, I will follow the UCSC process for violations of academic integrity. For more information see: http://www.ucsc.edu/academics/academic_integrity/undergraduate_students/
**test links

If you wonder what plagiarism is, or need help with correctly citing your sources, see: <http://nettrail.ucsc.edu>

By the way, I often *do* follow up on citations and will check to see if there might be plagiarism.

Grading

12 points	Quizzes & Personal Goals/Accomplishments Statements
20 points	Seminar participation
15 points	Interview participation
12 points	Questions for practitioners (turned in on notecards)
10 points	First paper – short essay
10 points	Second paper – letter/testimony
10 points	Final paper – literature review
10 points	Revised final paper
<i>20 possible points</i>	<i>Extra credit</i>

Lateness

I will take 1 point off your final grade for each day any assignment is turned in late. Assignments are due at the 2 pm start time of the class; later than that is considered 1 day late.

Appeals

Appeals of grades must be received in writing no sooner than 24 hours and no later than one week after the assignment is returned to you.

Extra credit

I will attempt to give you many avenues for extra credit. These include, but are not limited to: consulting writing tutors, attendance of office hours, turning in current events news that is clearly relevant to the course material, particularly stellar participation in seminar or interviews, etc etc. I will further clarify extra credit as the course progresses and opportunities arise.

Course Outline

March 31		Lecture
	<i>Title</i>	Definitions and Designs for Effective Protected Lands Networks
	<i>Concepts</i>	Fragmentation; Edge effects; Patch size; Connectivity; Corridors; Genetics; Extinction; Ownership; Development
	<i>Reading</i>	<p>Ghost Bears (Grumbine 1992, Jensen et al. 1993)</p> <p>Comparing marine and terrestrial ecosystems: Implications for the design of coastal marine reserves (Carr et al. 2003)</p> <p>What do genetics and ecology tell us about the design of nature reserves? (Soulé and Simberloff 1986)</p> <p>Rewilding and Biodiversity: Complimentary Goals for Continental Conservation (Soulé and Noss 1998)</p> <p>Mesopredator release and avifaunal extinctions in a fragmented system (Crooks and Soule 1999)</p> <p>Alternative causes of edge-abundance relationships in birds and small mammals of California coastal sage scrub (Kristan et al. 2003)</p>
	<i>Lectures</i>	Lecture 1: Course introduction Lecture 2: Definitions and Designs for Effective Protected Lands Networks
	<i>Assignments for today</i>	Reading Purchase materials (4x6 index cards) Personal Goals Statement

April 7		Seminar/Interview
	<i>Title</i>	California Department of Parks and Recreation: A Case Study in Protected Lands Network Design
	<i>Concepts</i>	Policy; Planning; Edge effects; Corridors

April 7		Seminar/Interview
	Reading	<p>The Seventh Generation: The Strategic Vision of California State Parks (California Department of Parks and Recreation 2001) See: http://www.parks.ca.gov/pages/23071/files/seven01.pdf</p> <p>Real Estate Assessment Document (California Department of Parks and Recreation 2008)</p> <p>California State Parks Acquisition Guidelines (California Department of Parks and Recreation 2009)</p> <p>Acquisition Process (California Department of Parks and Recreation undated)</p>
	Lectures	Guest Lecture: Victor Roth, California State Parks
	Assignments for today	<p>Reading</p> <p>Turn in 1 question for the speaker</p> <p>Turn in your short essay topic and the question that you will answer.</p>

April 14		Lecture
	Title	Why management matters
	Concepts	Endangered species; Communities/assemblages; protected lands management agency policy
	Reading	<p>Quantifying threats to imperiled species in the United States (Wilcove et al. 1998)</p> <p>Effects of disturbance on diversity in mixed-grass prairie (Collins and Barber 1985)</p> <p>Cattle grazing impacts on annual forbs and vegetation composition of mesic grasslands in California (Hayes and Holl 2003)</p> <p>Turning the ship around: changing the policies and culture of a government agency to make ecosystem management work (Belcher 2001)</p>
	Lectures	<p>Lecture 3: Why management matters</p> <p>Guest Lecture: Sean McStay, UCSC Natural Reserves Steward</p>
	Assignments for today	<p>Reading</p> <p>Continue working on your short essay – due next week</p>

April 21	Field Trip: Big Basin State Park
Title	A case study in why management matters
Concepts	Endangered species recovery; Habitat management; More: TBD
Reading	<p>Corvid Survey Techniques and the Relationship Between Corvid Relative Abundance and Nest Predation (Luginbuhl et al. 2001)</p> <p>Understanding the Effects of Forest Management on Avian Species (Marzluff et al. 2000)</p> <p>Corvid response to human settlements and campgrounds: Causes, consequences, and challenges for conservation (Marzluff and Neatherlin 2006)</p>
Lectures	<p>Guest lecture: David Suddjian, Independent Consultant</p> <p>Guest lecture: Portia Halbert, California State Parks</p>
Assignments for today	<p>Reading assignments</p> <p>Turn in 1 question relating to the field site, on a note card</p> <p>Turn in your short essay</p>

April 28	Lecture
Title	Then and now, ancient human management and new factors: fire and invasive species
Concepts	Human vs. nature; Wilderness; Disturbance ecology; Invasion ecology
Reading	<p>Biological Invasions and Ecosystem Processes: Towards an Integration of Population Biology and Ecosystem Studies (Vitousek 1990)</p> <p>The impact of the invasive alien grass <i>Cortaderia jubata</i> (Lemoine) Stapf on an endangered Mediterranean-type shrubland in California (Lambrinos 2000)</p> <p>Are long fire-free periods needed to maintain the endangered, fire-recruiting shrub <i>Arctostaphylos morroensis</i> (Ericaceae)? (Odion and Claudia Tyler 2002)</p> <p>Maritime chaparral community transition in the absence of fire (Van Dyke and Holl 2001)</p> <p>Native American Land-Use Practices and Ecological Impacts (Anderson and Moratto 1996)</p>

April 28	Lecture
<i>Lectures</i>	Lecture 4: Pleistocene to present – what have we done to our landscapes?
<i>Assignments for today</i>	Reading Literature review paper <i>outline</i> due

May 5	Field trip: Bureau of Land Management, Ft. Ord, Northern Monterey County
<i>Title</i>	Case study: Invasive species control on protected lands
<i>Concepts</i>	Monitoring; Invasive species control; Budgeting for management
<i>Reading</i>	Be familiar with: http://www.cal-ipc.org/ip/inventory/weedlist.php TBD- reading on specific invasive species
<i>Lectures</i>	Guest lecture: Sue Hubbard, BLM Ft. Ord
<i>Assignments for today</i>	Turn in 1 question relating to the field site, on a note card Report on one species from the CalIPC database, above Second writing assignment due

May 12	Lecture
<i>Title</i>	Marine Reserves: Another Kind of Protection
<i>Concepts</i>	Marine protected areas; Dispersal
<i>Reading</i>	Comparing marine and terrestrial ecosystems: Implications for the design of coastal marine reserves (Carr et al. 2003)
<i>Lectures</i>	Guest lecture: Mark Carr, UC Santa Cruz
<i>Assignments for today</i>	Final paper due

May 19	Field Trip: Sunset State Beach, southern Santa Cruz County
<i>Title</i>	Case study in recreation in and around conservation lands
<i>Concepts</i>	Carrying capacity; Recreation planning

	Reading	Effect of Recreational Disturbance to Waterbirds on Sand Beaches at Oceano Dunes State Vehicular Recreation Area and Adjacent Areas (Neuman et al. 2005) Snowy Plover Recovery Plan (Hornaday et al. 2007) (skim much of it, but read the following: pp. 33-78; 86&87; 141-143) Carrying capacity in the tourism industry: a case study of Hengistbury Head (Simón et al. 2004)
	Lectures	Guest lecture: Kris Neumann, PRBO Conservation Science Guest lecture: California State Parks, TBD
	Assignments for today	Reading assignments Turn in 1 question relating to the field site, on a note card

May 26	Field Trip: Swanton Pacific Ranch, northern Santa Cruz County	
	Title	Extraction in and around conservation lands
	Concepts	Buffers; Erosion; Public utility/support – history of protected lands Democracy and land management; Environmental Review- focus on CEQA
	Reading	Recreation and large mammal activity in an urban nature reserve (George and Crooks 2006) The effects of timber harvesting on the structure and composition of adjacent old-growth coast redwood forest, California, USA (Russell and Jones 2001)
	Lectures	Guest Lecture: Steve Auten, Forestry Program Manager, Cal Poly Swanton Pacific Ranch
	Assignments for today	Reading assignments

June 2	Presentations and discussion	
	Title	Where do we go from here: opportunities to improve protected lands management
	Concepts	Logic models; Collaborative learning

June 2	Presentations and discussion
Reading	Social Learning for Collaborative Natural Resource Management (Schusler et al. 2003) Collaborative learning: Improving public deliberation in ecosystem-based management (Daniels and Walker 1996) Landowners' Responses to an Endangered Species Act Listing and Implications for Encouraging Conservation (Brook et al. 2003)
Assignments for today	Be prepared to summarize your paper and discuss your opinions of the most important 'next steps' for protected lands management
Lectures	Lecture 6: Program design and evaluation: keys to successful, long term solutions for environmental stewardship
Assignments for today	Revised final paper due

Bibliography for Reading

Electronic versions will be placed on course website wherever possible

Anderson, K., and M. Moratto. 1996. Native American Land-Use Practices and Ecological Impacts. University of California, Centers for Water and Wildland Resources, Davis, CA.

Belcher, J. 2001. Turning the ship around: changing the policies and culture of a government agency to make ecosystem management work. *Conservation Biology in Practice* **2**.

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- Jensen, D., M. Torn, and J. Harte. 1993. In *Our Own Hands: A Strategy for Conserving Biological Diversity in California*. University of California Press, Berkeley and Los Angeles.
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- Marzluff, J. M., and E. Neatherlin. 2006. Corvid response to human settlements and campgrounds: Causes, consequences, and challenges for conservation. *Biological Conservation* **130**:301.
- Marzluff, J. M., M. G. Raphael, and R. Sallabanks. 2000. Understanding the Effects of Forest Management on Avian Species. *Wildlife Society Bulletin* **28**:1132.
- Neuman, K., G. W. Page, and D. George. 2005. Effect of Recreational Disturbance to Waterbirds on Sandt Beaches at Oceano Dunes State Vehicular Recreation Area and Adjacent Areas. California State Parks, Sacramento, CA.
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