

Conservation Geographies: Protected Areas in a Peopled World

Helen Hazen

Many students arrive at the start of their undergraduate career with a great interest in environmental issues. This initial interest in the environment provides an ideal starting point for getting students involved in deeper exploration of issues of economic development, global inequality, and interactions between people and their environment – key issues for any student undertaking a liberal arts degree.

This course will start with a very straightforward premise that many students may never have questioned: that protected areas (such as national parks) are a critical and entirely positive part of global conservation measures. Throughout the course we will then tease apart some of the assumptions behind the idea of the protected area, with the goal of encouraging students to develop the sort of critical thinking skills that move them from high school to undergraduate level. Are protected areas really as ‘natural’ as we think they are? Do people have to be excluded from protected areas in order for them to be fully ‘protected’? Are protected area boundaries meaningful beyond just a line on a map?

To begin the course, I plan to take students to Rocky Mountains National Park for their Destinations trip. This will ensure that we have a tangible starting point for what a major protected area looks like. While the students are there, we will begin to talk about how and why this area is protected; what is, and is not, natural about the park; and how active management is essential to maintaining the park. Reflections on this trip will inform our first class period back on campus when students will be asked to discuss the global definitions and values associated with protected areas.

The course will then be divided into two main sections. The first will consider how people have traditionally interacted with their environments and the changes that had to occur over time for the very idea of the protected area to emerge. This historical context is critical to understanding current issues in the protected areas literature. In this background section, we will consider major theoretical questions such as: Are people part of, or outside of, nature? Did prehistoric people have much impact on their environments? Is the idea of wilderness a myth?

The second part of the course will look at contemporary conservation challenges that emerge from these theoretical starting points. If people have always influenced their environment, is it realistic/desirable to exclude people from protected areas? Why do we tend to preserve certain ecosystems and species at the expense of others - whose definition or image of ‘natural’ are we trying to achieve? Is there anything really ‘natural’ about a bounded national park that requires active management to maintain its species assemblages?

Most of the class periods will primarily be discussion, with students encouraged to read and prepare effectively through required reading response papers that are submitted during the class period. A variety of additional in-class activities will be used to introduce the students to other sources of information, including historical documents, datasets, and videos. These activities will ask students to work in small groups to interpret the information provided and generate evidence-based solutions to conservation challenges.

Periodically, we will take field trips to local conservation organizations and protected areas. The plan for each trip is to talk to experts who are actually working in the field of conservation about their

experiences with protected areas. At the Denver Botanical Gardens, we will talk with scientists about their efforts to protect Rocky Mountain grassland ecosystems, focusing on the question of whether we can really recreate a “natural” ecosystem, and how we determine what that “natural” ecosystem would look like in a landscape that has already been heavily influenced by people. At Denver Zoo, we will speak with members of their conservation department working internationally. At Carson Nature Center, we will explore the challenges faced by protected areas in an urban setting. All three trips are designed with sustainability and budget in mind, as each is easily reached using public transit.

Assessment for the class will include two exams, a research paper, reading responses, and in-class activities. Considerable class time will be devoted to preparing students for success in these various assignments. In “core skills” sessions, we will discuss specific techniques for succeeding in college-level classes, using themes from the class to illustrate how we might approach each challenge. For instance, we will use the class research paper as a basis for discussing developing a research question, finding sources, and constructing an argument. On other occasions, we will consider plagiarism, taking notes from articles, and effective studying for exams. In addition, in order to encourage respectful classroom behavior (and to open up the opportunity to discuss expectations in this regard), a small proportion of the final grade will be based on attendance and participation.

As a whole, I hope that the class provides students with a solid grounding in theory and examples related to protected areas as a conservation strategy. However, I also hope that the class will set the students up with a variety of very practical skills that will help ease the transition between high school and college.

200-word summary

How do we balance the need for wild places with the growing demands of an increasingly-peopled world? This class engages with scholarship that explores the conservation of wildlands, asking how people interact with their environments in the context of conservation spaces like national parks and other protected areas. We begin our investigation with an exploration of historic patterns of human activity, questioning the meaning of wilderness in today’s world. How have people interacted with natural environments throughout human history? Is anything truly natural today? Have we really reached the era of the “Anthropocene” where human activity influences every corner of the globe?

We then turn to current controversies over protected areas, asking what role protected areas have in conservation today. How can we best protect intact ecosystems? Is it possible to balance the conservation of wildlands with the development needs of local communities? Could protected areas actually be a means of economic development? Can we reconcile different perspectives on wildland conservation in varied contexts (e.g., rural/urban or Global North/Global South)? Our investigation of these issues will include discussion of relevant literature and video case studies, exploratory data analysis, and field trips to local conservation spaces and organizations.

Destinations Trip Plan

Ideally, I plan to take the students to Rocky Mountain National Park for the day.

Scheduling

I am anticipating teaching the class Mondays and Wednesdays, noon to 1.50pm.

Conservation Geographies: Protected Areas in a Peopled World

FSEM XXXX, Fall 2016, Mondays and Wednesdays 12 to 1.50pm

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Course Description

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Course Learning Goals

All FSEM courses meet the following learning goals:

- Demonstrate membership in an intellectual community by meeting rigorous academic expectations through critical readings, discussion, research, and/or writing;
- Practice newly acquired skills in an active learning environment where writing, performing, laboratory experiments, quantitative analyses, or other forms of experiential and/or creative activities will shape the goals and activities of the seminar.

In order to meet these goals, each class will combine short lectures, discussion, video case studies, and in-class activities. Lectures will introduce students to key ideas, while discussions will allow students to develop ideas introduced in reading assignments. The in-class activities ask students to use data sets, historic documents, or software such as GIS and Google Earth to answer questions related to the topic of the day. For instance, when discussing the evolution of national parks in the US, students will review historic documents related to the creation of Yosemite National Park in order to better understand controversies surrounding the building of the Hetch Hetchy Dam. In looking at boundaries, students will look at a current controversy over the building of a new road through Serengeti National Park and use GIS software to try to generate their own solutions to the problems at hand.

Finally, many class periods will include short “core skills” segments to give students the tools needed for success in this, and future, classes at DU and beyond. For instance, we will discuss how to develop a research question in preparation for writing research papers, have a short presentation from a librarian on searching for sources, and talk briefly about skills such as studying for an exam and taking notes from an article.

Class Policies

- **Attendance** at all classes is very important. Planned absences for university-approved purposes, such as athletic events or religious observances, should be brought to the instructor’s attention in writing, ideally by the end of the first week of classes. For unplanned absences (for a medical or family emergency), please contact me as soon as possible and I will make sure that I get as much of the information that we covered in class to you as possible. If you have a valid excuse and provide proper notification of your absence you will have the opportunity to make up any major for-credit activities that you miss.
- Consistent with DU policy, **incompletes** will only be given in the case of a medical or other emergency that precludes you from completing the course on time. Please see your instructor to discuss your options if you believe you may need an incomplete for the course. (For further details, see: <http://www.du.edu/registrar/records/incompletegrade.html>).
- **Academic honesty** is expected at all times. **Plagiarism may result in a failing grade for the course.** We will discuss in class what plagiarism is and how to avoid it. For further information, please see the Office of Student Conduct’s website at www.du.edu/honorcode for the Honor Code Statement and <http://www.du.edu/studentlife/ccs/policies> for information on Student Conduct Policies and Procedures.
- **Late assignments** will be accepted, no questions asked, up to one week after the due date with a loss of 10% of the total grade. Assignments will NOT be accepted after this, except through prior arrangement with the instructor. If you feel that you are falling behind or are unable to keep up for any reason, come and talk to me as soon as possible.
- Please be **respectful** to your class colleagues and instructor at all times. By all means be critical of ideas (I actively encourage you to express your opinions, ask questions, and join in class discussions), but avoid being critical of other people or lifestyles.
- If you have **special needs**, I will do my best to provide accommodations appropriate to assist you in this class. Please contact the Disability Services Program (303 871 2372/2278/7432; 4th floor of Ruffatto Hall, 1999 E. Evans Ave.) as soon as possible to obtain appropriate documentation and then arrange an appointment with me to discuss arrangements.
- Please keep **mobile phones** off during class. Texting is not permitted.
- Please bring your **laptop** to every class, as we will be using them in many class periods. Please do not abuse the privilege of being able to use laptops during class.

- You are encouraged to **collaborate** with other students towards your success in the course. This may include sharing notes from lectures, discussing readings prior to coming to class, collaborating with a partner during in-class activities, and sharing resources (except where noted by the instructor or TA). For these purposes, I encourage you to obtain the contact details of at least one other student in the class. Collaboration is NOT appropriate during exams or during the writing up of the submission draft of graded assignments. Nor does collaboration include the use of another's work without permission and/or proper citation. Students are expected to uphold the DU Honor Code at all times.

Readings

All readings will be posted on Canvas. Please do all assigned readings each day **before** coming to class.

Graded Activities

The points available for the course are divided among a variety of assignments to ensure that no one is excessively penalized for poor performance in one particular activity.

Activities	% of final grade
Exams (x 2)	30
Research paper	20
Reading responses (x10)	20
In-class activities (x6)	15
Field trip reflections (x 2)	5
Class participation	10

Exams: The goal of the exams is to ensure that you are grasping the theories and ideas covered and know how to *apply* this information to specific case studies. As such, the exams require more than simple recall of information. You will have many opportunities to practice this application of information. Both exams will be a combination of multiple-choice, short-answer, and short essay questions. You may be asked to interpret data from non-written sources of information such as graphs, photographs, and maps.

Research Paper: You will be asked to write a research paper on a topic of your choice related to class content. Your paper will be handed in at several stages, with feedback at each step (abstract and bibliography, first draft, final draft). We will devote considerable class time to developing your papers and ensuring that you have all the necessary skills in place to develop a strong research question, undertake the necessary research, and formulate a strong argument.

Reading Responses: For many class sessions you will be asked to respond to several questions related to the readings PRIOR to coming to class. Please bring a printed, type-written copy of these reading responses to class with you. You will use this sheet (along with any other notes you have compiled on the readings) to inform in-class discussion of the articles. You will then hand in this reading response sheet at the end of class. For full marks, you must submit TEN reading responses by the end of the quarter. Each reading response will be graded according to the following criteria:

- Are all questions and prompts fully answered?

- Do the answers indicate critical thinking and evidence of an understanding of the complexity of the reading?
- Do the answers show connections with other class material?

In-class Activities: In order to ensure that you *use* the theories and ideas that we cover in class, we will be having many activities during class periods. These are designed to keep your participation in class active and provide a mechanism for me to assess your understanding of the material. Each worksheet will be due at the beginning of class exactly ONE week after it was assigned (e.g., if an activity was assigned on a Tuesday, you must submit the completed assignment by the beginning of class the following Tuesday.) If you miss a class with an in-class activity you may collect the worksheet from me during the following class or during my office hours and still complete it on time. I will not email worksheets out except in the case of illness. Please make sure that you have Google Earth installed on your computer in order to be able to participate in these activities. Google Earth can be downloaded free from <https://www.google.com/earth/> (you do not need Google Earth Pro).

Field Trip Reflections: After any TWO of the three fieldtrips (Denver Botanical Gardens, Denver Zoo, Carson Nature Reserve) you will be asked to write a one-page reflection on what you learned from the fieldtrip and how this relates to broader themes we have covered in class. You should attend all THREE fieldtrips but only need to write up your reflections on TWO visits.

Class Participation and Respect for Others in Class: This is an interactive class and participation is expected in all class sessions. Students are also expected to uphold a high level of respect for others in the class by, for instance, coming well prepared and listening attentively. At the end of the quarter, your participation grade will be assigned according to the following criteria:

- Did the student attend regularly?
- Did the student provide sufficient notice of excused absences and apologies for unexcused absences?
- Did the student arrive at class well prepared?
- Did the student listen attentively to others in class?
- Did the student display respect for other opinions during class discussions?
- Did the student conform to normal expectations of polite behavior in class? E.g.:
 - Arriving on time/ not leaving class early or packing up bags before class has finished
 - Being alert and attentive during class
 - Leaving cell phones switched off during class
 - Using laptops only for class-relevant activities

Letter Grades

At the end of the course, letter grades will be assigned approximately as follows:

Grade	A	A-	B+	B	B-	C+	C	C-	D	F
Percentage	>93	90- 92.9	87- 89.9	83- 86.9	80- 82.9	77- 79.9	73- 76.9	70- 72.9	60- 69.9	<60

The numbers given here for letter grades are guarantees that you will not have to earn a higher numerical score to receive a particular letter grade.

Conservation Geographies: Protected Areas in a Peopled World
Fall 2016, Mondays and Wednesdays, 12-1.50pm

Date	Wk	Topic	Readings	Assignments
6-9 Sept	0	Discoveries Week: Day Trip to Rocky Mountain National Park		
		I. People and their Environments in Historical Perspective		
12 Sept	1	Environmental perspectives <u>Key Question:</u> Are people part of or outside of nature? <u>Core skills:</u> Taking notes from an article (and completing reading response prompts)	Chape, S., et al. 2008. History, definitions, values and global perspective. In: <i>The World's Protected Areas: Status Values and Prospects in the 21st Century</i> . Berkeley: University of California Press, 1-35.	
16 Sept	1	'Living lightly on the land'? <u>Key Question:</u> Did prehistoric communities 'live lightly on the land'?	Vale, T. (ed.) 2002. Pre-European Landscape of the United States: Pristine or Humanized? Pre-European Landscape of the United States: Pristine or Humanized? In: <i>Fire, Native Peoples and the Natural Landscape</i> . Washington, DC: Island Press, 1-40. Rick, T. et al. 2013. Archeology, deep history and the transformation of island ecosystems. <i>Anthropocene</i> 4: 33-45.	Reading response 1: Living lightly on the land?
19 Sept	2	Case study: Ancient Amazonia <u>Key Question:</u> Did prehistoric communities live "lightly on the land"? <u>Core skills:</u> Developing a research question	Mann, C. 2006. Amazonia. In: <i>1491: New Revelations of the Americas before Columbus</i> . NY: Knopf, 280-311.	
23 Sept	2	Traditional Ecological Knowledge <u>Key Question:</u> What role can traditional ecological knowledge play today? <u>Core skills:</u> Library research	Hendry, Joy. Fire and water: Sustaining the Land. In: <i>Science and Sustainability</i> . 2014. New York, NY: Palgrave, Macmillan. 21-37. Berkes, Fikret. 2012. Context of traditional ecological knowledge. In: <i>Sacred Ecology</i> . NY: Routledge, pp.1-20.	Reading response 2: Traditional ecological knowledge

26 Sept	3	History of conservation in the US: The making of Wilderness <u>Key Question:</u> How have notions of wilderness informed the evolution of the idea of protected areas?	William Cronon, ed., <i>Uncommon Ground: Rethinking the Human Place in Nature</i> , New York: W. W. Norton & Co., 1995, 69-90.	Reading response 3: The concept of wilderness Activity 1: Hetch Hetchy Dam
30 Sept	3	Field trip – Denver Botanical Gardens: Preserving/Recreating Grasslands		Research Paper: Topic title, abstract, and bibliography due
3 Oct	4	Histories of conservation in sub-Saharan Africa: The “penitent butchers” <u>Key Question:</u> How have notions of wilderness informed the evolution of the idea of protected areas? <u>Core skills:</u> Reviewing sources		Field trip response 1 Activity 2
7 Oct	4	The Anthropocene <u>Key Question:</u> Is anything ‘natural’ any more? <u>Core skills:</u> Studying for exams	Palomo et al. 2014. Incorporating the social-ecological approach in protected areas in the Anthropocene. <i>Bioscience</i> 64(3): 181-191. Bridgewater, P. 2016. The Anthropocene biosphere: Do threatened species, Red Lists, and protected areas have a role in nature conservation? <i>Biodiversity and Conservation</i> 25(3): 603-607.	Reading response 4: Conservation in the Anthropocene
10 Oct	5	Exam 1		
		II. Contemporary Conservation Challenges		
14 Oct	5	Conservation prioritization schemes <u>Key Question:</u> How do we prioritize landscapes for protection?	Anthamatten, P. and Hazen, H. 2013. Changes in the global distribution of protected areas. <i>The Professional Geographer</i> 67(2): Watson, E. et al. 2016. Bolder science needed now for protected areas. <i>Conservation Biology</i> 30(2): 243-8.	Reading response 5: Conservation prioritization schemes Activity 3: Protected Areas on Google Earth

17 Oct	6	<p>Marine protected areas <u>Key Question:</u> Why have marine ecosystems been neglected in protected areas? <u>Core skills:</u> Structuring an argument</p>	Chape et al. 2008. Marine protected areas. In: <i>The World's Protected Areas: Status Values and Prospects in the 21st Century</i> . Berkeley: University of California Press.	
21 Oct	6	<p>Conservation islands <u>Key Question:</u> Can protected areas protect intact ecosystems?</p>	Goldman, M. 2009. Constructing connectivity: Conservation corridors and conservation politics in East African rangelands. <i>Annals of the AAG</i> 99(2): 335-359. TBA	Reading response 6: Protected areas as islands Activity 4: Conservation patchworks and connectivity
24 Oct	7	<p>Fortress parks <u>Key Question:</u> Should we keep people out of protected areas?</p>	Vergara-Asenjo, G. and Potvin, C. 2014. Forest protection and tenure status: The key role of indigenous peoples and protected areas in Panama. <i>Global Environmental Change</i> 28:205-15. Karanth, K. et al. 2013. Living with wildlife and mitigating conflicts around three Indian protected areas. <i>Environmental Management</i> 52: 1320-32.	Reading response 7: Fortress parks
28 Oct	7	<p>Field trip – Denver Zoo Conservation Department: International conservation approaches</p>		Research Paper: First draft due
31 Oct	8	<p>Environment and development <u>Key Questions:</u> How do we balance environmental and development goals? How do we reconcile differing priorities between the Global North and Global South?</p>	Obama's National Monuments have been an Economic Boon for Local Economies. 2016. http://thinkprogress.org/climate/2016/04/06/3767045/obama-public-lands-good-for-economy/	Field trip response 2
4 Nov	8	<p>Boundaries and Conservation Areas <u>Key Questions:</u> How do parks intersect with state and other boundaries? How are protected areas being used for wider geopolitical goals?</p>	Buscher, Bram. 2013. Frontiers of conservation. In: <i>Transforming the Frontier: Peace Parks and the Politics of Neoliberal Conservation in Southern Africa</i> . Durham: Duke University Press, 1-26. Sneddon, Chris. 2006. Conservation initiatives in the Mekong River Basin. In: <i>Globalization and New</i>	Reading response 8: Transfrontier conservation Activity 5: Serengeti Boundaries

			<i>Geographies of Conservation</i> , Zimmerer, K. Chicago: University of Chicago Press.	
8 Nov	9	Policy <u>Key Question</u> : How do national and global environmental policies influence protected areas?	Hails, C. 2007. The evolution of approaches to conserving the world's natural heritage: The experience of WWF. In: <i>Natural Heritage: At the Interface of Nature and Culture</i> , Howard, P. and Papayannis, T. (eds.). NY: Routledge, 58-72. Hazen, H. 2008. Of outstanding universal value. The challenge of scale in applying the World Heritage Convention at national parks in the US. <i>Geoforum</i> 39: 252-64.	Reading response 9: Conservation across scales
11 Nov	9	Field trip – Carson Nature Center: Protected areas in an urban setting		Research Paper: Final draft due
14 Nov	10	Rewilding <u>Key Question</u> : Can we recreate intact ecosystems?		Field trip response 3 Activity 6: Rewilding in Scotland
18 Nov	10	Living with nature <u>Key Question</u> : Are there alternatives to protected areas?	Hazen, H. and Harris, L. 2007. Limits of territorially-focused conservation: A critical assessment based on cartographic and geographic approaches. <i>Environmental Conservation</i> 34(4): 280-90. TBA	Reading response 10: Alternatives to protected areas?
		Exam 2		