

## History of Environmentalism & Ecology

**Time:** Mon/Wed 1:30-2:50 pm

**Location:** Green Hall 0-S-9

### PROFESSORS

**Erika Lorraine Milam**

**Contact:** email: [emilam@princeton.edu](mailto:emilam@princeton.edu)

**Office Hours:** 135 Dickinson / [Zoom](#), Mondays 9:45 to 11:45 am, or by appt.  
You can guarantee yourself a specific time by signing up through WASE:  
<https://wase.princeton.edu/princeton/views/pages/makeappt.php?calid=678>.

**Jack Klempay**

**Contact:** email: [jklempay@princeton.edu](mailto:jklempay@princeton.edu)

**Office Hours:** Tiger Tea Room, Tuesdays 9:45 to 11:45 am, or [Zoom](#) by appt.  
You can guarantee yourself a specific time by signing up through WASE:  
<https://wase.princeton.edu/princeton/views/pages/makeappt.php?calid=5047>.

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### course description

In this class, we will explore how scientific understandings of concepts like “nature,” “ecosystem,” and “biodiversity” became key tools for addressing environmental concerns about wilderness preservation, population control, the DDT controversy, wildlife conservation, environmental justice, invasive species, climate change, and other issues. We will confront the troubling legacy of environmentalist politics that have prioritized pristine landscapes over the lives of the local people, both in the United States and internationally. We will also consider the crucial role of the humanities in conceptualizing the past, present, and future environmentalist efforts.



#### HOS Concentration

This course explores ideas about nature from the perspective of the history of science, medicine, and technology. It is one of our many courses in the “History of Science” concentration within the History major.

Learn more at <https://history.princeton.edu/HOSUndergrad>

#### Environmental Humanities Concentration

This course is also one of the advanced humanities courses central to an Environmental Humanities focus within the generalist track of an ENV Certificate.

Learn more at <https://environment.princeton.edu/education/program-in-environmental-studies/env-generalist/environmental-humanities/>

## Readings

This course involves ~100 pages of reading per week. Readings will be made available through the course Canvas site.

## Evaluation & Grading

*Attendance and participation are mandatory.*

Class participation:	30%	incl. 6 reading responses, due Sundays by noon
Field trip:	5%	to be determined
Short paper (5 pp.):	20%	due March 4
Final project (15 pp.):		
- <i>Proposal &amp; Sources</i>	5%	March 25
- <i>Podcast</i>	20%	April 15
- <i>Paper</i>	20%	May 3 – Dean’s Date

### Class Participation

Each week spans two days: Wednesdays will be a combination lecture/discussion that will establish the historical context before diving into primary sources on Mondays. Monday discussions will thus provide a deeper analysis of questions introduced on Wednesday. Class participation will be assessed according to the History Department’s grading rubric (found at the end of the syllabus). If you miss more than two classes without a pre-arranged acceptable excuse, you will receive a failing participation grade.

Over the course of the semester, you are required to turn in six reading responses of 500 words, each describing two themes you see running through the primary source readings for the week and posing a question for discussion. These are due via Canvas before noon on Sunday. These will not be graded individually but will count towards your participation grade.

**Papers** will be graded on the merits of their argument, use of evidence, and presentation, as outlined in the History Department’s grading rubric (found at the end of this syllabus). For the short paper, you will be given an essay prompt that you will need to answer based on the readings and discussion from class. The final, longer paper will be more open-ended and allow you to explore a topic you have found especially interesting during the semester. It will require additional independent research.

### Late Policy

Late reading responses will not be accepted. The penalty for other writing assignments is as follows—a third of a grade for each 8-hour period after the deadline. It’s up to you to decide whether the deduction is worth the extra time. After 7 days, I will no longer accept papers for grading.

Regular **Office Hours** are Monday mornings (Milam) and Tuesday mornings (Klempay). Other options may also be available. Please sign up for office appointments through our respective calendars on WASE.

- *You are required to meet with each of us once during office hours in the first three weeks of class.*

## Device Policy

- During lectures, you are welcome to take notes on a laptop but we ask that you refrain from surfing or checking your apps. The easiest way to avoid temptation is to disable WiFi for the duration of class and/or enable a “do not disturb” function.
- Open laptops are not allowed in discussion. If you do your readings online, we suggest you bring handwritten or printed notes to class. You can also use an iPad, Kindle, or other tablet without a vertical screen. If you need to look something up on your laptop, no worries – you can do so and then close your screen.
- All phones must be turned off for the duration of class.

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## course schedule and readings

### Week 0: Introductions

#### Monday, January 24: The Balance of Nature

\* Raymond Williams, “Ideas of Nature” in *Problems in Materialism and Culture* (London: Verso, 1980): 67-85. [18 pp.]

\* Start with the starred reading, here and in future weeks

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## PART I: FOUNDING ECOLOGICAL AND ENVIRONMENTAL THOUGHT

President Theodore Roosevelt and John Muir  
Glacier Point, Yosemite National Park (1903)



### Week 1: Inventing ‘Nature’

#### Wednesday, January 26

\* Jim Endersby, *Imperial Nature: Joseph Hooker & the Practices of Victorian Science* (Chicago: University of Chicago Press, 2008): “Chp. 2: Collecting,” 54-83, notes 338-344. [29 pp.]

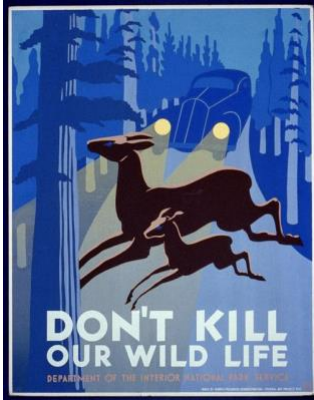
Andrea Wulf, *The Invention of Nature: Alexander von Humboldt’s New World* (New York: Vintage Books, 2015): Chp. 21, “Man and Nature: George Perkins Marsh and Humboldt,” 334-351, notes 489-493, and Chp. 23, “Preservation and Nature: John Muir and Humboldt,” 372-395, notes 499-504. [42 pp.]

#### Monday, January 31

\* Charles Darwin, “Bahia Blanca,” in *Voyage of the Beagle* (Washington, DC: National Geographic Society, 2004 [1839]), 71-92 [25 pp.]

George Perkins Marsh, *Man and Nature; or, Physical Geography as Modified by Human Action* (New York: Charles Scribner, 1864), Chp. 1, “Introductory,” 1-56. [56 pp.]

**FILM:** Caroline Gentry, dir. *Roosevelt, Friend of the Birds*  
(Roosevelt Memorial Association Film Library, 1924): 15 min.  
<http://hdl.loc.gov/loc.mbrsmi/trmp.4177>.



## Week 2: Nature's Nation

### Wednesday, February 2

John Muir, "The American Forests," *Atlantic Monthly* 80/478 (1897): 145-157. [12 pp.]

\* Alexandra Stern, "California's Eugenic Landscapes," in *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America* (Berkeley: University of California Press, 2005): 139-172, notes 289-302. [33 pp.]

### Monday, February 7

Charles C. Adams, "The New Natural History—Ecology," *American Museum Journal* 17 (1917): 491-494. [5 pp.]

Joseph Grinnell and Tracy I. Storer, "Animal Life as an Asset of the National Parks," *Science* 44/1133 (15 September 1916): 375-380. [6 pp.]

\* John McPhee, *The Pine Barrens* (New York: FSG, 1968): "The Woods from Hog Wallow." [16 pp.]

**FILMS:** *A National Program in the Tennessee Valley* (Tennessee Valley Authority, 1936): 36 min. [www.youtube.com/watch?v=TrlPHr4GzVs](http://www.youtube.com/watch?v=TrlPHr4GzVs) & *The Columbia* (Bonneville Power Association, 1949): 21 min. [www.youtube.com/watch?v=GkznnCBBpb0](http://www.youtube.com/watch?v=GkznnCBBpb0).

## Week 3: Cooperative Metaphors

### Wednesday, February 9

Aldo Leopold, "The Land Ethic," in *A Sand County Almanac and Sketches Here and There*, ill. Charles W. Schwartz (1949; New York: Oxford University Press, 1987).

\* Jill Lepore, "The Right Way to Remember Rachel Carson," *The New Yorker* (26 March 2018): 64-72. [7 pp.]

### Monday, February 14

\* James Lovelock, *Gaia* (New York: Oxford University Press, 2016 [1979]): "Introduction," 1-11; "Cybernetics," 44-58; "Living with Gaia," 115-132. [42 pp.]

Rachel Carson, "The Global Thermostat," in *The Sea Around Us* (1951; New York: Oxford University Press, 1991), 167-184.

Eugene Odum, "The Emergence of Ecology as a New Integrative Discipline," *Science* 195 (1977): 1289-1293. [5 pp.]

**FILM:** Pare Lorentz, dir. *The Plow that Broke the Plains* (Western Electric Noiseless Recordings, 1937), 25 min: <http://www.youtube.com/watch?v=fQCwhjWNcH8>.



Image: Viktor Ivanovitch Govorkov,  
"And We Shall Conquer Drought" (1949).



#### Week 4: Engineering Ecosystems

##### Wednesday, February 16

Stephen Brain, "The Great Stalin Plan for the Transformation of Nature," *Environmental History* 15/4 (2010): 670-700. [30 pp.]

\* James Scott, "Introduction" and "Authoritarian High Modernism," in *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 1-8, 87-102, notes 376-381. [23 pp.]

##### Monday, February 21

Douglas R. Weiner, "Storm over Baikal," in *A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachëv* (Berkeley: University of California Press, 1999), 355-373, notes 495-497. [18 pp.]

\* Valentin Rasputin, *Siberia, Siberia*, trans. Margaret Winchell & Gerald Mikkelson (Evanston, IL: Northwestern University Press, 1996): Chp. 3 "Lake Baikal," 119-177. [58 pp.]

**MUSIC:** Gabriela Bulisova & Mark Isaac, "The Second Fire" (2018-19)  
<https://www.bulisova-isaac.com/the-second-fire>.

#### Week 5: Global Ecology

##### Wednesday, February 23

\* William Tsutsui, "Looking Straight at *Them!* Understanding the Big Bug Movies of the 1950s," *Environmental History* 12/2 (2007): 237-253. [17 pp.]

Paul Warde, Libby Robin and Sverker Sörlin, "Ecology on the March" and "Climate Enters the Environment," in *The Environment: History of the Idea* (Baltimore, MD: Johns Hopkins University Press, 2018), 73-122, notes 195-208. [49 pp.]



##### Monday, February 28

Lisa Brady, "From War Zone to Biosphere Reserve: The Korean DMZ as a Scientific Landscape," *Notes and Records* 75 (2021): 189-205. [16 pp.]

Paul Edwards, "Control Earth," *LA+ Interdisciplinary J. of Landscape Architecture* 4 (2016): 10-15. Reprinted in *Places Journal*: <https://placesjournal.org/article/control-earth/>. [6 pp.]

\* Laura Martin, "Proving Grounds: Ecological Fieldwork in the Pacific and the Materialization of Ecosystems," *Environmental History* 23/3 (2018): 567-592. [26 pp.]

**FILM:** Mark Lewis, dir. *Cane Toads: An Unnatural History* (Film Australia, 1988), 48 min.



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## PART II: NATURE IN THE PUBLIC EYE

### Week 6: Landscapes of Exposure

#### Wednesday, March 2

\* Mary X. Mitchell, "The Cosmology of Evidence: Suffering, Science, and Biological Witness after Three Mile Island," *Journal of the History of Biology* 54 (2021): 7-29. [22 pp.]

John Wills, "Celluloid Chain Reactions: *The China Syndrome* and Three Mile Island," *European Journal of American Culture* 25/2 (2006): 109-122. [14 pp.]

**Short Paper due:** March 4



Three Mile Island, 1979

### SPRING BREAK

#### Monday, March 14

\* Svetlana Alexievich, "Voices from Chernobyl," *The Paris Review* 172 (Winter 2004): 94-127. [30 pp.]

Adriana Petryna, "Biological Citizenship: The Science and Politics of Chernobyl-Exposed Populations," *Osiris*, 2nd series, 19 (2004): 250-265. [16 pp.]

Rachel Carson, "Silent Spring," *New Yorker* (16 June 1962). [38 pp.]

**FILM:** James Bridges, dir. *The China Syndrome* (Columbia Pictures, 1979), 122 min.

### Week 7: Ecologies of Health and Disease

#### Wednesday, March 16

\* Mark Carey, "Inventing Caribbean Climates: How Science, Medicine, and Tourism Changed Tropical Weather from Deadly to Healthy," *Osiris*, 2nd series 26 (2011): 129-141. [13 pp.]

Warwick Anderson, "Nowhere to Run, Rabbit: The Cold-War Calculus of Disease Ecology," *History and Philosophy of the Life Sciences* 39 (2017): Article 13.

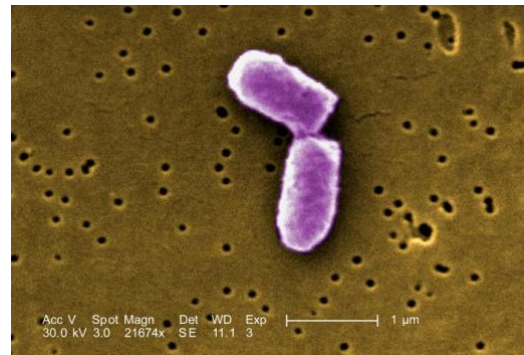


Image: CDC, *E. coli* (2005)

#### Monday, March 21

\* Gregg Mitman and Paul Erickson, "Latex and Blood: Science, Markets, and American Empire," *Radical History Review* 107 (2010): 45-73. [28 pp.]

Nicholas King, "The Scale Politics of Emerging Diseases," *Osiris*, 2nd series 19 (2004): 62-76. [15 pp.]

**FILM:** Gregg Mitman and Sarita Siegel, dir. *In the Shadow of Ebola* (Alchemy, 2015): 26 min. <http://intheshadowofebola.com/film>

## Week 8: Designing Natural Experiences

### Wednesday, March 23

Jeannie Kim, "Mission 66," in *Cold War Hothouses: Inventing Postwar Culture, from Cockpit to Playboy*, ed. Beatriz Colomina, Annmarie Brennan, and Jeannie Kim (Princeton Architectural Press, 2004), 168-189. [22 pp.]

\*Anne Whiston Spirn, "Constructing Nature: The Legacy of Frederick Law Olmsted," in *Uncommon Ground*, ed. William Cronon (Norton, 1996): 91-113. [23 pp.]



Marlin Perkins, host of *Wild Kingdom*

**Project proposal and sources due:** March 25

**Field Trip: LAKE CARNEGIE ? TBD**

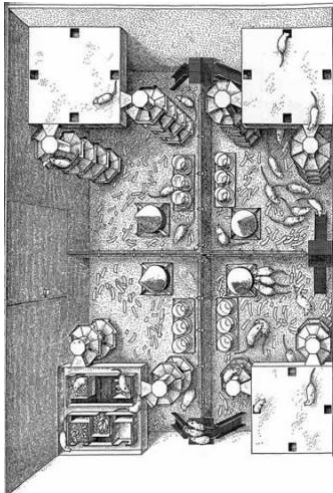
### Monday, March 28

\* Dian Fossey, *Gorillas in the Mist* (New York: Mariner Books, 2000 [1983]), Chapter 3. "Karisoke Field Impressions," 42-59. [18 pp.]

Ryan Thompson and Phil Orr, eds., *Bad Luck, Hot Rocks: Conscience Letter and Photographs from the Petrified Forest* (Los Angeles: The Ice Plant, 2014): excerpts.

Barbara Smuts, "Encounters with Animal Minds," *Journal of Consciousness Studies* 8/5-7 (2001): 293-309. [16 pp.]

**FILM:** *Miss Goodall and the Wild Chimpanzees* (National Geographic Documentary, 1965), 60 min.



## Week 9: Urban Natures

### Wednesday, March 30

\* Daniel Schneider, "From Sewage to Biotech: What We Have before Us Is an Industrial Product," in *Hybrid Nature: Sewage Treatment and the Contradictions of the Industrial Ecosystem* (Cambridge, MA: MIT Press, 2011): 205-230, notes 286-294. [25 pp.]

Christopher Sellers, "Suburban Taming: From the Personal to Political," in *Crabgrass Crucible: Nature & the Rise of Environmentalism in the Twentieth Century* (Chapel Hill: University of North Carolina Press, 2012), 171-206, notes 335-341. [35 p.]

**Field Trip: STONY BROOK REGIONAL SEWAGE ? TBD**

## Monday, April 4

Max Liboiron, "Introduction," in *Pollution is Colonialism* (Duke, 2021): 1-38. [38 pp.]

\* Meera Subramanian, "India's Vanishing Vultures," *Virginia Quarterly Review* 87/2 (2011): <http://www.vqronline.org/reporting-articles/2015/09/indias-vanishing-vultures>. [20pp.]

## Week 10: Biodiversity & Environmental Justice

### Wednesday, April 6

\* Ulrich Beck, "Living in the World Risk Society," *Economy and Society* 35/3 (2006): 329-345. [17 pp.]

Nathan Hare, "Black Ecology," *The Black Scholar* 1/6 (April 1970): 2-8. [6 pp.]

Eileen Maura McGurty, "From NIMBY to Civil Rights: The Origins of the Environmental Justice Movement," *Environmental History* 2/3 (1997): 301-323. [23 pp.]

### Monday, April 11

Carolyn Finney, *Black Faces, White Spaces: Reimagining the Relationship of African Americans to the Great Outdoors* (Chapel Hill: UNC Press, 2014), 116-138, notes 150. [20 pp.]

\* Julie Sze, "New York City Environmental Justice Campaigns: Stigma, Blight, and the Politics of Race and Pollution," in *Noxious New York: The Racial Politics of Urban Health and Environmental Justice* (Cambridge, MA: MIT Press, 2007), 49-90. [41 pp.]

**FILM:** Wanuri Kahiu, dir. *Pumzi*  
(Inspired Minority and One  
Pictures, 2009), 23 min:  
<https://vimeo.com/46891859>.



## Week 11: Moral Ecology of Extinction

### Wednesday, April 13

\* Ross Anderson, "Pleistocene Park," *The Atlantic* (April 2017): 75-85. [12 pp.]  
<https://www.theatlantic.com/magazine/archive/2017/04/pleistocene-park/517779/>.

Elizabeth Kolbert, "Recall of the Wild: The Quest to Engineer a World Before Humans," *New Yorker* (24 and 31 December 2012): 50-60. [11 pp.]  
<http://www.newyorker.com/magazine/2012/12/24/recall-of-the-wild>.

Sarah Dry, "Old Ice," in *Waters of the World: The Story of the Scientists Who Unraveled the Mysteries of our Oceans, Atmosphere, and Ice Sheets and Made the Planet Whole* (Chicago: University of Chicago Press, 2019), 231-269, notes 305-309.



**Podcast due:** April 15



**Monday, April 18**

\* Thom van Dooren, “Mourning Crows” & “A Call for Stories,” in *Flight Ways: Life and Loss at the Edge of Extinction* (New York: Columbia University Press, 2014), 125-147, notes 160-164. [22 pp.]



**FILM:** Grant Slater, “Mammoth,”  
(2017): 26 min.  
<https://vimeo.com/207624364>.

Image: *National Geographic* (April 2013)

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**Week 12: Final Wrap-up**

**Wednesday, April 20**

\* Podcasts! \* Final Discussion \* Where do we go from here? \*

**Final papers due on Dean’s Date: May 3**

## Department of History Grading Practices

### *Class Participation*

A student who receives an **A** for participation in discussion in precepts or seminars typically comes to every class with questions about the readings in mind. An 'A' discussant engages others about ideas, respects the opinions of others, and consistently elevates the level of discussion.

A student who receives a **B** for participation in discussion in precepts or seminars typically does not always come to class with questions about the readings in mind. A 'B' discussant waits passively for others to raise interesting issues. Some discussants in this category, while courteous and articulate, do not adequately listen to other participants or relate their comments to the direction of the conversation.

A student who receives a **C** for discussion in precepts or seminars attends regularly but typically is an infrequent or unwilling participant in discussion.

A student who fails to attend precepts regularly or to adequately prepare for discussion risks the grade of **D** or **F**.

### *Papers*

An **A** or **A-** thesis, paper, or exam is one that is good enough to be read aloud in a class. It is clearly written and well-organized. It demonstrates that the writer has conducted a close and critical reading of texts, grappled with the issues raised in the course, synthesized the readings, discussions, and lectures, and formulated a perceptive, compelling, independent argument. The argument shows intellectual originality and creativity, is sensitive to historical context, is supported by a well-chosen variety of specific examples, and, in the case of a research paper, is built on a critical reading of primary material.

A **B+** or **B** thesis, paper, or exam demonstrates many aspects of A-level work but falls short of it in either the organization and clarity of its writing, the formulation and presentation of its argument, or the quality of research. Some papers or exams in this category are solid works containing flashes of insight into many of the issues raised in the course. Others give evidence of independent thought, but the argument is not presented clearly or convincingly.

A **B-** thesis, paper, or exam demonstrates a command of course or research material and understanding of historical context but provides a less than thorough defense of the writer's independent argument because of weaknesses in writing, argument, organization, or use of evidence.

A **C+**, **C**, or **C-** thesis, paper, or exam offers little more than a mere a summary of ideas and information covered in the course, is insensitive to historical context, does not respond to the assignment adequately, suffers from frequent factual errors, unclear writing, poor organization, or inadequate primary research, or presents some combination of these problems.

Whereas the grading standards for written work between A and C- are concerned with the presentation of argument and evidence, a paper or exam that belongs to the D or F categories demonstrates inadequate command of course material.

A **D** thesis, paper, or exam demonstrates serious deficiencies or severe flaws in the student's command of course or research material.

An **F** thesis, paper, or exam demonstrates no competence in the course or research materials. It indicates a student's neglect or lack of effort in the course.