

Special Topics in the History of Science, Technology, & Medicine

Environmentalisms

Professor Erika Lorraine Milam
seminar: Tuesdays 9:00-11:50am

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<https://princeton.zoom.us/my/emilam>

This seminar explores the changing intellectual grounds on which ideas about natural environments were forged, from the 18th century to the present day. The readings interweave accounts of how some places were deemed “natural” and came to be objects of scientific study and political concern together with attention to landscapes as places of refuge and a basis for social transformation. The aim of the seminar is to introduce a series of conceptual tools for analyzing these meanings, across a range of times and places—after all, the meanings cultures invest in ideas like natural, global, or “environmentalism” are far from stable or singular.

ASSIGNMENTS



Over the course of the semester, you will be asked to produce, (1) on a topic of your choosing, an essay review exploring three to four books of environmental history, broadly conceived (3000 words), and (2) a book review of a work of environmental fiction – print or film (800 words).

The final assignment (3) is to produce a 30-minute podcast on a research topic in environmental history of your choosing (with accompanying script of ~5000 words, including notes). If you would prefer to write a research paper, that is also possible; it would substitute for the environmental fiction book review and the podcast.

Assignment 1: Essay Review, due before the end of Week 6.

Assignment 2: Book/Film Review, due before the end of Week 9.

Assignment 3: Podcast, due by Dean’s Date. We will work on this assignment throughout the semester.

p.s. You will also attempt to grow your own mushrooms (kit provided).

COURSE READINGS

Week 1 – Archive

2 February

Daniela Bleichmar, *Visible Empire: Botanical Expeditions and Visual Culture in the Hispanic Enlightenment* (University of Chicago Press, 2012).

Read two of the following...

- Lydia Barnett, "Showing and Hiding: The Flickering Visibility of Earth Workers in the Archives of Earth Science," *History of Science* 58/3 (2019): 245-274.
- Lorraine Daston, "The Immortal Archive: Nineteenth-Century Science Imagines the Future," in Lorraine Daston, ed. *Science in the Archives: Pasts, Presents, Futures* (University of Chicago Press, 2017), 159-183.
- James Delbourgo, "Divers Things: Collecting the World Under Water," *History of Science* 49 (2011): 149-185.

Additional resources:

Lydia Barnett, *After the Flood: Imagining the Global Environment in Early Modern Europe*.

Johns Hopkins University Press.

James Delbourgo, *Collecting the World: Hans Sloane and the Origins of the British Museum* (Harvard University Press, 2017).

Steven Lubar, *Inside the Lost Museum: Curating, Past and Present* (Harvard University Press, 2017).

Boris Jardine, Emma Kowal, and Jenny Bangham, eds. *How Collections End, Themes 4* (2019), 293 pp. <https://www.cambridge.org/core/journals/bjhs-themes/volume/8E24CBC531F70599F5559D7971878AE8>

Week 2 – Empire

9 February

Pekka Hämmäläinen, *The Comanche Empire* (Yale University Press, 2008).

Read two of the following...

- Virginia Anderson, "A Prophecy Fulfilled: From Cooperation to the Displacement of Indians," in *Creatures of Empire: How Domestic Animals Transformed Early America* (Oxford University Press, 2004), 209-242.
- Peder Anker, "From Social Psychology to Imperial Ecology," in *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Harvard University Press, 2001), 7-40.

- Theodore Binnema, Melanie Niemi, “‘Let the Line be Drawn Now’: Wilderness, Conservation, and the Exclusion of Aboriginal People from Banff National Park in Canada,” *Environmental History* 11/4 (2006): 724-750.
- Joyce Chaplin, “Gender and the Artificial Indian Body,” in *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676* (Harvard University Press, 2001), 243-279.

Additional Resources:

William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (Hill and Wang, 1983).

Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves and the Hidden History of American Conservation* (University of California Press, 2014).

Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge & the Teachings of Plants* (Milkweed Editions, 2013).

Bruce Pascoe, *Dark Emu: Black Seeds: Agriculture or Accident* (Magabala Books Aboriginal Corporation, 2014).

Laurence Savoy, *Trace* (Counterpoint Press, 2015).

Week 3 – Deep Time

16 February

Deborah Coen, *Climate in Motion: Science, Empire, and the Problem of Scale* (University of Chicago Press, 2018).

Read two of the following ...

- Pratik Chakrabarti, “Gondwana and the Politics of Deep Past,” *Past & Present* 242/1 (2019): 119-153.
- Paul Edwards, “Thinking Globally,” in *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming* (MIT Press, 2010), 1-26.
- William Rankin, “Mapping Time in the Twentieth (and Twenty-First) Century,” in Kären Wigen and Caroline Winterer, eds. *Time in Maps: From the Age of Discovery to Our Digital Era* (Princeton University Press, 2020), 15-35.
- Caroline Winterer, “The First American Maps of Deep Time,” in Kären Wigen and Caroline Winterer, eds. *Time in Maps: From the Age of Discovery to Our Digital Era* (Princeton University Press, 2020), 149-170.

Additional Resources:

Pratik Chakrabarti, *Inscriptions of Nature: Geology and the Naturalization of Antiquity* (Johns Hopkins University Press, 2020).

James Fleming, *Inventing Atmospheric Science: Bjerknes, Rossby, Wexler, and the Foundations of Modern Meteorology* (MIT Press, 2016).

Kristine Harper, *Make It Rain: State Control of the Atmosphere in Twentieth-Century America* (University of Chicago Press, 2017).

- Stefan Helmreich, *Alien Ocean: Anthropological Voyages in Microbial Seas* (Berkeley: University of California Press, 2009).
- Bruno Latour, *Facing Gaia: Eight Lectures on the New Climactic Regime*, trans. Catherine Porter (Polity Press, 2017).
- William Rankin, *After the Map: Cartography, Navigation, and the Transformation of Territory in the Twentieth Century* (University of Chicago Press, 2016).

Week 4 – Biodiversity

23 February

Megan Raby, *American Tropics: The Caribbean Roots of Biodiversity Science* (University of North Carolina Press, 2017).

Read two of the following...

- Raf de Bont, “Stations and Other Places,” in *Stations in the Field: A History of Place-Based Animal Research, 1870-1930* (University of Chicago Press, 2015), 17-50.
- Robert Kohler, “Nature’s Experiments,” in *Labscales and Landscapes: Exploring the Lab-Field Border in Biology* (University of Chicago Press, 2002), 212-251.
- David Sepkoski, “A Sixth Extinction? The Making of a Biodiversity Crisis,” in *Catastrophic Thinking: Extinction and the Value of Diversity from Darwin to the Anthropocene* (University of Chicago Press, 2020), 229-293.
- Mary V. Price and Ian Billick, “The Ecology of Place,” in Billick & Price, eds. *The Ecology of Place* (University of Chicago Press, 2010), 1-10.

Additional Resources:

- Mark Barrow, Jr. *Nature’s Ghosts: Confronting Extinction from the Age of Jefferson to the Age of Extinction* (University of Chicago Press, 2009).
- Etienne Benson, *Surroundings: A History of Environments and Environmentalisms* (University of Chicago Press, 2019).
- Sharon Kingsland, *The Evolution of American Ecology, 1890-2000* (Johns Hopkins University Press, 2008).
- Gregg Mitman, *The State of Nature: Ecology, Community, and American Social Thought, 1900-1950* (Chicago: University of Chicago Press, 1992).
- Philip Pauly, *Fruits and Plains: The Horticultural Transformation of America* (Harvard University Press, 2007).

Week 5 – Conservation

2 March

Dorceta Taylor, *The Rise of the American Conservation Movement: Power, Privilege, and Environmental Protection* (Duke University Press, 2016).

Read two of the following...

- J. Drew Lanham, “Birding While Black,” in *The Home Place: Memoirs of a Colored Man’s Love Affair with Nature* (Milkweed Editions, 2016): <https://lithub.com/birding-while-black/>
- Eileen Maura McGurty, “From NIMBY to Civil Rights: The Origins of the Environmental Justice Movement,” *Environmental History* 2/3 (1997): 301-323.
- Amanda Martin-Hardin, “Nature in Black and White: Summer Camps and Racialized Landscapes in the Photography of Gordon Parks,” *Environmental History* 23/3 (2018): 594-605.
- Dolores Greenberg, “Reconstructing Race and Protest: Environmental Justice in New York City,” *Environmental History* 5/2 (2000): 223-250.
- Lynne Feeley, “The Elevationists: Gerrit Smith, Black Agrarianism, and Land Reform in 1840s New York,” *Environmental History* 24/2 (2019): 307-326.

Additional Resources:

- Carolyn Finney, *Black Faces, White Spaces: Reimagining the Relationship of African Americans to the Great Outdoors* (University of North Carolina Press, 2014).
- Eileen Maura McGurty, *Transforming Environmentalism: Warren Country, PCBS, and the Origins of Environmental Justice* (Rutgers University Press, 2007).
- Brian McCammack, *Landscapes of Hope: Nature and the Great Migration in Chicago* (Harvard University Press, 2017).
- Harriet Washington, *A Terrible Thing to Waste: Environmental Racism and Its Assault on the American Mind* (Little, Brown, Spark, 2019).

Week 6 – Cultivation

9 March

Fabiola López-Durán, *Eugenics in the Garden: Transatlantic Architecture and the Crafts of Modernity* (University of Texas Press, 2018).

Read two of the following...

- Dianne D Glave, “‘A Garden So Brilliant with Colors, So Original in Its Design’: Rural African American Women, Gardening, Progressive Reform, and the Foundation of an African American Environmental Perspective,” *Environmental History* 8/3 (2003): 395-411.
- Alexandra Stern, “California’s Eugenic Landscapes,” in *Eugenic Nation: Faults and Frontiers of Better Breeding in Modern America*, 2nd ed. (University of California Press, 2016), 139-172.
- Jennifer Light, “The City is a National Resource,” in *The Nature of Cities: Ecological Visions & the American Urban Professions, 1920-1960* (Johns Hopkins University, 2009), 16-68.

Additional Resources:

- Cecilia Gowdy-Wygant, *Cultivating Victory: The Women’s Land Army and the Victory Garden Movement* (University of Pittsburgh Press, 2013).
- Adam Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (Cambridge University Press, 2001).

Christopher Sellers, *Crabgrass Crucible: Suburban Nature and the Rise of Environmentalism in Twentieth-Century America* (University of North Carolina Press, 2012).

SPRING BREAK

Week 7 – Incarceration

23 March

Connie Chiang, *Nature Behind Barbed Wire: An Environmental History of the Japanese American Incarceration* (Oxford University Press, 2018).

Read two of the following...

- Mary Mendoza, "Treacherous Terrain: Racial Exclusion and Environmental Control at the U.S.-Mexico Border," *Environmental History* 23/1 (2018): 117-126.
- Mary X. Mitchell, "Offshoring American Environmental Law: Land, Culture, and Marshall Islanders' Struggles for Self-Determination During the 1970s," *Environmental History* 22/2 (2017): 209-234.
- Laura J. Martin, "Proving Grounds: Ecological Fieldwork in the Pacific and the Materialization of Ecosystems," *Environmental History* 23/3 (2018): 567-592.
- Elizabeth Hennessy, "The Politics of a Natural Laboratory: Claiming Territory and Governing Life in the Galapagos Islands," *Social Studies of Science* 48/4 (2018): 483-506.

Additional Resources:

Willow Amam, *Trespasseis? Asian Americans and the Battle for Suburbia* (University of North Carolina Press, 2017).

Clarence Jefferson Hall, *A Prison in the Woods: Environment and Incarceration in New York's North Country* (University of Massachusetts Press, 2020).

Brett Story, *Prison Land: Mapping Carceral Power across Neoliberal America* (University of Minnesota Press, 2019).

Start your mushrooms!

Week 8 – Development

30 March

Julie Livingston, *Self-Devouring Growth: A Planetary Parable as Told from Southern Africa* (Duke University Press, 2019).

Read one the following...

- Alison Bashford, "Universal Rights? Population Control and the Powers of Reproductive Freedom," in *Global Population: History, Geopolitics, and Life on Earth* (Columbia University Press, 2014), 328-354.

- Michelle Murphy, “Investable Life,” in *Economization of Life* (Duke University Press, 2017), 113-134.
- Rob Nixon, “Introduction” in *Slow Violence and Environmentalism of the Poor* (Harvard University Press, 2011), 1-44.
- Dana Simmons, “Science of Man,” in *Vital Minimum: Need, Science, and Politics in Modern France* (University of Chicago Press, 2015), 116-137.

Additional Resources:

Amitav Ghosh, *The Great Derangement: Climate Change and the Unthinkable* (University of Chicago Press, 2016).

Cultivate your mushrooms

Week 9 – Toxicity

6 April

Andrew G. Kirk, *Doom Towns: The People and Landscape of Atomic Testing, A Graphic History* (Oxford University Press, 2017).

Read two of the following...

- Linda Nash, “Modern Landscapes and Ecological Bodies,” in *Inescapable Ecologies: A History of Environment, Disease, & Knowledge* (University of California Press, 2007), 127-169.
- Sara Pritchard, “An Envirotechnical Disaster: Nature, Technology, and Politics at Fukushima,” *Environmental History* 17/2 (2012): 219-243.
- Julie Sze, “Childhood Asthma in NYC: The Politics of Gender, Race, and Recognition,” in *Noxious New York: The Racial Politics of Urban Health and Environmental Justice* (MIT Press, 2007), 91-108.
- Noémi Tousignant, “Poisons and Unprotection in Africa,” *Edges of Exposure: Toxicology and the Problem of Capacity in Postcolonial Senegal* (Duke University Press, 2018), 1-24.

Additional Exploration:

Nancy Langston, *Toxic Bodies: Hormone Disruptors and the Legacy of DES* (New Haven: Yale University Press, 2010).

Gregg Mitman, *Breathing Space: How Allergies Shape our Lives and Landscapes* (Yale University Press, 2007).

Gregg Mitman, Michelle Murphy, and Christopher Sellers, eds. *Landscapes of Exposure: Knowledge & Illness in Modern Environments*, *Osiris* 19 (Univ. of Chicago Press, 2004).

Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Durham: Duke University Press, 2006).

Jebediah Purdy, *This Land Is Our Land: The Struggle for a New Commonwealth* (Princeton University Press, 2019).

Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2010).

Gregg Mitman, *Reel Nature: America's Romance with Wildlife on Film* (University of Washington Press, 2009).

Read two of the following...

- Thom van Dooren, "Mourning Crows: Grief in a Shared World," and "A Call for Stories," in *Flight Ways: Life and Loss at the Edge of Creation* (Columbia University Press, 2014), 125-148.
- Jean-Baptiste Gouyon, "As If Eavesdropping on Actual Filming': The Origins of the Wildlife Making-of Documentary Genre," *Journal of Science & Popular Culture* 1/2 (2018): 155-170.
- Dolly Jorgensen, "Remembering: Narrating Species Loss and Recovery," in *Recovering Lost Species in the Modern Age: Histories of Longing and Belonging* (MIT Press, 2019), 119-144.
- Ana María Gómez López, "On Taphonomy: Collages and Collections at the Geismuseum," *Themes* 4 (2019): 195-214.

Additional Resources:

William Cronon, ed. *Uncommon Ground: Rethinking the Human Place in Nature* (W.W. Norton & Company, 1995).

Lorraine Daston and Gregg Mitman, eds. *Thinking with Animals* (Columbia University Press, 2006).

Radhika Govindrajana, "Pig Gone Wild: Colonialism, Conservation, and the Otherworld," in *Animal Intimacies: Interspecies Relatedness in India's Central Himalayas* (University of Chicago Press, 2018).

Anna Grimshaw, *The Ethnographer's Eye: Ways of Seeing in Anthropology* (Cambridge University Press, 2001).

Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Duke University Press, 2016).

Ursula Heise, *Imagining Extinction: The Cultural Meanings of Endangered Species* (University of Chicago Press, 2016).

Fatimah Tobing Rony, *The Third Eye: Race, Cinema, and Ethnographic Spectacle* (Duke University Press, 1996).

Anna L. Tsing, Jennifer Degler, Alder Kelleman Saxena, and Feifei Zhou, eds. *Feral Atlas: The More-than-Human Anthropocene* (Stanford University Press, 2020).

Eat your mushrooms

Week 11 – Capitalism

20 April

Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton University Press, 2015).

Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Zero Books, 2009).

Share your mushroom stories

Week 12 – Vote!

27 April

We will vote on Week 6 about the final reading of the semester. Options include...

- a. Kate Brown, *Manual for Survival: A Chernobyl Guide to the Future* (W.W. Norton & Company, 2019)
- b. Bathsheba Demuth, *Floating Coast: An Environmental History of the Bering Strait* (W.W. Norton & Company, 2019).
- c. Thomas Fleishman, *Communist Pigs: An Animal History of East Germany's Rise and Fall* (University of Washington Press, 2020).
- d. Gabrielle Hecht, *Being Nuclear: Africans and the Global Uranium Trade* (MIT and Wits University Press, 2012).
- e. Helen Rozwadowski, *Vast Expanses: A History of the Oceans* (University of Chicago Press, 2019).
- f. James C. Scott, *Against the Grain: A Deep History of the Earliest States* (Yale University Press, 2017).
- g. Mark R. Stoll, *Inherit the Holy Mountain: Religion and the Rise of American Environmentalism* (Oxford University Press, 2015).
- h. Benjamin Wurgaft, *Meat Planet: Artificial Flesh and the Future of Food* (University of California Press, 2020).
- i. Jeremy Zallen, *American Lucifers: The Dark History of Artificial Light, 1750-1865* (University of North Carolina Press, 2019).

Please note: *If you suggest an additional title before Week 5, I'd be happy to add it to this list.*