

Week 1

JAN 10: Introductions, etc.

JAN 12: Ideas

Raymond Williams, *Keywords*, “ecology”; “history”; “nature”; “organic”

Reading Questions:

1. What is etymology? Why is it useful to Raymond Williams?
2. How does Williams define “ecology”?
 - a. Think about the “eco” prefix and how it gets used in current parlance.
3. How were “history” and “story” originally essentially the same word?
4. In what ways is “history” a much more complicated term than its derivatives: “historian,” “historical,” and “historic”?
5. What are Williams’ three essential definitions of “nature”?
 - a. How is sense (i) so different than senses (ii) and (iii)? And how can we distinguish between sense (ii) and (iii)?
6. What are some of the benefits and pitfalls of personifying “nature”? (ex. “Mother Nature”)
 - a. What human qualities have humans seen in “nature” over time? What does this tell us about humans?
7. How has the idea of “nature” changed over time?
 - a. How did this lead to “nature” being commonly understood as a contrast to “human”?
8. How is the “organic” in “organic society” different than “organic chemistry”?
 - a. Similarly, how have “organic” and “organized” been used at times as antonyms?
 - b. How is this different than “organic” and “artificial” being used as antonyms? Or is it similar?
9. Can machines be “organic”?

Week 2

JAN 17: Ideas, cont.

Steinberg, “Rocks and History”; Worster, “A Long Cold View of History”; Gould, “Fall in the House of Ussher”

Reading Questions:

Steinberg

1. How can where you start telling your history affect what sort of history tell?
2. What natural features affect human history?
 - a. What point is Steinberg trying to make with all his counterfactuals?
3. How does the scale at which we tell our histories change the sort of history we tell?
 - a. We will study this further on the “Big History” day.

Worster

1. According to Worster, when is nature at its most powerful? Why?

2. What is environmental determinism?
 - a. Is Worster an environmental determinist?
3. How have ice ages affected human history?
 - a. What point is Worster trying to make with his counterfactual? In what ways is the mental exercise helpful? And in what ways is it not?
4. Which is the more useful mental conception: thinking of nature as “allowing” certain human behaviors or “encouraging” certain human behaviors? Or do we need both conceptions?
5. How did Midwest soil affect U.S. history?

Gould

1. Who was Archbishop James Ussher? What was his life like?
2. Why does Gould argue that it’s wrong to excoriate Ussher for his 4004 BCE creation date?
3. How did Ussher arrive at his estimate of a 4004 BCE creation date (yes, it’s long and complicated)? And why does his method matter?
4. How might we change the way we judge past systems of knowledge based on Gould’s argument?

JAN 19: Ideas, cont.

Worster, “Transformations of the Earth”

Optional: [The Land Institute \(Salina, KS\)](#)

Reading Questions

1. Who is Aldo Leopold?
2. How does Worster define environmental history? What are the benefits or drawbacks of this definition?
3. How, then, do we differentiate between what is “natural” and what is “cultural”?
4. What are worster’s three levels of environmental history?
5. Is an agroecosystem still nature? Why or why not?
6. Are we comfortable with Worster’s essential suggestion that environmental history really needs to be studying farming, first and foremost?
7. What does Worster believe brought the biggest shift in agriculture in the last millennium?
8. How did land become a commodity?
9. What do you make of Worster’s contention that there has been, as a general trend in recent human history, “a radical simplification of the natural ecological order in the number of species found in an area and the intricacy of their interconnections”?
 - a. Does his focus so heavily on agriculture force him into this idea? Or does it work even outside the agroecosystem?

Week 3

JAN 24: Big History

Plumer, "This is the most detailed map yet of our place in the universe" (PDF in folder or [here](#)); Lewis and Maslin, "Defining the Anthropocene"; Pyne & Pyne, *The Last Lost World*, 87-93; 97-104

In-class graphic: [chart of human evolution](#)

In-class photo: Carl Sagan's "[little blue dot](#)"

Short Paper due: "What is nature?"

Reading Questions:

1. What is Laniakea? How big is it?
2. How did researchers discover Laniakea?
3. Check out [this Hubble Telescope image](#). What can we learn from it?
4. What is the Anthropocene?
 - a. What typically demarcates geological epochs?
 - b. How could there be a political element to defining the Anthropocene?
5. The four things the Anthropocene article covers:
 - a. How have humans affected the planet's geology?
 - b. What all has our current epoch been called, and what do the different names mean?
 - c. What all have humans done that may have left global markers? (Think of this as finding the human "golden spike.")
 - d. Ultimately, when do the authors argue the Anthropocene began? Why, and what are the ramifications of this choice? (Why didn't they choose 1964? Either way, is this a case of science being too narrowly focused on one type of data?)
6. Should *Homo erectus* be included in human history? Why or why not?
 - a. If we do, how does human history change? What stories become important?
7. What are the most important historical events related to *Homo erectus*?
 - a. What changes did those historical events cause?
 - b. How did these changes affect the "human" relationship to the natural world, both physically and culturally?

JAN 26: Gender

Scharff, "Man and Nature!"

Discussion about future class topics

Book for review selected by this date

Reading Questions:

1. What is Scharff's primary complaint about environmental history?
2. How does defining humans as a species require attention to sexual division?
3. Why have men been much more present in environmental history than women?
 - a. And how might this come from male-focused words (i.e. "man" meaning "humans") and science?
4. Why did Birkhead and Moller realize that they might need to focus on female finches?

- a. How might this affect the way that we do science? Put another way, how might their realization require we set up experimental science to get the most accurate data and findings?
5. What are some of the philosophical problems with thinking about nature as male or female?
6. In what ways is Scharff's tallying of how often men and women are mentioned in famous environmental histories fair? In what ways is it fundamentally ahistorical?
7. How might stories change if we focus more on female than male activities?
8. What might happen if we stopped separating production and reproduction?

Week 4

JAN 30: Columbian Exchange

Crosby, "Ecological Imperialism"; Cushman, "Cooking the Cuban Ajiaco"

Reading Questions:

1. Why does Crosby think that humans are the most visible (and by extension most successful, and *important*?) immigrants from the Old World to the New World?
2. Are we satisfied with Crosby's reasoning for why Western Europeans did not take over Africa?
3. What are the four categories of species that Crosby identifies as being crucial in the Columbian Exchange?
4. Why is a demographic takeover ultimately Crosby's most important evidence?
 - a. Demographic takeover by whom, though?
 - b. Which species other than humans seems most important?
 - c. What was "Englishman's Foot"?
5. How do we define what a "weed" is?
6. Is Crosby a biological determinist?
7. What are the parts of the ajiaco stew?
 - a. How does it represent the Columbian Exchange, both in physical ingredients and in social relationships?
8. How does Cushman see the ajiaco stew as correcting Crosby's ideas?
9. Be able to trace the ingredients' voyages on [this blank world map](#).
10. How do South American domesticates help falsify an hypothesis of Jared Diamond's? (Which one?)
11. How might the Ajiaco be a metaphor for Cuban identity and nationality?
 - a. Compare it to the idea of the "melting pot."

JAN 31: Disease

Watts, "The Human Response to Plague"

Reading Questions:

1. Look at [this map](#) of how plague spread across Eurasia and Africa. Did it spread in any ways you were not expecting?

- a. The [Wikipedia page](#) is actually pretty decent if you have questions about the disease.
2. What does Watts argue proved to be the decisive difference in how plague affected Europe differently than the Middle East?
3. How did human contact with the black rat differ from the country rat? How did how humans lived affect how rat fleas might come into contact with them?
 - a. In general, what was the disease environment of plague, and how did humans affect it?
4. How did older understandings of disease transmission affect human response to plague?
 - a. In particular, be able to explain (1) the relationship between Christianity and disease transmission; (2) the effect Galenic medicine had on plague transmission.
5. How did human desires to avoid plague in Florence interact with social conditions?
6. What was the “Ideology of Order”? (First seen on p. 16.)
7. What were the five elements of Italian plague control? (pp. 16-17)
 - a. Did these help prevent the transmission of plague? Or did they further the spread of plague?
8. Which caused greater societal disruption in Europe: plague or plague control measures? (Hint, there’s not necessarily a right answer.)
9. Why did human response to plague *not* change in the Middle East between 1347-1805? (Be sure to include both elite and peasant responses.)
10. What behaviors in Egypt increased/decreased plague mortality?
11. How did Muslims interpret plague death very differently than did Italian Christians?
12. Did you know that it may have been [giant gerbils](#), and not black rats, who spread the plague in Europe?
13. If you have never seen one, [plague masks](#) were terrifying. Why are they shaped like that?

FEB 2: Wilderness

Cronon, “The Trouble with Wilderness”

Reading Questions:

1. How should we define “wilderness”? How has its definition changed over time?
 - a. The [Wilderness Act of 1964](#) is probably a good place to start.
2. What is Cronon’s thesis?
 - a. Do you buy it?
3. How did Romanticism (and Primitivism) and Transcendentalism change the way we thought about wilderness?
 - a. Think about the idea of the wilderness sublime.
 - b. How have wilderness and religion (religiosity?) been related.
4. We will read/analyze in class the Wordsworth poem, “The Prelude.”
5. How has wilderness been positioned as supporting “traditional” American values and in opposition to “modern” values?

6. Why has wilderness been so important to modern humans, especially modern Americans?
 - a. And how have definitions of wilderness been bound up in class distinctions?
7. How is Cronon critiquing the environmentalist movement when he writes, “the trouble with wilderness is that it quietly expresses and reproduces the very values its devotees seek to reject”? (p. 16)
 - a. To the contrary, what does Cronon say the concept of “wilderness” allows people to do, hurting actual environmentalist causes?
 - b. Similarly, how does the concept of “wilderness” limit the causes on which environmentalists should focus?
8. How is “wilderness” a class issue?
9. Can you find wilderness in your backyard?
 - a. What’s the difference between wildness and wilderness?
10. Ultimately, what does Cronon think is the utility of wilderness?

Week 5

FEB 7: Environmentalism

White, “Are You an Environmentalist?”

Reading Questions:

1. What is the relationship between work and nature?
 - a. What is the relationship between environmentalists and work in nature? Why has environmentalism often been more about playing in nature than working?
2. What does it mean to “know” nature? (No dirty jokes, Caelan.)
3. Is there a difference between work and human labor?
4. What two convictions do humans hold that confuse many Americans about the relationship between work, play, and nature? (p. 175)
5. How do many writers differentiate between traditional or American Indian forms of work as being separate from modern, industrial forms of work?
 - a. How has premodern work been made to seem like modern play?
 - b. Is this difference tenable?
6. How have racial and gendered understandings of work affected how we view its place in the natural world?
7. How has technology mediated between human work and nature, both physically and in our mental conceptions of what work is like?
8. How should we work in a way that both embeds us in nature but also doesn’t destroy the planet?
 - a. Or does all work (such as typing on a typewriter) embed us in nature?
 - b. Should we not worry about whether our work destroys nature?
9. What does White mean when he writes, “if work is not perverted into a means of turning place into property, it can teach us how deeply our work and nature’s work are intertwined”? (p. 185)
 - a. Moreover, what do you make of the entire last paragraph of the essay?

10. Does [this video](#) show nature? Where does nature end and artifice begin? (I first heard the song in [this GEICO commercial](#).)

FEB 9: Warfare

Tsutsui, “Landscapes in the Dark Valley”; Plumer and Dreazen, “In Iraq, the environment itself has once again become a weapon of war” (In the readings folder or [here](#))

Reading Questions:

1. How did the Japanese home islands fare during WWII?
 - a. What does it mean that the war was a “dark valley” (暗い谷間)?
2. How did WWII have mixed effects on the Japanese environment?
 - a. How permanent were these effects, typically?
 - b. How do these change our assumptions about the environmental legacies of war?
3. What were the effects on Japan of the following facets of WWII? Which was the worst for humans? Which for the natural world? (Or does it depend on *what part* of the natural world you mean?)
 - a. Direct war damage
 - i. Why do you think this section angered many people?
 - b. Economic mobilization
 - c. Environmental consequences of scarcity
 - d. Autarky and the environment
4. How has ISIS used the natural environment as a weapon of war?
 - a. Who has been most affected?
5. What is “ecocide”? Where did this term originate?
6. What historical precedents are there for what ISIS did?

Week 6

FEB 14: Food and Farming

Diamond, “The Worst Mistake in Human History”; McGinty, “Food Labels Like ‘Organic’ and ‘Whole Grain,’ Meant to Clarify, Often Confuse” (in the readings section or [here](#)); Kennedy, “Artificial vs. Natural Watermelon and Sweetcorn” (in the readings section or [here](#)); Koerth-Baker, “Big Farms Are Getting Bigger” (in the readings section or [here](#))

In-class viewing: [Steinmetz, “Super Size: The Dizzying Grandeur of 21st-Century Agriculture”](#)

Short Paper due: “What does it mean to protect the environment?”

Reading Questions

1. What does it mean when something is “organic”?
2. Do labels on foods help or hurt consumers?
3. What traits do humans find valuable in watermelons?
4. What traits do humans find valuable in corn?
5. At what point, in the course of their human-induced evolution, do plants stop being the same plant?

- a. How much did proto-watermelons need to change before we could call them modern watermelons?
 - b. How much did proto-corn need to change before we could call it modern corn?
6. What is Diamond's thesis?
7. What evidence does Diamond cite to support his argument?
 - a. Which of it is most convincing? Unconvincing?
8. My favorite: What happened to the heights of Grecian and Turkish hunter gatherers when they shifted to agriculture? Why?
9. What arguments might be persuasive against Diamond?
10. How did farm consolidation happen while the number of farms stayed constant?
 - a. What does this say about U.S. food production?
 - b. What does this say about the U.S. society/political system?
11. What challenges might exist to changing the definition of what constitutes a farm?

FEB 16: Individual reading day; consultations about book review/presentation

Week 7

FEB 20: Individual reading day; consultations about book review/presentation

Week 8

FEB 27: Industrial Revolution

In-Class presentation: Industrial Revolution and the Environment

FEB 28: NO CLASS: ACT Day

MAR 2: Big History (student chosen/led)

Spier, *The Structure of Big History*, selections

[Big History Project](#)

Optional video: [Christian, "The history of our world in 18 minutes" \(TED Talk\)](#)

Reading Questions:

1. Why does Spier like the word "regime," and what does it mean in this sense?
 - a. What are some examples of regimes?
 - b. What causes a regime shift?
2. What three regimes does Spier specifically reference?
 - a. Which of these is most important? Why?
3. Which countries are examples of being in the different phases of "it"? Can societies advance even if they skip through these phases or will they lack something fundamentally?
4. Would you consider the invention of fire to be humanity's greatest invention?
5. How did sedentary gatherers/hunters survive in their climates?
6. Was the agrarian way of life the first step towards global civilization?

- a. And why could the sedentary gatherer/hunter regime not reach “the elaborated social hierarchy that would become the hallmark of agrarian-based state societies” (55)?
- 7. Did settling increase the value of material objects?
 - a. Is it still like that today?
- 8. Does the idea of a “garbage regime” make sense (71)? Why or why not?

Week 9

MAR 7: US History as Environmental History (student chosen/led)
Steinberg, “Death of the Organic City” from *Down to Earth*

Reading Questions:

1. How did class affect responses to the Progressive Era?
 - a. Who were the winners and losers?
2. What were the benefits of having animals within the city?
 - a. Specifically, how did manure impact urban life?
3. What issues concerning human excrement emerged before and during the installation of sewer systems?
4. What was the result, both environmentally and socially, of the transition to modern plumbing?
5. By what means were cities recycling their wastes before the start of municipal trash collection?
6. Which of the urban cleaning movements damaged the relationship between humans and the environment the most?
 - a. How did the transition to a “modern” city break traditional human connections to the natural world?
7. Were the cleaning movements during the Progressive Era a mistake? Why or why not?

MAR 9: Fracking/Mining

Galchen, “Weather Underground” (In readings folder or [here](#))

In-class presentation: Mining and Resource Extraction

Reading Questions:

1. What does it mean that earthquakes are “human-made”?
 - a. Relatedly: Why have the number of earthquakes in Oklahoma increased?
2. Why has Oklahoma seen an increase in the amount of wastewater disposal?
3. How did oil production affect Oklahoma’s statehood?
 - a. How do oil/gas production continue to affect Oklahoma politics?
 - b. What does this tell us about the social importance of resource extraction?
4. How have the social benefits of oil and gas, at times, been prioritized over ecological and human health?

5. How has the [Oklahoma Corporation Commission](#) sat on both sides of the fence?
6. How should scientists balance their obligations to: good science, the public, and sources of funding?
7. How does the idea of luck or chance affected humans' relationship to the natural world in Oklahoma?
8. If you're not sure how mineral rights work, read up [here](#).
9. See an [oil derrick in action](#).
 - a. On a bigger scale, remember what happened at [Deepwater Horizon](#).
 - b. Here's what a [disposal well](#) looks like.
10. Here's what the U.S. Geological Survey has to say about [induced earthquakes](#).
 - a. Why have the U.S. Geological Survey and the Oklahoma Geological Survey come to different conclusions about the increase earthquakes?
11. As an example of the amount of money in Oklahoma oil, check out this series of tweets from [Drake](#), [T. Boone Pickens](#) (an oil tycoon), and [Drake again](#).

Week 10

MAR 13: Technology and Animals

Jørgensen, "Not By Human Hands"

Optional reading: [Seidel, "20 Years After Dolly"](#)

Optional reading: [Morell, "Minds of Their Own"](#)

Short Paper Due: "How much should humans be allowed alter the environment before we are doing something wrong?" (The paper is explicitly asking you to make a moral argument about human effects on the natural world and when our activities cross an ethical line.)

Reading Questions:

1. What does Jørgensen mean about "the usefulness of seeing the whole constellation of science, technology, and environment as simultaneously human-made" (481)?
2. Are humans the only animals to deploy technology? (There is a right answer to this.)
3. What is [Envirotech](#)?
4. What is the "black box" concept? (I'll help: read [here](#).)
 - a. Why does STS try to "open up the black box of science and technology" (483)?
5. Jørgensen's five tenets of animals and technology are below. Which of them is most important?
 - a. "Animals and plants are themselves technology"
 - b. "Technologies provide means of controlling other living beings"
 - c. "Technologies mediate our knowledge of animals"
 - d. "Technologies affect our valuation of other living creatures"
 - e. "Technology is part of the ecosystem"
6. Historian Edmund Russell once elegantly argued, humans have yet to uncover "how to transform sunlight, carbon dioxide, and a few nutrients into grain—except by subcontracting the job to plants." (Edmund Russell, "The Garden in the Machine: Toward an Evolutionary History of Technology," in *Industrializing Organisms: Introducing*

Evolutionary History, edited by Susan R. Schrepfer and Philip Scranton (New York: Routledge, 2004), 8)

- a. Does this mean that all agricultural plants and animals should be considered technology?
7. How has technology drawn us closer to “nature” while simultaneously distanced us from “nature”?
8. Should humans bring back extinct species?
 - a. Does your answer change if humans mostly caused the extinction (vs. something like the dinosaurs)?
9. Evaluate this contention: “Although narratives about the technological ravaging and scarring of the land certainly exist, all technological environmental histories need not be dystopian. Technological changes modify human relations with the nonhuman world rather than destroy them” (488).
10. Here’s the “[Amazing FishCam](#).”
11. Here is Olaus Magnus’s [Carta Marina](#), which shows the beavers dragging another beaver.

MAR 14: Trench Warfare and the Environment (student chosen/led)

Brantz, “Environments of Death” from *War and Environment*, Closmann ed.

Reading Questions:

1. What is Dorothee Brantz’s definition of Landscape? What is Dorothee Brantz’s definition of Environment? How are these definitions different than the normal definitions?
2. What is her purpose for writing this Chapter?
3. What are some reasons for why wars are fought during the Spring and Summer?
4. What are some activities that are key to day-to-day life of a soldier in the trenches?
5. How did new technologies affect the Environment? How did they affect the War?
6. How was WWI an attack on the senses? How did it affect sight, hearing, and smell?
7. Look at the images of the landscape [here](#) (especially #37!). (Warning: Some photos are graphic.)
 - a. What are some major changes you see?
 - b. What is the best way to use photographs as historical evidence? (I.E. how should we “read” photos to make them as powerful as possible?)
8. How did weather affect the soldiers and the war? Why was mud a big adversary in the war?
9. How did vermin effect Trench Life?
10. What was affected by the gas attacks?
11. While we think more about war crimes stemming from WWII, could affects on the environment be considered a war crime?
 - a. You might consider examining the idea of [ecocide](#), first proposed by botanist Arthur Galston in response to defoliant use during the U.S.-Vietnam War.
12. Read about [Sgt. Stubby](#), the most decorated dog of WWI.

MAR 16: Fishing (student chosen/led)

McEvoy, *The Fisherman's Problem*, Ch. 1 "The Problem of Environment" and Ch. 11 "An Ecological Community"

Reading Questions:

1. If you don't know about the concept, read about the "[tragedy of the commons](#)" and think about what causes it, whether it can be prevented, and what its effects are.
2. Why does McEvoy spend so much time and go so in depth about the aquatic environments on and off the coast of California?
3. Are fishing industries simply "just another predator?"
4. Fishing industries can obviously have detrimental effects on a fishery. Are they able to have a positive effect?
5. Analyze "The Fisherman's Problem." Is it restricted to solely the fishing industries? Where else might the same effect be occurring?
6. If Gordon's model is accurate, why do fishing industries not follow it and why is there still overfishing?
7. It can easily be seen how the tragedy of the commons can be applied to areas such as fisheries, range land and underground aquifers, but how can it be applied to areas such as national parks and air/water pollution?
 - a. Are there areas in the environment where it cannot be applied?
8. How do the law and the market evolve together?
9. Is it possible to claim that there is currently a new human nature that has not existed before?
10. According to McEvoy, what causes "the tragedy of the commons?"
11. Does the assumption that the earth is a store of resources for the benefit of humans still exist in today's society?
12. How can "learning to care for other living things" be applied in areas such as fishing industries and elsewhere?

Week 11

MAR 28: Marketing and Capitalism
Oatsvall, "Advertising Indians"

Reading Questions:

1. In what ways does the Mountain Valley advertisement signify that the viewer is looking at "Indians"?
 - a. What historical events helped create that particular stereotype of what an "Indian" was?
2. How was the Mountain Valley advertisement related to conquest?
3. What is Hot Springs's "creation myth"? (Think de Soto here.)
 - a. How is it bound up in capitalism and understandings of the relationship between nature and health?

4. How did Mountain Valley advertise an “authentic” health experience with the natural world?
 - a. Similarly, how did that advertisement fit into a common style of advertising at that time?
5. What did Leroy Ashby mean when he said that Wild West shows functioned as “visions of empire” (6)?
6. How did presenting the water as having “Indian” qualities present an often contradictory worldview? (Page 8 really delves into this idea).
7. Do some searching on the internet and try to find an advertisement that also uses American Indians and the natural world to sell a product?
 - a. I’m thinking of something similar to the [“Crying Indian” advertisement](#).
 - b. FYI, I honestly have no idea what, if anything, you’ll find. But put in a good faith effort.
 - c. You found: [American Spirit Cigarettes](#); [Land O Lakes Butter](#); [Heritage Coffee](#); also see [Pierson, “Native Americans Within Mid-Twentieth Century American Film and Consumerism”](#) (especially the Coca Cola ad!) and Indian Country Media Network, [“10 Racist Advertisements Featuring Native Americans”](#)

MAR 30: Cultural History and the Environment (student chosen/led)

Jennifer Price, “A Brief Natural History of the Plastic Flamingo” from *Flight Maps*, 111-113, 130-134, 136-149, 162-165.

Reading Questions:

1. What are some of the different spheres of life that the plastic pink flamingo has penetrated?
2. What do you think Price means by “[the flamingo] is a story of the meanings of Artifice”?
3. How do you think Artifice relates to Nature, and the meanings we prescribe as Nature?
4. Why do you think that flamingoes are associated with wealthy environments (hotels, casinos, boardwalks, fame, etc.)?
5. What was the primary concern of critics of the plastic pink flamingo?
6. Is there any difference between art and life? And if there is, what is it?
7. What was the primary concern of critics of suburban ChemLawn users?
8. How did the baby boomer “Get Real” movement arm the generation with the cultural tools for ironic plastic flamingo use?
9. How was ironic expression of plastic also simultaneously a form of conscious environmental expression?
 - a. Namely, what abstract ideas did ironic flamingo uses mock and commentate on?
10. As the baby boomers aged, what happened to plastic flamingos? What kind of effect may have this had had on their cultural meaning?
11. How are Artifice and Nature related, according to Prices’ conclusion?
12. Do you think plastic flamingoes function better as “an ‘unnatural link’” or as “‘products of human beings’”?
 - a. Can it be both? If it is, what might this say about humans and how we perceives ourselves and our actions?

13. How is anatomy (or lack of) important when it comes to the plastic flamingo?
14. To help understand the mindset Price is talking about, watch this clip from *The Graduate* (1967) about [“One word: Plastics!”](#) (she discusses it on p. 141)
15. Here’s an [obituary for Don Featherstone](#). In it, you’ll learn that Featherstone and his wife wore matching outfits every day.
16. Here’s the [Smithsonian Institute’s official page on the pink flamingo](#).
17. More on defining natural: Which of [these photos](#) is more natural? Which *looks* more natural?

Week 12

APR 3: Oceans

Taylor, “Knowing the Black Box”

Reading Questions:

1. What is the article’s thesis?
2. Why are ocean histories worth writing?
3. What is epistemology? What is an “epistemological challenge”?
 - a. In our specific context, relatedly, what does Taylor mean when he writes: “Scientific authority wrought profound political-ecological consequences, but the fulcrum for its ascendancy was a preexisting breakdown in older forms of knowing nature” (61)?
4. What might the differences be between environmental history, historical geography, and historical ecology?
5. What are the biggest challenges to writing good histories of oceans?
 - a. How do historians and scientists gather data about oceans? (Do they do so in similar or different ways?)
 - b. What methodologies seem most promising for researching the history of human relations to oceans?
6. What does it mean that “the ocean is an open system with too many variables to isolate” (66)?
7. Why do scientists call oceans “the black box” (68)?
8. Do you agree that the “oceans temporal and spatial complexities make an old-growth forest seem simple” (68)? Why or why not?
9. Reminder: [oceans are scary](#).

APR 4: Nature and “Work” (student chosen/led)

White, *Organic Machine*, 2-15

Reading Questions:

1. What is the “organic machine”? What all does it entail? How does it blur the lines between humans and non-human nature?
2. What is White’s purpose to explaining how the Columbia formed?
3. When White gives the definition of work is this the work he references on page 4?

4. Are White's definitions of energy and work complete on page 6? What might those be missing?
5. Did the early settlers recognize the full power of the river?
6. The knowledge that the natives possessed was important why?
7. What was the purpose for smoking the peace pipe with the natives?
8. What did White mean when he wrote, "The geography of energy intersected quite tightly with the geography of danger and a human geography of labor" (12)?
9. When White claims that human work is "socially organized and given cultural meaning" (13), what does he mean? Is he right? Why or why not?

APR 6: Nature and Suburbia

Rome, "Septic-Tank Suburbia" from *Bulldozer in the Countryside* (student chosen/led)

Reading Questions:

1. How a septic tank [works](#)
2. The awareness of the septic tank problem came in three stages: Public Health, Contaminated Groundwater and more public concern, and finally environmental concern. Which of these do you believe is the most pressing from the:
 - a. Homeowner's perspective?
 - b. The builder's perspective?
 - c. Environmentalist's perspective (This one is kind of obvious)?
 - d. Why do you think the number of septic tanks used continued to increase after these problems were realized?
3. Was it okay to use septic tanks, even when the problems were known, since there was such a shortage of homes post WWII and those had to be inexpensive enough for the average family to afford?
 - a. Put more broadly, are there times when economic concerns *should* override environmental concerns?
4. What are some ways that the problems with septic tanks could have been overcome where they were still a viable option in home development?
5. Is it more the responsibility of the homebuilder or the homeowner that the septic tanks were a problem?
6. Since the concern of groundwater contamination was huge, why do you think it took so long to get the preemptive measures required to combat that contamination? (1940s - 1965) Even with these measures, it was still possible to build subdivisions without following them, so were the measures even worth the effort?
7. When do humans seem most apt to fix environmental problems?
8. Be sure to look at the photos that William Garnett took of [Lakewood, California](#).
9. William Levitt even made the [cover of Time magazine](#) on 3 July 1950. The cover said, "House Builder Levitt, For sale: a new way of life"

Week 13

APR 11: African Environmental History (student chosen/led)

Jacobs, "The Great Bophuthatswana Donkey Massacre"

Book Review Due

Reading Questions:

1. How are interviews (like the ones conducted by Jacobs) problematic sources?
 - a. How do the problems of oral sources help shed light on problematic aspects of more traditional historical sources?
2. Why did donkeys become prevalent among poor black people?
 - a. What does this say about the correlation between use of the environment and socio-economic status?
3. Why did ideas about environmental degradation continue for so long despite no strong evidence supporting them?
 - a. How did they start?
4. What institutions allowed the state to have so much control over the people?
5. What are the differences in the way the Bophuthatswana government treated the poor and the rich?
6. Why did donkey culls increase with the decline of paternalism and the rise of regional autonomy?
7. How did donkey culls affect women?
 - a. What does it mean that donkeys acted as the husbands for widows and divorcees (503)?
8. What were the goals of the donkey massacre in 1983?
 - a. Was it successful?
9. Even though donkey ownership was common among the poor of all races, what factors led to only black people being subjected to donkey culls?
10. What are the differences between donkey populism and the received wisdom on degradation?

APR 13: The Twentieth-Century World (student chosen/led)

McNeill, *Something New Under The Sun*, XXI-XXVI, 21-23, 35-49, 357-362

1. According to McNeill, what is something new under the sun? What does this mean?
 - a. Here's the [full Biblical text](#) McNeill cites.
2. Do you agree with McNeill's four propositions?
3. What are the differences in the rat strategy versus the shark strategy?
4. Why is soil erosion a problem?
5. What are the three pulses of erosion?
 - a. What did this say about the relationship between humans and the environment?
 - b. How was soil erosion and/or conservation different in different regions of the world (second pulse)?
6. Can McNeill's propositions be witnessed in soil erosion?
7. Have humans really created an ecological crisis in the twentieth century? If so, so what?
8. Is McNeill's story ultimately a happy one or a sad one?
 - a. (Part of this question involves you imagining how it *could* be a happy story.)

9. McNeill wrote this book in 2000. Is it out of date? Why or why not?
10. FYI This is the [current book cover](#), while this is the [original book cover](#). The original art comes from [Diego Rivera's mural "Man, Controller of the Universe."](#)

Week 14

APR 19: Marijuana (student chosen/led)
Cannabis Manifesto (selection)

Reading Questions:

1. DeAngelo seemingly holds government prohibition and federal enforcement officers solely accountable for environmental destruction and increased organized criminal activity to the "countryside." Is he justified in doing this?
2. In what ways did the cultivation of cannabis plants affect their region's economy and culture? At what price did it come with from the environmental perspective?
3. What were the overall effects of the government intervention (CAMP raids, fighting regulations, postponing medical legalization)?
4. Once growers moved their operations indoors, the cannabis industry and research advanced further and faster than ever before. What are some reasons for this rapid growth?
5. How did the cannabis industry influence the political and economic structure of this country?
6. If this book were actually an environmental history, what would it have been like?
7. [Why is marijuana illegal?](#)
8. For more reading:
 - a. Koerth-Baker, "[Why That Maui Wowie Doesn't Hit You The Same Way Every Time](#)"
 - b. Johnson, "[Rocky Mountain high : An Environmental History of Cannabis in the American West](#)"

APR 20: NO CLASS: Crystal Bridges trip

Week 15

APR 25: Nature as a Weapon (student chosen/led)
Hamblin, "The Terroristic Science of Environmental Modification" (from [Arming Mother Nature](#))

Reading Questions:

1. Why is the quote at the beginning relevant to the reading?
2. Why is global environmental action sometimes seen as a "hypocritical rich man's game"?
3. What is doomsaying and how was it met in politics?
4. What were ways that scientists were able to control weather, and how could these have been used to help people? How were they used instead?

5. What is the difference between weather modification and environmental warfare?
 - a. If interested, watch this [1959 Disney film](#), "Eyes in Outer Space: A Science-Factual Presentation," on potential weather control technology.
6. How did the Cold War politics affect the use of environmental weapons.
7. How was the treaty roughly outlined on page 215 a success? How was it a failure?
8. Based on the treaty what weapons on the table on page 214 be banned? Are there some that should be banned that aren't?
9. What does the book's title mean?

APR 27: Aldo Leopold (student chosen/led)

Leopold, *A Sand County Almanac, and Sketches Here and There*, selections

Reading Questions:

1. What was Leopold's purpose in writing in detail the seemingly mundane occurrences around his farm?
2. Why did he see his "two spiritual dangers" as a problem? (6)
3. What was his "land-ethic"?
 - a. Pros?
 - b. Cons?
 - c. Is this a reasonable/effective solution to the struggles conservationists face in today's society?
4. How do we know what is ethical ("ethical"?) in terms of our ecological relations?
5. How does Leopold's hunting tie in with his "land-ethic"?
6. What does Leopold blame for the lack of effectiveness of the conservation movement?
 - a. Is this still relevant today?
 - b. Do Leopold's wilderness ideas seem passé or naïve today?
7. Why is this book considered so revolutionary to the environmental movement?
 - a. Who was [Aldo Leopold](#)?
8. There's a great documentary about Leopold called: "Green Fire: The Life & Legacy of Aldo Leopold." You can see a trailer for it [here](#).

Week 16

MAY 1: Syphilis (student chosen/led)

Watts, "The Secret Plague," 122-139

Reading Questions:

1. What is syphilis? (Joseph Davidson, aka Josephilis) [click here](#)
 - a. [S-s-s-syphilis](#).
2. How did popular culture affect the spread of syphilis?
3. What does Watts mean from the statement regarding Cartesian binary terms and how it relates to syphilis? (pg.123)

4. In tracing the origins of syphilis, what are some of the views regarding its origins and how is this a reflection of society in the given time frame?
 - a. Of these 'origin stories,' which one was the most interesting or peculiar? (Your Opinion)
5. What does Watts say about the general 'nature' of rural people and the subsequent lack of syphilis-infected individuals?
6. How is the role of religion displayed as demonstrated with Gonzalo Fernandez de Oviedo and the [guaiac tree](#)?
 - a. With regards to the Spanish, how else did they 'smear' the reputation of the natives of Hispaniola?
7. How and why did syphilis help small time press entrepreneurs?
8. As a whole (from the excerpt given), relate this idea of viewing venereal syphilis through a multitude of perspectives, rather than a clear cut view.
9. How (if at all) does syphilis help us reevaluate the nature/culture dialectic?
10. FYI a part of Pieter Bruegel the Elder's ["The Triumph of Death"](#) is the cover painting on the book.

Short Paper Due: Write a response to one of the class readings that has been posted by a fellow student (i.e. NOT your own book). Evaluate the author's ideas for what they tell us about the human relationship with non-human nature.

MAY 2: Energy (student chosen/led)

Sieferle, [The Subterranean Forest](#), 1-8,14-19 (pages in the book, not PDF)

Reading Questions:

1. How does history look different when we first and foremost consider energy flows and exchanges?
2. Were there any improvements to the dietary habits of humans after the dawn of agriculture?
 - a. What are some reasons one may call agriculture man's greatest mistake?
3. What is the rule of ten%?
 - a. Where does all initial energy in an ecosystem come from?
 - b. By this logic, would a agriculture be more efficient that hunting and gathering? Think about other factors.
 - c. Reminder that [plants both create AND use energy](#) (and you know what I mean-- I'm not suggesting that plants actually "create" energy, violating the first law of thermodynamics).
4. What is the significance of defining the efficiency of various methods of hunting and gathering in kJ/hr AND kJ/m²?
5. What did agriculture offer humanity that hunting and gathering did not?
6. What may be a reason that Europeans developed more of an agricultural based society where Native Americans maintained their hunter-gather ways?
7. Are there any problems that have arisen from our shift to agricultural society that impact humanity today?

8. FYI: [historical US energy consumption](#).

MAY 4: Space

Maier, "Shooting the Moon"; Podcast: [Oosthoek, "Out of this world"](#)

Optional: [Every Apollo mission photograph is online](#)

Optional video: [Neil Maier, "Ground Control: Beyond an Environmental History of the Space Race"](#)

Reading/Listening Questions:

1. How did different photos of the Earth change the way people thought about the planet?
 - a. Apollo 8's [Earthrise](#); Apollo 17's [Whole Earth](#)
2. What technology *did not* matter in the reception of these two photographs? What technology *did* matter? Why?
3. How had political and space race realities shifted between 1968 and 1972? Why did these matter?
4. How did the narratives told about Earthrise differ from those told about Whole Earth? What do they reveal about the United States at the time?
5. How does Oosthoek argue that space is an integral part of daily human lives and environments?
6. While space is commonly portrayed as being the opposite of an environment, how is it indeed an (abiotic) environment?
7. What is "space junk"? Is it a problem? Why or why not?
 - a. What can be done about it?
 - b. [NASA tracks space junk](#), or you can see a [video of the rise of space junk](#).
8. How is the space environment in many ways a product of Cold War geopolitics?
 - a. In this way, is space any different than many terrestrial environments?
9. Why were astronomers concerned for the future of their discipline in the 1960s?

Week 17

MAY 9: Ecomusicology (student chosen/led)

[Pedelty](#), *Ecomusicology* excerpts

Discuss Final Questions

Reading Questions:

1. What is [ecomusicology](#)?
2. Why are historic songs about the United States' natural resources/beauty most often utilized by conservative movements and not progressive ones?
3. Does Guthrie's way of writing songs so that the lyrical content progressed from apolitical to political constitute weakening the political ideas or making them more accessible?
4. Regarding "This Land is Your Land:" "[s]ome students feel betrayed at having been taught a censored song, while others argue that it is appropriate to edit out the overtly political verses" (54). Which viewpoint do you agree with?
 - a. "This Land is Your Land" original lyrics [written](#) and [performed](#)

5. Where do we draw the line between being paid to produce heartfelt art and selling out
6. one's principles?
 - a. Is this line drawn differently if the artist's primary concerns are political?
 - b. ["Roll on, Columbia"](#) and [lyrics](#)
7. In the 1930s, damming rivers and turning them into "freshwater pools" was seen by environmentalists as utopian because of the great damage floods and erosion caused (page 88). How does danger to human life affect environmentalist goals?
8. Did Guthrie know about potential environmental and human concerns of dams? How hard did he look for them?
 - a. How do we balance the potential for futuristic "green" technologies with potential damages from them? Were Guthrie and his BPA employers negligent in this regard?
9. How was Guthrie able to become such an important advocate for displaced farmers and other marginalized groups without interacting with them?
 - a. Why did both Guthrie and his admirers embellish or just invent stories of such interactions?
 - b. Is this separation ethical? Dangerous?
10. Guthrie was a dam advocate in part because he believed that the dams would be publicly controlled and benefit the people. Instead, private companies benefit most from them today. How should we weigh environmental concerns when taking action that may lead to economic inequality or corruption? Is this different from the balancing of environmental and general economic concerns?
11. In case it's useful, here's a [map of BPA works](#).

MAY 11: *Silent Spring* (student chosen/led)

Rachel Carson, *Silent Spring*, excerpts

Reading Questions,

- 1) From experience, I have learned most people do not care about pesticide pollution. So, why do you think the book became so popular?
- 2) What were some of the arguments against the book?
 - a) She was a smart cookie and prepared for those tree haters. How did she and what did that give to the book as a whole?
- 3) In Carson's chapter "A Fable for Tomorrow," she depicts "A grim specter [that] has crept upon us almost unnoticed." Assuming this image is a possible future, why do you think Carson decided to open the book with her fable? In other words, what was the purpose of the first chapter? (3)
- 4) The Tragedy of the Common Household Chemicals
 - a) Here is [Ortho](#) and its [chemical structure](#)
 - b) Here is [DDT's chemical structure](#)
 - c) Here is [Roundup](#) and its [chemical structure](#)
 - i) And now they even make [Roundup Ready Soybeans](#).
 - d) Here is [Parathion's chemical structure](#)

- i) What do you notice about the similarities of the pairs?
 - ii) What about the ingredients of Round-Up and Ortho?
- e) Did you know that it's legal to spray pyrethrum on organic foods? [What is pyrethrum](#), and why would it be allowed in organic food production?
- 5) Even though water is abiotic and can never be "killed" (or we would have killed it a lot time ago), Carson dedicates a whole chapter over it. Why is water important when talking about pesticide contamination?
 - a) She also states that "water must also be thought of in terms of the chains of life it support - from the small-as-dust green cells of the drifting plant plankton from the water and are in turn eaten by other fishes or by birds, mink, racoons - in an endless cyclic transfer of materials from life to life." (46)
 - i) The whole quote takes, like, an entire paragraph so we know Carson was not fooling around. What does this mean and why is it important?
- 6) With a relatively low concentration of DDD added to (not so) Clear Lake, California and no trace of DDD found in the water, what made the case at Clear Lake so special?
 - a) Note concentrations found in other places at Clear Lake. In hindsight, are these effects worth exterminating [Chaoborus astictipus](#)? Explain the pros and cons.
- 7) In the hotly debated issue of chemical residues on the food consumed, where can these chemicals be found in a public? How do the different concentration of certain food happen?
 - a) Why does this make "safe" concentrations a meaningless number?
 - b) Knowing the effects of chemical application, how does this represent the human relationship with nature?
- 8) Carson's book show that evidence of widespread pollution and negative health effects due to pesticides are available, saying "[e]ven the chemical industry recognizes the frequent misuse of insecticides and the need for education of farmers." (180) So why does improper widespread herbicide use continue even today?
 - a) I tried to call some farmers and chemical companies one time, and most of them hung up on me very abruptly when I asked what kind of chemical they used.
 - i) What does that tell you about their knowledge on their chemicals.
 - ii) What does that tell you about public knowledge on these chemicals.
 - b) The last chapter you may or may not have read was called "Beyond the Dreams of the Borgias." What is the Borgias? Why do you think Carson named the chapter over this?
- 9) You have only read 3 chapters, two of which were not even the whole chapter. So I'll ask some easy questions.
 - a) What is the thesis of the book?
 - b) What is the theme of the book?
- 10) Carson questions (p. 182) at what level of exposure are pesticides safe. What is her answer? Do you agree with her logic?

Week 18

MAY 15: CLASS CANCELED--work on final essays (but if you're looking for something else to do, these articles/photo essays are fascinating)

History of Disaster/Post-Apocalypa

[Valinsky, "The BBC Flew a Drone over Auschwitz"](#); Cartwrite, "Inca Food & Agriculture" (in readings or [here](#)); Wade, "That Arctic Seed Vault Isn't Just for Doomsday" (in readings or [here](#)); Morton, "Attack on Kiska" (in readings or [here](#)); Aubourg, "How Shells from WWI May Be Contaminating Food in Northern France Today" (in readings or [here](#)); Gerd Ludwig photos, "[The Exclusion Zone](#)" and "[Chernobyl: Update at 25](#)"; [What was the worst environmental disaster of all time?](#)

Optional reading: [Jørgensen, "Endling, the power of the last in an extinction prone world"](#)

MAY 16: Sutter, "The World With Us: The State of American Environmental History" (read the introduction of the essay closely and then skim the rest)

Guest speaker, [Adam Sundberg](#)--Think about what questions you have about the field, about European/world environmental history, and where environmental history might be going in the future.

Reading Questions:

1. Is the primary goal of environmental history still to account for "the role and place of nature in human life" (94)?
2. What does Sutter mean that "all environments are hybrid" (96)?
3. What does Sutter think is environmental history's biggest problem (as emphasized by all the new fields it has spawned)?
4. What is "agency," and can nature have it (97-98)?
5. What is the environmental-management state?
6. Read about Jim Giesen's *Boll Weevil Blues* (108). How is it exemplary of agroenvironmental histories? What does it do so well?
7. How do cities well show the "hybridity" of environmental history?
8. Why is Thomas Andrews *Killing for Coal* the book that has come closest to Sutter's "inchoate vision for a critical rethinking of nature and agency in environmental history" (118)?
9. What do you make of Sutter's "two brief provocations" toward the end of the essay?
 - a. "First, while American environmental historians have unsettled the narrative of environmental enlightenment, they continue to believe in it, and that is a good thing" (118)
 - b. "Second, American environmental historians must look up from their tight focus on complexity and hybridity and return some of their attention to arguably the most radical historical point that environmental history allows them to make: over a relatively short period of time humans have spread across the planet and transformed it to serve their ends to an extent that is difficult to fathom."

MAY 18: Wrapping up

Graphic: [xkcd, "A Timeline of Earth's Average Temperature"](#)

In-class video: [“When did environmentalism become so political?”](#) (Are they right? Or was it because of the fall of the USSR?)

Questions for discussion

1. What is...
 - a. Environmental history
 - b. Nature
2. Why is environmental history needed?

FINAL EXAM QUESTIONS (we’ll say it’s a 4-7 page paper; choose one below and answer in a thorough manner according to the syllabus--be sure to note which prompt you’re answering)

1. Define environmental history, especially by giving examples from course readings.
 - a. What are the limits of environmental history? How has the field changed over time?
 - b. You will also need to define what “environment” is to answer this question.
2. What’s the most important theme in environmental history? Why? (For themes, think disease, warfare, capitalism, energy etc.)
 - a. Be sure to use a variety of readings to help make your point.
3. How does environmental history help mediate between humans, our culture, and the natural world?
 - a. How can environmental history help better our species?
4. What components of environmental history *should* be taught in traditional history surveys? Why?
 - a. Really, this question is asking you to argue for what aspects of environmental history are important for the average student to know.

Key dates to remember:

Jan. 10: Spring classes begin
Jan. 16: No class: (MLK Day/Day of Service)
Feb. 13: No class (extended weekend)
Feb. 22-24: No class (Science Fair)
Mar. 20-24 No class (Spring Break)
Apr. 17: No class (extended weekend)
Apr. 20: No class (Crystal Bridges)
May 22: Academic Dead Day
May 23-25: Spring Semester Exams
May 26: Grades due (9am)
May 27: Graduation