Biodiversity Protection Law

Vermont Law & Graduate School
Summer 2025
M-W 16-18 June & M-TH 23-26
830 AM to noon

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WELCOME! Conservation biologists warn that we are causing a great "extinction crisis," with millions of species about to disappear due to habitat destruction, climate change, and other anthropogenic factors. "Biodiversity Law" is an emerging field, examining how we are (and should be) constructing legal regimes to conserve Earth's endangered forms of life across multiple levels (ecosystem, landscape, species, population, and genetic diversity). We will examine U.S. laws (especially the Endangered Species Act, our most powerful biodiversity law) and international law (including treaty law and foreign domestic legislation). We will look at how law is (or is not) succeeding in preserving life on Earth, and pay particular attention to most effective legal practices to conserve biodiversity. We will take voyages to foreign (for law school, at least) intellectual lands – e.g. environmental ethics, conservation biology. And, frankly, I really want us to have some fun in this class.

Our investigations will be framed by two overarching questions:

- What is the legal framework for preserving life on Earth?

- What should be the components of the legal framework for preserving life on Earth?

COURSE OUTCOMES: As a result of taking this course, you should be able to:

1. Explain what biodiversity is and isn't;
2. Understand the ethical frameworks for preserving life on Earth;
3. Explain basic tenets of conservation biology essential for legal approaches to conserving biodiversity
4. Explain the history of domestic legal attempts to conserve elements of the biosphere for future generations;
5. Name the primary tenets of the Endangered Species Act, and evaluate how the ESA is and is not effective in preserving biodiversity;
6. Analyze the current threats to and alternatives to the Endangered Species Act
7. Understand the main tenets of the National Forest Management Act, Marine Mammal Protection Act, and Magnuson Stevens Act, and apply those tenets to problems of managing biodiversity;
8. Explain the legal strengths and weaknesses of an "endangered species" approach to managing biodiversity;
9. Explain the primary tenets of international agreements to conserve biodiversity, including the
    a. Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES);
    b. Convention on Biological Diversity, including the Biosafety Protocol and Nagoya Protocol, and the Aichi Biodiversity Targets;
    c. UN Convention on the Law of the Sea (UNCLOS);
    d. Ramsar Convention on Wetlands;
    e. International Tropical Timber Agreement;
    f. The UN Framework Convention on Climate Change;
10. For a given biological entity (e.g. a particular population, species, ecosystem), understand how domestic and international law do or do not work together to provide a safety net for that biological unit;
11. Evaluate the role of market mechanisms for preserving biodiversity;
12. Cite pertinent, foreign domestic legal protections for biodiversity protections, and critique these as models for how other nations, including the U.S., might manage our biodiversity resources;
13. Analyze the role of climate change in affecting biodiversity, and understand how legal regimes are or are not accounting for biodiversity's future in a changing climate;
14. Explain the human rights implications of biodiversity loss;
15. Understand and evaluate novel, cutting edge paradigms for biodiversity conservation, including conservation translocations, rights for nature, rewilding, and deextinction;

16. Offer legal prescriptions for how we *should* construct a legal regime to preserve life on Earth.

TEACHING PHILOSOPHY: I'm teaching this course because a) our human and nonhuman communities with whom we share our planet need a corps of rigorous, dedicated, skilled lawyers; b) all students should graduate from any educational experience further on the pathway to being ethical, involved participants in the civic and political lives of their chosen communities. This means in this course we will consider:

- *Facts*: What *are* the potential impacts of biodiversity diminution? What *does* the law say that citizens, businesses, and courts must, or may do to diminish or protect biodiversity?
- *Values*: What do various stakeholders in biodiversity legal debates care about? What do you care about?
- *Norms*: How do facts and values combine to determine what we *should* do about threats to biodiversity as citizens, businesses, communities, nations? How *should* laws and policies reflect these norms?

Any classroom should be a community of engaged teachers and learners. At the heart of the course will be the 3.5 hours/day you spend in the class with the other participants. When you are in class, you have responsibilities as a teacher: your classmates and I will learn from you. Please come to class each day, on time, prepared, and ready to participate fully.

You can expect me to plan the best course I can. That means I will select intriguing, pertinent material for you to read, contemplate, and write about, and that I will do my best to keep our time in class challenging, productive, interesting, and even fun. I will provide prompt, engaged feedback to your work, and I will attempt to assess your work fairly. If you feel that I have assessed you unfairly, or if you want to discuss any other aspect of the course or subject matter, you should always come and speak with me. You should expect a good listener. You should expect someone who wants your feedback, and who will respect what you have to say. Above all, you should expect to be in the classroom with someone who loves to teach because I love to learn from you; I will always try to treat you accordingly.

COURSE TEXT: None. Syllabus (via links) and Canvas course website will have all the readings. I will update this regularly, so always check the latest version of the syllabus when preparing for class.

REQUIREMENTS/GRADING:

➔ **Attendance and Participation**: You should be in class promptly each morning (I know it's extra early this year), prepared to engage with the other course participants. We only have seven course sessions! If you miss a day, I'll deduct a grade and possibly more(e.g. A to A- or B+). Exceptions for

- Illness or injury;
- Immediate family health or bereavement responsibilities;
- Some other really excellent reason
- Massive storms (Two out of three times I have at VLGS, the first day of class was cancelled due to catastrophic weather. I'm hoping against a third strike.)

In other words, if you're absent with good cause, drop me a line so I don't unfairly penalize you. Among the reasons that do *not* count (compiled from students in my classes) as good cause:

- Friend/relative weddings or other celebrations;
- Job interviews;
- Gnarly hangovers;
- "I overslept!"

Note: Sometimes these pose very good reasons for missing class and paying the small penalty; in law school, as in life, you can't be in two places at once, and you might deem it a prudent choice to miss class for some excellent opportunity.

Grading: We'll have a take home final worth 80% of your grade. It will be available when class ends at noon on Thursday 26 June and will be due at 1159 PM on Sunday 29 June. Class participation and preparation are worth 20% of your grade.

AI: AI has many uses in the legal profession. However, in this class, the use of generative AI to complete any assignment is a VLGS Honor Code violation. As an attorney (or legal-adjacent professional), you will need to be able to able to analyze and synthesize information and to communicate results effectively. Therefore, the use of generative AI (including but not limited to ChatGPT, GPT-4 based tools (whether standalone or incorporated into a third-party platform), or any other product that uses AI to generate blocks of text or answers to questions) is prohibited. To put it another way, you have to learn to think and write, and this class is a good exercise in those skills.

Finally, this is a seminar where we will all teach and learn from each other: please no /Instagram/text/facebook/TikTok/etc. while in class.

SCHEDULE: Note I have not yet put in individual assignments, which you'll have many days during the semester. I will update the schedule when I have a better idea who is actually going to take the class. Feel free to contact me if you have preferences for any day's assignment, and be on the lookout for updates.

Monday 16 June: Introduction to biodiversity conservation and the biodiversity crisis, and Intro to the Endangered Species Act NOTE THIS IS A HEAVY READING DAY (and yes, I expect you to do all of it…). Things will get easier. Maybe.

- **Part ONE:** Please visit https://www.iucnredlist.org and **be prepared to discuss:**
  - What is the International Union for the Conservation of Nature, and what is their mission?
  - **Pick your favorite** species (or pick any species that interests you) and enter it in the search box.
    - Why did you pick this species?
    - What information does the IUCN provide for your species?
    - Where does it live?
    - How is it doing? That is to say, is the species healthy? Is it in jeopardy? What IUCN Red List Category does it fall under?
    - Please read the "Assessment information in detail" and "Threats" sections for your species:
      - What threats does the species face?
      - Who determined this?
      - What else did you learn about the species?
    - What is anyone doing to conserve the species?

- **Part TWO:** Please see the Intergovernmental Summary for Policy Makers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. Posted on Canvas, or find (Summary for policymakers – Global Assessment (plain text) at https://www.ipbes.net/system/tdf/spm_global_unedited_advance.pdf?file=1&type=node&id=35245
  - Who and what is the IPBES? (And could you come up with a worse name? I didn't think so.)
  - Of course, I don't expect you to read this entire document! But I do want you to get an idea of what this document is about and what the authors are trying to achieve.
  - Starting on p.3, the authors list their "Key Messages." Please pick **one** of these bullet points (and there are *many* in the subsequent pages) to read about. Find the section in the rest of the report (yes,

I know it's confusing) and be able to report to the class what this "Key Message" is about. What is the message? Why does it matter for protection of biodiversity?

Part THREE: DOWNLOAD a copy of the Endangered Species Act (you can find a copy under "ESA Text" on CANVAS), and please have it in class for the next few sessions.

READ Tennessee Valley Authority v. Hill, 437 U.S. 153 (1978) (Also on Canvas under "Cases")

➔ This is the most important Biodiversity Law case in any court ever. And so you should understand what happened, and why.

Optional, but delightful: See Prof. Plater's TED talk at https://lira.bc.edu/work/ns/cb58267d-96b3-4acd-8206-f78889f0396f. (His description: "Deemed "The Most Extreme Environmental Case Ever," Zygmunt Plater and a team of students in Tennessee used the endangered little "snail darter" fish to help several hundred family farmers and fishermen block a pork-barrel dam that was going to destroy far more—in economic and ecological term—than it ever could produce. A double takeaway: "Good Ecology equals Good Economics" and "The governance of society is too important to leave it up to those who govern us."

NOT Optional: BE PREPARED TO ANSWER:

- What happened here?
- Why is this case such a big deal? Why does the prof think this is the most important biodiversity law case ever?
- What had the District Court and Court of Appeals held, and why?
- What is the TVA arguing?
- What is § 7a of the ESA, and how does the Court understand it?
- Despite what the Court holds, do the justices think this whole thing is kind of weird? Then why do they rule as they do?
- What does the Dissent argue?
- Do you think the Court reached the right decision? To put it another way: How would you have ruled in this case?

Tuesday 17 June: Insects and the biodiversity crisis, and Environmental Ethics

- **Part ONE:** Please **read**: Brooke Jarvis, "The Insect Apocalypse is Here." *NY Times* 27 Nov. 2018. [I am also posting this on Canvas]

- Please be able to summarize the main ideas of this article.
  - Who cares about insects?
  - What might be best legal steps to take to preserve insect diversity?
  - Does any of this matter to you? If you care, why do you care?

Part TWO: Environmental Ethics Boot Camp

ASSIGNMENT: Your job is to do a bit of research and prepare an informal presentation of **2-3 minutes and no more** where you explain what this idea is. (You'll only be assigned one!) This isn't onerous or formal: Pretend you have to explain this concept to someone at a cocktail party or do your niece who is in seventh grade. Applied examples can be helpful. Internet research at the Wikipedia-level is just fine. These are not formal presentations, but If you'd like to send me a SINGLE slide to use in class, please do so before 730 AM on Tuesday to **takacsassignments@gmail.com**.

➔ **Environmental Ethic ():** What *is* an Environmental Ethic?

➔ **Moral Standing ():** What does it mean to have moral standing? What are some candidates for moral standing? Once something has moral standing, what are our ethical obligations towards it? Can biodiversity (as a whole, or any part of it) have moral standing?

➔ **Egocentrism and Anthropocentrism ():** People who fall under these labels have what moral beliefs? To whom would they grant moral standing? Would they ever believe we have moral obligations *to* the natural world?

➔ **Biocentrism ()**: People who are biocentrists have what beliefs? To whom or what would they grant moral standing? Would biocentrists believe we have moral obligations *regarding* the natural world? Would biocentrists ever believe we have moral obligations *to* the natural world?

➔ **Ecocentrism ()**: People who are ecocentrists have what beliefs? To whom would they grant moral standing? How do they differ from biocentrists?

➔ **Speciesism ():** What is this? How is it similar/different to some of the other "isms" (e.g. racism, sexism, homophobia)? Who or what would have moral standing if we are anti-speciesist?

➔ **Utilitarianism/Consequentialism ():** What does this ethical theory hold? How does a utilitarian consequentialist know when an action is ethically acceptable? Would people with this ethical worldview value biodiversity? Why?

➔ **Anti-Consequentialism and Deontological Ethics ()**: How do anticonsequentialists or those who hold deontological ethics decide what is right and wrong? If we were interested in preserving biodiversity, how would we know when an action is right or wrong?

➔ **Instrumental Value vs. Inherent or Intrinsic Value ()** Why does something with instrumental value possess value? How does this help us understand natural "resources?" What would biodiversity's "instrumental value" mean? What would biodiversity's "inherent/intrinsic value" mean? Where does value inhere, in the thing or in you who is contemplating the thing?

➔ **Conservation and Preservation ():** Explain the historical roots of these terms. Which is based in anthropocentric ethics? Which may be biocentric or ecocentrist? What is the difference for biodiversity?

➔ **Animal Rights ():** What do animal rights activists believe? To whom would they grant moral standing? What is their moral position on *biodiversity* protection? What is a "right," anyway?

➔ **Aldo Leopold's Land Ethic ()** from A Sand County Almanac**:** What is an "environmental ethic," anyway? What is Leopold's central thesis and what does it have to do with biodiversity preservation? You can find this online, and I'll post a snippet on our Canvas website.

➔ **John Rawls and the Veil of Ignorance ():** What is the "veil of ignorance?" If the method applied, how would it change how we act in the world? What would it have to do with the non-human environment that surrounds us?

➔ **Christopher Stone, "Should Trees Have Legal Standing?" ()** 45 S. Cal. L. Rev. 450 (1972) On Canvas. (You can easily find it on Westlaw, as well.) You need not read the whole thing. Read enough to get the main thesis. How is he making a leap from environmental *ethics* to environmental *law*?

➔ **Earth Law/Earth Ethics ():** What is this? How would someone who subscribes to Earth Ethics or takes an Earth Law approach think about Biodiversity Law

Wednesday 18 June: The Current Threat to the ESA, and Conservation Biology

Part ONE: READ: *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995)

➔ ***We will start with a brief quiz on Sweet Home***

Tough case! But interesting! *And whereas* *TVA v. Hill* is the most important biodiversity law case anywhere ever, *Babbitt v. Sweet Home* is the most important case to understand if you are concerned about the future of the Endangered Species Act in the U.S.

1. Be prepared to explain what the debate is about. Why isn't it clear what "take" and "harm" mean? Why does the answer matter so much to biodiversity? Be able to explain this a) to a reasonably intelligent 10-year old, and b) to a sophisticated lawyer.
2. This is a classic statutory interpretation case. The Court outlines three different tools (which the Decision conveniently label "First," "Second," "Third" -- Thank you Supremes!) it's using to understand Congressional intent and how the Secretary has interpreted that intent when defining a rule. Follow what they do here.
3. The Dissent and Concurrence are interesting. What's Justice Scalia's and Justice O'Connor's main points.

Part TWO: Conservation Biology Boot Camp

ASSIGNMENT: Your job is to do a bit of research and prepare an informal presentation of **2-3 minutes and no more** where you explain what this ideas is. (You'll only be assigned one!) This isn't onerous or formal: Pretend you have to explain this concept to someone at a cocktail party or do your niece who is in seventh grade. Applied examples can be helpful. Internet research at the Wikipedia-level is just fine.[1] These are not formal presentations, but If you'd like to send me a SINGLE slide to use in class, please do so before 730 AM on Wednesday to **takacsassignments@gmail.com**.

What is a "species," anyway? (): (Absolutely optional, but if this topic interests you, read: https://www.newyorker.com/science/elements/the-bizarre-bird-thats-breaking-the-tree-of-life

Evolution by Natural Selection (): This may be the most difficult and most important assignment of all – but can you explain how evolution by natural selection works in 4 or 5 easy to follow steps?

Genetic diversity, Genetic drift, and genetic bottlenecks (): What do these things mean? The cheetah might be your go-to example of a genetic bottleneck.

[1] http://www.theonion.com/articles/wikipedia-celebrates-750-years-of-american-indepence,2007/

Keystone species (): What is this? What happens when one disappears from an ecosystem? (e.g. you may look up Robert T. Paine and starfish…)

Habitat and Carrying Capacity (): Define and explain the relationship.

Trophic levels and trophic pyramids and trophic cascades (): What does "trophic" mean? Why can an ecosystem support much greater populations of plants (e.g. grass, phytoplankton) than it can of predators (e.g. mountain lions, otters)?

Why are there so many species in the tropics (in general) and in tropical forests (in particular)? ()

Island Biogeography (): Provide a one-sentence overview of this field. How does it attempt to explain species richness in a given location? What are the factors that influence extinctions in islands? Are islands always literally islands?

Minimum Viable Population Size and Minimum Dynamic Area (): These are important terms when considering endangered species and critical habitat. Why?

Ecosystem and Ecosystem Services (): What is an "ecosystem?" Explain the concept of ecosystem services and provide a couple of examples.

Biological Corridors/Landscape Linkages (): What are these and why are they so important in attempts to preserve biodiversity (especially now)?

Adaptive Management of biodiversity (): What is this? What are the benefits of this approach for biodiversity? Can you see any drawbacks?

Biodiversity hotspots and Endemism () What is a "hotspot?" What role do they and should they play in biodiversity conservation? Explain the role of endemic species in biodiversity conservation.

Vulnerability to Extinction () What makes some species more vulnerable to extinction than others?

In situ vs. ex situ conservation strategies (): What do these mean, and how do they work together (or, *do* they work together)?

"Charismatic Megavertebrates/Megafauna" (): What is a "charismatic megavertebrate," (or charismatic megafauna)? What role do they play in biodiversity biology? What role do they play in biodiversity conservation?

The "Anthropocene" (): What is this? What does it suggest about humans' relationships with the rest of the nonhuman world?

Rewilding () What is this and how does it relate to biodiversity law?

Monday 23 June: FLMPA, NFMA, Magnussen Stevens, the Wilderness Act, NFMA, Migratory Birds Treaty Act…And, Intro to International Biodiversity Law

ASSIGNMENT PART ONE: Today we are moving beyond the ESA and consider other U.S. legal approaches to preserving biodiversity. As you consider your case, please think about how the laws you're considering complement the ESA:

- What do these laws do that the ESA doesn't?
- What does the ESA do that these laws don't?
- In what situations would this be a worthy approach to biodiversity conservation?

Please READ one of the following (also posted on Canvas under "Cases") (and note that some of my questions may require a bit of light research):

1. () **Federal Land Policy and Management Act (FLPMA) and Wilderness Act of 1964: Norton v. Southern Utah Wilderness Alliance**, 542 U.S. 55 (2004)
    a. Understand the fundamentals of this case. What is the Bureau of Land Management and what is their mandate?
    b. What are the biodiversity enhancing provisions of FLPMA and the Wilderness Act?
    c. What is the problem with ORVs?
2. () **Magnuson-Stevens Fishery Conservation and Management Act (FCMA): Blue Water Fisherman's Association v. Mineta**, 122 F. Supp.2d 150 (D.C. Dist. Ct., 2000)
    a. Understand the fundamentals of this case.
    b. What are the biodiversity-related goals of Magnuson-Stevens FCMA?
    c. What are "optimal yield" and "maximum sustainable yield?"
    d. What are National Standards One, Two, Eight, and Nine and do they matter to biodiversity?
3. () **Migratory Bird Treaty Act (MBTA) of 1918: The Fund for Animals v. Kempthorne**, 538 F.3d 124, (2nd Cir., 2008)
    a. Understand the fundamentals of the case. What is the MBTA, why is it important for biodiversity?
    b. We have an Endangered Species Act. Why do we need this law, too?

c. Hearken back to our discussion of Biodiversity Ethics: In what ways are two different ethical worldviews clashing here?
d. The Trump Administration changed a key rule around the MBTA. What did it do? What is the relationship between this and Sweet Home? What has the Biden Administration done in response?

4. **() Center for Biological Diversity v. FPL Group, Inc.** California Court of Appeal, First District. 83 Cal Rptr. 3d 588 (2008)
   a. What is the Public Trust Doctrine?
   b. Who or what won the battle here? Who or what (potentially) won the war?
5. **() Sierra Club v. Marita**, 46 F.3d 606 (7th Cir., 1995).
   a. This is a longish case. We're more interested in the National Forest Management Act (NFMA) claims, less on the NEPA claims (so you can skip the NEPA sections if you'd like). We're also not terribly interested in standing claims here.
   b. We *are* interested in continuing our theme of how to consider biodiversity conservation *science* when implementing biodiversity conservation *law*. The case contrasts different understandings of what it means (and what the law requires) to manage land for biological *diversity*. The case presents alternative legal means of addressing biodiversity beyond a one-track focus on endangered species. Thus:
      i. What does NMFA require with respect to managing biodiversity?
      ii. How did the USFS implement those regulations?
      iii. What is the Sierra Club's problem with the Forest Service's interpretation of diversity management?
      iv. How do the two entities differ in how they understand biological "diversity?"
      v. Understand why one might say that the Sierra Club was aiming for a big, big hit here. What role does conservation biology play here for the USFS? For the Sierra Club? For the court? What role *should* it play in biodiversity law?
      vi. What does the court hold, and why?

PART TW0: Convention on Biological Diversity

A copy of the Convention on Biological Diversity is available under "Class Materials" on our course website. You need not read it, but we will be using it in class. You may also download a copy.

PLEASE READ:

➔ At https://www.cbd.int/nbsap/, please see the page for National Biodiversity Strategies and Action Plans. Follow the link for "Find an NBSAP or National Report" on the left (https://www.cbd.int/nbsap/search/). (You'll see a pdf link when you go to the country page.) Choose any nation. Please peruse a) the country's main "Country Profile" webpage and b) the Country's National Biodiversity Strategy Action Plan and come prepared to discuss:

- What biodiversity does this country shelter?
- Is the nation's biodiversity healthy?
- What threats face the nation's biodiversity?
- (Briefly) What laws currently exist to protect the nation's biodiversity?
- (Briefly) What are the major elements of the nation's National Biodiversity Plan? What initiatives is it pursuing?
- Does the nation give a framework (with benchmarks/goals/indicators/enforcement/dates) for how it is going to achieve its biodiversity goals? What are some of those goals?
    - How is the nation planning How is the nation planning to fund its biodiversity preservation goals?
    - What strikes you as most interesting here?

In the Plan, do you see a tension between "biological diversity" and "biological resources?" Between "preservation" and "sustainable use?"

Tuesday 24 June: Diverse International Legal Approaches

ASSIGNMENT PART ONE: Please be prepared to do the following (and this will mean a bit of text/web/westlaw research)**:**

- Explain the basic tenets of the instrument/organization:
    - What is its foremost goal(s)? What problem(s) does it aim to solve? Who or what does it aim to protect or preserve?
    - By what mechanism(s) does it work?
    - Who is bound by it?
    - How is it enforced?
- We have examined various legal approaches to biodiversity conservation this semester. For your instrument, please name
    - One approach that you consider to represent "best practices" in Biodiversity Law. Why is this a "best practice?"
    - One approach that you see as a shortcoming. Why is this a shortcoming?

- Please find one concrete success/case study claimed by those who support or implement the law:
    - We'll be covering a lot of information, so please find something concrete and vivid for us to visualize (with pictures, even!)"
    - Be able to paint the scene for us: Where are we? What is/was endangered? What is its status now? Why does it matter?
    - What success do they claim?
    - How has this success been achieved?
    - Do you consider it a success? Why?

Please come to class understanding one of the following:

1. () **Ramsar Convention on Wetlands of International Importance, www.ramsar.org**
    a. For the mission of the Convention, see https://www.ramsar.org/about/the-convention-on-wetlands-and-its-mission
    b. For the official text and the actual list of Ramsar sites, note the sites in your home country or state.
    c. How do they figure out if a wetland is of "international importance?"
2. () **United Nations Convention on the Law of the Sea, http://www.un.org/depts/los/convention_agreements/texts/unclos/UNCLOS-TOC.htm**
    a. This is a long document! Please pay attention to the most important biodiversity law-related provisions: Articles 56, 61-67, 87, 116-119
    b. How does UNCLOS balance the tension between ownership, exploitation, and conservation of marine biodiversity?
    c. And for recent (good) news, see: https://www.unep.org/news-and-stories/story/marine-biodiversity-gets-lifeline-high-seas-treaty
3. () **The International Tropical Timber Agreement (http://www.itto.int/itta/#2006) and International Tropical Timber Organization (http://www.itto.int/about_itto/)**
    a. Make sure you understand who these people are: What is the nature of the organization and the agreement?
4. () **The Cartagena Protocol on Biosafety to the Convention on Biological Diversity, (http://bch.cbd.int/protocol/)**
    a. You can find this here or https://bch.cbd.int/protocol/.
    b. Look at the text of the Protocol:
        i. What is this about? Pay special attention to Articles 1, 2, and 18.
    c. Why is this part of the Convention on Biological Diversity?

5. (,) **The Nagoya Protocol on Access and Benefit-sharing to the Convention on Biological Diversity**, http://www.cbd.int/abs/
    a. As above: This seems to be about who gets to *use* biodiversity. What does that have to do with preservation of biodiversity?
    b. Pay special attention to Articles 1, 4, 5, 6, 7, 9, and 11
    c. Please also read "ANDES-Potato Park-CIP agreement", grain.org, http://www.grain.org/article/entries/2165-andes-potato-park-cip-agreement
        i. Evaluate this legal approach to biodiversity conservation
6. **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) ()**
    - Please read "What is CITES?" and "How CITES works?" At https://www.cites.org/eng/disc/what.php
    - In the text of the Convention itself, please understand Articles II, VI, and Viii.
    - Understand the differences between trade of species in the different Appendices, as described in Articles III, IV, and V.

ASSIGNMENT PART TWO: Please peruse: IPBES-IPCC Sponsored Workshop on Biodiversity and Climate Change Scientific Outcome (Course webpage, but you can download at the bottom of this page)

- Please read every word of the Report. Just kidding!
- Please read enough of the Introduction to get a feel for what this report is about. Who are these people and what are their main messages?
- Chapter 3 covers the impacts of our efforts to mitigate GHGs and climate change. Choose one such impact and explain: Does this action to mitigate GHGs help or harm biodiversity? If the latter, what can we do differently?
- Chapters 4 and (especially) 5 discuss biodiversity and adaptation to climate change. What is the most interesting way that robust biodiversity can help communities adapt to climate change?

Wednesday 25 June: Yet More Approaches

Assignment Part ONE:

Please read: John Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and

sustainable environment. Human Rights Council, Thirty-fourth session, 19 Jan. 2017 [See Canvas]

   i. This report focuses on the relationship between human rights and biodiversity. What are those connections?
   ii. How would human rights law help to conserve biodiversity?
   iii. How would biodiversity law help to respect, protect, and fulfill human rights?
2. Please choose one country from the list of countries that responded to the Special Rapporteur's request for information. In what specific ways is that country taking specific measures to link biodiversity to human rights?

Assignment Part TWO: Please peruse IUCN, Guidelines for Reintroductions and Other Conservation Translocations, https://portals.iucn.org/library/efiles/documents/2013-009.pdf (also on Canvas)

- **a.** Section 2 describes the difference between "reintroduction," "assisted colonization" and "ecological replacement." Make sure you understand the differences therein.
- **b.** The rest of the document (you need not read every word) describes how to assess feasibility and risks of biodiversity conservation translocations. *Please come to class prepared to give a concrete example of the conditions for a specific species we (or you, through your research) have studied that would merit a specific conservation translocation*. Why that species? Why those conditions?

Thursday 26 June: Aggressive Conservation Interventions and Wrapup:

1. Please read Emma Marris, The Debate That American Conservationists Should Be Having, [Link here but may be paywalled [See Canvas]:
   - **a.** What's the debate? Why aren't we having it? If you were a biodiversity conservationist (which maybe you are), would you be pushing the community to advocate for this approach?

2. Please peruse the website of https://colossal.com:
   - **a.** Make sure you understand the organization's overall goals and how they are pursuing those goals.
   - **b.** Please see their plans for the Woolly Mammoth: https://colossal.com/mammoth/

c. In what circumstances would you support bringing back a species from the dead? Does the woolly mammoth meet those circumstances? What about the Dodo?

3. Let's finish up the course on an upbeat note. Please go to your favorite news sources (do any of you look at grist.org?) and find one upbeat biodiversity law story. Where are things going well for biodiversity? What are the conditions that allow this positive news? What methods/techniques/approaches are being used to help this element of biodiversity survive and thrive in your story?