Environmental Law

“I fought the law and the law won.”
Bobby Fuller, 1965

Why study environmental law?
- Laws represent codified values
- The development of conservation ecology and environmental law are closely linked
- Environmental laws are one of the most effective ways to conserve biodiversity
- Jobs

Why do many ecologists avoid the law?
- It’s messy
- It’s complicated
- It’s time-consuming
- It’s not our job
- There may be an appearance of bias

Some major US environmental laws
- Wilderness Act (1964)
- National Environmental Policy Act (NEPA; 1969)
- Clean Air Act (1970)
- Clean Water Act (1972)
- Marine Protection, Research, and Sanctuaries Act (1972)
- Endangered Species Act (ESA; 1973)
- National Forest Management Act (1974)
- Comprehensive Environmental Response, Conservation, and Liability Act (CERCLA; Superfund; 1980)

Some thoughts on the last slide...
- Notice the dates of the laws’ passages
- Who were some of the presidents?
- What do you think the chances of passing such legislation are today?

Purpose of NEPA
- “The purposes of this Act are:
  - To declare a national policy which will encourage productive and enjoyable harmony between man and his environment;
  - to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man;
  - to enrich the understanding of the ecological systems and natural resources important to the Nation;
  - and to establish a Council on Environmental Quality.”

Sec. 2 [42 USC § 4321]
NEPA

- Central goal:
  - Ensure that federal actions do not significantly affect the environment
- Primary mechanism:
  - Construct an Environmental Impact Statement (EIS) before the proposed action, which evaluates the impact and allows for public input
  - Established environmental quality as a national priority

What's in an EIS?

- Any adverse environmental effects that cannot be avoided
- Alternate actions (including no action)
- Relationship between local, short-term uses of the environment and maintenance and enhancement of long-term productivity
- Irreversible or irreplaceable commitments of resources that would be involved

NEPA can be complicated

**NEPA Process Overview**

100’s/year

1. Proposed Action
2. NEPA Process
3. Potential Action

NEPA can be complicated

100’s/year

1. Proposed Action
2. NEPA Process
3. Potential Action

Problems with NEPA

- A single federal agency prepares an EIS despite the need for collaboration and communication with all stakeholders
- Although the public makes comments, the agencies don’t always change their planned actions, which results in lawsuits

Purposes of ESA

- "...to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved."
- "...to provide a program for the conservation of such endangered species and threatened species."

Endangered Species Act (1988)
Central goal:
- Prevent extinction of species

Primary mechanism:
- Once a species is ‘listed’, it and its ‘critical habitat’ are protected
- Established preservation of biodiversity as a national priority
- Non-humans have intrinsic value

Who’s in charge?
- US Fish and Wildlife Service of the Department of Interior
- National Marine Fisheries Service of the Department of Commerce
- However, there is also much inter-agency and federal-state collaboration
- The public also can participate

Who’s protected?
- Plants and animals can be listed (but, no bacteria, Archaea, and viruses)
- U.S. species listed as of 2020: 1,661 spp.
  - Plants: 943 spp.
  - Vertebrates: 441 spp.
- What’s missing?
  - The "boxscore"
- What’s a species?
  - Includes subspecies and any distinct population segment that interbreeds when mature

How’s a species get listed?
- Candidate Conservation Process (USFWS) examines several factors to be considered for listing:
  - “the present or threatened destruction, modification, or curtailment of the species’ habitat or range;
  - overutilization for commercial, recreational, scientific, or educational purposes;
  - disease or predation;
  - the inadequacy of existing regulatory mechanisms; and,
  - other natural or manmade factors affecting the species’ continued existence.”

Who’s protected in SC?
- Species listed as of 2020: 35 spp.:
  - Plants: 22 spp.
  - Animals: 13 spp.
- How do we compare?

How does a species get listed and resources for recovery?
- US Fish and Wildlife Service ranking system (2016)

Some key components

- **Species focus**
- **Action needs to occur**
- **A recovery plan** is to be developed for each species
  - 1,168 of 1,661 spp. (= 70%)
- **Critical habitat** is to be designated for each species
  - 851 of 1,661 spp. (= 51%)

Some changes over the years

- Initially, effects on economics were not to be considered at all
- Later changed to allow economics to play a role in designating critical habitat
- Also a ‘God Squad’ (= Endangered Species Committee) was created to revoke species protection if economics were severely compromised (result of snail darter vs. Tellico Dam)

A major change (1)

- **Habitat Conservation Plan** (HCP; 1982)
- An attempt to smooth the waters with private land owners
  - ‘shoot, shovel, and shut up’
- Private land owners reach an agreement with the government to conserve and manage the listed species on their land
  - **Safe Harbor Agreements**
  - **“No Surprises”** policy (1994)

A major change (2)

- “Incidental take” permits are given if a HCP is prepared and approved
- Contentious issue, but private landowners must be included across a landscape if all species are to be protected

Restani & Marzluff (2002); uses a similar, older ranking system

https://www.fws.gov/endangered/esa-library/index.html#expenditure

Red-cockaded woodpecker at Lewis Ocean Bay HP
ESA “success”
- 90 species have been delisted
  - 59 due to recovery
  - 11 due to extinction
  - 7 due to taxonomic changes
  - 17 due to errors at the time of listing and new information
- 41 endangered species have been downgraded to threatened status

Some problems of ESA
- Species vs. ecosystem protection
- Listing of declining vs. almost extinct species
- Expensive
- Conflicts between listed species?

And some solutions

Six Biological Reasons Why the Endangered Species Act Doesn’t Work—And What to Do About It
1991
DANIEL J. ROHILF
National Resources Law Center
Lewis and Clark Law School
901 SW Fifth Avenue
Portland, OR 97201, USA

- Scientists should become knowledgeable about the law
- Scientists should conduct directed research
- Scientists should take advantage of opportunities to participate

One important international law
- Convention on International Trade in Endangered Species (1973)
- 183 member countries

CITES overview
- Regulates commercial trading of globally endangered species or their products
- Three appendices/levels of protection
  - I: Endangered species that are vulnerable to trade (commercial trade prohibited); Ex. Panthera tigris
  - II: Species that could be threatened or species that cannot be distinguished from threatened ones (trade requires a permit from exporting country); Ex. Myrmecophaga tridactyla
  - III: Species protected in at least one country and needs a permit from exporting country for trade, but not all countries vote on including these species like in I and II; Ex. Odobenus rosmarus

CITES oddities
- Instead of complete protection and prohibition from trading, sometimes it’s argued that a little trading is ok
  - Why?
    - Removes black market
    - Price drops
    - Profit goes to species conservation
  - Nevertheless, issues remain…

Legal ivory trade in a corrupt world and its impact on African elephant populations
Elizabeth L. Bennett 2014
Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, NY 10460, USA, email: elizabeth@wcs.org
Become an environmental lawyer

- Joe Lovett
  - Appalachian Center for the Economy and the Environment

- Jim Hecker
  - Trial Lawyers for Public Justice

Sierra Club 2009 Awardees