



Introduction to the Endangered Species Act

Tracy Hester

Environmental Law
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ESA Engines

- Listing of species as endangered or threatened and designation of critical habitat – Section 4
- Consultation and “no jeopardy” requirement for federal action – Section 7
- Prohibition on “taking” – Section 9

“Species” – “any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature”

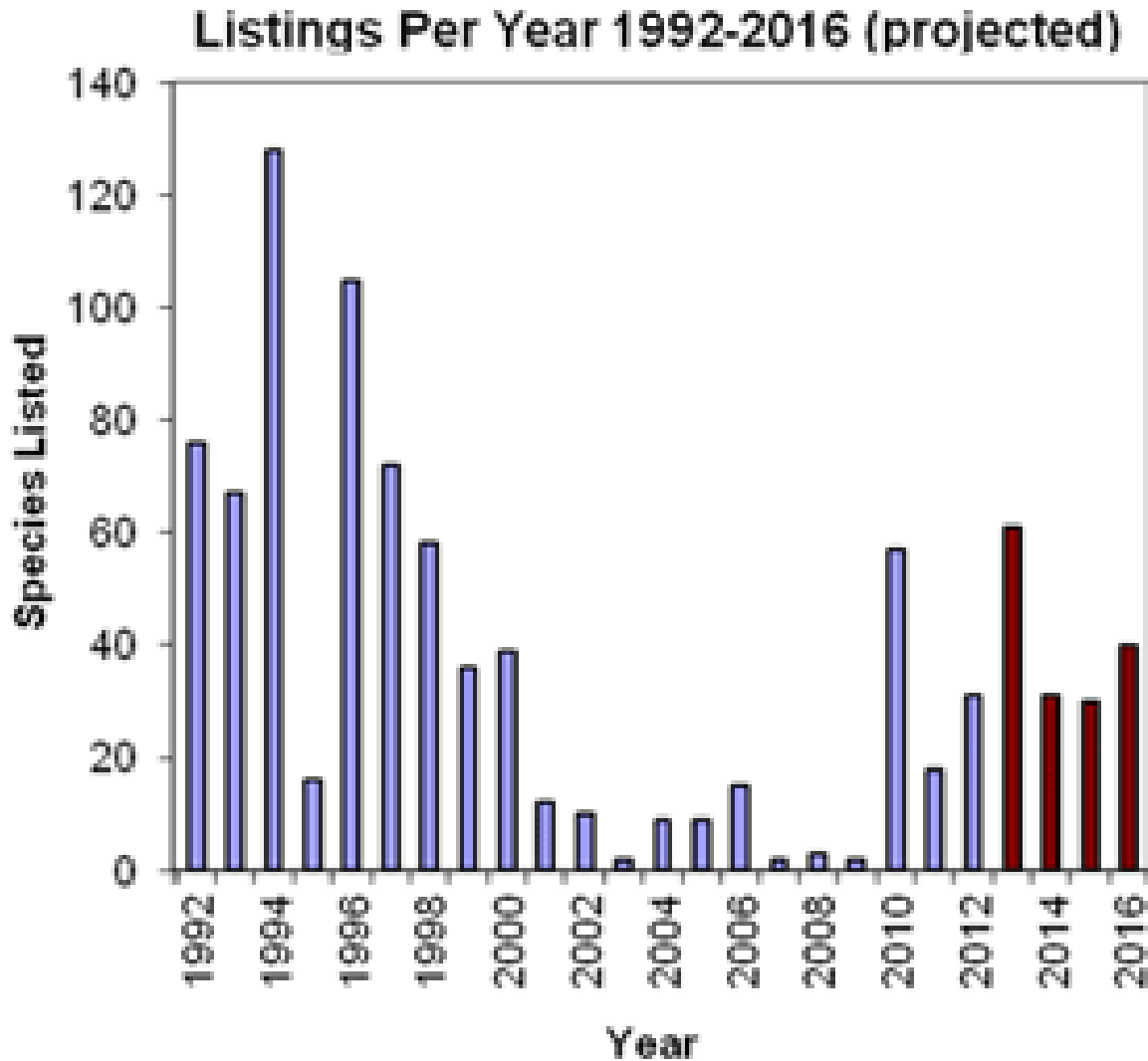
What is a species?



The Tale of the Pygmy Sloth

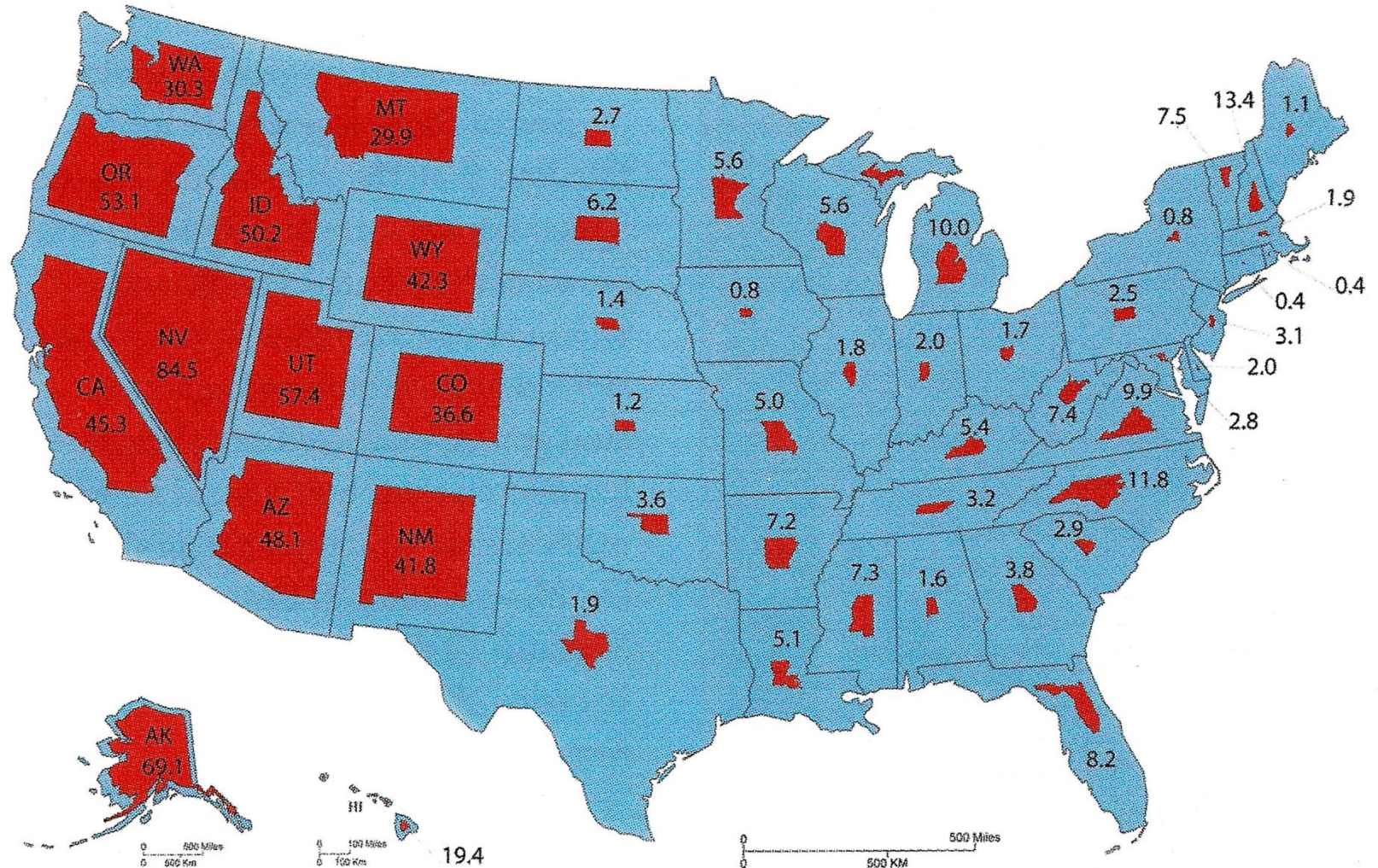


WildEarth Guardians settlement

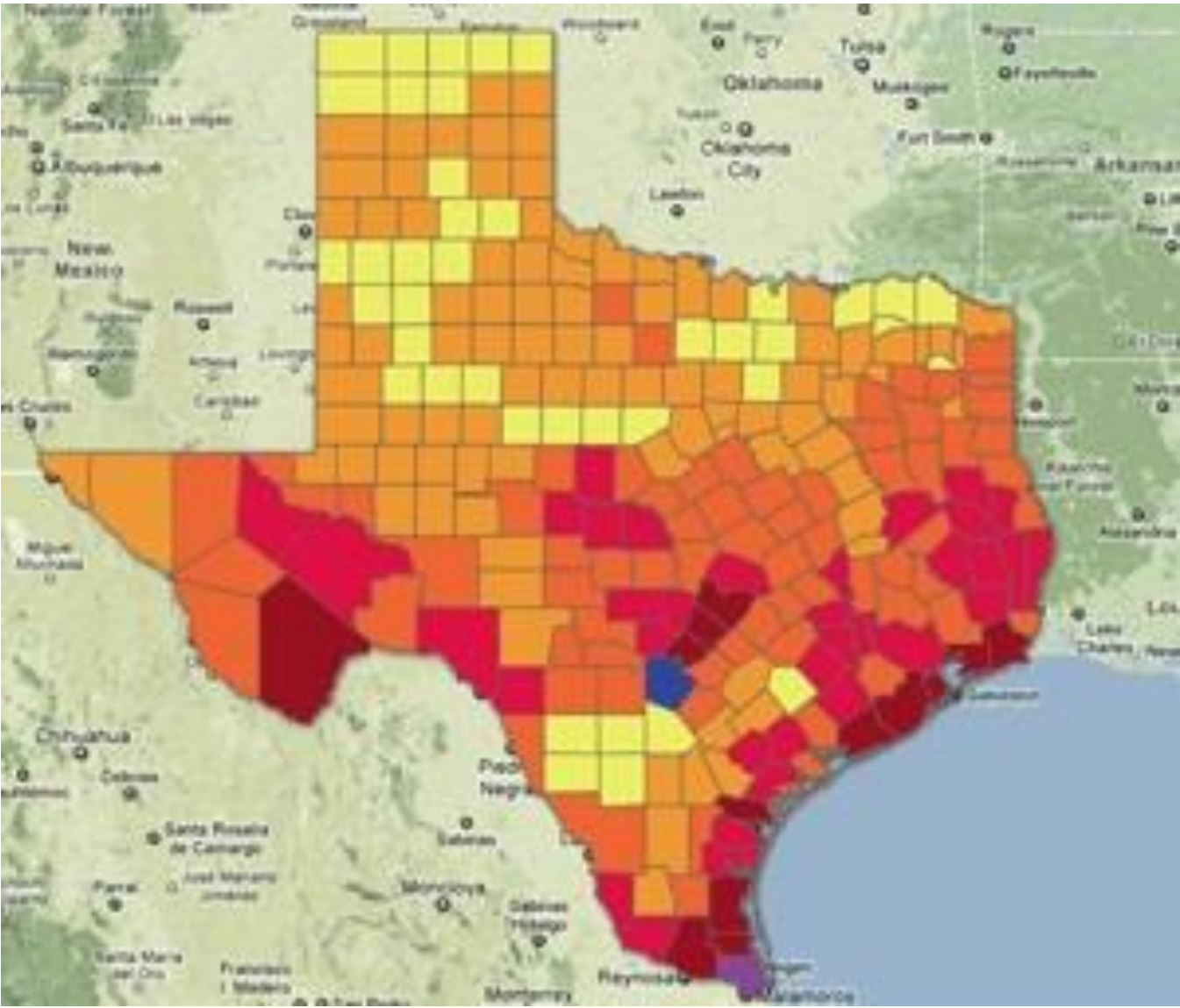


WHO OWNS THE WEST?

Federal Land as a Percentage of Total State Land Area



Data source: U.S. General Services Administration, *Federal Real Property Profile 2004*, excludes trust properties.



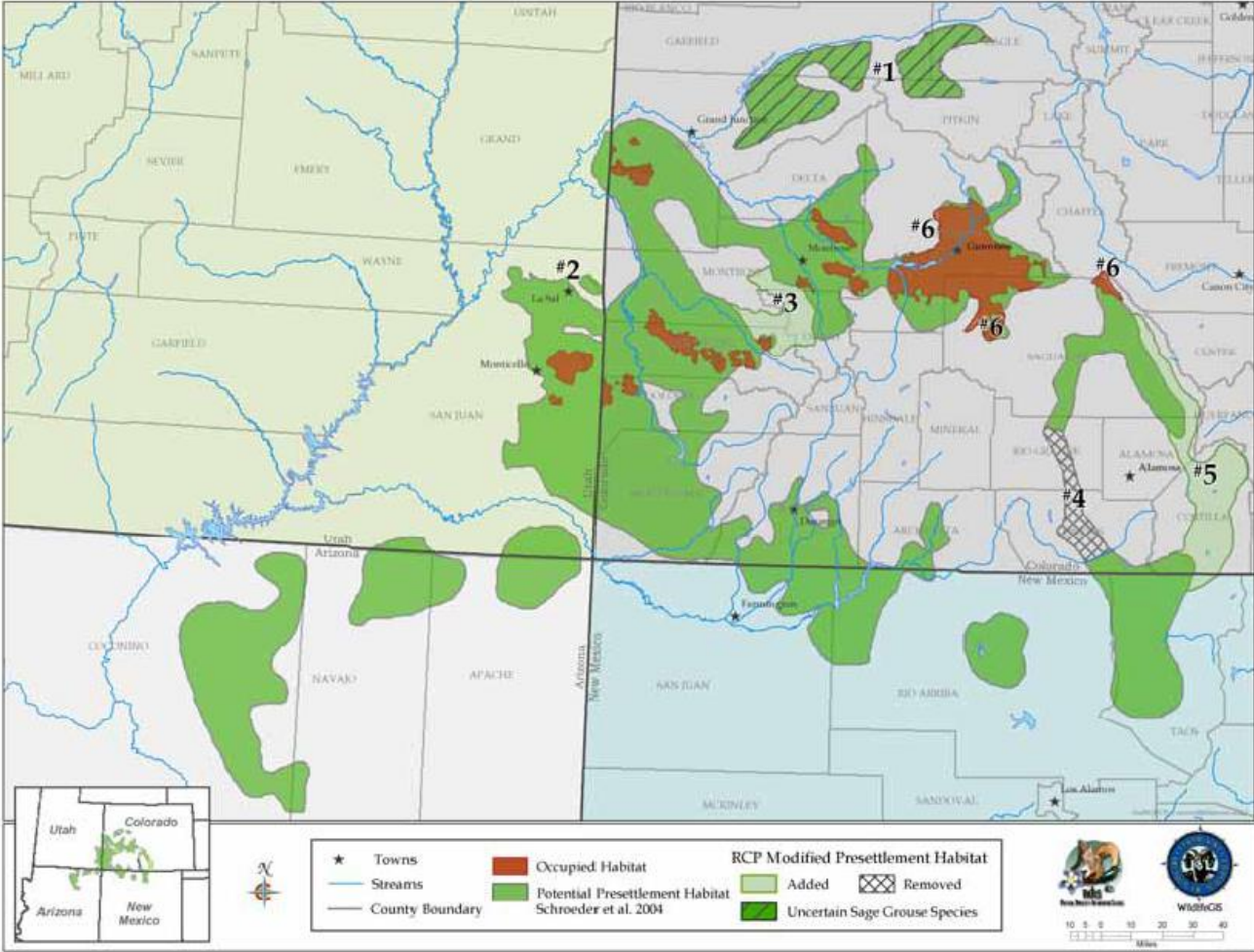
Candidate Conservation Agreements



Sage Grouse



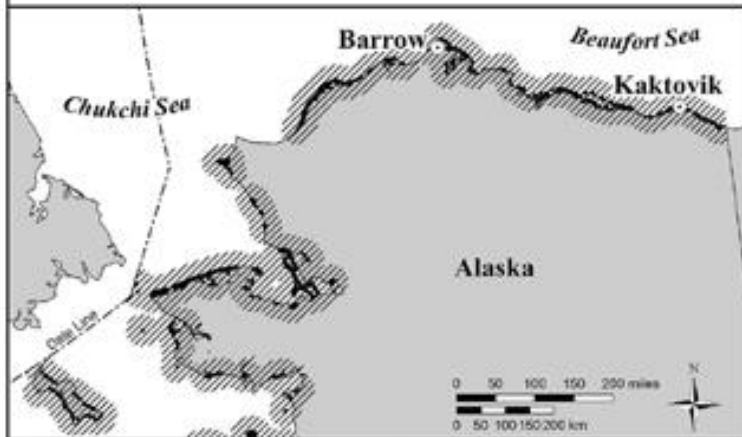
1202-100 20 Displaying Gunnison sage-grouse male showing thick patch of philoplumes
 © Lance Beeny - All Rights Reserved




ESA and Climate Change



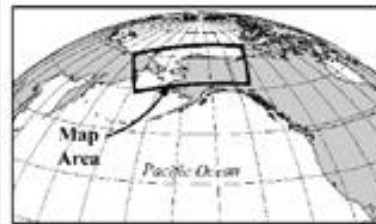
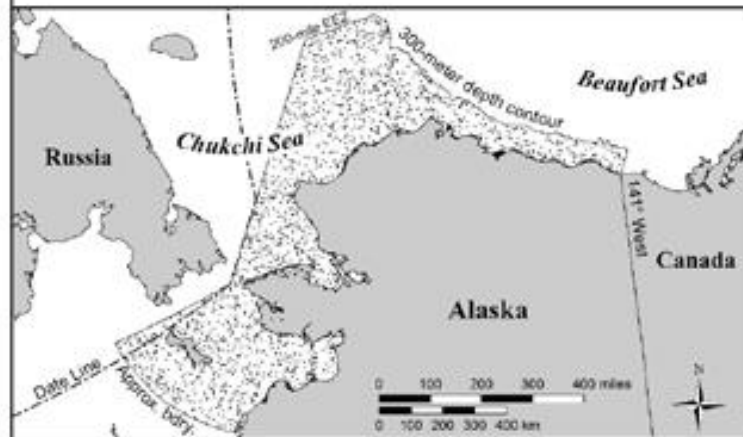
**Unit 3: Barrier Island Critical Habitat
of the Polar Bear (*Ursus maritimus*)**




Legend

 Unit 3 - Barrier Islands

**Unit 1: Sea Ice Critical Habitat
of the Polar Bear (*Ursus maritimus*)**



Legend

 Unit 1 - Sea ice habitat



Winners and Losers

Conservationists are trying different forms of triage to help them decide which species to save and not to save. Each method favors certain priorities, such as an animal's role in preserving a food chain or in maintaining genetic diversity. Serving those priorities ultimately deems species winners or losers; some samples are shown below.

Winners



Function First

Favors species that perform a unique job in nature. Gray wolves control animal populations; Chinese river dolphins serve no meaningful role.

Losers



Evolution First

Seeks to preserve genetic diversity. California condors are rare relics of the Pleistocene era; Gunnison sage grouse are related to other grouse species.



Hotspots

Prefers ecosystems rich in species. Sequoia forests house many unique plants and animals; mangrove forests are less diverse.



Species Triage?

- Competing species for limited natural resources and food supplies
- Limited scientific and financial assets available to save all species
- Ethics based arguments to limit extraordinary efforts to save species

Lazarus Project



Resurrection of extinct species



- Gastric brooding frog extinct in the wild in 1980s
- Genetically unique – only known species with this type of brooding
- Successfully cloned in 2013