



# Threaten and Endangered Species

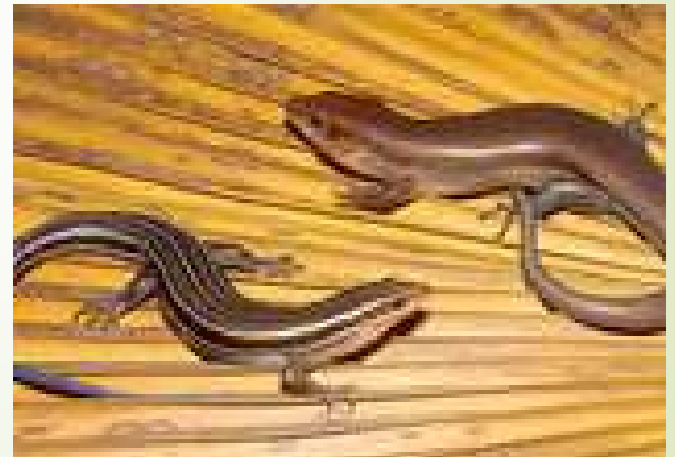
## History - Federal

- ▶ Federal Threaten and Endanger Species Act
  - ▶ Enacted in 1973, several similar version prior to this version
  - ▶ Protect plant and animal species from extinction
  - ▶ Carried out by US Fish and Wildlife Service and National Marine Fisheries Service
  - ▶ Driven by the near extinction of the Bison and the whooping crane and the complete loss of the passenger pigeon
  - ▶ Listing/delisting is solely based on scientific data
  - ▶ Require a recover plan to be put in place to hopefully eventually delist in the future



# History – Kansas

- ▶ Kansas Nongame and Endangered Species Conservation Act
  - ▶ Enacted in 1975
  - ▶ Protect plant and animal species within the state boundaries
  - ▶ Carried out by KDWPT
  - ▶ Keep common Kansas species common
  - ▶ Not all Kansas T & E species are federally listed
  - ▶ Also requires a state recovery plan (or use the federal plan if listed federally)





# Currently

- State
  - 51 species listed
    - 3 Mammals
    - 16 Fishes
    - 4 Birds
    - 16 Invertebrates
    - 8 Amphibians
    - 4 Reptiles
  - Some are both state and federal and some are just state







# Process



- ▶ Research
  - ▶ Show significant decline is range
  - ▶ Show significant threats to populations
    - ▶ Usually human caused – oil, gas or wind development, urban sprawl, deforestation, etc
- ▶ Petition for listing
  - ▶ Write up a formal document with all the research to back it and send to USFWS
- ▶ Committee from USFWS and USMFS review data
- ▶ Public hearings and comments are accepted and reviewed
- ▶ Decision is made
  - ▶ List and either Threaten or Endangered
  - ▶ Don't list as either
  - ▶ Rules as warranted but precluded – needs more data and will be brought back to the committee in 12 months



# Problems

- ▶ Historically underfunded
- ▶ Species are not listed until it is almost too late
- ▶ Sub-species listed?
  - ▶ Sage Grouse
  - ▶ Prebbles meadow jumping mouse
- ▶ Good job preventing Extinction but not necessarily Recovery
  - ▶ Recovery only seems to happen with the simple fixes
    - ▶ No hunting, stop pesticide/herbicides use, etc

# Success Stories – Bald Eagle

- History
  - Early 1800s estimated 300,000-500,000 birds
  - 1950s only about 800 birds
- Reasons for Decline
  - Habitat loss
  - Shooting and trapping
  - Pesticides – DDT interfered with metabolism of calcium which was needed to make strong eggs, eggs were too thin to support weight of incubating adult
- Recovery
  - Protected under early ESA and Bald and Golden Eagle Protection act
    - No shooting, trapping or killing
  - DDT banned in US in 1972 and in Canada in 1989
  - Estimates in 1992 had approximate 115,000 birds.
    - Kansas had 189 nests last year that we know of
  - Delisted in 2007





# Success Stories – Grey Wolf

- ▶ Also called the Timber Wolf
- ▶ History
  - ▶ Used to range all over North America except in SE US
  - ▶ Declined with increase human populations and agriculture
    - ▶ Hunting and poisoning was the main issue
    - ▶ Over hunting of deer species, elk and caribou
  - ▶ Basically no wolves left in lower US and only a few packs were know of in Canada and Alaska
- ▶ Recovery
  - ▶ Listed on ESA in 1974 as Endangered
  - ▶ Regulations on hunting and poisoning imposed and regulations on hunting of deer, elk and caribou increased the prey abundance
  - ▶ Pack of wolves have been reintroduced to parts of Montana, Idaho and Minnesota
  - ▶ Down listed to Threatened in US and completely delisted in Canada in 2003



# Stories Still in Progress

## - Whooping Crane

- History
  - Estimated 10,000 birds in early 1800s to 15 adults by 1938
  - Reasons for decline
    - Very low reproductive success, severe weather in wintering grounds, reduction in marsh habitat in breeding ground and on migration route
- Recovery
  - Tried captive breeding programs – most of which were unsuccessful
  - Conserve of wetlands and marshes in Canada and along the migration route in the Central US
  - Populations have seen a slow but steady increase
    - Current population is just over 800 birds



# Stories Still in Progress – Black Footed Ferret

## History

- Unknown how many ferrets used to be around
- Harvest for fur, poisoning of prairie dogs, and sylvatic plague (which killed prairie dogs) were the main causes of decline
- Only 18 ferrets were known to be living in the wild

## Recovery

- Listed on ESA in 1967 as endangered
- Those 18 were captured and bred in captivity using artificial insemination to ensure good genetic spread between individuals
- Very successful however issues with prairie dogs is still on going
  - Have to treat prairie dog towns for plague
  - Some states still allow poisoning of prairie dogs for agriculture purposes
- 2013 approximately 1200 ferrets in wild

