



FUTURE DIRECTIONS OF CONSERVATION EFFORTS BY THE WYOMING GAME AND FISH DEPARTMENT IN THE GRASSLANDS OF WYOMING

By Robert Stephens

(The following are outline notes from Mr. Stevens' presentation.)

Wyoming Grasslands

- Estimates are not available, but grasslands are still largely intact (see Table 1 on next page).
- As a result, healthy populations of grasslands species—black-tailed prairie dogs (*Cynomys ludovicianus*), swift fox (*Vulpes velox*), burrowing owls (*Athene cunicularia*), and mountain plovers (*Charadrius montanus*)—are present.

Black-Tailed Prairie Dogs in Wyoming

- Wyoming Game and Fish Department (WGFD) is currently completing an assessment of black-tailed prairie dog colonies in Wyoming.
- Preliminary results indicate that black-tailed prairie dogs are still present throughout most of their historic distribution in Wyoming.
 - Prior to research (Plumb 2004), estimates of the number of mountain plovers have ranged from 500 to 1,500 individuals, based largely on conjecture.
 - Plumb calculated a minimum population estimate of 3,400 birds.
 - Wyoming's mountain plover population appears to contribute substantially to a revised continental population estimate of 11,000 to 14,000 birds.

Burrowing Owls in Wyoming

- While burrowing owl distributions have contracted in the eastern portion of the range, Wyoming populations appear to be stable.
- During the summer of 2003, 73 active burrows were counted (Lantz 2004) in the Thunder Basin National Grassland (TBNG) region.

Swift Fox in Wyoming (WY)

- Similar to burrowing owls, swift fox distributions have also contracted in the eastern portion of the range, yet in Wyoming the population is present throughout the historic range and the population appears to be stable.
- Swift fox populations in Wyoming have been used as a source for reintroductions in South Dakota and Canada.

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If Grassland Species Are Doing Well In WY, Why Are Conservation Efforts Important?

- Large portions of the prairies outside of Wyoming have been lost due to agriculture (conversion to croplands) and urbanization.

These losses are associated with the loss in distribution of grassland species.

- Successful conservation of Wyoming’s prairies to date are a factor of 1) our grasslands are not as suitable for conversion to cropland, and 2) low human-population density.
- Population density in Wyoming was only 5.1 people/mi² compared to 79.6 people/mi² for the rest of the United States in 2000 (<http://quickfacts.census.gov/qfd/states/56000.html>).

**Table 1--
Mixed-grass
prairie
decline**

State	Historical Acreage	Present Acreage	% Decline
Nebraska	19,026,700	4,694,900	75.3
South Dakota	3,953,600	1,186,100	70.0
North Dakota	35,088,200	11,119,500	68.3

Population Projections for Wyoming

- This will not always be the case. Wyoming will be the 11th fastest growing state by percentage of population (44% or ~ 214,000 people) between 1995 – 2025. Pressures on grassland resources will only be increasing in the future.
- For example, within the “grassland counties,” signs of population growth are most evident in Campbell County, where the population has increased by 160% since 1970, largely because of energy development.
- Most recently, the boom in coalbed methane (CBM) development in Campbell County is contributing to this population growth, which is rapidly altering grassland landscapes there.

Future Directions of WGFD in Wyoming’s Grasslands

- Creation of Grassland Ecologist position.
 - Contract position funded by State Wildlife Grants.
 - There is a desire to convert the position to permanent, due to the increasing emphasis being placed on the management of grassland ecosystems.
- Develop a “Conservation Plan for the Grasslands of Wyoming.”
 - Monitor grassland species and maintain a database of distribution of nongame wildlife.
 - When future petitions occur to list a species under the Endangered Species Act (ESA), we *can’t* counter claims that a species is declining without information from private lands. Example: the Swift fox,
 - Identify areas where private landowners and WGFD have similar interests. In those instances, we can provide coordination and planning to assist you in your conservation efforts through such means as facilitating incentives, obtaining funds for management efforts, and providing expertise.
 - In areas where there is potential for conflict, attempt to resolve conflict, if possible.

“It’s easier to conserve than restore. It’s less costly, too. Private landowners are the key to successful conservation.”

Look at Wyoming’s grasslands relative to others. It’s easier to conserve than restore. It’s less costly, too. Private landowners are the key to successful conservation. We are looking for opportunities to assist and work with landowners.

Potential Conservation Efforts

Restore and maintain a mosaic of vegetation structure throughout the grasslands that provides habitat for a variety of native wildlife.

Potential Sources of Funding for Nongame Management Efforts

- State Landowner Incentive Program
- High Plains Partnership Landowner Incentive Program
- Private Stewardship Grants Program
- Farm Bill
- State Wildlife Grants



Thunder Basin landscape scene. Photo: J. Hauller 2005