

Dwarf Shrew - *Sorex nanus*

Abundance: Rare

Status: NSS3 (Bb)

NatureServe: G4 S4

Population Status: distribution is restricted but extirpation is not imminent; limited ability to increase species distribution

Limiting Factor: Habitat (and Ecology): limiting factors are severe; distribution is restricted to western Wyoming and the Medicine Bow Mountains

Comment:

Introduction

The dwarf shrew is distributed locally from Montana and South Dakota south to Arizona and New Mexico. It probably occurs throughout most of Wyoming except the Bighorn Mountains, the basins of northeastern Wyoming, and the southeastern grasslands. The dwarf shrew is considered rare in Wyoming, and probably occurs in relatively small, isolated populations.

Habitat

The dwarf shrew occupies a variety of habitats, from alpine tundra through subalpine forests and rock-slides, and, at lower elevations, from montane forests and foothills to arid shortgrass prairie. It appears to be relatively tolerant of arid situations and often occurs at greater distances from permanent water than other small shrews. It often inhabits rocky areas such as talus slopes, especially in alpine and subalpine habitats.

Problems

- h Although suitable habitat in Wyoming is widely distributed, it is naturally fragmented and very limited. Geographical isolation of existing populations may leave them vulnerable to demographic and genetic stochasticity.
- h Natural history of the species make surveys difficult and costly to implement.
- h No ongoing efforts to delineate important habitats in Wyoming.
- h Population densities and trends are not well known.
- h Species is difficult to survey (e.g., capture, detect, identify, etc.).

Conservation Actions

- h Conduct inventories for species in all suitable habitats in the state.
- h Delineate important habitats and work cooperatively with land management agencies to maintain these within the designated areas
- h Design vegetation treatments, fire management plans, and grazing regimes in habitat that mimic and restore natural landscape patterns and disturbance processes, retain and recruit old growth and woody debris, maintain habitat connectivity, and maintain the native composition of herbaceous plant and shrub communities.
- h Improve survey methodology (e.g., capture, detection, etc.).

Monitoring/Research

No on-going monitoring.

Recent Developments

None.

References

Oakleaf B, Cerovski AO, Luce B. 1996. Nongame bird and mammal plan: a plan for inventories and management of nongame birds and mammals in Wyoming. Wyoming Game and Fish Department, Nongame Program. 183 p.

Wilson DE, Ruff S. 1999. The Smithsonian book of North American mammals. Washington: Smithsonian Inst Pr. 750 p.

Clark TW, Harvey AH, Dorn RD, Genter DL, Groves C, eds. 1989. Rare, sensitive, and threatened species of the Greater Yellowstone Ecosystem. Northern Rockies Conservation Cooperative, Montana Natural Heritage Program, The Nature Conservancy, and Mountain West Environmental Services. 153 p.

Hoffman RD, Owen JG. 1980. *Sorex tenellus* and *Sorex nanus*. Mammalian Species 131:1-4.



SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.