

## Pygmy Rabbit - *Brachylagus idahoensis*

Abundance: Rare

Status: NSS3 (Bb)

NatureServe: G4 S1

Population Status: distribution is restricted but extirpation is not imminent; The IUCN reports that population trends rangewide are unknown.

Limiting Factor: Habitat (and Human Activity): limiting factors are severe; habitat is extremely patchy and susceptible to natural resource extraction, habitat manipulation, and exotic weed infestations.

Comment:

### Introduction

The pygmy rabbit is patchily distributed throughout the Great Basin and some adjacent intermountain areas from east-central Washington, south to east-central California, and east to Utah and Wyoming. In Wyoming, it occurs only in the southwestern portion of the state. The pygmy rabbit was petitioned for listing under the Endangered Species Act in 2003.

### Habitat

The pygmy rabbit inhabits dense, tall stands of big sagebrush, usually along intermittent streams or riparian areas in sagebrush-grasslands. It is uniquely dependent on sagebrush, which comprises up to 99% of its winter diet. Also, since it excavates its own burrows, soft, deep soil is a key habitat feature. The pygmy rabbit is considered a keystone species in the big sagebrush habitat type because it does not flourish in habitats dominated by other vegetation, its burrows are used by invertebrates and other vertebrates, and it offers terrestrial and avian predators a dependable food supply.

### 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 Habitat specialist that occurs in a disjunct pattern within a limited portion of the state.
- 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.).
- h Species is susceptible to population declines as a result of large-scale habitat manipulation projects that destroy or remove mature stands of sagebrush.
- h Species is vulnerable to invasion of exotic weeds (e.g., cheatgrass).

## 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 Designate important habitats, habitat corridors, and identify where habitat conservation and management efforts should focus to protect, enhance, or improve suitable habitat.
- h Improve survey methodology (e.g., capture, detection, etc.).
- h Monitor population densities and trends. If monitoring data show that populations are declining, provide information to the WGFD Commission to allow them to evaluate and consider an appropriate response.
- h Integrate management needs for this species with other sagebrush obligates (e.g., sagegrouse, sage sparrow, etc.) to the best degree possible; however, some results indicate that this species has very specific and different requirements than other sagebrush obligates.

## Monitoring/Research

PAPO is implementing annual monitoring based on occupancy monitoring through an RFP. No other statewide efforts are occurring.

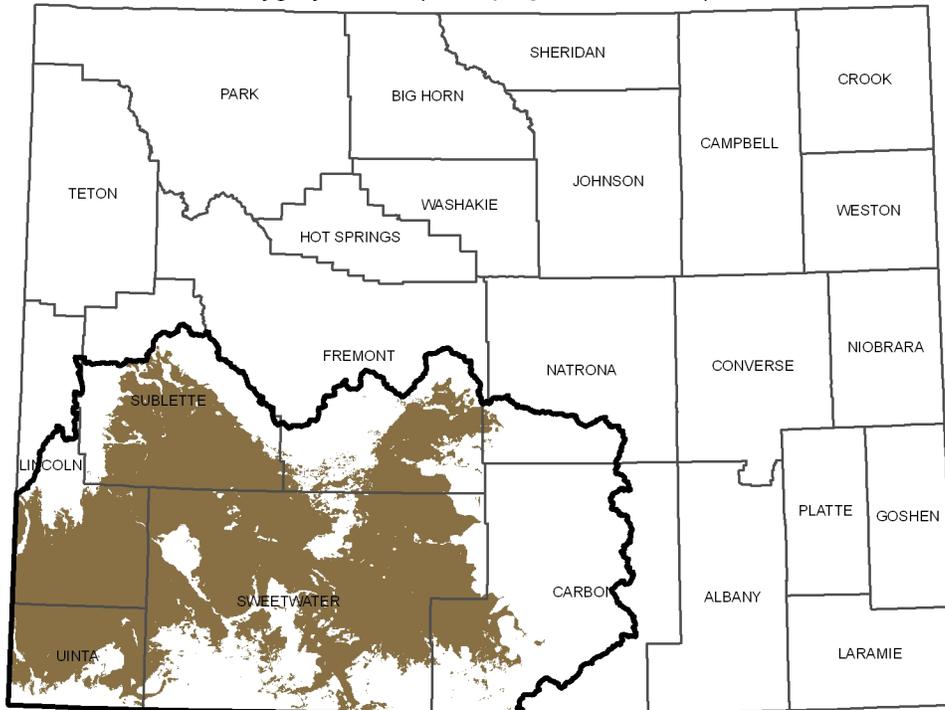
## Recent Developments

UW Zoology and Physiology Department is completing a MS thesis partially funded by SWG. Results due Fall 2010. As of May 2010, no listing decision has been made and a 12-month finding is still pending for this species.

## References

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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.