Pygmy Rabbit (Brachylagus idahoensis)

Species Status Statement.

Distribution

Pygmy rabbit is a small burrowing rabbit native to the sagebrush habitats of the Great Basin, Wyoming Plateau, and Columbia River Basin (Green and Flinders 1980). In Utah, pygmy rabbit is known from Rich County, the West Desert from Box Elder County south to around Cedar City, and the mountain valleys of Central Utah.

Table 1. Utah counties currently occupied by this species.

| Pygmy Rabbit | |
|--------------|------------|
| BEAVER | PIUTE |
| BOX ELDER | RICH |
| CACHE | SEVIER |
| GARFIELD | TOOELE |
| IRON | WASHINGTON |
| JUAB | WAYNE |
| MILLARD | |

Abundance and Trend

While population numbers are unknown, this species' current distribution has not changed from its historical one within the state (UDWR 2015). Monitoring data by UDWR has shown stable distributions, and research projects have evaluated impacts of habitat disturbance and developments. These individual research projects have shown some displacement of individuals and behavioral responses to habitat degradation (Lee, et al. 2009). These responses suggest that while the overall distribution has been relatively stable, it is likely that local abundances are down.

Statement of Habitat Needs and Threats.

Habitat Needs

Pygmy rabbit requires sagebrush. Its winter diet consists of up to 99% sagebrush; when necessary, individuals will tunnel through snow to access sagebrush forage. The species prefers tall, dense, well established sagebrush with deep soils suitable for burrowing (Green and Flinders 1980). Pygmy rabbit is the only rabbit species in Utah that will dig its own burrow; sometimes individuals will also use old burrows of other burrowing mammals.

Threats to the Species

Threats to pygmy rabbit are mainly agents of habitat loss and degradation. Habitat loss is realized from brush removal treatments, wildfire, and development (Lee et al. 2009). Habitat loss or fragmentation of even 2% has been shown to negatively impact populations (Germaine et al 2017). Changes to climate has also been shown to affect pygmy rabbit distribution (Larrucea and Brussard 2008).

Table 2. Summary of a Utah threat assessment and prioritization completed in 2014. This assessment applies to the species' entire distribution within Utah. For species that also occur elsewhere, this assessment applies only to the portion of their distribution within Utah. The full threat assessment provides more information including lower-ranked threats, crucial data gaps, methods, and definitions (UDWR 2015; Salafsky et al. 2008).

| Pygmy Rabbit | |
|--|--|
| High | |
| Brush Eradication / Vegetation Treatments | |
| Improper Grazing (current) | |
| Inappropriate Fire Frequency and Intensity | |
| Invasive Plant Species – Non-native | |

Rationale for Designation.

Sagebrush habitats across the entire west are reduced and declining. Pygmy rabbit populations rely heavily on extensive, undisturbed sagebrush to survive (Lee et al 2009). In Utah, pygmy rabbit has been designated both a Sensitive Species and a Species of Greatest Conservation Need since 2005 (UDWR 2015). Rangewide, pygmy rabbit was petitioned for listing under the Endangered Species Act in 2008, with a finding of not warranted for listing (USFWS 2008). However, the disjunct Columbia River Basin Distinct Population Segment in central Washington State was listed as endangered in 2003. Potential continued habitat loss and population declines make continued protection prudent and necessary.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to prevent Endangered Species Act listing and lessen related economic impacts. Due to this species' reliance on sagebrush cover, a pygmy rabbit ESA listing could trigger environmental review and potential mitigation and land-use restrictions for a wide variety of activities that alter sagebrush cover and density. Such impacted activities could potentially include management of vegetation, grazing, motorized recreation, and wild horses, as well as linear developments such as pipelines.

Literature Cited.

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