

Preble's Meadow Jumping Mouse - *Zapus hudsonius preblei*

Abundance: Common

Status: NSS4 (Bc)

NatureServe: G5T2 S1

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

Limiting Factor: Human Activity: limiting factor is moderate

Comment: New species designation due to King et al. (2006)

Introduction

The range of subspecies *preblei* has not been well defined, but most occurrences are along the Front Range of Colorado and the southeastern section of Wyoming. Recent inventories indicate that the species is more widespread and abundant in Wyoming than originally believed. It is found primarily in the southeastern quarter of Wyoming (Orabona et al. 2009). King et al. (2006) argued that the *preblei* subspecies is valid and warrants specific status.

Habitat

The Preble's meadow jumping mouse prefers marshy meadows, moist grasslands and riparian shrub communities. Typical habitat consists of well-developed riparian vegetation near undisturbed upland grasslands within proximity to water (Bakeman 1997). The species is often located in proximity to a wide range of water features from large perennial rivers to small ephemeral streams including agricultural ditches (USFWS 2003).

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 Population densities and trends are not well known.
- h Species is susceptible to population declines as a result of large-scale habitat manipulation projects that destroy or remove suitable habitat.
- h Species is difficult to identify; consequently difficult to survey.

Conservation Actions

- h Cooperate with private landowners and land managers to conserve riparian habitats.
- h Delineate important habitats and work cooperatively with land management agencies to maintain these within the designated areas
- h The results of the delisting *Z. h. preblei* should continue to be supplemented with additional data to more clearly define the distribution of this species.
- h Conduct inventories for species in all suitable habitats in the state.
- 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.

Monitoring/Research

No on-going monitoring.

Recent Developments

Survey efforts are under way through an Request For Proposal through the State of Wyoming. Surveys will be completed in 2012. Genetic analysis will be completed by 2013.

King et al. (2006) argued that the *preblei* subspecies is valid and warrants specific status and resolved taxonomy issues.

References

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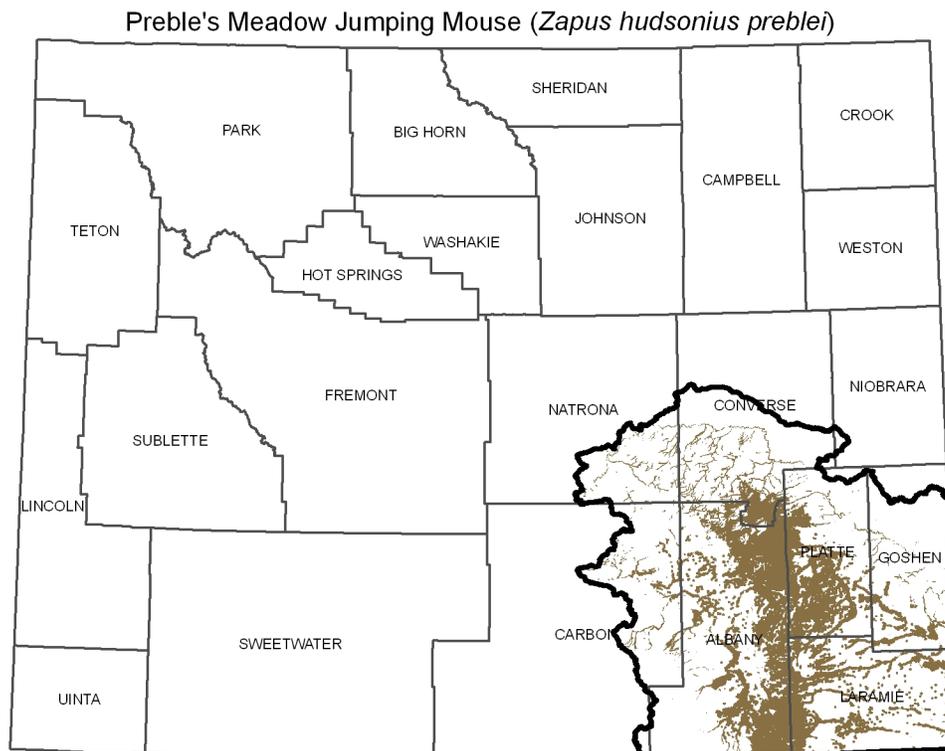
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SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution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