

Preble's Meadow Jumping Mouse



Parks & Open Space

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Species Description



Figure 1: Preble's meadow jumping mouse (*Zapus hudsonius preblei*)

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Description: The Preble's mouse is a relatively small mouse with a very long tail and large hind feet. The tail is lightly furred and typically twice as long as the body. An adult Preble's meadow jumping mouse (PMJM) has a distinct dark, broad stripe on its back that runs from head to tail and is bordered on either side by lighter tan to orange-brown fur.

Lookalikes: The hind feet can be twice as large as those of other mice, such as the deer mouse (*Peromyscus maniculatus*), that are found in the same habitat.

Habitat: The Preble's mouse lives in well-developed riparian habitat along streams and ditches of the plains and foothills below 7,800 feet in elevation. They prefer riparian areas that provide cover and are rich in native plant species.

Background

The Preble's meadow jumping mouse (PMJM) is a threatened subspecies of jumping mice that is protected under the Endangered Species Act. The PMJM has a limited habitat range, which contributes to its vulnerability of extinction. The subspecies' entire geographic distribution is restricted to a narrow band along the Front Range of Colorado and the southern foothills of Wyoming.

Distribution & Range

Based on known occurrence records, Critical Habitat has been federally designated for PMJM in Boulder County along South Boulder Creek. Additionally, PMJM have been recorded along the St. Vrain River as well as along the south branch of the St. Vrain. Occurrence records exist elsewhere in Boulder County as well. City of Boulder and Boulder County Open Space areas are of elevated importance for this species because of their relatively undisturbed miles of continuous habitat.

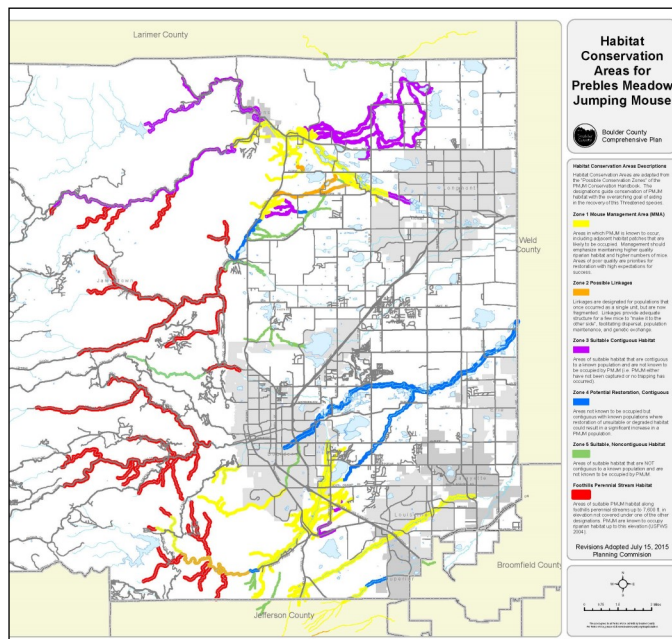




Figure 2: Preble's meadow jumping mouse
(*Zapus hudsonius preblei*)

Threats

Habitat destruction: Habitat loss and degradation is perhaps the greatest threat to the continued existence of PMJM on our landscape. Fragmented riparian habitat isolates PMJM populations, increasing their vulnerability to extinction.

Grazing and agriculture: Overgrazing in riparian areas can lead to trampled banks, increased erosion, and a loss of vegetation richness. Some riparian areas are being lost to crop production, further fragmenting PMJM habitat.

Urban development: Colorado's riparian habitats continue to be threatened by urban and recreational development. Indirect effects of development are habitat alteration and introduction of non-native: plants, animal predators (e.g. domestic cats), and competitors (e.g. Norway rats). Disease and artificially inflated populations of native urban-adapted predators (e.g. racoon, fox, coyote, skunk, great horned owl) can cause problems as well.

Management Considerations

- *Habitat preservation:* Prior to any construction or maintenance in potential PMJM habitat, land owners and managers are responsible for assessing the planned work area to determine if suitable habitat for PMJM is present.
- *Habitat restoration:* Restoration should target stretches of streams that mitigate fragmentation of riparian corridors. Land owners should look for areas where natural stream processes can support and sustain riparian vegetation and that have existing neighboring PMJM populations.
- *Grazing:* Grazing can continue if it is being managed at appropriate levels, which includes timing and intensity to ensure riparian vegetation is left mainly intact.



Figure 3: Preble's meadow jumping mouse