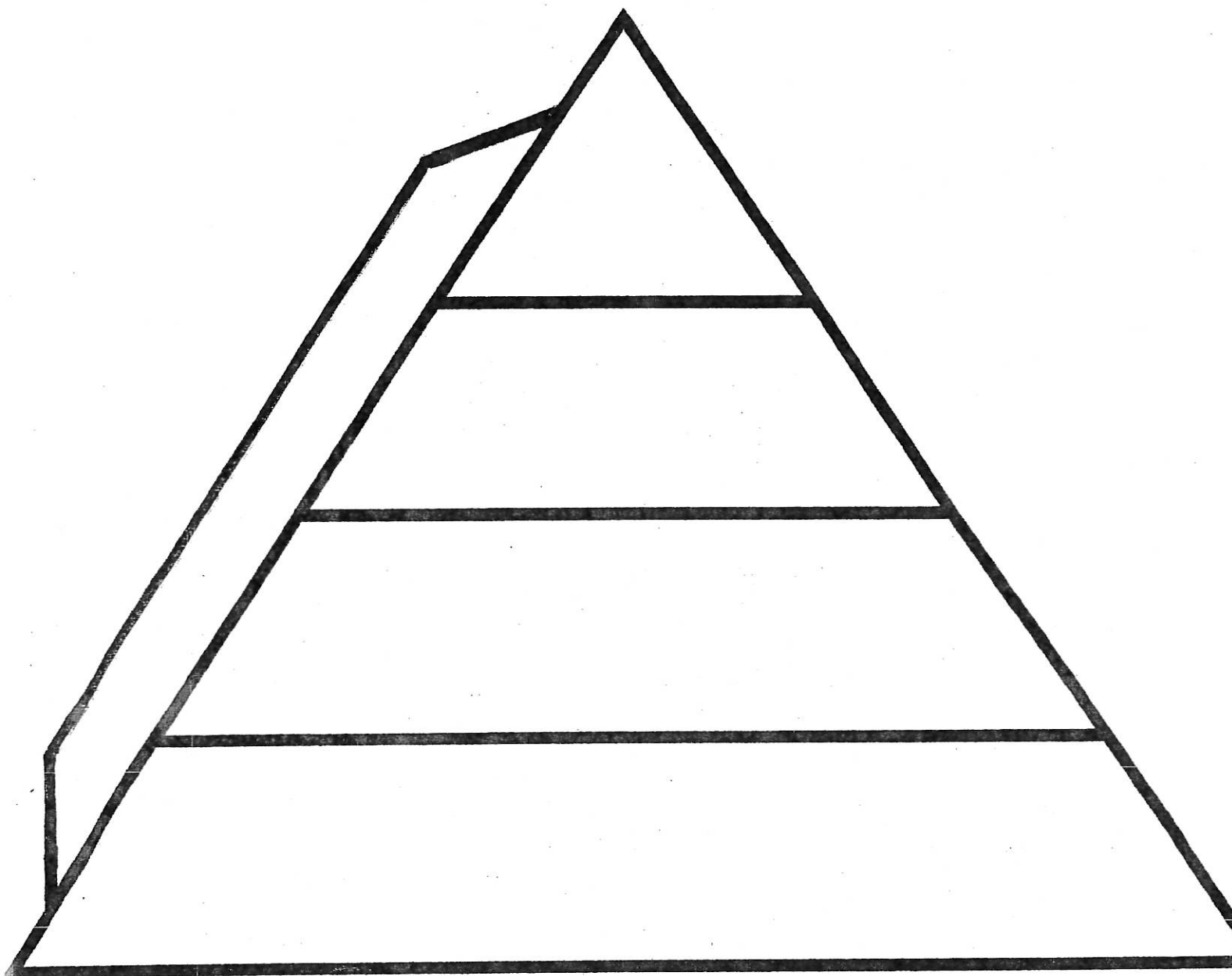


1. What is the Endangered Species Act? What does it do?
2. Describe the Preble's Meadow Jumping Mouse (PMJM). List 6 or more details:
3. Where does the PMJM live? Describe its range and habitat:
4. What is the "Critical Habitat" of the PMJM?
5. What is the current status of the PMJM?
6. What does it mean if the PMJM is threatened? (refer to your species notes)
7. Why is the PMJM threatened?

8. What does the PMJM eat?

9. What eats or preys upon the PMJM?

10. Make a food web for the PMJM. Include producers, 1<sup>st</sup> level consumers, 2<sup>nd</sup> level consumers, and 3<sup>rd</sup> level consumers. Draw arrows to show the flow of energy between organisms.



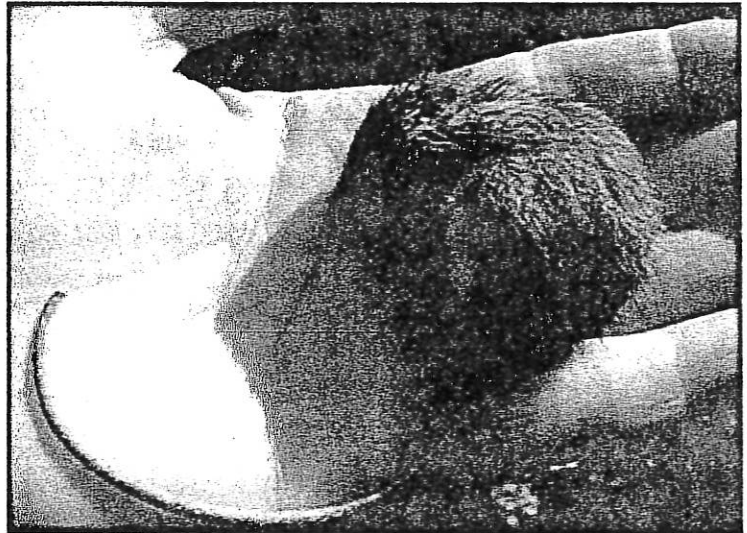
# Endangered Species: Preble's Meadow Jumping Mouse

## What is the Endangered Species Act (ESA)?

The ESA is a government law which protects and helps threatened and endangered plants and animals and the habitats in which they are found. It works to save these plants and animals.

## Preble's meadow jumping mouse

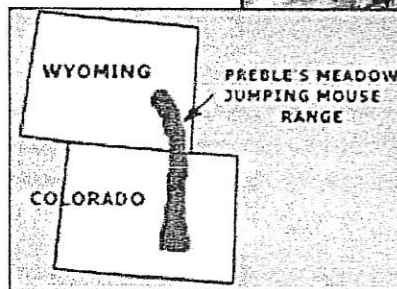
Its scientific name is (*Zapus hudsonius preblei*) and it is a species of jumping mouse, native to Colorado and Wyoming in North America. It is found nowhere else in the world. It is listed as Threatened under the United States Endangered Species Act. The mouse is around nine inches long, and can jump in bounds of four feet when threatened. It usually travels slowly. It swims and climbs grass stems. It has long hind legs and a long, slender, scaly tail that it uses to communicate by making drumming noises. It also communicates using clucks and chirps. The mice are born without hair (naked) and live nearly two years. They hibernate from mid-September to early May, building themselves a soft vegetation nest. The breeding season is from May to October. Meadow jumping mice like to eat mostly plants, insects, spiders, slugs.



## Habitat

Typical habitat for Preble's is comprised of well-developed plains riparian vegetation with adjacent, relatively undisturbed grassland communities and a nearby water source. These riparian areas include a relatively dense combination of grasses, forbs, and shrubs. Preble's are known to regularly range outward into adjacent uplands to feed and hibernate.

This largely nocturnal mouse lives primarily in heavily vegetated, shrub dominated riparian (streamside) habitats and immediately adjacent upland habitats along the foothills of southeastern Wyoming south to Colorado Springs along the eastern edge of the Front Range of Colorado. The Preble's mouse enters hibernation in September or October and doesn't emerge until May. Its diet changes seasonally and consists of insects, seeds, fungus, fruit and more. CRITICAL HABITAT: 411 miles of rivers and streams and 34,935 acres in Boulder, Broomfield, Douglas, El Paso, Jefferson, Larimer and Teller counties designated in 2010.



## Background.

Once the glaciers receded from the front range of Colorado and the foothills of Wyoming and the climate became drier, the Preble mouse was confined to riverside areas where moisture was plentiful. The eastern boundary for the Preble's is likely defined by the dry shortgrass prairie, which may present a barrier to eastward expansion. Preble's is one of twelve subspecies of meadow jumping mice found throughout North America.

The Preble's Meadow Jumping Mouse was found in Colorado in 1899 by Edward A. Preble. Listed in 1995 as a threatened species, the Preble's is long lived for a small mammal, compared to other species of mice and voles that seldom live a full year. Preble's mice captured as adults were still alive two years later. The PMJM has a long list of predators that includes garter snakes, rattlesnakes, bullfrogs, foxes, house cats, long-tailed weasels, hawks, owls and others. The Preble's meadow jumping mouse is believed to have two litters each year with an average size of five young.

The PMJM recently documented distribution includes Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Elbert, Jefferson, Larimer and Weld counties in Colorado; and Albany, Laramie, Platte Goshen, and Converse counties in Wyoming. The Colorado portion of this area had undergone rapid residential, commercial, and industrial designation that has impacted the PMJM habitat.

## Current Status of the PMJM

On May 13, 1998, the U.S. Fish and Wildlife Service (Service) designated the mouse as threatened in its entire range (63 FR 26517).

## Why is it threatened?

Habitat loss and degradation due to agricultural, residential, commercial, and industrial development, with urban development as the primary cause in Colorado and conversion of native riparian ecosystems to commercial croplands and grazed rangelands as the primary cause in Wyoming. Habitat loss continues to threaten the existence of the mouse throughout its range in Colorado and Wyoming. As people build shopping centers, roads, and turn fields into suburban housing developments, the mouse loses its habitat or places to live. As it doesn't live in too many places, it is slowly becoming homeless. Soon there may be nowhere for it to live. At that point it will go extinct.

