

New Mexico Meadow Jumping Mouse

SCIENTIFIC NAME: The New Mexico meadow jumping mouse's scientific name is *Zapus hudsonius luteus*. The scientific name originates from Latin and Greek. *Za* translates to "very" and *pous* to "foot" in Greek, referring to the mouse's long feet. *Hudsonius* is Latin and refers to the place (the Hudson River) where the first meadow jumping mouse was collected and named. Also from Latin is *luteus*, which means "yellow" or "saffron-colored," a feature that distinguishes this species from other meadow jumping mice.

DESCRIPTION: The New Mexico meadow jumping mouse is a small mouse with long hind feet and a long tail. The back is grayish-brown with yellowish sides, and the body is white underneath. This mouse's total length is 7.4–10 inches, of which 4.25–6 inches is its tail. Long feet allow it to jump up to 3 feet when startled, and the long tail can act as a rudder, helping the mouse shift directions in midair.

DISTRIBUTION: The New Mexico meadow jumping mouse has a very limited range within the Southwest. It can be found in small areas in southern Colorado, New Mexico and Arizona, where it inhabits southern Apache and northern Greenlee counties in the White Mountains.

HABITAT: Only found in areas along rivers and streams below 9,000 feet elevation, the New Mexico meadow jumping mouse is a habitat specialist. Within that riparian area, it inhabits a micro-niche composed of dense vegetation, moist banks and permanent free-flowing water. The vegetation is dominated by grasses and forbs, along with willow and alder. Dense vegetation is necessary to supply the mouse with plenty of cover, which protects it from predators and provides food sources and nesting materials. An abundance of food is vital for the mouse to survive hibernation.

BIOLOGY: While many animals hibernate during the winter, the New Mexico meadow jumping mouse takes it to the extreme, spending up to nine months between September and May hibernating. It spends the remaining three months of the year breeding, birthing and raising young, and storing up fat reserves for another long hibernation. It is mostly nocturnal, only occasionally found in the day, and is active during those seasons when grasses and forbs are growing.

Meadow jumping mice are very docile and solitary animals. They are excellent swimmers, diggers and climbers. They eat insects, seeds, snails, slugs and fruits. Females give birth to one litter per year, generally between May and July. Meadow jumping mice live to 1 year of age, on average, but can survive to 3 years of age. Red-tailed hawks, great horned owls, weasels and foxes often prey upon them.

STATUS: On June 20, 2013, the U.S. Fish and Wildlife Service proposed to list the New Mexico meadow jumping mouse

as endangered, and designated critical habitat. Populations have declined significantly, and it is believed that some aspects of this jumping mouse's life history (short active period, short life span, low fecundity, specific habitat needs and low dispersal ability) make it vulnerable to many threats, such as habitat reduction and fragmentation.

MANAGEMENT NEEDS: Management is a collaborative effort between the Arizona Game and Fish Department and the Apache-Sitgreaves National Forest. Strategies include maintaining vegetation along perennial streams in the White Mountains, managing fencing and livestock grazing to reduce habitat loss, establishing survey protocols for the population and for its associated vegetation, and investigating the potential to reintroduce beavers into areas that could provide beneficial habitat for the meadow jumping mouse. 🦊

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ILLUSTRATION BY
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