



WILDLIFE NOTES

Deer Mice



Deer Mice (*genus Peromyscus*) is a collective name for

a number of species of field mice that, to the casual observer, look much alike. The group is also referred to as “white-footed mice”.

Peromyscus are native New World mice unrelated to the Old World immigrant House Mice (*Mus musculus*). Deer Mice are more widespread geographically and ecologically than any other North American mice. Outside of cities, from the Arctic Circle to Panama, there is hardly an acre without some variety of Deer Mouse. Across the USA, they are the most common type of mammal. There are almost sixty species; New Mexico has nine of

these. Because of their abundance, these mice constitute a major component of terrestrial ecosystems.

They are called Deer Mice because their fur color resembles

that of deer. The name *Peromyscus* is from the Greek words *pera* (pouch) and *muskos* (little mouse), or “pouched little mouse,” referring to the internal cheek pouches where the mice stuff seeds for transport.

The most common species of Deer Mouse in the continental U.S. (and in New Mexico) is *P. maniculatus*.

RANGE

Peromyscus mice range from Alaska to Central America.

HABITAT

Deer Mice occur in myriad habitats but do not usually occur in urban areas. They are found in nearly all life zones including alpine habitats, deserts and tropics. They can be highly abundant, as many as ten per acre.

DESCRIPTION

Even specialists have a hard time distinguishing species in the genus *Peromyscus* (the mice themselves have no such problems). Sometimes only DNA can tell them apart.

Even though Deer Mice species are similar to one another, they differ greatly from the introduced House Mice. All *Peromyscus* are bicolored, usually rich brown on top and snowy white on the belly. House Mice are uniformly gray. House Mice have naked tails and small eyes; Deer Mice have furred tails and large eyes.

The Deer Mouse is a small rodent, about six inches long from the nose to the tip of its tail. The fur is short, soft, and dense, usually some shade of yellow-, orange-, or reddish-brown on top. The underparts are white, including the underside of the tail. They weigh about an ounce. The group name “white-footed mice” reflects the fact that most have white feet. Deer mice are the prototype for “field mice” and most people find them cute because they are “Mickey Mouse” like with large, bulging eyes, big round ears and long whiskers.

BEHAVIOR

Since they are heavily preyed upon, Deer Mice are quite secretive and nocturnal. They do not burrow but build cup-shaped nests of shredded plant material in protected areas like

rock crevices, tree cavities, brush piles, or abandoned burrows of other animals. Here the animals sleep, escape bad weather, and give birth. Family groups usually nest together through the winter to conserve heat and may be found together at other times as well.

They save energy by reducing their body temperature when in their burrows but they do not hibernate in winter. They continue to forage, even under the snow, but also rely heavily on cached food in the nest.

Deer Mice have good eyesight and keen senses of hearing, touch, and smell. They communicate using touch, visual, chemical, and auditory signals. They drum with their front feet, possibly as a warning signal, emit a variety of squeaks and also “sing” a musical buzzing hum. They groom one another, emit pheromones, and mark their territories with scent.

Many species forage on the ground, but others are adept climbers. Lacking collarbones, Deer Mice can flatten their bodies and squeeze into openings a fraction of an inch high.

DIET/FEEDING

Food selection is dependent on both habitat and season. Seeds, berries and nuts are common food items. Deer Mice carry these in their extensible cheeks and cache them in the nest, often by the quart. Eating in bed is customary.

They also feed heavily on caterpillars and other insects in the spring. They can eat large volumes and are capable of ridding an area of many insects that may be detrimental to trees. Deer Mice also gnaw on old bones and antlers to get the calcium.

In addition to killing many injurious insects, Deer Mice are beneficial seed dispersors. They also disperse mycorrhizal fungi, which are critical components of the soil.

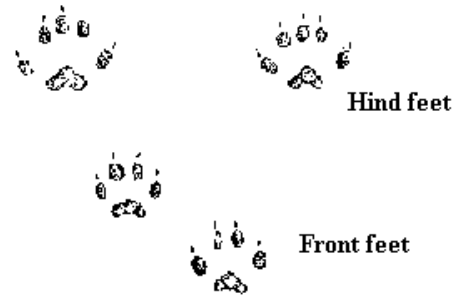
REPRODUCTION

When conditions are favorable, Deer Mice are prolific, but breeding is largely determined by the abundance of food so it slows in winter. During the breeding season, females come into heat every fifth day until impregnated. In some species, mated pairs remain together during the breeding season with the males assisting in care of the young; in other species, males mate with multiple females.

Young can be born from early spring on into late fall with as many as 4 litters a year. Typical litters contain 4-6 individuals. The young are very dependent at birth but grow rapidly, are weaned by the age of 3 weeks and can breed at the age of 5 to 6 weeks. Since they become sexually mature so quickly, mouse math could go exponential. They could easily overpopulate their habitats, but this seldom occurs because of predation and variable food supply. Deer Mice are the snack food of the predator world. In most locations only 5% survive past their first year. Although *Peromyscus* can live as long as eight years, in the wild, life expectancy is usually less than a year.

CONSERVATION

Since the genus *Peromyscus* is widespread and adaptable,



there is no evidence that Deer Mice as a group are declining; however, some species with specialized niches and restricted habitats may be threatened by habitat destruction and/or invasion of exotic species. Deer mice are an important link in the food chain because they are a major food item for a variety of predators.

DEER MICE and DISEASE

In 1993, the most common species of Deer Mouse (*P.maniculatus*) was identified as a reservoir of hantavirus, an agent responsible for a human respiratory distress syndrome that has high fatality rates. When present in mice, this virus is spread through the rodents' urine, saliva and feces. Humans can become infected when they are exposed to contaminated dust from the nests or droppings, such as after disturbing or cleaning rodent-infested settings. There is no evidence that the disease spreads from one person to another.

For more information on rodent control, cleanup of buildings, or hantavirus, call the Department of Health's hantavirus hotline at 1- 800-879-3421.

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