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The Shrew: A Rarely Seen Tiny Mammal Predator – Evergreen Audubon

3-4 minutes



This shrew carcass was found in north Evergreen at sunrise on an extremely windy in February 2016. It may have been killed and then dropped by a Great horned owl seen flying above the location, or it may have died of other causes. The body of shrew in photo is 2.25" long and the tail 1.5" long. Confirmation on species of this specimen will be forthcoming from Denver Museum of Nature and Science.

Shrews live in many areas of the world and a variety of habitats, including in Colorado foothills. The tiny insectivores are among the most ancient of mammals. Other than a slight reduction in size, they have remained virtually unchanged for 38 million years. Shrews are among the smallest mammals alive today. While active day and night, summer and winter, they are rarely noticed.

There are 4 genera and 10 species of shrews in Colorado. The Masked (*Sorex cinereus*) and Montane shrews (*Sorex monticolus*) may share the same habitat, with more of the Masked on Eastern slope and Montane shrews on the Western Slope. The Masked shrew is the most common shrew of the central Colorado mountains, and occurs in moist areas of subalpine and montane forests – and are rarely found away from standing water. The Masked shrew has a wide distribution from both coasts and most of North America. Montane shrew lives in coniferous forests, montane and boreal regions and damp meadows from Alaska to the Northern mountains of Mexico.

While shrews in Colorado are similar in size to small rodents, shrews are very different. For example, most mammals have a set number of chromosomes, shrews show considerable variation in chromosomes. Shrews have voracious appetites and high metabolic rates, they eat frequently and consume one to three times their body weight every 24 hours. Their heart rate can range from a resting rate of 88 to over 1,300 beats per minute compared to a hummingbird's rate of 250 to 1,260. Shrews have small brains, specialized dentition, well-developed senses of hearing and smell, and tiny eyes with poor eyesight. Shrews have a common digestive, urinary, and genital system opening (cloaca), more like birds. Shrews may go into torpor in some conditions. Some shrew species use echolocation.

Depending on species, shrews may be solitary, territorial or live in communal burrows. Shrews live in or under dense vegetation,

including dried grasses and shrubs, and stay hidden much of the time by using shallow runways or tunnels. The young disperse shortly after weaning. Depending on the species, the dispersal distance varies. Shrews may nest in dried grasses, beneath fallen logs, or even underground burrows. Shrews eat a variety of invertebrates, including worms, beetles, spiders; some shrews may consume plant matter – but prefer protein. Shrews' strong and offensive odor may help deter predation by mammal predators, but does not seem to bother raptors or fish.

For more information, review Armstrong's <u>Mammals of Colorado</u> and Churchfield's <u>Natural History of Shrews</u>.

Article provided by Shirley Casey.