

Wild Mammals of Grayson County—Order Soricomorpha (Shrews and Moles)

The Order Soricomorpha (Shrews and Moles) is comprised of two mammalian families which both occur in Texas. There are about 400 species of shrews (Family Soricidae) worldwide of which 4 occur in Texas. Of the 51 species of moles (Family Talpidae), only one occurs in the state.

Two of the four shrew species in Texas have been reported in Grayson County; they are the Southern Short-tailed Shrew (*Blarina carolinensis*) and the Least Shrew (*Cryptotis parva*). Shrews have high metabolic rates and voracious appetites; they may consume their own body weight in food each day. Several species of shrews, including the two that occur in Grayson County, produce venom that is used to help subdue their prey. Although the venom can paralyze or kill invertebrates and small vertebrates, humans rarely have any severe reactions; however, I would urge some caution. A colleague of mine from my time at Kansas State University was allergic to shrew venom and if he was bitten by one, his fingers and hand would swell up significantly.



The Southern Short-tailed Shrew is found in forested habitats and grassy meadows within forested areas in the eastern 25% of the state. This somewhat solitary mammal maintains a well-developed burrow system. An upper level is constructed on top of the ground in the vegetation or just a few inches below the soil surface, while the lower level may be 2-3 feet below ground. This densely-furred mammal is about 3.5 inches long and usually weighs less than an ounce. Their primary foods are insects, annelids (earthworms and the like), centipedes, and spiders. The diet also includes snails which may be stored in burrows for consumption in winter. In contrast to other species, the Short-tailed Shrew also eats nuts and berries, as well as small vertebrates such as mice and salamanders.



The Least Shrew is one of the smallest mammals in Texas; it is less than 3 inches long and weighs less than a quarter of an ounce. The Least Shrew is found throughout the state except in the Trans-Pecos region of west Texas and much of the Edwards Plateau. This species is most common in grassland habitats and often uses the trails of other small mammals through the grass. It digs burrows under objects on the soil surface (e.g., rocks, logs, objects discarded by people). The Least Shrew is more social than most species of shrews and several may be found nesting in a single burrow. This species eats grasshoppers, crickets, snails, sow bugs, and other small invertebrates and vertebrates.



The Eastern Mole (*Scalopus aquaticus*) is the only species of mole in Grayson County and the state; it occurs in the eastern two-thirds of Texas. This fossorial mammal has several adaptations for its underground life including dense fur, no visible eyes or ears, short limbs, and webbed front feet with claws. The Eastern Mole is about six inches long and weighs between 2.5 and 3.5 ounces. It constructs two types of interconnected burrows. Deep burrows are used to avoid predation and provide nest sites for the rearing of young. The shallow feeding burrows are near the surface; you may have seen ridges of soil that have been pushed to the surface in your yard. Moles feed primarily on earthworms and grubs; however, a variety of other small invertebrates are consumed including spiders beetles, centipedes, and pupae and larvae of insects.

The next article will discuss the second most speciose order of mammal of Texas, the United States, and the world. As a hint, an incantation of the three witches in Shakespeare's *Macbeth* referred to the wool of one of these mammals.

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