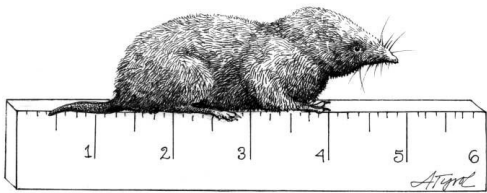


Creature Feature: Winter 2018

By W. Scott Douglas

Short-Tailed Shrew (*Blarina brevicauda*)



I was out walking my dogs on one of those frigid days we had last January, when both became very interested in a pile of leaves. I was pretty surprised when a dark mouse-like form jumped out at them and squeaked loudly before scurrying away quickly to disappear in the brush. I suppose the dogs were not surprised, but they both sure jumped back when the animal jumped at them.

Wait, what's a mouse doing out in single digit temperatures in January? Shouldn't they be sleeping away, tucked into a straw lined nest under a log? I watched the little creature snuffle in the brush and got a good look at it. Not a mouse at all, I realized, but a shrew. By the length of the tail, I knew it was a northern short-tailed shrew, *Blarina brevicauda*. The short-tailed shrew is one of the smallest but most common mammals in Pennsylvania. Some naturalists estimate that there are more than 100 of these little guys per acre.

The northern short-tailed shrew shares Pennsylvania with five other species of shrew. The short-tailed is by far the most common, and easiest to identify with its stunted and mostly hairless stub of a tail. Shrews are not rodents at all, but along with moles are members of the Order Insectivora; the most primitive of the placental mammals. Shrews are incredibly energetic, staying active year round, and their sole activity appears to be desperately looking for food. This is hardly a surprise when you learn that they have a heartbeat of over 750 beats per minute, and a metabolism to match. While they don't weigh much, less than an ounce, they have to eat their weight in worms, insects and basically anything else they can catch, every day just to stay alive. They even cache berries, nuts and roots in their tunnels for lean cold periods when insects are hard to find. This frenetic activity makes them more than a bit belligerent, explaining the attack on my dogs. Perhaps my dogs even knew instinctively that this little guy is actually dangerous, being the only mammal with a venomous bite. Milliliter for milliliter, shrew venom is actually as toxic as rattlesnake venom, and is strong enough to kill a human, but it would take more than the shrew has available. Its delivery system is not very efficient either, since it uses it for eating, not for defense. The bite slows the struggles of its prey enough for it to shred it and gulp it down before quickly moving on to its next victim. Don't let this make you think that a shrew is safe to handle

though, their bite is painful and the effects of the toxin are not pleasant and last for several days.

Shrews live in a variety of habitats, anywhere that there are cracks and crevices to hide and hunt. They will even climb trees and will take to the water as well. They make their nests of shredded leaves and grasses in logs, stumps or old rodent tunnels. They don't live very long, often not even through their second winter, but they make up for this by being very prolific. Shrews mate in January and February, and have their first litters at the end of February or early March. Gestation is only 21-22 days, after which they give birth to 3-10 blind, naked, helpless pups that each weigh less than a paperclip. The pups grow quickly though, and are weaned in only 25 days. Consequently, shrews can easily have 2-3 litters per year.

It's a good thing, because shrews have a lot of enemies; they are eaten by a whole host of predators, including raptors, shrikes, snakes, fish and many predatory mammals. Interestingly, while mammals like skunks, fox, opossum, mink and weasel will kill shrews, many won't eat them, presumably because of their strong musky odor.

You can find shrews practically anywhere, I usually see them when raking leaves, picking up brush or moving the woodpile. You can often hear them working through dried leaves when sitting out in the woods. Since their eyesight is very poor, they move about by echolocation, much like bats, but their system is not nearly as sophisticated. Their squeaking is pretty audible to us, and they don't seem to show much fear of being seen, so they are fun to watch. Just don't try to pick them up.