

## Moles on My Mind

During the winter we stay inside more, "hunker down," as the saying goes. The nights are long, and there's time to read and think about things, imagine things. Then one day the tilt of the axis wakes us up with days that run early to late. The changes every day are dramatic, irresistible, and somehow we just don't want to miss a thing. All this is familiar, reliable and right, and yet each year it comes around new. Is this because we get so caught up in the "hunkering down" that we forget what is coming, what we woke up to just a year ago and every year? Where do we stand, and who are we, really?

Right now I am a mole. Moles have blossomed up for me this year and the more you pay attention and think about a mole, the more you get a chance to handle a mole and notice the places a mole has been, then the more you can identify. I have so appreciated Donald Kroodsma's words in The Backyard Birdsong Guide , Chronicle Books, 2008:

" . . . This book is not a mere guide to identifying particular species; no, my goal was instead to create a guide to identifying with birds . . ." (The italics are the author's.) Moles are warm-blooded mammals just like us. These are not seed-nibbling rodents like mice and chipmunks, but real hunters with the right kind of teeth for catching and eating other living things. They also are specialists and have perfected over generations of natural selection the perfect body and behavior for life underground, where the prey you find are earthworms, centipedes, slugs, snails, sowbugs, and beetle larvae (grubs). Not all of these are insects, but moles are classified as "insectivora," an order they share with the shrews and hedgehogs.

There are three kinds of moles in these parts and they have similar lifestyles. The ones we have been seeing here lately are called hairytailed moles and they are about six inches long, sturdy and silver-grey, with short plushy fur and long delicate noses. The eyes and ears are hard to find but the front feet are their glorious shovel blades, sticking right out from the sides on short stout legs. These feet are broad and rounded, with five toes and strong claws. They



look more like paddles than feet and sometimes I think of moles as swimming through the ground. They muscle along just under the surface, scraping and digging with those side paddles, while propelling with the hind feet, which look like typical mouse-style little feet on downward-oriented legs.

I doubt I will ever see mole tracks, but in the field guides the artists have drawn both hind and front tracks as just sets of claw marks, with no "registration" from any toe pads or heels. The front shovelfeet would never register at all except that a mole moving across the surface of the ground has to roll from side to side to get any purchase with those side-jutting feet. Even so, only three of the five claws on each foot leave a mark.

If a mole finds itself on the surface, for any reason, it can't move fast and it can't see, except for light and dark. Lately I have spotted a live mole on the surface twice, and I am pretty sure each time it was rousted out by our new young dog. Twice we have intervened with rescue and relocation, surprised to find the mole unharmed. Rocky is a digger who loves to turn up a prize and then make a parade, with prancing. He will do this with your hat if you leave it lying around, or with a piece of firewood. Recently his greatest treasure was a dead mole. We don't know what killed it, but it has remained intact for several days, showing up here and there where the dog has gotten distracted and dropped it. I have wondered if a mole rousted out of its tunnel is doomed on a sub-freezing night. But the books say they can burrow right down nearly anywhere and make a fresh 15 feet of tunnel in an hour. This includes stopping to eat and to rest. Moles eat 2/3 their body weight in a day, which can mean a lot of shallowtunnel digging to find those grubs. One writer did the simple math: it's like 100 pounds of meat per day for a 150-pound person. It could mean even more if you live on corn, beans, and squash, like us, but that is trickier math.

Moles make two kinds of tunnels. Those shallow ones are for hunting and are the ones we see, humping up the lawn in ridges. The moles don't usually come back to these, but other creatures use them, like meadow mice (voles) who don't have the tools for serious digging. They don't eat up the beetle larvae and centipedes but they are really the ones who nibble on bulbs and move things around. This year we have a daffodil blooming right in the middle of last year's potato patch in our big garden. There are daffodils over in the orchard, and along a stone wall. I feel sure a mole would not bother to carry around a daffodil tuber, but maybe a mouse would, and would travel along an underground mole highway.

The deep tunnels moles make are for living quarters and can be two feet underground. The ground is not soft down there and digging is slow. All the dirt has to be removed, since it can't be humped up. As she digs, the mole shovels the dirt behind her, then does a slow, fluid somersault and works her way back to the surface, pushing the load of dirt in front and spilling it out above to make a molehill.

Moles mate in March and give birth in the deep tunnel six weeks later, to one to five babies. They are weaned in a month, and after two months are nearly full-grown and independent. Most small mammals have more than one litter in a season, an evolutionary tactic to offset high rates of infant mortality. Not moles. Theirs is a much safer lifestyle because it is underground.

We don't see them much, but moles are strong and successful. There is an old song from the mountains of North Carolina, where rural people understand the power of the mole.

I wish I was a mole in the ground I wish I was a mole in the ground If I was a mole in the ground I'd root that mountain down I wish I was a mole in the ground. — Bonner McAllester