The Hidden Lives of Moles

By Susan Camp

“I think we have one million moles,” bemoaned a friend last week. I know just how she feels. Jim and I have spent the past few weeks slogging through damp soil, attempting not to step in a tunnel and break an ankle.

It is treacherous out there in springtime. Resident moles are active and going about their business of tunneling through our yards and fields in search of tasty grubs, worms, and other mole delicacies we shudder to imagine.

Actually, moles are solitary creatures. It may seem like an entire army of furry miners has invaded your property, but chances are good that there is only one, and it will spend its entire four years of life tunneling through your lawn and flowerbeds. Moles breed in February and March with females producing litters of two to five babies in four to six weeks. The young leave the nest after five to six weeks to establish their own territories elsewhere.

Adult moles are small mammals, about 4 to 8 inches long. As insectivores, they spend their lives burrowing underground, searching for grubs, earthworms, snails, and slugs, but may consume seeds or plants accidentally while burrowing, or damage roots and upend plants they encounter. Moles must consume 60 to 100% of their body weight every day in order to survive, according to VCE Publication 420-021 (CNRE-169P) “Managing Human-Wildlife Interactions: Moles.”

Three species of mole are found in Virginia, one of which lives only in the Appalachians. The mole most commonly found in our region is the eastern mole (Scalopus aquaticus), with its naked tail. The star-nosed mole (Condylura cristata) also is found in the Coastal Plain. Its unique nose, consisting of short, fleshy tentacles, may help the animal navigate in its environment. All moles have velvety black or brownish-gray fur and short, outward-turned forefeet with powerful claws designed for tunneling. They have poor eyesight, but can distinguish light from dark.

Moles prefer sandy loam and avoid rocky or heavy clay soils. Each mole produces an extensive underground tunneling system consisting of shallow feeding tunnels or “runways” visible above ground, and deep excavations that lead to living areas that are safe from most predators, drought, and freezing weather. Molehills on the surface are made up of soil that the mole has moved out of the way.

Positive effects of mole excavation include soil aeration, improved drainage, and the mixing of soil components and nutrients. Along the way, moles consume the larvae of many lawn and garden pests, including Japanese beetle grubs.

At present, there is no commercial or homemade product available that will reliably rid your garden of moles. There is no Pied Piper to lead them out of your garden. We have all heard success stories with fruit-flavored chewing gum, garlic, mothballs (naphtha), and broken glass or used razor blades. Moles will simply wall off the sharp objects and tunnel around them. Poisoned

bait doesn’t work because moles feed on insects. Gas cartridges and smoke bombs aren’t dependable, and many techniques and products pose a danger to gardeners, children, and pets.

Physical barriers that may help deter moles from invading gardens include hardware cloth or sheet metal installed about 20 inches below ground, a somewhat expensive, labor-intensive endeavor. Alternatively, a trench filled with gravel can be installed around the garden. Both methods involve a lot of digging, and neither is feasible for a large garden. See specific instructions for constructing both barriers in VCE Publication 420-201 (CNRE-169P).

In Virginia, chemical pesticides must bear an EPA label specifically for moles and be approved for use in the Commonwealth. Some of these pesticides must be administered by licensed applicators.

Trapping is another option for eliminating moles from your yard. There is a danger of injury from metal traps to the property owner, children, pets, and other small animals and birds.

Ultimately, we may have to accept what our tenant mole has to offer: well-aerated soil that percolates and fewer Japanese beetles.