Are they really that predictable?

The Creature That Keeps on Digging

Story By Kari Thornton
Photo By Adele Hodde

Some say groundhog, some say woodchuck. Others call it a whistle pig for the noise it makes to communicate with others.

Cast no doubt about Groundhog Day. Believers and skeptics alike know the basis of this February holiday. But how many people really understand these furry winter forecasters that modify their environment and have both positive and negative interactions with humans?

These large rodents are a forest-edge species that modify their environment by herbivory (eating plants), defecation and excavation. Living underground in burrows, groundhogs can excavate up to 700 pounds of dirt for just one den. Usually dens are dug on slopes of hills, with a couple of entrances—important for a quick retreat from a predator for this slow-moving mammal—and several nests, and are used for sleeping, rearing young and hibernating. Groundhogs generally hibernate from October to February, although some individuals rouse and emerge briefly from their dens—even in late fall and winter.

Males wake from their winter's nap a month before females. A hormone related to sleep, melatonin, alerts groundhogs to a change in daylight hours and that it's time to leave the burrow. Abandoned dens may be used by other mammals, including opossums, river otters, rabbits and voles.

A recent study funded in part by the Federal Aid in Wildlife Restoration Project posed the question of how the range of the woodchuck had changed in Illinois as a result of urbanization and modification of preferred habitats.

"While woodchucks can be found in a variety of habitats—residential, industrial, agricultural and natural areas—they prefer fence rows and woodlands, and numbers are highest where these habitats abut sources of abundant, palatable foods," reported Bob Bluett, manager of the DNR Wildlife Diversity Program. "Four other woodchuck studies have been conducted in Illinois, one of which dates back to 1855."

Woodchucks are found statewide, as in the past. However, their numbers appear to have waned during the past couple of decades. Causes are not clear—habitat, predators or any number of explanations are possible. Research under way by Southern Illinois University and the University of Illinois should shed some light on this puzzling problem.

Depending on your perspective, woodchucks are a source of headaches or a valuable addition to the Illinois landscape. Damage to crops, homes, outbuildings and archaeological resources concerns some folks. On the other hand, the woodchuck is valued for its pelt and meat, and as model for medical research on human diseases (hepatitis).

And, each year, the groundhog is celebrated on its namesake holiday, when its ability to predict the weather is widely touted in the media. Scientifically, the groundhog's ability as a weather forecaster is pathetic, and observing birds, trees and insects often more reliably predicts the end of winter.

It appears that for years woodchucks reigned predictable in their ability to adapt to environmental changes. Or not. The question has been posed and in the coming years the Illinois scientific community will be paying closer attention to groundhogs—recording more than the date of their annual appearance.

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