During the 30 years we have studied snakes here at the Savannah River Ecology Lab, we have heard lots of interesting stories and answered many urgent calls concerning snakes. One group of snakes in particular has been the inspiration for many of the anecdotes. The strange tales of these serpents have ranged from “All I did was look at it and it died” to “It flattened out and hissed at me so I knew it must be deadly” to the ever memorable “Help me! Help me! There’s a black cobra in my yard.” What kind of snakes inspired these accounts? You guessed it—hognose snakes.

Two species of hognose snakes, the southern and eastern hognose, are found in the southeastern United States. The two species are similar in many respects. Both have a name, hognose, which reflects the appearance of their upturned snouts. Both species live in sandy habitats, and feed primarily on toads. Enlarged rear teeth help hognose snakes to feed on the toads, which often inflate their bodies to much larger sizes to try to keep from being eaten. Both hognose species lay eggs, usually in mid-June, and the eggs hatch in mid-August. The eastern hognose snake is larger than the southern, and eastern females may lay more than 40 eggs, while southerns generally have clutch sizes of less than 15 eggs.

It is the defensive behaviors of eastern and southern hognose snakes that give rise to the stories we hear. When frightened, hognose snakes instinctively coil, flatten their heads and necks, and hiss. In fact, many people call the snakes “spreading adders” or “hissing vipers.” If this impressive display is not enough to scare away most intruders, hognose snakes have another trick—they roll over and play dead. The act can be so convincing, with convulsions and writhing and vomit and sometimes blood, that even people who know the snakes can do this still think the snake has died. The true test is to put the snake back on its stomach…it will immediately flip back over to appear “dead.” We said the snakes have neat behaviors—we didn’t say they were smart.

The southern hognose snake is one of the many reptile species that scientists who study these animals are worried about. Southern hognose snakes can no longer be found in several states where they used to occur, such as Alabama and Mississippi. Southern hognose snake populations still occur in South Carolina and North Carolina, but even in these states the numbers of snakes has declined. The most likely reasons for the decline of this species are habitat loss, being run over by cars, and possibly the spread of fire ants. Scientists hope to learn enough about this very secretive snake species to help it before it is in danger of becoming extinct.