

The Virginia Opossum: Our Only Native Marsupial

► The Virginia opossum (*Didelphis virginiana*), also known as possum, is both a benefit and a nuisance to landowners. Learn its characteristics, behavior, habitat, diet, benefits and uses, and damage and control techniques.

Known widely for playing dead when frightened, the opossum is a creature with a unique place among Alabama's wildlife. As other animals are vanishing from forests in the United States, opossums appear to be flourishing due to their remarkable ability to adapt.

Characteristics

The opossum is the only marsupial, or pouched mammal, that is native to the United States. Much like kangaroos, opossums give birth to relatively undeveloped young that complete development inside the mother's marsupium (pouch) located on her underside between her hind legs. Only females have marsupia. In females that have not had a litter, the pouch is small and not fully formed. Once a female is pregnant, the pouch enlarges to prepare for the birth of her young. The mother can close the pouch to protect her offspring once they have been born.

Females usually begin reproducing during their first year of life. Most can produce two litters in that year, one in winter and one in spring, although some may produce three. Following a short gestation period of only 13 days, the young are born. At birth, young weigh less than a hundredth of an ounce each and are about the size of a honeybee. The young climb to the marsupium without assistance, using their sense of smell. Because opossums can give birth to as many as 20 offspring at once and have an average of only 13 nipples, not all of the young will survive. The only ones to survive are those that are able to latch onto a milk-producing nipple within the pouch (and not all nipples produce milk). On average, only about seven young survive.

After about two months, the young are sufficiently developed to venture outside of the mother's pouch. After this, they can be seen hitching a ride on her back, although they do not hang from her tail suspended over her back as is popularly believed. Young opossums disperse and are able to fend for themselves at the age of 3 to 4 months.



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Behavior

Opossums are terrestrial, meaning that they are ground-dwelling, but they also spend a significant amount of time in trees. They use their prehensile tails to help them climb. However, in contrast to popular folklore and cartoons, opossums rarely hang by their tails, and they do not sleep in this position. Opossums are solitary creatures but are not territorial. Several opossums, both male and female, may have overlapping home ranges. Males do not seem to tolerate other males as much as they do females. Opossums are nocturnal, preferring to forage at night rather than in the daytime. Opossums do not hibernate and even in the northernmost part of their range can be found searching for food during the warmest part of the day during winter.

Despite their many interesting behaviors, opossums are renowned for one in particular: playing dead when faced with danger. It is unclear at this time as to the true significance of this behavior. When threatened, opossums

appear to go into a catatonic-like state. They drool and exude a noxious substance from their anal glands. This behavior helps keep predators from attacking. Although intriguing, this method of defense is not the most common method that opossums practice. Most often, opossums try to escape when confronted with danger. If cornered, opossums are likely to gape and hiss or growl, revealing their 50 teeth, instead of playing possum.

Habitat

The opossum is a common inhabitant of North America. Native to Central America and the southern United States, opossums have expanded their range northward over the past 100 years. Now, their range extends as far north as Ontario, Canada. They occur east to the Atlantic coast and west into the Great Plains, mainly where trees and water occur together to form their natural habitat, or anywhere the presence of humans can support them. Populations also exist along the Pacific coast from California to Washington, where they have been introduced. From there, opossums expanded their range northward into British Columbia, Canada. Colorado, Idaho, Arizona, and New Mexico also have populations of opossums, although there is some disagreement about whether or not these populations were introduced. Their northward expansion is believed to be limited by cold weather because in northern parts of their range, opossums suffer from starvation and frostbite on their ears and tails.

Opossums have a home range of 50 to 300 acres and often live in forested areas with brushy cover and available water. Open areas usually are avoided, although opossums may make trips into these places to forage. Opossums can live in rural, urban, and suburban

areas, adapting easily to life among humans. Although they do not hibernate, they will create sleeping dens in cavities of trees or logs, sheds, barns, piles of building materials, and crevices in rocks. Sometimes they attempt to den in attics or under porches.

Diet

Opossums are opportunists. They will eat almost anything. Their diet includes fruits, such as persimmons, apples, plums, blackberries, hackberries, wild grapes, and various nuts, but most of their diet consists of animals, including crustaceans, reptiles, amphibians, birds, small mammals, carrion (animals that are already dead), and eggs. Insects, in particular, are a staple food for opossums. They will also eat gardens and crops (particularly corn) on occasion, but they are not considered to be a significant threat to crops. They also have been known to raid chicken houses. In urban and suburban settings, they scavenge garbage and bird seeds, and, not surprisingly, they also enjoy pet food. Many people have gone onto the porch to feed their dogs and cats only to find an opossum cleaning out the pet bowl.

Opossums are also food for many other types of animals. Foxes, coyotes, bobcats, and great-horned owls are common predators of the opossum. And let's not forget that humans sometimes eat opossums too.

Benefits and Uses

As with many wildlife species that share space with humans, opossums may be considered as pests, but they do provide some significant benefits. For one, the opossum is an important fur-bearing species. Although its pelts are



Young opossums venture outside the pouch at about 2 months of age and disperse at 3 to 4 months of age.



Opossums may gape and hiss rather than play dead when faced with danger.

not as high in demand as those of some other species, they can be used as a substitute for more expensive furs. In Alabama, opossums are classified as fur-bearers and game and can be trapped and hunted in accordance with state laws and regulations. Opossum hunting traditionally has been an entertaining sport for those who enjoy hunting with hounds. The 'possum hunt historically has engaged aristocrats such as Franklin D. Roosevelt.

At one time, it was much more common to hunt opossums for food than for sport. "Possum and taters" has been a well-known and inexpensive treat. For regulations on trapping and hunting, refer to the current Alabama Regulations Relating to Game, Fish and Fur-Bearing Animals, available at the Alabama Department of Conservation and Natural Resources website (www.dcnr.state.al.us/).

Another benefit opossums provide is pest control since two major components of the opossum's diet are insects and rodents. Opossum consumption of large numbers of insects and rodents therefore may help control damage to gardens and lawns. Because carrion is also a component of their diet, opossums may play an important role in the delicate balance of nature as a cleanup crew.

Opossums are also of particular interest in the medical field due to their rapid development, and studying them may provide insight into the care of premature babies and growth of organs. In addition, opossums have a natural resistance to snake venom due to the presence of a protein in their blood known as lethal toxin-neutralizing factor (LTNF). This protein has allowed researchers to find a better way to treat human snake-bite victims, and the treatment is now produced synthetically.



Opossums can live in many types of habitats.

Management

Opossums are adaptable animals and can live in a variety of habitats, both natural and human made. Because opossums are habitat generalists, little encouragement is needed to attract them to an area. General backyard-management strategies used for attracting other native wildlife, such as creating den sites, planting natural food sources, and increasing access to water, will benefit opossums. Brushy areas, wood piles, and stacks of rocks provide excellent cover for many species of wildlife. Old snags (standing dead trees) and fallen logs often provide denning cavities and can be left as they occur. Native plants such as crabapples, persimmons, blackberries, and hackberries provide natural food sources to many species.

Because opossums are so adaptable to varying environments and sometimes choose to live close to humans, however, the problem may not be how to create better habitat for opossums, but how to control them.

Damage and Control

Opossums opportunistically prey upon turkey and quail eggs, which may cause concern for wildlife managers. Contrary to public opinion and perception, however, predation on nests by opossums, and other medium-sized mammals (such as raccoons and skunks), is not the cause for low populations of game.

Opossums do occasionally eat chicken eggs, chickens, and crop items. When they den in houses, sheds, and barns, they can damage property by creating or enlarging entry holes, tearing insulation and other soft items during denning activities, chewing on wires and water lines, and defecating in unacceptable locations.



Opossum hunting is an entertaining sport.

These damages can be costly. In addition, opossums sometimes eat and scatter garbage and consume food left for pets.

Opossums often are viewed as a threat to people and pets because they hiss when cornered, but they rarely follow through with the bluff. They often are believed to carry diseases transferable to humans and 5pets; however, they show a remarkable resistance to many viruses and rarely contract rabies, parvovirus, distemper, or feline hepatitis, which are common in other mammals. Unfortunately, they do carry one type of parasite, *Sarcocystis neurona*, that can cause a serious disease known as equine protozoal myeloencephalitis (EPM) in horses. They may also carry ticks, fleas, roundworms, and other common parasites.

The first, and easiest, way to deter opossums is to remove whatever is attracting them. Bring in pet foods during the night, or, if you store them outside, keep them in metal bins that latch. Place garbage in bins on the morning of pickup, and be sure to close the lids securely. Close off any access points to potential denning areas, such as attics, garages, and crawl spaces. Remove any brushy areas or piles of wood and rocks around the yard, and plug up any obvious holes that the opossums may be using. In summer, remove any available sources of water, such as bird baths, which may bring opossums into your yard overnight (these can be replaced in the morning). Also, large dogs usually discourage opossums from approaching.

If you find that none of these actions controls the problem, there are other options that may be useful. Pest-control or animal-removal services in your area will remove opossums for a fee. By Alabama regulation, property owners may remove one opossum per damage incident without acquiring a special take, capture, or kill permit. If you are in an area that permits discharge of firearms, opossums can be removed by shooting.

Trapping is a particularly efficient strategy for removing opossums, but caution must be used during trapping to avoid personal injury and unintentional capturing of pets (both yours and your neighbors') and other species of wildlife. Leghold traps (No. 1½) and live traps (at least 2' x 8" x 8") are appropriate and can be set easily. Once the opossum is trapped, it must be destroyed or relocated. It is illegal to relocate opossums across county lines or drainage basins due to the possibility of spreading disease. However, relocating problem individuals within the county and drainage basin will simply shift the problem to another area, and the survival rate of relocated animals often is low.



Opossums are at home in residential areas and may cause problems for homeowners.

It is illegal to keep an opossum as a pet. If you find an injured or orphaned opossum, do not attempt to capture the animal. It is best to leave it alone and allow nature to take its course. If you have questions concerning acceptable or suggested forms of removal, please contact your local Cooperative Extension agent for assistance.

Conclusion

The remarkable Virginia opossum is here to stay, and as the Southeast becomes more populated, more contact between people and opossums will occur. Homeowners can learn to avoid contact with opossums and therefore reduce potential conflicts and minimize damage.

Although it may not be obvious to some people, opossums are a unique member of Alabama's wildlife and play an important role in the function of the ecosystem. As Aldo Leopold, the father of wildlife management, once stated, "The first step in intelligent tinkering is to keep all the parts." The Virginia opossum is one of these important parts.



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