

Opossums



Figure 1. Opossum with young. Photo by Dave Schmidt.

Objectives

1. Explain opossum behavior
2. Communicate control options to clients
3. Describe the health risks posed by opossums

Overview of Damage Prevention and Control Methods

Habitat Modification

Remove pet food, fruits, and other foods

Remove or modify bird feeders

Cover trash cans with lockable lids

Secure compost piles in bins

Exclusion

Install hardware cloth or wire-mesh fence where opossums are entering structures

One-way doors or sunken perimeter fencing

Frightening

Not practical

Repellents

None registered

Toxicants

None registered

Fumigants

None registered

Shooting

.22 caliber rifle or pistol

12-gauge shotgun No. 6 shot

Trapping

Cage traps: 10 x 12 x 32-inch single-door; 9 x 9 x 32-inch double-door

6- or 8-inch tube box trap

Footholds: No. 1, longspring, No. 1 coil, KB 5.5 compound w/ laminated jaws, or jump.

Other Control Methods

Direct removal with catch-pole, cat graspers, or nets

Dogs may deter opossums

Species Profile

Identification

Opossums (*Didelphis virginiana*) are whitish or grayish mammals about the size of a house cat (Figures 1 and 2). They can range in color from snow-white to almost jet black.



Figure 2. Opossum. Photo by Erin Bauer.

Physical Description

Opossums are the only marsupials (pouched mammals such as kangaroos and wombats) in North America. They have changed little since the time of the dinosaurs. Solitary and mostly nocturnal, they are slow moving animals. The face is long and pointed with a skull that is usually 3 to 4 inches and contains 50 teeth, more than is found in any other North American mammal. Canine teeth (fangs) are prominent. The ears are rounded and hairless and are prone to frostbite in the northern regions. The underfur is dense with sparse guard hairs. The tail is moderately prehensile, rat-like in appearance, and prone to frostbite in northern regions. Opossums have poor vision but very acute hearing.

Maximum length is 40 inches. The rat-like, hairless tail is slightly less than half the total length. The tail may be unusually short in northern opossums due to loss by frostbite. Opossums may weigh as much as 14 pounds, but the average is between 4 to 12 pounds with males generally larger than females.

Species Range

Opossums are found in eastern, central, and west coast states. They are absent from the Rockies and the most western ends of the northern plains states (Figure 3).

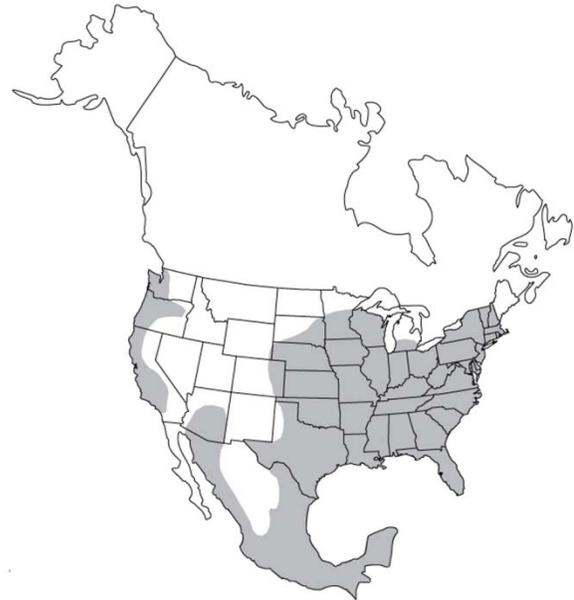


Figure 3. Range of the opossum in the US. Image by PCWD.

Voice and Sounds

When frightened opossums will hiss, growl, screech, and/or bare their teeth depending on the perceived threat level. A clicking sound is used when males and females signal one another during the breeding season.

Tracks and Signs

Tracks of both front and hind feet look as if they were made by little hands with widely spread fingers (Figure 4). They may be distinguished from raccoon tracks, as the hind foot of an opossum looks like a distorted hand due to the opposable big toe of the hind foot. Opossums can emit an oily-yellow liquid from anal glands that smells like diluted skunk essence.

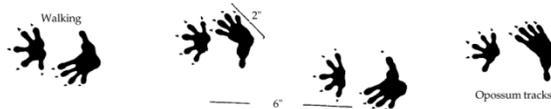


Figure 4. Opossum tracks in walking pattern. Hind foot is about 2 inches in length and is a unique footprint among North American animals. Gait is about 6 inches. Image by PCWD.

General Biology

Opossums may appear stupid and inhibited when captured or surprised during daylight, though they are surprisingly intelligent. They rank above dogs in some learning and discrimination tests.

Reproduction

Opossums may raise two, rarely three, litters per year and, like other marsupials, the blind, helpless young develop in a pouch. They are born 13 days after a successful mating. The young, only $\frac{1}{2}$ inch long, find their way into the female's pouch where they each attach to one of 13 teats. About 23 young are born but only those that can attach to a teat survive; the rest quickly perish. The average viable litter size is seven to eight young. They remain in the pouch for seven to eight weeks and are not weaned completely until about 96 to 108 days after birth.

Most young die during their first year. Those surviving until spring will breed within that first year. A few wild opossums have been known to have lived two to three years. In captivity, opossums may live up to twice as long as their wild counterparts.

Nesting Cover

Opossums do not dig their own burrows but will use abandoned burrows of other animals. Other den areas include tree cavities, brush piles, rock crevices, and abandoned squirrel nests. They sometimes den under homes, attics, and garages where they may make a messy nest.

Behavior

Opossums have a top running speed of only 3.5 miles per hour, though they are well equipped to escape predators. They enter burrows, climb trees, and swim to escape. When threatened, opossums may bare their teeth, growl, hiss, bite, screech, or exude a smelly, greenish fluid from anal glands that smells like mild skunk essence. Opossums may "play dead" by rolling onto their back and going limp, sometimes with their tongue lolling out of the mouth. Some suggest that the renowned "playing possum" is actually an involuntary comatose state.

Opossums do not hibernate. In periods of extremely cold weather they enter their dens for short periods of time until temperatures warm. Although they are primarily nocturnal, it is not uncommon to see opossums foraging for food during daylight hours during cold weather.

Habitat

Opossums prefer diverse habitats that range from arid to moist, wooded forests to open

fields and urban areas. They seem to prefer habitat near streams or swamps.

Opossums usually are solitary and somewhat nomadic, with a home range of 10 to 50 acres. Young appear to roam randomly until they find a suitable home range.

Food Habits

Opossums are generalists, opportunistic, and omnivorous. They consume animal and plant matter including insects, worms, snakes (even venomous), lizards, mice, rats, grasses, fruits, and vegetables. Opossums may visit compost piles, garbage cans, or food dishes intended for dogs, cats, and other pets. Opossums often are considered beneficial because they feed on many types of insects, mice, and rats.

Legal Status

Laws protecting opossums vary from state to state. Opossums are considered a game animal in Alabama and have established annual hunting and trapping seasons.

Damage Identification

Signs of opossum damage often are misidentified with that of skunks or raccoons. A correctly identified hind foot track is definitive. Often, seeing an opossum is the only way to confirm a nuisance opossum.

Damage to Structures

Opossums may enter trailer houses and climb up into the insulation underneath the floor. They often are encountered moving about the ductwork of mobile homes. They commonly enter the living quarters through large gaps around pipes and drains under sinks. Opossums are not destructive or strong animals, so they

typically enter areas that already have an opening. In contrast, raccoons can create an opening.

Damage to Pets and Livestock

Opossums generally avoid pets and livestock. Injuries may result from domesticated animals approaching opossums. They will prey on chickens, ducks, pigeons, other domestic birds, and quail or turkey eggs.

Damage to Landscapes

Opossums consume garden produce and fruits. They also feed on food scraps in compost piles.

Health and Safety Concerns

Opossums present a variety of safety and health concerns. They often harbor parasites such as fleas and ticks and are more resistant to rabies than any other mammal, though they are not immune to the disease.

Opossums are definitive hosts for the microorganism that causes Equine Protozoan Myeloencephalitis (EPM), which kills horses. The protozoan is shed in feces, so an opossum that is denning or feeding where horses are housed may contaminate horse feed and water. EPM is a serious and often fatal disease to horses.

Nuisance Problems

Individuals may be a nuisance near homes where they get into garbage, bird feeders, pet food and enter structures. They may destroy poultry, game birds, and their nests. Opossums may leak an oily substance that smells similar to skunk spray.

Homeowners may become concerned about individual opossums simply staying on their property. Opossums may appear sick or injured, which is a common misperception as they do not always move when approached. When frightened, opossums often just “play dead” or hunker down, baring their teeth in a menacing manner. In these circumstances, remove people and pets from the area and give the opossum time to move on. If the opossum does not leave within 24 hours, assume it is sick or injured and remove it. Alabama regulation 220-2-.27 allows property owners or tenants to take one opossum per incident that is causing damage to said individual’s property without a permit. Confirm that no person or animal came into contact with the opossum. In general, opossums are shy, non-aggressive animals that try to avoid contact with other species.

Damage Prevention and Control Methods

Integrated Pest Management

Timing, Economics, and Methods

Opossums can be controlled whenever damage is occurring. No data are available for economic damage caused by opossums in the US.

Habitat Modification

Remove cover and brush piles and plug burrows to reduce frequency of visits by opossums, though more practical in urban than rural settings.

Remove or modify bird feeders to prevent food from falling to the ground. Pick up fallen fruit from trees or shrubs, and remove outdoor pet food dishes. Secure compost piles in specially

designed containers to prevent opossums from gaining access.

Exclusion

Prevent nuisance opossums from entering structures by closing openings to cages and pens that house poultry. Opossums can be prevented from climbing over wire mesh fences by installing a tightly stretched electric fence wire near the top of the fence 3 inches out from the mesh (Figure 5) or by installing strips of stainless-steel porcupine wire. Fasten garbage can lids securely. Use compost bins to secure compost in which food scraps are deposited.



Figure 5. Fencing with a hotwire near the top can be very effective against climbing mammals. Photo by Stephen M. Vantassel.

Secure crawl spaces, porches, and decks using 1- x ½-inch galvanized hardware cloth. Bury the mesh at least 2 inches below the soil and create a 12- to 18-inch skirt under the soil to discourage digging. Some resources suggest digging down at 12 to 24 inches with a 12-inch perpendicular skirt. But that depth is not necessary unless one wants to exclude more capable diggers, such as woodchucks. Consult Diggers Hotline before initiating any digging. If aesthetics are a concern, consider painting the mesh with flat-black paint and install lattice over it to reduce visibility.

Opossums can be excluded from structures using one-way doors. Secure all openings to the structure and install a one-way door (6 x 6 x 10 inches). Prop the door partially open with crumpled newspaper, leaving a gap so the opossum can see out.

Frightening Devices

No frightening devices are effective for the control of opossums.

Repellents

No repellents are registered for the control of opossums.

Toxicants

No toxicants are registered for the control of opossums.

Fumigants

No fumigants are registered for the control of opossums.

Shooting

The legality of shooting nuisance opossums varies by state. Alabama regulation 220-2-.27 allows property owners or tenants to take one opossum per incident that is causing damage to said individual's property without a permit.

A rifle of almost any caliber (.22 caliber is most commonly used) or a shotgun loaded with No. 6 shot or larger will kill opossums effectively. Use a light (if legal) to look for opossums after dark. If an opossum has not been alarmed, it usually will pause in the light long enough to allow an easy shot. Opossums do not run rapidly; they usually will climb a nearby tree where they can be located with a light.

Trapping

Opossums are not wary of traps and are caught easily. Place traps in areas where opossums have been observed. Use foods that may have attracted opossums to the site as bait for traps (i.e. cat food, dog food, fruit).

Use fatty and oily baits if necessary. Use of fruit or sweet baits (instead of meat) will reduce the chance of catching cats, dogs, or skunks. Blind or positive trapping sets are very effective over den entrances.

Cage Traps

Single door cage/box traps should be 10 x 12 x 32 inches in size. Double-door traps should be 9 x 9 x 32 inches in size. Tube-style box traps made from round PVC pipes also are effective in capturing opossums. Use tubes of 6 or 8-inch diameter and 24 inches long.

Body-gripping Traps

The use of body-gripping traps with a jaw width exceeding 5 inches on dry land is illegal in Alabama (Figure 6).



Figure 6. Running pole set. Image by PCWD

Foothold Traps

No. 1, 1½ (regular or jump), or KB 5.5 compound w/ laminated jaws, foothold traps also are effective. Set traps along fences or trailways. Dirt hole sets or cubby sets are effective (Figure 7). Opossums are not strong. However, foothold traps should be anchored securely in case a non-target animal is captured.

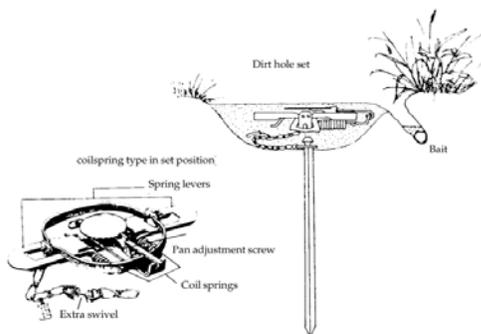


Figure 7. Dirt hole set. Image by PCWD.

A dirt hole set is about 3 inches in diameter and 8 inches deep and extends into the earth at a 45° angle. The trap should be set at the entrance to the hole. A cubby is a small enclosure made of rocks, logs, or a box. The trap is set at the entrance to the cubby. The purpose of the dirt hole or cubby is to position the animal so that it will place its foot on the trap.

Cable-restraints

Cable-restraints typically are not used for opossums and are illegal to use in Alabama on dry land.

Handling

Relocation

Alabama regulation 220-2-.27 prohibits the relocation of opossums across a county line or major river drainage. Release animal into cover and trees away from roads and human habitations.

Translocation

Alabama regulation 220-2-.27 prohibits the translocation of opossums across a county line or major river drainage. If legal, transport at least 5 miles away from the capture site.

Euthanasia

Carbon-dioxide gas is the most appropriate euthanasia technique for opossums.

Disposal

Check your local and state regulations regarding carcass disposal.

Other Control Methods

Opossums are easy to run down and corner in enclosed areas, and can be taken with catch-poles, cat-graspers and/or hand nets. Grasping the tail is not recommended. Hand capture can be employed by grasping the back of the neck and using the other hand to support its back. The opossum usually will relax once captured. Dogs can be trained to locate opossums (Figure 8).



Figure 8. Dogs may be helpful in locating opossums. Photo by Dave Schmidt.

Keeping dogs outdoors may discourage opossums from visiting the area.

Acknowledgments

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Resources

Key Words

Wildlife, wildlife control, damage management, nwco, opossums

Online Resources

<http://wildlifecontroltraining.com>

<http://icwdm.org/>

<http://wildlifecontrol.info>

Questions for Reflection

1. A client says an opossum appears to be dead on his property. How would you respond?
2. An opossum is believed to be living under the floor of a porch. What control options would you suggest to the client?
3. A client feeds opossums in her backyard. What are the concerns of which should you make the client aware?

4. Why should horse owners be concerned about opossums?

Disclaimer

Implementation of wildlife damage management involves risks. Readers are advised to implement the safety information contained in Volume 1 of the National Wildlife Control Training Program.

Some control methods mentioned in this document may not be legal in your location. Wildlife control providers must consult relevant authorities before instituting any wildlife control action. Always use repellents and toxicants in accordance with the EPA-approved label and your local regulations.

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