

# OPOSSUM

*Integrated Pest Management for Home Gardeners and Landscape Professionals*

The opossum (*Didelphis virginiana*) is the only native North American marsupial. Marsupials are distinguished by their abdominal pouch used for carrying their young. The opossum is not native to California, but was introduced many years ago from the east coast of the United States and has now become well established throughout much of the state. It is about the size of a house cat, has coarse grayish fur, a pointed face, and hairless, rounded ears (see Fig. 1). With its long hairless prehensile tail, the opossum can carry things such as nesting materials and even hang upside down from a tree branch. Opossum are about 2 to 3 feet long, including the tail, and weigh up to 15 pounds. Males are usually larger than females. Their feet resemble small hands with five widely spread fingers (see Fig. 2). All of the toes have a claw except for the opposable thumb on the rear foot. Opossum are well adapted for climbing. The opposable toe on the hind foot assists in holding on to small branches or similar structures.

## BIOLOGY AND BEHAVIOR

While their natural habitats are diverse, ranging from arid to moist and wooded to open fields, opossum prefer environments near streams or wetlands. They take shelter in abandoned burrows of other animals, in tree cavities and brush piles, and beneath other dense cover. In urban and suburban settings they may den under steps, porches, decks, garden tool sheds, and if accessible, in attics, garages, and beneath houses, where they make an untidy nest of sticks and whatever else may be available. The nest components appear piled together rather than woven or stacked. The old belief that opossum are nomadic without well-developed home ranges has been disproved. They have complex but flexible social relationships, with overlapping home

ranges that allow high populations to develop when food is plentiful.

In its foraging, the nocturnal opossum is a true omnivore, feeding on fruits, nuts, green plants, insects, snails, snakes, frogs, birds and their eggs, and small mammals such as meadow voles, mice, and rats. It eats both fresh meat and carrion and is often seen feeding on road kills, a habit that makes it vulnerable to also being killed. Opossum that live near people may visit vegetable gardens, compost piles, garbage cans, or food dishes intended for dogs or cats. Having lost much of their natural fear of people, they will even enter a home through a pet door in search of food. Fortunately, they are not aggressive unless cornered, when they may hiss, growl, and show their teeth.

The mating season extends from January to July; two litters are produced averaging about seven young each. After a short 13-day gestation period, the tiny, hairless young are born. Like other marsupials, the blind, helpless young find their way into the mother's pouch where they each attach to one of the 13 teats. No bigger than one-half inch and weighing less than 0.13 gram they do not let go for about 8 weeks, during which time they continue their development and growth. At approximately 11 weeks of age they can leave the pouch for short periods. When the young become too large for all of them to fit inside the pouch at one time, some will ride along by hanging on to the mother's back. The young are weaned at about 14 weeks, at which time they are about 9-inches long, not including the tail. Females mate again after the first litter of the season is able to live on their own. The second litter will be sufficiently grown to leave the



**Figure 1. The opossum (*Didelphis virginiana*) is the only native North American marsupial.**

mother by fall. Mortality in the young is high; most will perish before they are a year old. Those that survive will breed the following spring. Few opossum live beyond 3 years.

Opossum have a top running speed of only 7 miles per hour, so they have developed strategies to escape enemies. They readily enter burrows and climb trees in an attempt to elude danger.

# PEST NOTES

**Publication 74123**

University of California  
Agriculture and Natural Resources

April 2005

When threatened, an opossum may bare its teeth, growl, hiss, and exude a repulsive, smelly, musk like fluid from its anal glands, which offers some degree of protection from predators. "Playing possum" is another characteristic reaction; the animal rolls over on its side, becomes limp, shuts its eyes, and lets its tongue hang from an open mouth. The heartbeat slows and the animal appears to be dead. This is a nervous shock reaction, but the opossum recovers quickly and takes the first opportunity to escape. When surprised during daylight, opossum appear bewildered and sluggish.

Opossum are considered a nuisance in gardens and near homes when they feed on berries, grapes, tree fruits and nuts, and defecate on garden paths and patios. They get into fights with dogs and cats and can inflict serious injury with their mouthful of sharp pointed teeth.

Opossum carry diseases such as leptospirosis, tuberculosis, relapsing fever, tularemia, spotted fever, toxoplasmosis, coccidiosis, trichomoniasis, and Chagas disease. They may also be infested with fleas, ticks, mites, and lice. Opossum are hosts for cat and dog fleas, especially in urban environments.

**LEGAL STATUS**

The California Fish and Game Code classifies opossum as nongame mammals. If you find opossum threatening growing crops or other property of which you are the owner or tenant, you may control the opossum using any legal means. Fish and Game regulations prohibit the relocation of wildlife without written permission from the department. Check to make sure there are no local restrictions pertaining to the removal of opossum prior to taking any action.

**MANAGEMENT**

Control methods for opossum are the same or similar to those for skunks and raccoons. Opossum do not usually become as numerous as raccoons sometimes do and are not as objectionable as skunks. Opossum are highly adapt-

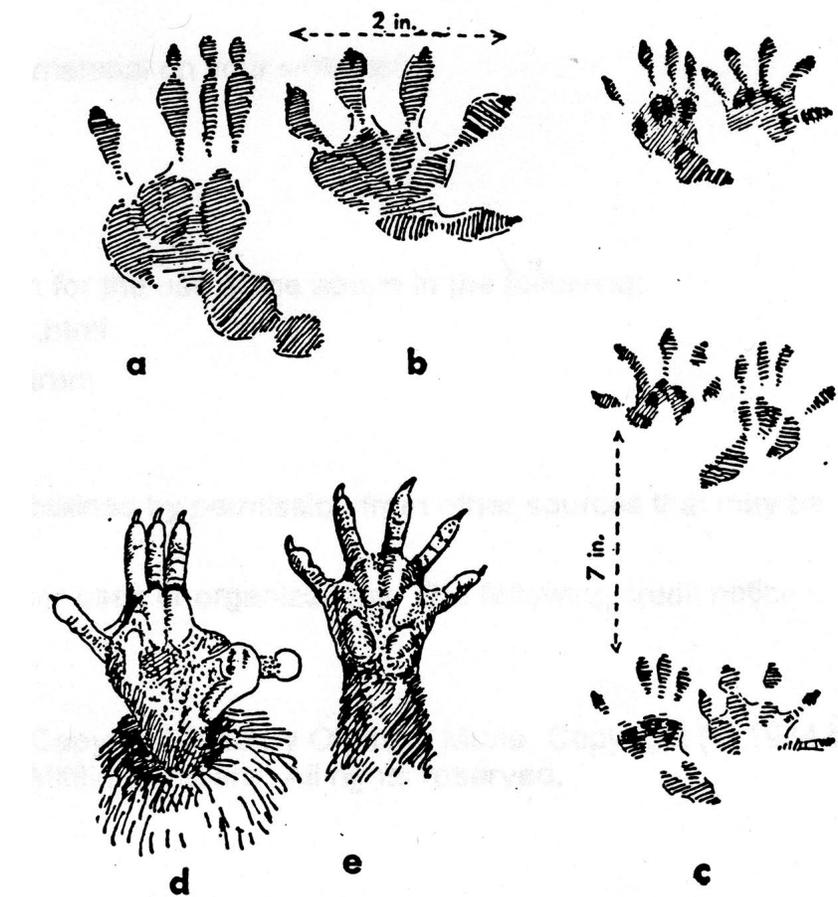


Figure 2. a: Hind foot track; b: front foot track; c: trail pattern; d: hind foot, note unusual arrangement of the toes; e: front foot.

able and are great survivors. Once they have invaded a neighborhood they are probably there to stay so long as food, water, and shelter are available.

**Detection**

Because they are only active at night, the animals may never be seen as they travel through neighborhoods or yards. Barking dogs and disappearing pet food left out overnight may be the first apparent clues. Sometimes strange looking droppings may be found on garden paths, walkways, and patios, though typically opossum defecate in protected and leafy areas. The scat is difficult to describe as the omnivorous eating habits of the animal preclude an average size, shape, or texture. Since they are messy feeders, you may find remnants of the previous nights foraging and feeding. An occasional visit

by an opossum or a family of opossum may not present cause for concern unless you have pets that remain outdoors at night. Pet and opossum confrontations are relatively common and the pets are often injured. Early action may be warranted to avoid such a problem.

**Habitat Control**

The aim of habitat control is to make your premises less appealing to the opossum. Overgrown shrubbery should be cut back and trees that overhang rooftops should be trimmed back at least five feet from the roof edge. Fallen fruit should be removed frequently. Be sure your firewood is stacked tightly, leaving no major gaps suitable for a den. Scrap lumber and other items should be stored in an orderly manner, preferably about 18 inches off the ground. Garbage cans should have tight-fitting lids and

food items or table scraps should not be placed in your compost bin. Food placed outdoors for pets should be removed by nightfall.

### **Exclusion**

As with skunks and raccoons, the best solution to an opossum's presence beneath stairs, porches, decks, or buildings is to screen or block it out. Close off all potential entrances or openings under the house, garden tool shed, mobile home, deck, etc. with 1/4-inch mesh hardware cloth. The advantage of using the small mesh is that it will also exclude rats and house mice.

Once an opossum has taken up residence beneath a building or deck you have to be sure the animal has left before blocking the opening. A fairly easy way to make this determination is to sprinkle a smooth layer of flour about 1/8-inch thick just in front of the point of entrance to form a tracking patch in which the animal's footprints are evident (see Fig. 2). Examine the tracking patch soon after dark; the presence of footprints will indicate the animal has left and the opening can then be closed off. Normally opossum live alone except when with young and then, since the young remain in the pouch, they leave with the mother.

Exclusion of opossum from gardens can be accomplished with a fence built of poultry wire. The fence should be four feet high with the top 12 to 18 inches of the fence bent outward, away from the garden, and not attached to any support. Since the top of the fence is not rigid and bends under the weight of the animal, it cannot climb over it. As an alternative, any standard wire fence can be made opossum proof by stretching a parallel electrically charged wire near the top of the fence, three inches out from the mesh. A cattle-type electric fence charger activates the wire. A similar approach can be used to prevent opossum from climbing trees. More electric fence details are provided in *Pest Notes: Raccoon*. Oakland: Univ. Calif. Div. Agric. Nat. Res. Publ. 74116. It is also available online at [www.ipm.ucdavis.edu/PMG/PEST-NOTES/pn74116.html](http://www.ipm.ucdavis.edu/PMG/PEST-NOTES/pn74116.html).

### **Trapping**

Opossum are not wary of traps and can easily be caught with a box or cage-type, live-catch trap. Traps should be at least 10 x 12 x 32 inches in size and set along trails or known routes of travel. Fish-flavored canned cat food works well as trap bait but often attracts cats as well. To avoid this possibility, try using whole raw chicken eggs, or jam or peanut butter spread on a bit of bread. Other baits can include overripe fruit such as grapes, bananas, or melon. Live trapping presents the problem of dealing with the animal once captured. Since it is illegal to relocate an opossum without a permit, those not wanting to deal with its disposal may prefer to hire a professional wildlife control operator. They are equipped to handle problem wildlife in a legal and humane manner. You can find them listed under the Pest Control heading in the yellow pages of the phone book.

### **Other Control Methods**

A motion-activated sprinkler device sometimes induces a fright response in opossum, skunks, and raccoons. If the animal has established the habit of visiting the yard or garden, such fright responses rarely last for more than a few days. A greater effect is observed on animals that have not habituated to the site.

An array of chemical products is marketed for repelling various wildlife species but, unfortunately, none offer significant results. The odor of mothballs or naphthalene crystals, used as a home remedy repellent, has occasionally been reported to be successful in driving opossum from confined areas, but can build up toxicity in the soil.

There are no registered toxicants for poisoning opossum. Poison baits sold for the control of rodents should never be used in an attempt to control opossum, skunks, or raccoons. The penalty for such pesticide misuse can be substantial and the practice usually becomes known as a result of the accidental poisoning of someone's pet.

In rural areas where it is legal and safe to do so, opossum may be spotlighted

at night and shot.

### **COMPILED FROM**

Salmon, T. P., D. A. Whisson, and R. E. Marsh. In press. *Wildlife Pest Control Around Gardens and Homes*. 2nd ed. Oakland: Univ. Calif. Agric. Nat. Res. Publ. 21385.

For more information contact the University of California Cooperative Extension or agricultural commissioner's office in your county. See your phone book for addresses and phone numbers.

AUTHORS: T. P. Salmon, D. A. Whisson, and R. E. Marsh  
 TECHNICAL EDITOR: M. L. Flint  
 COORDINATION, DESIGN, & PRODUCTION: P. Galin  
 ILLUSTRATIONS: **Figs. 1.** Nona Smith; **Fig. 2:** *A Field Guide to Animal Tracks*. Copyright 1950 by Olaus J. Murie. Copyright (c) 1974 by Margaret A. Murie. Reprinted by permission of Houghton Mifflin Company. All rights reserved. [www.hmco.com](http://www.hmco.com).

Produced by IPM Education and Publications, UC Statewide IPM Program, University of California, Davis, CA 95616-8620

**This Pest Note is available on the World Wide Web ([www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu))**



This publication has been anonymously peer reviewed for technical accuracy by University of California scientists and other qualified professionals. This review process was managed by the ANR Associate Editor for Pest Management.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.

This material is partially based upon work supported by the Extension Service, U.S. Department of Agriculture, under special project Section 3(d), Integrated Pest Management.

**WARNING ON THE USE OF CHEMICALS**

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits or vegetables ready to be picked.

Do not place containers containing pesticide in the trash or pour pesticides down sink or toilet. Either use the pesticide according to the label or take unwanted pesticides to a Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Household Hazardous Waste Collection site nearest you. Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6th Floor, Oakland, CA 94612-3550, (510) 987-0096.