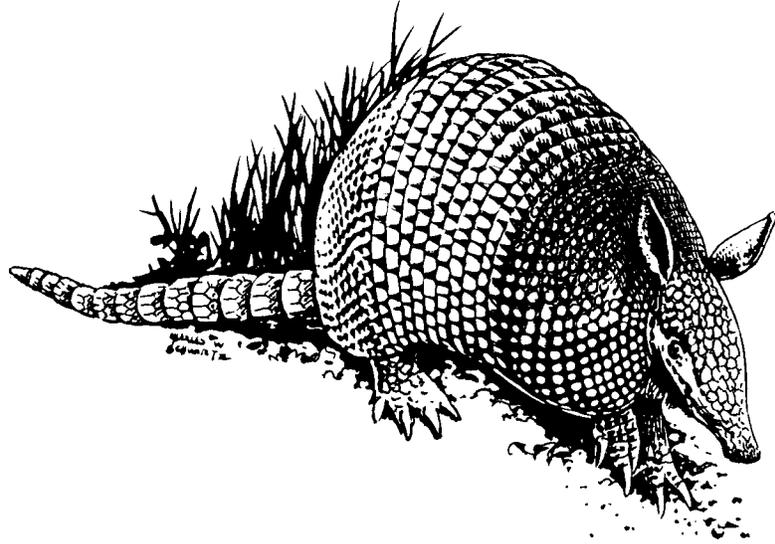


ARMADILLOS

Fig. 1. Armadillo, *Dasypus novemcinctus*



Damage Prevention and Control Methods

Exclusion

Fences or barriers are generally not practical, but a possible option.

Cultural Methods

Clear brush and other cover to reduce habitat.

Repellents

None are registered.

Toxicants

None are registered.

Fumigants

None are registered.

Trapping

Live traps (box traps).

Leghold traps (size No. 1 or 2).

Conibear® 220.

Shooting

One of the most commonly used methods.

Other Methods

Soil insecticides that remove food sources will discourage armadillos from feeding in an area.

Identification

The armadillo (*Dasypus novemcinctus*) is a rather interesting and unusual animal that has a protective armor of "horny" material on its head, body, and tail. This bony armor has nine movable rings between the shoulder and hip shield. The head is small with a long, narrow, piglike snout. Canine and incisor teeth are absent. The peglike cheek teeth range in number from seven to nine on each side of the upper and lower jaw. The long tapering tail is encased in 12 bony rings. The track usually appears to be three-toed and shows sharp claw marks. The armadillo is about the size of an opossum, weighing from 8 to 17 pounds (3.5 to 8 kg).



PREVENTION AND CONTROL OF WILDLIFE DAMAGE — 1994

Cooperative Extension Division
Institute of Agriculture and Natural Resources
University of Nebraska - Lincoln

United States Department of Agriculture
Animal and Plant Health Inspection Service
Animal Damage Control

Great Plains Agricultural Council
Wildlife Committee

Range

The armadillo ranges from south Texas to the southeastern tip of New Mexico, through Oklahoma, the southeastern corner of Kansas and the southwestern corner of Missouri, most of Arkansas, and southwestern Mississippi. The range also includes southern Alabama, Georgia, and most of Florida (Fig. 2).

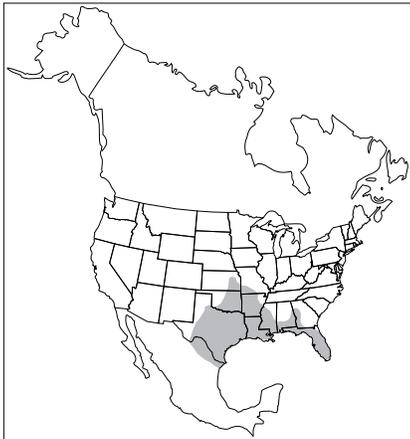


Fig. 2. Range of the armadillo in North America.

Habitat

The armadillo prefers dense, shady cover such as brush, woodlands, forests, and areas adjacent to creeks and rivers. Soil texture is also a factor in the animal's habitat selection. It prefers sandy or loam soils that are loose and porous. The armadillo will also inhabit areas having cracks, crevices, and rocks that are suitable for burrows.

Food Habits

More than 90% of the armadillo's diet is made up of insects and their larvae. Armadillos also feed on earthworms, scorpions, spiders, and other invertebrates. There is evidence that the species will eat some fruit and vegetable matter such as berries and tender roots in leaf mold, as well as maggots and pupae in carrion. Vertebrates are eaten to a lesser extent, including skinks, lizards, small frogs, and snakes, as well as the eggs of these animals.

General Biology, Reproduction, and Behavior

The armadillo is active primarily from twilight through early morning hours in the summer. In winter it may be active only during the day. The armadillo usually digs a burrow 7 or 8 inches (18 or 20 cm) in diameter and up to 15 feet (4.5 m) in length for shelter and raising young. Burrows are located in rock piles, around stumps, brush piles, or terraces around brush or dense woodlands. Armadillos often have several dens in an area to use for escape.

The young are born in a nest within the burrow. The female produces only one litter each year in March or April after a 150-day gestation period. The litter always consists of quadruplets of the same sex. The young are identical since they are derived from a single egg.

The armadillo has poor eyesight, but a keen sense of smell. In spite of its cumbersome appearance, the agile armadillo can run well when in danger. It is a good swimmer and is also able to walk across the bottom of small streams.

Damage and Damage Identification

Most armadillo damage occurs as a result of their rooting in lawns, golf courses, vegetable gardens, and flower beds. Characteristic signs of armadillo activity are shallow holes, 1 to 3 inches (2.5 to 7.6 cm) deep and 3 to 5 inches (7.6 to 12.7 cm) wide, which are dug in search of food. They also uproot flowers and other ornamental plants. Some damage has been caused by their burrowing under foundations, driveways, and other structures. Some people complain that armadillos keep them awake at night by rubbing their shells against their houses or other structures.

There is evidence that armadillos may be responsible for the loss of domestic poultry eggs. This loss can be prevented through proper housing or fencing of nesting birds.

Disease is a factor associated with this species. Armadillos can be infected by the bacterium *Mycobacterium leprae*, the causative agent of leprosy. The role that armadillos have in human infection, however, has not yet been determined. They may pose a potential risk for humans, particularly in the Gulf Coast region.

Legal Status

Armadillos are unprotected in most states.

Damage Prevention and Control Methods

Exclusion

Armadillos have the ability to climb and burrow. Fencing or barriers, however, may exclude armadillos under certain conditions. A fence slanted outward at a 40° angle, with a portion buried, can be effective. The cost of exclusion should be compared to other forms of control and the value of the resources being protected.

Cultural Methods

Armadillos prefer to have their burrows in areas that have cover, so the removal of brush or other such cover will discourage them from becoming established.

Repellents

None are currently registered or known to be effective.

Toxicants

None are currently registered.

Fumigants

None are currently registered; however, there are some that are effective. Since state pesticide registrations vary, check with your local extension office

or state wildlife agency for information on pesticides that are legal in your area.

Trapping

Armadillos can be captured in 10 x 12 x 32-inch (25 x 30.5 x 81-cm) live or box traps, such as Havahart, Tomahawk, or homemade types. The best locations to set traps are along pathways to armadillo burrows and along fences or other barriers where the animals may travel.

The best trap is the type that can be opened at both ends. Its effectiveness can be enhanced by using "wings" of 1 x 4-inch (2.5 x 10-cm) or 1 x 6-inch (2.5 x 15-cm) boards about 6 feet (1.8 m) long to funnel the target animal into the trap (Fig. 3). This set does not need baiting. If bait is desired, use overripe or spoiled fruit. Other suggested baits are fetid meats or mealworms.

Other traps that may be used are leghold (No. 1 or 2) or size 220 Conibear® traps. These types should be placed at the entrance of a burrow to improve selectivity. Care should be taken when placing leghold traps to avoid areas used by nontarget animals.

Shooting

Shooting is an effective and selective method. The best time to shoot is during twilight hours or at night by spotlight when armadillos are active. A shotgun (No. 4 to BB-size shot) or rifle (.22 or other small caliber) can be used. Good judgment must be used in determining where it is safe to shoot. Check local laws and ordinances before using shooting as a control method.

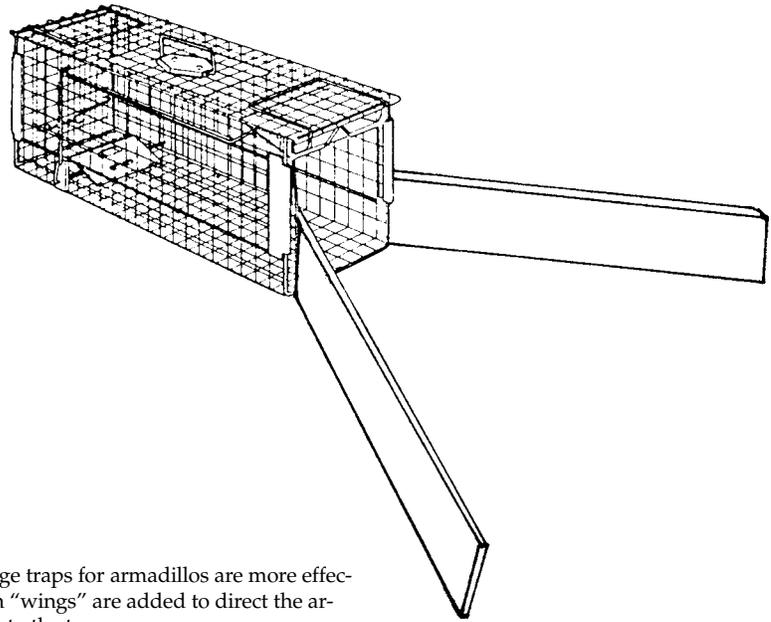


Fig. 3. Cage traps for armadillos are more effective when "wings" are added to direct the armadillo into the trap.

Other Methods

Since most of the damage armadillos cause is a result of their rooting for insects and other invertebrates in the soil, soil insecticides may be used to remove this food source and make areas less attractive to armadillos.

Economics of Damage and Control

There are few studies available on the damage caused by armadillos. The damage they do is localized and is usually more of a nuisance than an economic loss.

Acknowledgments

Figure 1 from Schwartz and Schwartz (1981), adapted by Emily Oseas Routman.

Figure 2 adapted from Burt and Grossenheider (1976) by Jill Sack Johnson.

Figure 3 by Jill Sack Johnson.

For Additional Information

- Burt, W. H., and R. P. Grossenheider. 1976. A field guide to the mammals, 3d ed. Houghton Mifflin Co., Boston. 289 pp.
- Chamberlain, P. A. 1980. Armadillos: problems and control. Proc. Vertebr. Pest Conf. 9:163-169.
- Galbreath, G. J. 1982. Armadillo. Pages 71-79 in J. A. Chapman and G. A. Feldhamer, eds. Wild mammals of North America: biology, management and economics. The Johns Hopkins Univ. Press, Baltimore.
- Humphrey, S. R. 1974. Zoogeography of the nine-banded armadillo (*Dasypus novemcinctus*) in the United States. BioSci. 24:457-462.
- McBee, K., and R. J. Baker. 1982. *Dasypus novemcinctus*. Mammal. Sp. 162:1-9.

Editors

Scott E. Hygnstrom
Robert M. Timm
Gary E. Larson

