June 1992

VIRGINIA OPOSSUM (Didelphis virginiana)

Follow this and additional works at: http://digitalcommons.unl.edu/nebgamepubs
Part of the Environmental Sciences Commons


This Article is brought to you for free and open access by the Nebraska Game and Parks Commission at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Game and Parks Commission Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
DESCRIPTION: Opossums are a member of the order Marsupialia, a primitive group of mammals found most commonly in Australia. Kangaroos, koalas and wombats are other well-known marsupials.

The Virginia opossum is among the most primitive and generalized of marsupials. Its closest relative is the Central American opossum. An adult opossum is 2 to 3 feet long and weighs between 4 and 12 pounds. It has an elongated snout, a pink nose, black eyes and prominent, naked black ears. Its head is usually white and its coarse body fur is mostly grayish white but tends to be darker on its legs.

An opossum is well-adapted for climbing. Its feet are plantigrade (shaped so the opossum walks on the sole of its foot with the heel touching the ground) and its toes are dexterous (skillful, like fingers). Its hind feet have a toe that resembles a thumb and makes them look somewhat like human hands. Its naked, scaly tail is able to wrap around and grasp limbs and can support the animal's full weight for short periods.

The opossum's skull has 50 teeth, the highest number found in any mammal.

DISTRIBUTION AND ABUNDANCE: Prior to the European settlement of North America, the Virginia opossum was found only in Central America and the southeastern United States. During the 1900s, its range expanded northward and westward. Its northern distribution is limited by winter temperatures and its western distribution is limited by dry, hot climates. The opossum has been introduced along the Pacific Coast and is currently found from southern California to southwestern British Columbia.

Extreme southeastern Nebraska was part of the opossum's presettlement range and it is now common in southern and eastern Nebraska. In the Sandhills and Panhandle, opossums are restricted to major drainages such as the Loup, Niobrara and North Platte rivers.

HABITAT AND HOME: Opossums and raccoons share similar habitat requirements and both species use similar areas in a similar manner. Good opossum habitat includes a combination of large trees and shrub thickets, abundant water and crop fields. An opossum will den nearly anywhere that is dry, sheltered and safe, such as the abandoned dens of other animals, hollow trees and logs and brushpiles. A nest of leaves and grass is usually made at the den site. An opossum will use a number of dens within its home range.

HABITS: An opossum is primarily nocturnal (active at night) but may become diurnal (active during daylight hours) during cold weather. An adult male’s home range is about 250 acres and tends to shift through the course of its life, while the adult female’s home range is smaller, about 125 acres, and is more permanent. An adult male is solitary, while an adult female is with her young through most of the year. The young of the first litter begin living on their own away from the nest when they are three months old, but second-litter young stay with the mother until the following spring. Litter-mates may share common dens
An opossum does not hibernate, but remains inactive for short periods during severe winter weather. However, its energy reserves are not as extensive as those of a raccoon, so it must forage on a regular basis, even during extreme weather conditions.

An opossum is a very slow runner and will try to escape predators by climbing the nearest tree. When cornered on the ground, it initially exhibits a threatening posture, hissing and making low growls. If attacked, it generally lies very still as if paralyzed or dead, a habit called playing possum. It also emits a foul smelling substance when threatened.

**FOODS:** An opossum does not have a method for storing food or energy and needs food sources that are stable from season to season and year to year. Its diet includes a wide variety of foods, including insects, earthworms, small mammals, fruits, grains, plants, and the flesh of dead animals it happens to find. It forages intensively in a small area on whatever is available. When food resources become depleted in one place, the animal simply moves to a new area.

Although the foods an opossum eats are varied, they must be abundant and closely spaced. Extreme weather conditions, such as a severe drought or extended cold, can reduce food availability and have devastating effects on opossum populations.

**REPRODUCTION:** A female opossum usually has two litters per year. Mating occurs in mid-January through February and continues into August. Young partially-developed opossums are born 13 days after mating. They migrate to the female’s pouch where they continue to develop for several weeks. The young emerge from the pouch when they are 1½ to 2 months old and ride on their mother’s back. They are weaned at three months. The adult female mates again soon after the first litter is weaned, and the first litter disperses within one month of weaning. Young from the second litter are weaned and on their own by September or October.

There are 8 to 10 young in an average litter, but litters of 17 have been reported. The young are capable of reproducing at six months of age, but usually don’t until the year after they are born.

**MORTALITY:** An opossum is short-lived and has high mortality rates at all stages. Mortality of young still in the pouch ranges from 10 to 25 percent. Of those that survive through weaning, fewer than 10 percent live longer than one year. The oldest known wild opossums were 2½ to 3 years old.

The most important mortality factors are caused by humans, predation, parasites and disease, exposure and starvation. Human-caused mortalities include hunting, trapping and highway collisions. Important predators include great horned owls, dogs and coyotes. An opossum is a host to a multitude of internal and external parasites including intestinal worms, fleas and ticks. These generally are debilitating and increase susceptibility to diseases and malnutrition. An opossum is highly resistant to rabies.

**IMPORTANCE:** Opossums seldom cause problems for homeowners, ranchers or farmers. They sometimes raid trash cans or dog food containers, but these situations are easily remedied by denying access to the containers.

The opossum is classified as a furbearer in Nebraska but is not taken in large numbers by hunters or trappers, and its pelt has little value. Opossum furs are primarily used to trim inexpensive cloth garments.

From 1941 to 1989, over 350,000 opossums were taken by fur hunters and trappers. Harvest totals from 1980 to 1989 indicate an average annual harvest of 11,900 opossums valued at $7,200. From 1984 to 1989, only 42 percent of the harvested opossum pelts were sold.

The uniqueness of the opossum intrigue scientists and nature enthusiasts. It is the only marsupial in the United States. In Australia and elsewhere, marsupials have been out-competed and even driven to extinction by more modern mammals. Yet, the opossum has adapted to the changing environment in the U.S. with its simple manner, and continues to thrive.