

Wildlife Services

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Factsheet

October 2010

Nutria, an Invasive Rodent



Wildlife Services (WS), a program within the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), provides Federal leadership and expertise to resolve wildlife conflicts that threaten the Nation's agricultural and natural resources, human health and safety, and property.

The increased population and range of invasive species can harm native ecosystems, impact agricultural resources, and increase disease transmission. Under an Executive Order that directs Federal agencies to address invasive species damage, the WS program works to control and prevent damage caused by nutria.

The nutria (*Myocastor coypus*), a large, semi-aquatic rodent native to South America, originally was brought to the United States in 1889 for its fur. When the nutria fur market collapsed in the 1940s, thousands of nutria were released into the wild by ranchers who could no longer afford to feed and house them. Entrepreneurs began selling the herbivores to control noxious weeds. Wildlife agencies further expanded the range of the nutria by introducing the species into new areas of the United States. While the nutria did devour weeds and overabundant vegetation, they also destroyed native aquatic vegetation, crops, and wetland areas.

Recognized in the United States as an invasive wildlife species, nutria have been found in 22 States, and are currently established in 16 States. The nutria's relatively high reproductive rate combined with a lack of population controls have resulted in a proliferation of the species. In many regions they cause severe damage. Nutria are most abundant in the Gulf Coast States, but they also cause problems in other southeastern States and along the Atlantic coast. In addition to damaging vegetation and crops, nutria destroy the banks of ditches, lakes, and other water bodies. Of greatest significance, however, is the permanent damage nutria can cause to marshes and other wetlands.

In these areas, nutria feed on native plants that hold wetland soil together. The destruction of this vegetation intensifies the loss of coastal marshes that has been stimulated by rising sea levels.

Identification

Nutria are approximately 2-feet long, with a large head, short legs and a stout body that appears hump-backed on land. They are dark brown in color, although occasional light-colored and albino animals are observed. Because nutria spend much of their time in the water,

A small bay area along Maryland's Chesapeake Bay shows recovery in the 2 years after invasive nutria were removed by Wildlife Services biologists and specialists.



they are highly adapted for a semi-aquatic existence.

Their hind feet are partially webbed for swimming, and their eyes, ears, and nostrils are set high on their heads, so they can stay above the waterline when swimming. Nutria are excellent swimmers, and valves in their nostrils and mouths seal out water when submerged to swim or feed. When pursued, they can swim long distances underwater, seeing well enough to evade capture. Female nutria have teats located high on their backs so that their young can suckle when floating in the water. From a distance, nutria often are mistaken for beavers and muskrats. All three species are dark brown in color and semi-aquatic with large front teeth that are yellow to orange in color. However, at 15- to 20-pounds for a large adult, nutria are about one-third the size of an adult beaver (45 pounds) and 5 to 8 times larger than an adult muskrat (2–4 pounds).

Additionally, the tails and whiskers of the three species are distinctly different. Beavers have large broad flat tails that they often smack loudly on the water to signal alarm. Muskrats have long narrowly flattened tails that can be seen whipping snake-like behind when swimming the water. Nutria have a heavy, rat-like tail thinly covered in bristly hairs that trails smoothly behind when swimming. In northern climates, nutria often suffer frostbite to their tails and may retain only a stub tail following a cold winter. Another distinguishing characteristic of nutria

are the long (3–5 inch) noticeable white whiskers that protrude from either side of their nose and can be easily seen from a distance. Beaver and musk-



Sometimes mistaken for beaver or muskrat, some characteristics can assist in identifying nutria. These include large front teeth that are yellow to orange in color; a heavy, rat-like tail thinly covered in bristly hairs; and noticeable white whiskers that protrude from either side of their nose and can be easily seen from a distance (USFWS photo).

rat have subtle black whiskers that can only be viewed from very close.

Nutria adapt to a wide variety of habitats but are usually closely associated with water. In the United States, the largest nutria populations are located in freshwater marshes in coastal areas along Gulf Coast States. These regions have an abundance of small trees, shrubs, and vegetation with underwater roots and surface leaves. In these areas, nutria live in farm ponds and other fresh water impoundments, drainage canals, rivers, bayous, freshwater and brackish marshes, and swamps. In cities, they can be found under buildings, in overgrown lots, on golf courses, and in storm drains.

Beaver create lodges from mud and sticks and muskrat create mounded huts from mud and vegetation. Nutria do not create their own shelters from the elements. Nutria sometimes live in burrows; in

Included in the nutria's preferred diet are the roots, rhizomes and tubers of cattails, cordgrass, and bulrush.

marshes they often create flat, nest-like platforms of dead vegetation for feeding, loafing, grooming, and birthing. Sometimes, nutria will burrow into muskrat houses and displace their residents.

Damage

Nutria damage is evident to varying degrees in every area they are found. Burrowing causes the most noticeable damage. Nutria are notorious in Louisiana and Texas for undermining and breaching water-retention levees in flooded fields used to produce rice and crawfish. Nutria burrows also can damage flood-control levees that protect low-lying areas; weaken the foundations of reservoir dams, buildings, and roadbeds; and erode the banks of streams, lakes, and ditches.

Nutria damage, however, is not limited to burrowing. Depredation on crops is well documented.

In the United States, sugarcane and rice are the primary crops damaged by the nutria. Grazing on rice plants can significantly reduce yields, with severe localized loss. Other crops damaged by the nutria include corn, milo, sugar and table beets, alfalfa, wheat, barley, oats, peanuts, various melons, and a variety of vegetables. This depredation can lead to significant losses, especially for small farmers.

The negative impact this invasive species has on native vegetation and associated wetlands is critically important. In Louisiana, some nutria feed on seedling bald cypress with such intensity that the trees cannot survive. Similarly, nutria can severely damage coastal marshes by decimating native plants that hold marsh soils together and support the survival of native wildlife species. The impact of nutria on disappearing marshlands along the Gulf Coast and the Chesapeake Bay in Maryland has been well documented. Nutria have caused widespread ecosystem changes. In some cases, nutria damage to marsh vegetation and soils is so severe that these resources are permanently lost. The

destruction of these marshlands also increases the vulnerability of adjacent upland sites to erosion and flooding during storms.

Nutria also can impact public health and safety. The rodents can serve as hosts for several pathogens, including tuberculosis and septicemia, which can infect people, pets, and livestock. In addition, nutria can carry parasites, such as blood flukes, tapeworms, and liver flukes and a nematode known to cause a rash called “nutria itch.” Many of these organisms—found in nutria feces and urine—can contaminate drinking water supplies and swimming



Highly adapted for a semi-aquatic existence, from a distance, nutria often are mistaken for beavers and muskrats while swimming.

areas.

How Wildlife Services Manages the Damage

WS is authorized by Congress to resolve damage caused by wildlife. A 1997 Executive Order also directs USDA to provide national leadership and oversight in managing invasive species, such as the nutria, in cooperation with other Federal agencies.

When requested, WS provides nutria assistance; WS program specialists work closely with Federal, State, and local governments to develop comprehensive management plans that include

Their eating, digging, rooting, and swimming causes massive erosion, converting healthy marsh and habitat for native species into open water habitat.

provisions for protecting native vegetation, marsh soil, and other natural resources against nutria damage.

Preventive measures should be used whenever possible, especially in areas where nutria damage is common. Habitat management can help reduce rodent numbers by manipulating vegetation and water sources attractive to nutria. Small areas, such as gardens, can be enclosed by partially buried fences. Wire tubes can be used to protect bald cypress and other tree seedlings from nutria damage and bulkheads can be used to deter burrowing into banks. These methods can be expensive to implement and are not always effective or practical.

When damage cannot be resolved by nonlethal measures, WS has the expertise to remove nutria populations in problem areas. Relocation is not a viable option; nutria are an invasive species that threaten both native wildlife species and vegetation. Relocating nutria to a new area just relocates the problem, and can lead to the establishment of new nutria colonies and new damage concerns.

Additional Information

For more information about this and other WS programs or to request assistance from your WS State office call 1-866-4USDA-WS (1-866-487-3297). Find more information at www.aphis.usda.gov/wildlife_damage.



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Animal and Plant Health Inspection Service

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