



**Animal and Plant Health
Inspection Service**

Wildlife Services

Factsheet

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Nutria, An Invasive Rodent



Wildlife Services, a program within the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS), provides Federal leadership and expertise in managing conflicts between people and wildlife to help protect the Nation's agricultural and natural resources, property and infrastructure, and public health and safety.

Increased populations and ranges of invasive species can harm native ecosystems, impact agricultural resources, and increase disease transmission. An Executive Order directs Federal agencies, including WS, to address invasive species damage, including that caused by nutria.

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 (USFWS photo).

The nutria (*Myocastor coypus*), a large, semi-aquatic rodent native to South America, was originally brought to the United States in 1889 for its fur. When the nutria fur market collapsed in the 1940s, thousands of nutria escaped or were released into the wild by ranchers who could no longer afford to feed and house them. While nutria devour weeds and overabundant vegetation, they also destroy native aquatic vegetation, crops, and wetland areas.

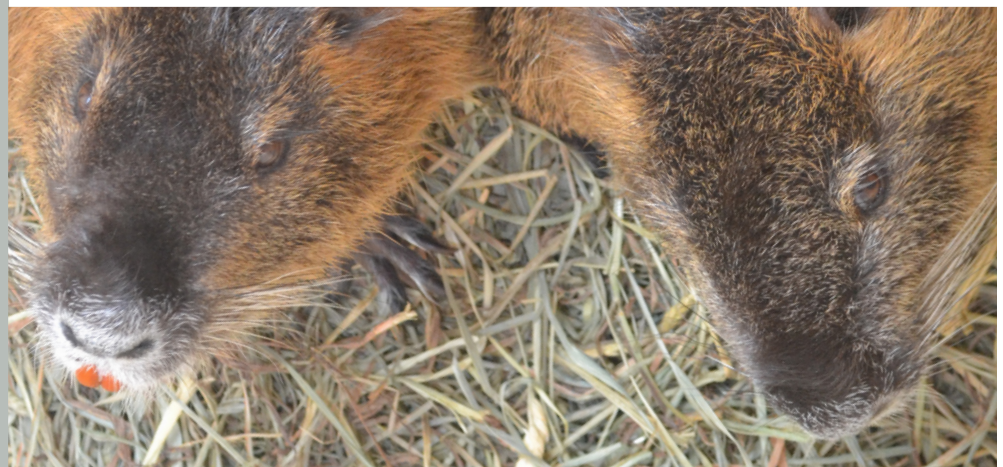
Recognized in the United States as an invasive wildlife species, nutria have been found in at least 20 States and most recently in California. The nutria's relatively high reproductive rate, combined with a lack of population controls, helped the species to spread. In many regions they cause severe damage.

Nutria are most abundant in the Gulf Coast States, but they also cause problems in other southeastern States, the Pacific Northwest, 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 exacerbated by rising sea levels.

Identification

Nutria are approximately two-feet long, with a large head, short legs and a stout body that appears hump-backed on land. They are dark brown





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.

in color although occasional light colored and albino animals are observed. Because nutria spend much of their time in the water, 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 are often mistaken for beavers and muskrats.

All three species are dark brown in color and semi-aquatic. However, nutria have visible large front teeth that are yellow to orange in color. Adults weigh 15 to 20 pounds for adults, this is about one-third the size of an adult beaver (>45 pounds) and 5-8 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 them 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 long (3-5") white whiskers that protrude from either side of their nose and are easily seen from a distance. Beavers and muskrats 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 under-water roots and surface leaves. In these areas, nutria live in farm ponds and other fresh water impoundments such as 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.

Beavers create lodges from mud and sticks and muskrats create mounded huts from mud and

The nutria's preferred diet includes the roots, rhizomes and tubers of cattails, cordgrass, and bulrush.

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

vegetation. Unlike beaver and muskrat that construct protective shelters from mud, sticks, and or vegetation, nutria do not build structures to protect themselves from the elements. Nutria sometimes live in burrows and in marshes, often creating 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 can also 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. Crop damage 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.

To address the threat and protect the Chesapeake Bay area of Maryland from further environmental damage, numerous partners joined forces in the mid-1990's and the project to remove nutria from nearly 800 square miles, officially began in 2002. Within two years, the eradication team had nearly eliminated nutria from the Blackwater National Wildlife Refuge and by 2006, they expanded the eradication zone into surrounding counties, where the effects of eradication were immediately observable.

Expansion to the landscape level required the cooperation, or partnership, of hundreds of private landowners as well as the governmental, academic, and private partners. It took 12 years, working on nearly half a million acres, and the removal of 14,000 nutria to accomplish the goal and in 2020 the area is still being monitored to confirm the absence of the invasive rodent.

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 areas.



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

How Wildlife Services Manages the Damage

Wildlife Services 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 WS is asked to provide nutria assistance, program specialists work closely with Federal, State, and local governments to develop comprehensive management plans that include provisions for protecting native vegetation, marsh soil, and other natural resources against nutria damage.

Preventative 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 may not always be effective or practical.

When damage cannot be resolved by nonlethal measures, WS has the expertise to remove nutria populations in problem areas. Because nutria are an invasive species and threaten both native wildlife species and vegetation, relocation is not a viable nutria option. Relocating nutria to a new area just relocates the problem, and can lead to the establishment of new 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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Wildlife Services is not the only source of wildlife damage management services available to the public. Private-sector wildlife damage management providers may also be available. Wildlife Services does not endorse or recommend any specific private-sector provider or the use of any specific product over another.

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