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United States Department of Agriculture

Managing Burrowing Mammals (Muskrats & Groundhogs)



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WILDLIFE SERVICES MISSION

“...to provide leadership in minimizing the effects of wildlife damage on America’s agriculture, industry, and natural resources and to safeguard public health and safety.”

Research
Technical Assistance
Applied Management

WILDLIFE SERVICES IS NON-REGULATORY!

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Objectives Include the Protection of the Following Resources:

- Agricultural crops
- Livestock
- Aquaculture
- Natural Resources
- Public Health and Safety:
 - Wildlife Disease
 - Airports
- Threatened and Endangered Species



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Nuisance Wildlife

Wildlife that occurs in a place where it is unwanted

Wildlife that causes damage to valuable property




- Adaptable
- Intelligent
- Use “easy” resources through human influence

Wildlife are not malicious, destructive or hateful - just instinctual

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Nuisance Wildlife Management/Wildlife Damage Management

Finding balance between the interests of humans and needs of wildlife



Threshold of Acceptable Damage: What are you willing to put up with on your property?

Learn to live with wildlife

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Basic Wildlife Ecology

Wildlife Needs for Survival

- food
- water
- shelter
- space

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Define the Problem

I swear it wasn't me!!

- What is causing the Damage
- What is the issue
- Can I live with it

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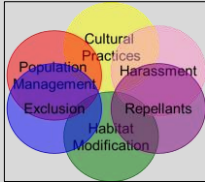
Finding a Solution

Integrated Wildlife Damage Management

- The integration and application of practical methods of prevention and control to reduce damage by wildlife while minimizing the harmful effects of management measures on humans, other species, and the environment.

- Cultural Practices
- Habitat Modification
- Animal Behavior Management
- Population Management

There is no quick fix to resolving wildlife conflicts



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Ohio Administrative Code

Rule 1501:31-15-03 | Nuisance wild animal control

- It shall be unlawful to fail to euthanize, or release on site, any nuisance raccoon, skunk, beaver, coyote, red fox, or opossum that is captured, trapped or taken.
- Except as otherwise provided, it shall be unlawful to fail to release all other nuisance wild animals:
 - (a) Outside the limits of any incorporated city or village,
 - (b) On public or private property without the permission of the landowner,
 - (c) Squirrels, chipmunks, woodchucks, mice, shrews, voles, rats, rabbits, mink, muskrats or moles may be released or may be euthanized.


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It seemed like a good idea at the time

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Relocation

- Moving and relocating an animal you don't want increases the risk of transmitting disease and disrupts native populations
- It is against the law to relocate some species because they can carry rabies
- Trapping and relocating can stress the animal and cause conflict, and potentially injury or death. (Territorial response, become roadkill)
- There is no guarantee a relocated animal will not come back after you put effort (AND money) into relocation
- The best way to prevent wildlife from using your property is to reduce the reason they want to be there



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Muskrats

- Muskrats, as adults, are approximately 18-24 inches long
- Muskrats weigh around 1.75-4 pounds
- They have a long redder like tail which helps them steer as they swim
- Coloration ranges from light brown to dark/almost black
- Extremely prolific
- Mating may occur 3+ times in the South and 1-2 times farther north
- Gestation period is only 25-30 days
- Litter sizes are typically 3-4 in number



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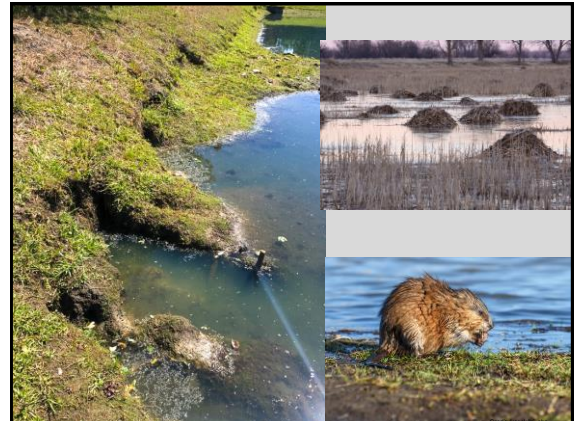
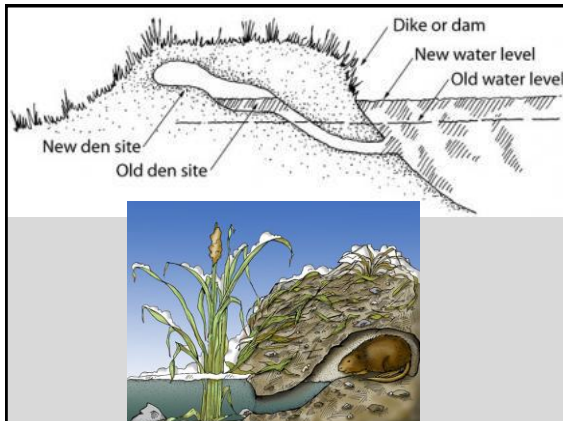
Muskrat Diet and Habitat

- Muskrats will eat almost any aquatic vegetation, including the bulbs, roots, tubers, stems and leaves of numerous wetland plants.
- Occasionally eat corn, soybeans, grain sorghum and small grains. Will sometimes eat animals, such as crayfish, mussels, turtles, frogs or fish, during periods of low food supply.
- For shelter muskrats use bank burrows, "houses" built of aquatic plants and feeding huts.



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Muskrat Damage



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Muskrat Legal Considerations

2022-23 OHIO HUNTING & TRAPPING REGULATIONS FURBEARER TRAPPING			
SEASON	OPENING DATE	CLOSING DATE	BAG LIMIT
Fox, Raccoon, Opossum, Skunk, Weasel	Nov. 10, 2022	Jan. 31, 2023	No limit
Mink, Muskrat	Nov. 10, 2022	Feb. 28, 2023	No limit
Mink, Muskrat, Raccoon, Opossum, Skunk, Weasel, Ermine, Otter, Sandpiper & Larks counties east of Maumee River	Nov. 10, 2022	March 15, 2023	No limit
Beaver	Dec. 26, 2022	Feb. 28, 2023	No limit
River Otter	Dec. 26, 2022	Feb. 28, 2023	See page 30

A Fur Taker permit is required to hunt or trap furbearing animals (except coyote) in Ohio.

TRAPPING REGULATIONS

Ohio Administrative Code 1501:31 Division of Wildlife Chapter 1501:31-15
Hunting and Trapping

1501:31-15-03 Nuisance wild animal control



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Muskrat Damage Management

Significant damage often can be prevented

Construct Dams with the following specs:

- **3:1 slope for the inside face of the dam**
- **2:1 slope for the outer face with a top width of no less than 8 feet, preferably 10-12 feet**
- **Normal water level should be at least 3 feet below the top of the dam**
- **Often referred to as overbuilding**

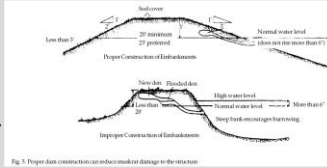


Fig. 1. Proper dam construction can reduce muskrat damage to the structure.

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Muskrat Damage Management

In Some situations, muskrats can be excluded or prevented from digging into farm pond dams and banks through rip-rapping.

- Draw down water level at least 2 feet to identify den entrances
- Can also use fencing to exclude den entrances

Vegetation Management



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Muskrat Damage Management

Population Management/Lethal Management

- Trapping
- Shooting



Woodchucks

- Woodchucks usually are grizzled gray-brown from head to toe. The compact, chunky body is supported by short strong legs
- Adults 20-27 inches long
- Weigh 5-10 pounds
- The tail is short, furred, and dark brown
- When startled, a woodchuck may emit a shrill whistle or alarm
- Mating occurs March-April
- Gestation period is about 32 days
- One litter/year. Litter sizes are typically 2-6
- True hibernator



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Look a Squirrel



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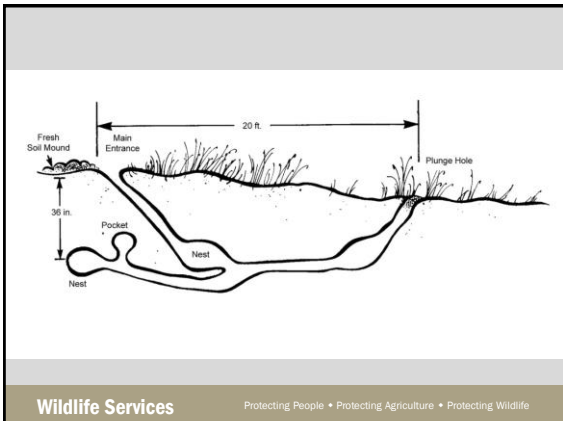
Woodchuck Diet and Habitat

- primarily are herbivores and feed on a variety of vegetables, grasses, and legumes
- Preferred foods include beans, peas, carrot tops, alfalfa, clover, and grasses
- In general, woodchucks prefer open farmland or wooded or brushy areas
- Burrows commonly are located in fields and pastures, along fence rows, stone walls, roadsides, building foundations, and bases of trees
- burrow serves as home to the woodchuck for mating, weaning young, hibernating, and protection



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Woodchuck Legal Considerations

- Rule 1501:31-15-03 | Nuisance wild animal control
- (H) Species specific limitations
 - (6) Woodchucks or groundhogs
 - (a) It shall be unlawful to use a body gripping trap with a jaw spread greater than seven inches across to take woodchucks.
 - (b) It shall be unlawful to set, use, or maintain a body gripping trap to take woodchucks which is set more than three feet from the hole, or structure the woodchuck is inhabiting.
 - (c) It shall be unlawful to set, use, or maintain a body gripping trap greater than five inches to take woodchucks that does not have an enclosure or structure around the trap which prohibits other animals from getting into the trap from the outside.
 - (d) It shall be unlawful for any person except licensed commercial nuisance wild animal control operators to use snares without a relaxing lock for the purpose of taking woodchucks

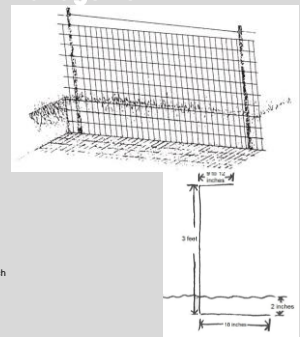
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Woodchuck Damage Management

Prevention

- Remove piles of wood, brush, rocks, and other debris that might be attractive as den sites
- Make certain that all garage doors and shed doors are closed to prevent entry, especially those with dirt floors
- Close any openings that provide access under porches, decks, crawl spaces, or sheds
- The most permanent control method is fencing/exclusion.
 - 3-foot high fence with an 18-inch skirt buried at least 2 inches with a 9- to 12-inch overhang



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Woodchuck Damage Management

- Frightening Devices
- Repellents



Meh...

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Woodchuck Damage Management

- Fumigants
 - Gas Cartridges
 - Aluminum Phosphide



Woodchuck Damage Management

- Trapping
 - Cage traps
 - Body gripping traps
 - Snares*

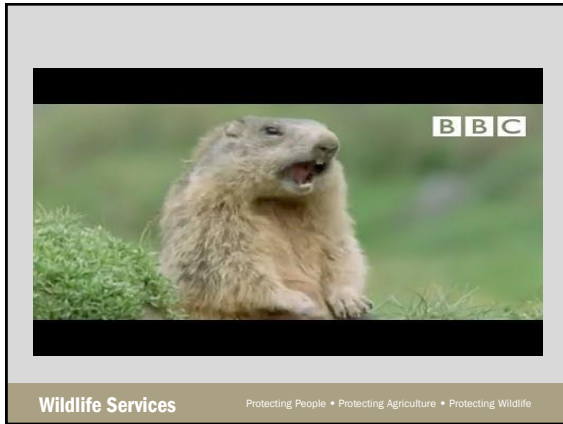


Covered Body-Gripping Trap Set



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[Internet Center for Wildlife Damage Management | Researched based Wildlife Damage Management Information \(icwdm.org\)](#)
[USDA APHIS | Wildlife Damage Management Technical Series](#)
[Rule 1501:31-15-03 - Ohio Administrative Code | Ohio Laws](#)
[Wildlife Management | Ohio Department of Natural Resources \(ohiodnr.gov\)](#)
[Ohio Hunting and Trapping Regulations ENGLISH.pdf \(ohiodnr.gov\)](#)
[Contact a Nuisance Trapper | Ohio Department of Natural Resources \(ohiodnr.gov\)](#)
[Nuisance Species: Groundhogs | Ohio Department of Natural Resources \(ohiodnr.gov\)](#)
[Pesticide Online Services | Ohio Department of Agriculture](#)
[Muskrat | Washington Department of Fish & Wildlife](#)
[Muskrat BMP_2014_F.pdf \(fishwildlife.org\)](#)
[Missouri's Muskrats, A Guide to Damage Prevention and Control \(mo.gov\)](#)

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