



RABBIT AND HARE MANAGEMENT IN WASHINGTON STATE HOME YARDS AND GARDENS

Home Garden Series

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Rabbit and Hare Management in Washington State Home Yards and Gardens

We often think of rabbits as cute, furry, and harmless, but some species can cause extensive damage to home gardens and orchards throughout the year. Here you will learn how to protect your plants and still enjoy having wild rabbits and hares in your yard.

Rabbits, hares, and pikas belong to the order *Lagomorpha*. For descriptions and images of all our Washington lagomorphs, see the Burke Museum website in the Further Reading section.

Washington State is home to eight species of these animals. The most well-known include:



- Nuttall’s cottontail rabbit (*Sylvilagus nuttallii*)
- Domestic European rabbits (*Oryctolagus*)
- Black-tail jackrabbit (*Lepus californicus*)
- Whitetail jackrabbit (*Lepus townsendii*)
- Snowshoe hare (*Lepus americanus*)
- Eastern cottontail rabbit (*Sylvilagus floridanus*)

The Northwest native cottontails may occasionally cause damage in Washington State home landscapes. Domestic European rabbits, which tunnel extensively, can cause trouble when the rabbits are released. In the past, Feral European rabbits have caused serious damage on some of the San Juan Islands with their extensive tunnel systems, also called warrens.

Washington’s two jackrabbits, the black-tail jackrabbit and the whitetail jackrabbit, seldom cause damage in home gardens because they generally prefer the wide open spaces of eastern Washington.

Only the snowshoe hare and the introduced Eastern cottontail rabbit commonly damage gardens, orchards, and landscapes. To help homeowners identify these two species, Table 1 compares their physical characteristics, biology, and habits.

Table 1. Comparison of the snowshoe hare and Eastern cottontail rabbit.

	 Snowshoe Hare	 Eastern Cottontail Rabbit
Description	Ears outlined with black and white. Patches of white fur on feet, chin, toes and undersides. Some populations turn white during winter. Hind feet noticeably larger than those of rabbits. Young are born fully furred with their eyes open. Snowshoes prefer areas with dense conifer thickets and other brushy cover.	Brown with an orangey-brown patch of fur on back of neck. Relatively large white tail. Young are born naked and with their eyes closed. Eastern cottontails prefer brushy hedge-rows and edges of blackberry or salmonberry patches.
Length	13–19 in. (32–47 cm)	13–18 in. (34–45cm)
Reproduction	Up to 4 litters per year, born fully furred and eyes open.	3–4 litters per year, born blind and hairless.
Litters	3–8. First litters born about March.	3–4 on average. First litters may be born in late March or April.
Home Range	3–25 acres	3–25 acres
Population Density	1.6 to 3 per acre.	Up to 8 per acre, depending upon time of year, mortality (predator pressure), and dispersal of young.

Sources: Verts and Carraway (1998) and Maser et. Al (1981). Snowshoe hare photo by David Pehling, WSU Extension. Eastern cottontail rabbit photo by Michael Bush, WSU Extension.

Signs of Rabbit or Hare Activity

Feeding

Rabbits and hares feed on a wide variety of herbaceous and woody plants. Although they have clear favorites, they will feed on whatever is growing.

Droppings

Rabbit and hare droppings, or scat, (Figure 1) are round, about pea-sized, and closely grouped. Deer droppings are similar but usually longer, somewhat pointed on one end, and more scattered from one another.



Figure 1. Cottontail scat. Photo: Dave Pehling, WSU Extension.

Damage Identification

Bark Damage

During winter, rabbits and hares remove “chips” of bark and wood (Figure 2) from thin-barked woody plants. Eventually, they may girdle the entire trunk. Each incisor tooth scar is about 0.08 inches (2 mm) wide. Voles, squirrels, and roof rats cause similar damage, but each incisor tooth scar is only 0.04 inches (1 mm.) wide. Shoot tips are neatly clipped at a 45-degree angle (Figure 2).

Herbaceous Plant Damage

Stems, leaves (Figure 3a and b), and fruits (Figure 4) are attractive to rabbits and hares. Although cuts are clean, tooth scars may be hard to see in soft plant material.



Figure 2. Cottontail rabbit damage to apple tree. Photo: Dave Pehling, WSU Extension.



Figure 3. Characteristic cottontail rabbit damage to pea plants (a). Close up of cottontail damage to pea plants (b). Photos: Dave Pehling, WSU Extension.

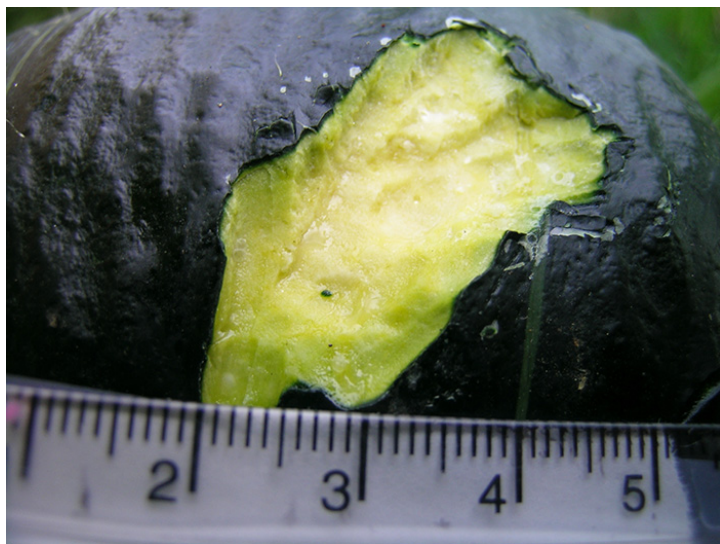


Figure 4. Cottontail rabbit damage to squash. Photo: Dave Pehling, WSU Extension.

Management Options

Habitat Management

Eliminate brush piles and thick vegetation around gardens and orchards. Block access under buildings (Figure 5) where rabbits and hares can take shelter. Reducing shelter exposes rabbits to predators, such as hawks, owls, dogs, cats, and coyotes.



Figure 5. Rabbit hole under deck. Photo: Dave Pehling, WSU Extension.

Fencing

The most effective management technique is fencing, especially if installed around the garden at the first sign of damage. Fences of 1-inch mesh should be at least 24 inches high (Figure 6). Burying fences an additional 4 inches may increase effectiveness by blocking digging access. Inspect your fence line often to make sure it has not become damaged.



Figure 6. Rabbit fence. Paper backing is used to show mesh size. Photo: Dave Pehling, WSU Extension.

Tree Guards

Poultry wire cylinders (1-inch mesh) or staked plastic tree guards (Figure 7), placed 18 to 24 inches taller than anticipated snow levels, are effective for protecting young trees and shrubs (Marsh et al. 1990). Keep these braced away from the trunk to avoid nibbling between the mesh. Because small rodents can also damage young trees and shrubs, keep grass and weeds out of the tree guard area. Wrapping trunks with burlap or aluminum foil only provides temporary protection. Tree guards should be in place by winter and may be removed in late spring. Alternatively, they can be left in place if there is no chance of girdling the plants.



Figure 7. Plastic tree guard. Photo: Kevin Zobrist, WSU Extension.

Repellents

Several repellents are available for home use. Research indicates that those containing dried eggs or dried blood as one of the active ingredients are most effective. Repellents usually do not completely eliminate feeding damage (Williams and Short 2014). Be sure to read and follow all label directions.

Traps

Cage-type traps (Figure 8) can be effective, but it's important to be aware of two issues:

1. translocated wildlife often does not survive and
2. rabbits and other animals may not be released off the property without a permit from the Washington Department of Fish & Wildlife (WDFW).

Traps should be placed in runways or where animals are entering the garden. Covering the top and sides of the trap with a burlap bag or other dark colored material makes it more attractive. Good baits include apples, alfalfa, and leafy vegetables. If trapping, bear in mind that rabbits and hares can vector some human diseases, so extra care is warranted.



Figure 8. Cottontail trap (note damaged peas behind trap). Photo: Dave Pehling, WSU Extension.

Foot-hold traps and lethal traps, including deadfalls and snares, are not legal to use in Washington (Washington State Legislature 2000).

Visit the [WDFW website](#) for more information on trapping wildlife and the various options.

Shooting

In some areas, shooting may be an option if it can be done safely. Contact your local [WDFW office](#) for information on lethal control of game animals. Invasive feral domestic rabbits may be destroyed at any time of the year.

Further Reading

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- Verts, B.J., and L.N. Carraway. 1998. *Land Mammals of Oregon*. Berkeley, CA: University of California Press.
- Washington State Legislature. 2000. [Unlawful Traps–Penalty: RCW 77.15.19](#).
- Williams, S., and M. Short. 2014. [Evaluation of Eight Repellents in Deterring Eastern Cottontail Herbivory in Connecticut](#). *Human–Wildlife Interactions* 8(1): 113–122.



Use pesticides with care. Apply them only to plants, animals, or sites as listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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