

# Snowshoe Hare

*Lepus americanus*



## Other common names

Snowshoe rabbit, varying hare, white rabbit

## Introduction

Snowshoe hares are named for their hind feet, which are large and webbed and act like snowshoes, stopping the animal from sinking into deep snow. Like some other northern mammals, snowshoe hares grow a thick white coat in winter to help with low temperatures and camouflage.

## Physical Description and Anatomy

Hares look very similar to rabbits, but hares are larger with taller hind legs. Snowshoe hares have very large hind feet as well, complete with webbed toes that can spread out to increase surface area. These large feet act like snowshoes, allowing the animal to run on top of snow rather than sinking deep into the powder. Snowshoe hares also have fur on the soles of their feet to protect them from freezing temperatures.

From December through April, snowshoe hares have a coat of dense white fur. In warmer months, they shed this coat and produce one that is less dense, brownish grey on the back and

gray to white on the chin, tail, and lower parts. The tips of the ears remain black all year. When fully grown, they weigh 3 – 4.5 lbs (1.4 – 2.0 kg) and measure 16 – 20 inches (40.6 – 50.8 cm) long.

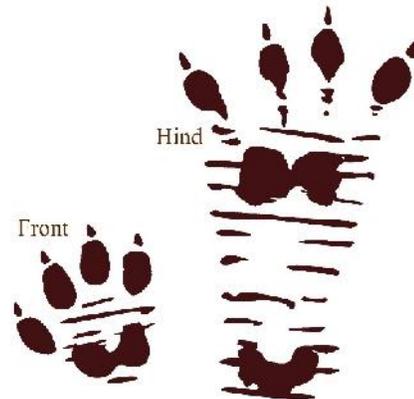
## Identifying features (tracks, scat, calls)

Tracks of snowshoe hares will be much larger than those of other rabbit species found in this area. Tracks left by the hind feet are highly variable because the toes can spread out considerably, and may even be confused for the tracks of canines and fishers.

Don't forget to listen. Hares are generally very quiet animals, but they will produce grunts, growls, and squeals during mating or when threatened by predators. They will also thump their large hind feet on the ground to send a warning that there is danger nearby.



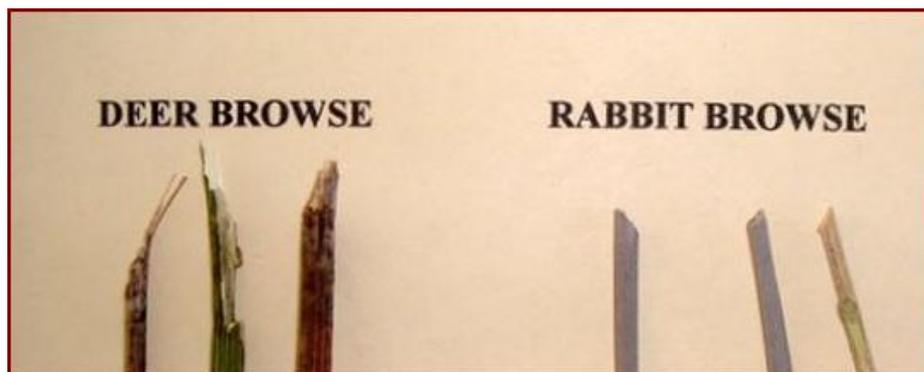
Snowshoe hare scat.



Snowshoe hare tracks.

Front: 1 7/8 – 3 inches long  
by 1 1/8 – 2 1/4 inches  
wide.

Hind: 3 1/4 – 6 inches long  
by 1 5/8 – 5 inches wide.



Note the difference in feeding habits. On the left are twigs fed on by deer, left with jagged ends. On the right are twigs neatly clipped off at a 45° angle by a hare.

## Habitat

Snowshoe hares are found in coniferous and deciduous forests. They require dense, woody undergrowth to provide food and protection from predators. They can be found in fields and clearings, but they tend to avoid wide open areas.

## Behavior and Diet

Unlike rabbits that dig underground dens, hares spend all of their time above ground. They sleep under bushes, in root hollows, or under debris. Snowshoe hares are mostly active at night. They do not hibernate, but they will remain fairly inactive for extended periods in winter. In the summer, they take dust baths to help control parasites in their fur. Their large feet allow them to run on top of snow, as well as enabling them to swim very well.

Snowshoe hares are herbivores, feeding on a variety of vegetation like grasses, leaves, roots, and fruit. In winter, they feed on twigs, buds, and bark of woody vegetation like raspberry bushes, maple, birch, aspen, alder, and willow. Less favored species are white pine, white cedar, red spruce, and eastern hemlock.

Snowshoe hares have a special digestive system where their food undergoes “hindgut fermentation”. They have symbiotic bacteria that help break down nutrients at the very end of the digestive tract. This process produces two types of feces: hard pellets and soft droppings. The soft droppings are formed first, and are rich in protein and vitamins. Because they are formed at the end of the process, the hares must re-ingest these soft droppings in order to absorb the nutrients made available by the symbiotic bacteria. Material that has gone through the second digestion is expelled as hard pellets, which are composed mainly of fibrous material with little nutrition.

## Human Interactions

The majority of human interactions with snowshoe hares is in the form of hunting for meat and fur. Gardeners and farmers may consider snowshoe hares pests for eating their crops as well.

## Reproduction

Mating season for snowshoe hares runs from March through August. A single female snowshoe hare can have 3 – 4 litters every year, with an average of 3 young per litter, for up to 12 young every year in optimal conditions. Gestation lasts about 36 days, and females mate again shortly after young are born. The young, called leverets, are born fully furred and with their eyes open. This contrasts with rabbit young, which are born hairless with their eyes tightly closed. Female snowshoe hares only spends 5-10 minutes a day with the young to nurse them. She cares for her leverets until they are about 4 weeks old, at which point they are weaned and disperse. They begin breeding the following spring. They are preyed upon by many predators, including weasels, fox, coyotes, birds of prey, and big cats, especially lynx. In the wild they live 2 – 5 years, but in captivity they are capable of living up to 8 years.

## Fun Facts

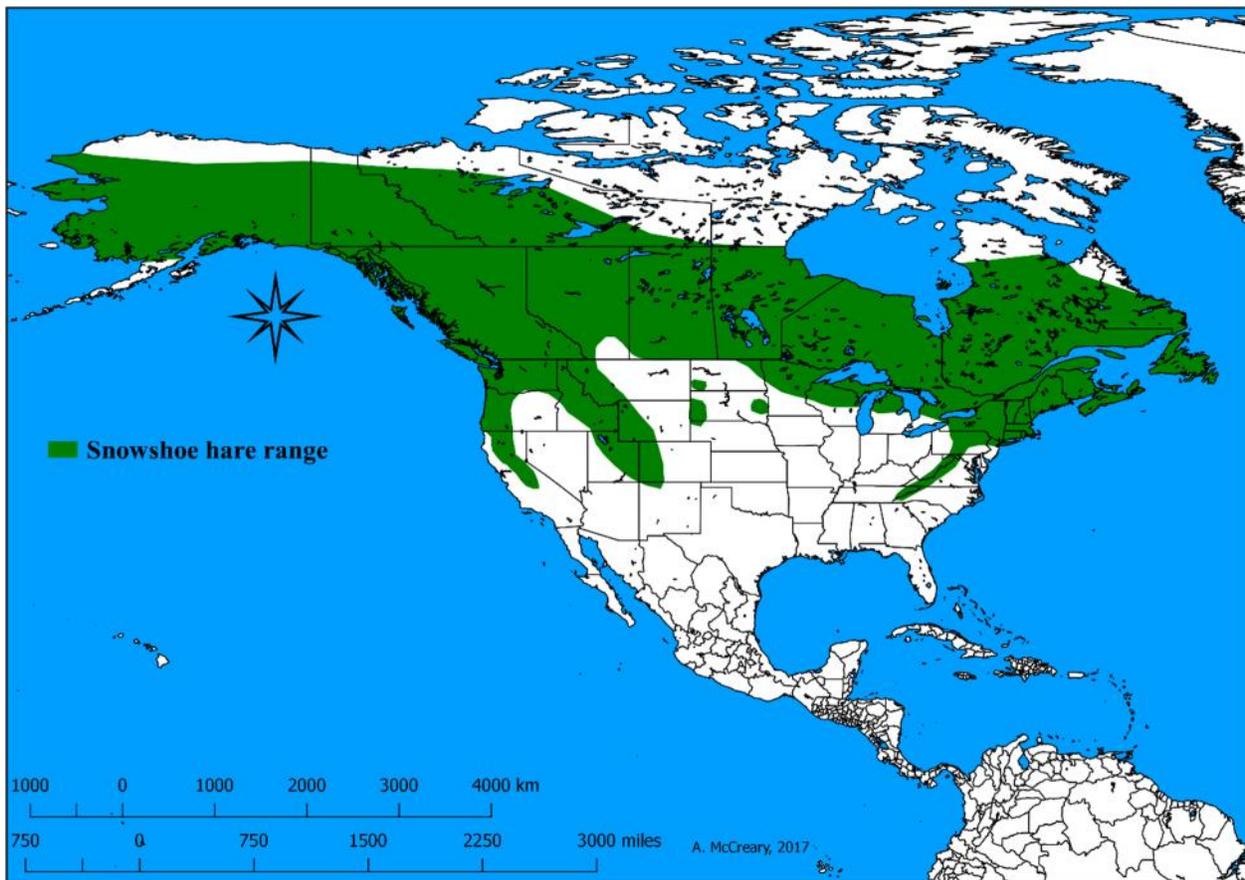
Snowshoe hares can run up to 35 mph (56 kph).

They can jump 10 feet (3 m) in a single leap.

A baby hare is called a leveret.

## Range and Status

Snowshoe hare populations go through cyclical fluctuations, peaking every 9 years. Lynx and bobcats are main predators of snowshoe hare, and populations of lynx and bobcats follow these fluctuations as well.



## Management and Research in New York

Snowshoe hares in New York are managed as a group with other hare and rabbit species. They are trapped and hunted as small furbearers, used as a source of meat as well as for their pelts.

## At Dyken Pond

Snowshoe hare like thick underbrush where there is lots of browse to eat and cover to protect them from predators.

## Sources

- Elbroch, M. (2003). *Mammal tracks & sign: A guide to North American species*. Mechanicsburg, PA: Stackpole Books.
- Hoyt, L. (2016). *Mammals*. Dyken Pond Environmental Education Center, Cropseyville, NY.
- Ohio Department of Natural Resources [ODNR]. (n.d.). *Mammals of Ohio: Field guide* (ODNR Publication no. 5344, R1012). Columbus, OH: ODNR Division of Wildlife. Available from:  
<https://wildlife.ohiodnr.gov/portals/wildlife/pdfs/publications/id%20guides/pub344.pdf>
- Newell, D. (2009). *Orange county trackers: Analyzing the rabbit track*. Available from:  
<http://otrackers.com/analyzingtherabbittrack.htm>
- Saunders, D.A. (1988). *Adirondack Mammals*. Syracuse, NY: State University of New York, College of Environmental Science and Forestry [SUNY-ESF].