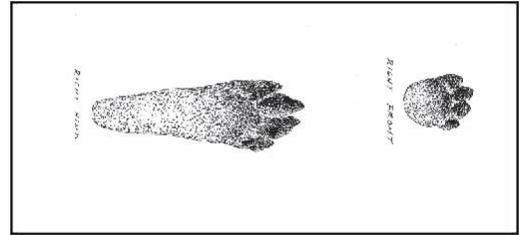
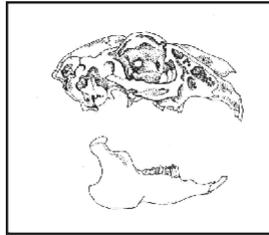
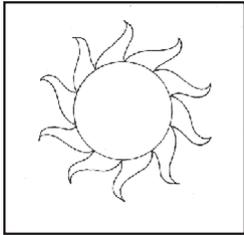




# Rabbits & Hares

## Order Lagomorpha



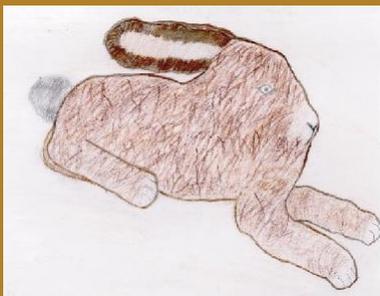
A lot of animals want to feed on **rabbits & hares**. It's an unfortunate place to be in the food chain. But all is not lost, for both rabbits and hares are well-adapted to this constant threat from predators. In fact their populations are genetically stronger, thanks to the evolution of their species in response to the constant assault on their populations.

One of the ways they ensure the survival of their species is to **produce lots of young**. Most will not survive. But if adults can produce enough young, chances are some bunnies *will* survive to adulthood and produce their own young. Constantly replenishing their populations is a successful survival strategy for rabbits and many other small mammals, like mice and squirrels.

Other survival tools are specific **physical adaptations**. Large, movable ears give rabbits a sharp sense of hearing from every direction. Their large eyes enable them to see well. But perhaps more important than the size of the eyes is the location of the eyes on the head. Like most prey species, rabbit eyes are located on the sides of their head. This gives them a wide field of vision which helps them see predators approaching from any direction.

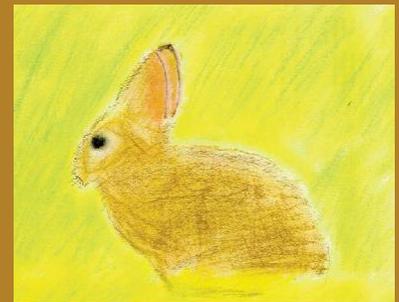
The **ability to run—and hop—in every direction . . . is a survival tool**. Long hind legs paired with short front legs may not seem like a recipe for speed, but they give rabbits short bursts of speed when needed and a zigzag running pattern. This doesn't allow them to run long distances, but it is very effective for evading predators. And believe it or not, rabbits can even swim if they have to.

Rabbits and hares are **well-camouflaged**. Their natural cream, buff and brown fur helps them blend into their surroundings. They are also adept at staying perfectly still, which helps because camouflage only works if they are motionless.



## Eastern Cottontail

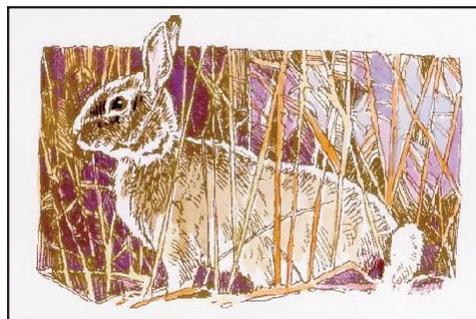
*Sylvilagus floridanus*



The **Eastern Cottontail Rabbit** is probably the second most recognized mammal in our state, after the white-tailed deer. Found in both suburban backyards and wild thickets and hedgerows, rabbits are popular with homeowners and sportsmen alike. Upright ears, large eyes and explosive speed give clues to how rabbits survive in a world full of predators.

**Please don't call me a rodent!** It's true that I have teeth designed for gnawing, but I am not related to mice, rats or other rodents. I have more incisors than a rodent does, and **I have a digestive system similar to a deer.**

**Cottontails** can be up to 18 inches long and weigh two to three pounds. Female rabbits are slightly heavier than male rabbits.



**Cottontail litters** are usually born from March through September. Litters range from two to nine bunnies who are born blind and furless after a gestation of about 28 days. The **doe or female** averages four litters per year. She lines her nest with dried grasses and fur that she plucks from her chest and belly. The nest is a cup-shaped depression about five inches across and four to six inches deep.

**Once the eyes of the bunny are open they are able to fend for themselves**, no matter how helpless they may seem. They might still spend a good bit of time in the nest with their littermates, but if you find small bunnies out and about, leave them alone. They are okay and are much safer on their own. **Do not touch or hold them.** Your body scent will lead a dog or cat right to them, and that could lead to their injury or death.

**Rabbits inhabit patches of briars, overgrown fields, hedgerows and suburban neighborhoods.** In summer they feed on grasses, clover, leaves, fallen fruit and twig buds. **And let's face it—they also love to feed in your garden and the farmer's fields!** But whatever they feed on, there is usually cover nearby to ensure protection from predators.

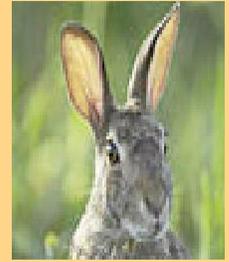


**In winter, rabbits will switch their diet** to items like the canes of wild bramble bushes (raspberries, blackberries and wineberries), tree buds, soft twigs and vines. And rabbits love to eat tree bark off young saplings in the winter. This can lead to **tree girdling**, a circle of bark chewed off the tree. Deer will do the same thing. Girdling can kill a tree, but you can try to protect newly-planted trees in your yard by wrapping the tree bark at about rabbit (or deer) height.



### What do Elephants & Rabbits have in common?

A built-in air-conditioner. Mammals with large ears have prominent veins that carry blood throughout their ears. As air blows over the veins in the ear, it helps to cool down the entire animal's circulatory system when that cooled blood flows back into their body.



## Snowshoe Hare

*Lepus americanus*



The **Snowshoe or Varying Hare** gets one name from its **big, furry hind feet** designed for travel over deep snow. The other name refers to its **varying coat**, which changes from white each winter to brown each summer.

**Each autumn** their tawny pelage begins to be replaced as **brown hairs gradually fall out and are replaced by an almost all white coat, except for black ear tips**. In spring, they molt back to brown. It's good camouflage, but if there isn't any snow in winter, the white coat may cause the hare to be seen easier by a predator. Snow or no snow, the hare will remain white until spring.

Like cottontail rabbits, **snowshoes are herbivores, have excellent hearing and eyesight** and are active during the day. Hares can also stand upright on their hind legs to see or hear even better. **They can run up to 30 miles an hour** and leap up to 10 feet. **And they can swim too.**

### How is a snowshoe hare like a deciduous tree?

Like the changing leaves in the fall, snowshoes change colors whether the temperatures are warm or cold. The change in leaf color or coat color is the result of **phototropism**, length in daylight. As days get shorter in fall, the hare's pituitary gland shuts off pigment production in the fur. Any new hair grows in white. The lengthening days in spring cause a reverse in this process.

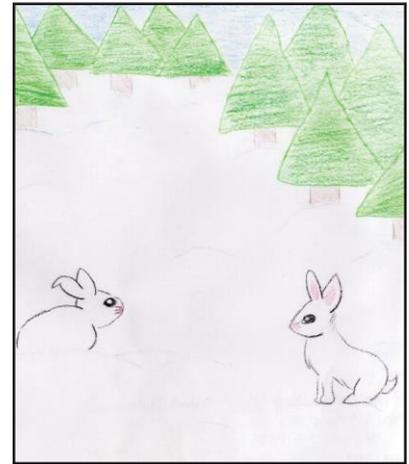


**Snowshoe hares are slightly larger than rabbits** at about 19 inches in length and up to five pounds in weight. Unlike rabbits, the male snowshoe is heavier than the female.

**Hares** do not build nests or dens. The doe gives birth wherever she happens to be. Breeding begins in March, when **bucks** fight over **does**, kicking each other with their powerful hind feet. Up to six **leverets** are born after a 36-day gestation period. **Unlike bunnies, leverets are born fully furred and with their eyes open.** They are able to walk and hop soon after they are born.

**Snowshoe hares are considered rare** and live mostly in our higher elevations in mixed deciduous and pine forests. They especially like rhododendrons and mountain laurel coverts. **Both rabbits and hares feed near cover to protect themselves from predators.**

**In summer, both species feed** on grasses, leaves, clover, garden vegetables, fallen fruit and the buds and tender twigs of low-growth shrubs. **But snowshoes rely mostly on woody plants for their winter food.** Deep snow enables them to eat twigs and bark further up shrubs and trees by creating a platform for them to stand on with their hind legs. They'll feed on the bark, twigs and needles of many coniferous trees like hemlock, cedars, pines and spruce, in addition to brambles, willows, aspens and alders.



## A Simple Review of Rabbits & Hares



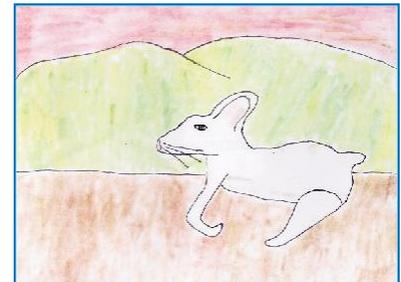
### Here's What They Have in Common

Both belong to the **Order Lagomorpha** and the **Family Leporidae**.

Both share the following features:

**They have two pairs of upper incisors.** The front pair look like rodent teeth. But unlike rodents, rabbits and hares have a **second pair of teeth** behind the front pair. These are much smaller and are **called pegs**.

The **upper jaw of the skull** has a lacey appearance. There are **28 teeth** but no canine teeth, only incisors and molars.



Their two **front legs are short**. Their two **hind legs are long**. The design is perfect for hopping and running fast from a standstill. That's important if they spend much of their life escaping predators. **Each foot has four toes with a claw on each toe.**

The large black eyes help them **see very well**. Large ears that stand upright help them **hear well, too**. A thick coat of **fur also covers the soles of their feet**. Both have a small tufted tail that looks like a cotton ball.

Both are **herbivores** and **diurnal**, meaning active during the day. Their large incisors are made for biting tough plant material. These incisors continue to grow throughout their lives. **Rabbits and hares need to constantly gnaw on plant material** to prevent their front teeth from growing too large.

## Here's How They Differ

**Rabbits give birth** in fur-lined nests. **Hares give birth** on the ground.

Baby rabbits (**bunnies** or kittens) are born naked with their eyes closed.

Newborn hares (**leverets**) are born fully-furred with their eyes open.

**Bunnies** stay in the nest for a couple of weeks.

**Leverets** hop less than five minutes after birth and can leave home almost immediately.

**Hares** (below left) are **bigger** than rabbits; They have longer legs and ears and bigger feet.

**Rabbits often dig** burrows. **Hares rarely dig** burrows.

When danger is near **rabbits dive for cover** or run and **hide** from a predator.

**Hares** try to **outrun danger** by leaping across open fields.

**Rabbits stay a brownish-cream** color throughout their lives.

**Hares** are brown in summer but **turn white** with black ear tips **in winter**.

**In winter, hares grow** heavy hair on their hind feet, their "**snowshoes**."

**Pet rabbits are popular** and come in a variety of colors (below center).

