

**West Virginia**  
**Wildlife**  
**Series**

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*A Guide to Mammals of West  
Virginia*

**Eastern Cottontail (*Sylvilagus floridanus*)**



**Volume 8**

## **Characteristics:**

The eastern cottontail has speckled brown-gray fur above, reddish-brown fur around its neck and shoulders and lighter fur around its nose and on its undersides. It has big eyes and a tail that is puffy white on the underside. In the winter its fur may be more gray than brown. In weight it averages 2 to 4 pounds.

## **Range:**

The eastern cottontail can be found in most of the eastern United States except for New England. It has been introduced to parts of southern New England. It is also found in parts of New Mexico and Arizona. There is a subspecies of cottontail in New England, the New England cottontail (*Sylvilagus transitionalis*), that is very similar to the eastern cottontail. It has a black patch between its ears. It rarely comes out into the open. They range from 1 to 15 acres.

## **Habitat:**

The eastern cottontail prefers habitats that are between woody areas and open land. It can be found in bushy areas, fields, woodlands, swamps and thickets.

## **Diet:**

The eastern cottontail is an herbivore. It eats a variety of different plants including grasses, clover, fruits and vegetables. In the winter it eats the woody parts of plants like the twigs and the bark of brambles, birch, oak, dogwood and maple trees.

## **Herbivore:**

Animals that eat only plants are called **herbivores**. Deer, grasshoppers and rabbits are all herbivores. There are lots of different plants and lots of different herbivores. Some herbivores eat only part of a plant.

Honey bees take nectar from flowers for energy. When bees gather nectar, they pick up pollen on their fuzzy bodies. As bees travel from flower to flower gathering nectar, they leave some pollen behind. Pollen left behind pollinates flowers and helps these plants reproduce. Bees have a **symbiotic relationship** with the flowers they pollinate. A symbiotic relationship is one that benefits both living things; for example, bees get the nectar they need and the flowers get pollinated! Plants are often very easy for herbivores to find, but they are sometimes low in the nutrients the animals need to grow and stay healthy. Seeds are often packed with energy-rich nutrients like starches, but other parts of plants -- like stems and leaves -- don't have as many nutrients. Herbivores that rely on those plant parts must spend a lot of their time grazing and browsing to get the nutrients they need!



Some herbivores have digestive systems to help them get the most out of the plants they eat. Animals like sheep, moose, white-tailed deer and cows have a special stomach called a **rumen** where microorganisms break down cellulose. Animals with a rumen are called **ruminants**. Ruminants swallow their food and then regurgitate it and chew on it again to break down the cellulose in the plant. Once the cellulose is broken down, the food returns to

the stomach where it is digested. When you hear that an animal is chewing its cud, it is re-chewing food that it had already swallowed!

### **Diseases common to Cottontails:**

Of the parasites that afflict the cottontail, "wolves" are probably the most well-known. These worm-like parasites are actually the larval stage of the bot fly. The fly lays eggs on the fur of rabbits. When these eggs hatch, the immature larvae bore into the skin of the rabbit. They develop there just under the rabbit's skin until they are approximately 1.5 inches long. They then burrow out of the skin and fall to the ground, where they burrow into the soil, pupate, and later emerge as adult flies. Infestations are greatest in warmer weather and usually disappear by late fall or early winter. The parasite is not harmful to the rabbit, in most cases, and is not dangerous to humans. Hunters will often discard rabbits that are infested. However, there really is no reason to do so. The larvae are restricted to the skin and do not damage the muscle tissue or otherwise affect the edibility of the meat.

A disease that is deadly to rabbits is tularemia. Tularemia is caused by a bacterium, *Pasteurella tularensis*, which is transmitted to the rabbit by ticks or fleas. A number of wildlife species and humans can contract the disease, but it usually occurs in rabbits and rodents. The disease is always fatal to the rabbit, with most succumbing to the illness within 10 days following onset. As mentioned, humans can contract the disease. However, it responds quickly to antibiotics and is not considered a serious health threat if treated promptly. The following precautions will greatly reduce your risk of exposure:

- Do not harvest rabbits that appear sluggish or do not run.
- Wear rubber gloves when dressing rabbits.

- After removing the gloves, wash your hands with antibacterial soap.
- Cook rabbit meat thoroughly. Do not eat rare or undercooked rabbit meat.

### **Eastern Cottontail Communications:**

Eastern cottontails have excellent vision, hearing, and sense of smell. Eastern cottontails make many sounds. They have cries of worry that are used to startle an enemy and warn others of danger. They grunt if predators approach a nesting female and her litter. They also make squeals during mating.

### **Life Cycle:**

During mating season, males often fight with each other. The male and female also perform a kind of mating "dance". The male will chase the female. Eventually the female will stop and face the male and box at him with her front paws. At some point,



one of them will leap straight up in the air and then the other one will jump up in the air too.

The eastern cottontail mates between February and September. The female builds a nest in a depression in the ground and lines it with soft materials and fur from her chest. The female gives birth about a month after mating. She has between one to nine babies, although she usually will have four to five young. The female feeds the young twice a day. The babies are weaned after about three

weeks and leave the nest after about seven weeks. The female may mate again just hours after giving birth. Females can have three or four litters a year. Eastern cottontails are ready to mate when they are three months old.

Eastern cottontails are short-lived. Most do not survive beyond their third year.

### **Behavior:**

The eastern cottontail is solitary and very territorial. It is mostly nocturnal, but it sometimes will come out in the early morning and at dusk and sometimes during the day on dark days. The eastern cottontail can leap distances of between 10 and 15 feet. It will sometimes stand on its hind feet to watch for predators like coyotes, foxes, weasels, eagles and hawks. When a predator is chasing it, the eastern cottontail will often leap from side to side to break its scent trail. It can run at speeds of up to 15 miles an hour.

### **Identifying Cottontail Scat:**

The eastern cottontails scat is a little bit smaller than a deer. It is pellet-like, usually spherical or egg-shaped, sometimes flattened discs, usually less than .5 inches in diameter. The color is usually dark brown, becoming lighter and more fibrous looking with age. Pellets are often deposited in groups of six or more.

## Eastern Cottontail Tracks:



Four toes on all four feet. Forefeet nearly round, 1 to 1.5 inches long. Hind feet elongated, 3 to 4 inches long. Claws generally show prominently in tracks.

Front Foot:  $7/8$  in L x  $5/8$  in W

Rear Foot:  $2 \frac{3}{4}$  in L x  $1 \frac{1}{8}$  in W

Straddle: 4 - 5 in

Trail Width: 6 in

Slow Stride: 7 - 12in

Running Stride:  $12 \frac{1}{2}$  -36 in



This series of Wildlife guides has been compiled and edited by Bill Church.

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