## WILDLIFE DIVERSITY NOTEBOOK: Eastern Cottontail



## By Chuck Fergus Scientific name: Sylvilagus floridana

**Description:** The cottontail rabbit is a long-eared, small- to medium-sized mammal of the family Leporidae. It hops when running because its hind legs are longer than its front legs. A rabbit's soft fur is brownish above and white below, it has a conspicuous two-inch-diameter white tail, and some individuals have a small white blaze on the forehead. Cottontails are 15 to 18 inches long. They weigh two to three pounds; females are slightly heavier than males.

Habitat: The rabbits' preferred habitat includes swamps, thickets, briar patches, downed-timber, weedy fields, brushpiles, overgrown fencerows and brushy gullies. Rabbits seldom dig dens, preferring to occupy abandoned woodchuck burrows.

**Range:** Home range may be <sup>1</sup>/<sub>4</sub> acre to 20 acres, depending on the availability of food and cover. An individual rarely leaves its home territory, where it knows food sources, cover and escape routes thoroughly.

Diet: Summer foods include leaves, herbs, legumes, fallen fruit, garden vegetables, low broad-leafed weeds, clover and grass. Captive wild rabbits have eaten grass equivalent to 42 percent of their weight daily during the summer. In winter, cottontails eat blackberry and raspberry canes, bark, buds, tender twigs of bushy plants and poison ivy vines.

**Life History:** A rabbit possesses sharp hearing and a keen sense of smell. Its eyes are set well back on the sides of its head, providing a wide field of vision. Rabbits are basically nocturnal, feeding in the evening, at night, and in the early morning. They lead solitary lives on their home ranges.

Rabbits rely on a burst of speed and a zigzagging running pattern to evade predators, but they cannot run steadily for long distances. They can swim if they have to.

Cottontail litters are usually born from March through September, with about half the total litters being born in May and June. Litter size ranges from two to nine young, with five the average. The gestation period is approximately 28 days. Each mature female bears an average of four litters per year. Juvenile females born in early spring are sexually mature and often breed by late summer of the same year.

A cup-shaped hole about five inches across and four to six inches deep serves as a nest.

This depression is lined with dried grasses and fur, which the female plucks from her chest and belly. Young are born blind, naked and helpless, but they develop rapidly and are weaned, fully furred and on their own at

the age of 16 days. The male takes no part in raising the young. Predators, spring floods, heavy rains and farming operations are major causes of nest mortality.

Few cottontails live to be more than a year old in the wild, although their potential lifespan is three to four years.

**Status:** The rabbit population today is not as large as it was in the past. The main reason for this decline is loss of good habitat. Many of the small farms that existed 50 years ago were abandoned and have now reverted to hardwoods. On the farms which are in operation today, modern equipment lets farmers clean up and cultivate fence rows, swamps and brushy slopes that once held many rabbits. Expanding cities and towns, new roads and dams continually reduce habitat.

Around the turn of the 20th century, many forest areas were logged off. As these areas grew up in brush, new rabbit habitat was formed, accounting for the tremendous populations in the early 1900s. Later, low vegetation—which supported the large rabbit populations—began to die as it was shaded out by growing trees. This natural mortality of low vegetation is a result of normal forest succession. From year to year, rabbit populations fluctuate in a given area due to changes in habitat and climate. Often in years of abundant rainfall, succulent herbaceous cover results

> in more rabbits surviving until fall.

Hunters usually harvest less than 30 percent of the available rabbits. Studies show that even if hunters

take as many as 40 percent of the rabbits available in autumn, the next year's rabbit population will not be adversely affected because the species' tremendous reproductive potential builds the population back up again. Young rabbits usually comprise about 80 percent of the population.

## Management:

Good rabbit habitat provides abundant food and protective cover. Heavily cultivated land produces ample food, but often not enough protective cover; on abandoned farming land, the reverse of this often hold true. Cutting along woodland edges stimulates the growth of low vegetation. Brushy plants which grow in these cut-over areas provide food and cover for several years.

Individuals interested in creating more summer food for rabbits can plant areas of clover and grasses. These food plots may require four or more mowings each summer to keep them in a "lawn" condition, and they should also be located near good cover.

Rabbits like to take shelter in brushpiles. Brushpiles are best made by placing smaller brush over several firm, large logs, which provide support. The larger logs also keep the brush off the ground, preventing its rapid deterioration. Many conifers also produce fine cover, including white, red and Virginia pines and Norway spruce.

Most of West Virginia's small game is produced on private land, and the key to a larger rabbit population lies in more habitat improvement on the part of the private landowner.

This information is compiled from a Pennsylvania Game Commission **Wildlife Note** written by Chuck Fergus.



