



Appalachian Cottontail

North Carolina Wildlife Profiles



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Appalachian Cottontail (*Sylvilagus obscurus*)

The Appalachian cottontail was first described as a distinct species in 1992. No, this is not a mysterious species of rabbit discovered in some remote location! It has been ranging across the mountains in western North Carolina for thousands of years.

The problem in recognizing the Appalachian cottontail as a distinct species stems from its similarity in appearance to the New England cottontail, which ranges through portions of several New England states. Until 1992, both species were considered to be New England cottontails. However, after studying chromosome numbers, taking measurements from hundreds of specimens, and discovering no evidence of hybridization, scientists determined that the two were indeed separate species.

Description

The Appalachian cottontail is a medium-sized rabbit with brownish upper body and white underparts. The species cannot be conclusively distinguished from the eastern cottontail just using external traits. However, the Appalachian cottontail is slightly smaller than the eastern cottontail, and usually has a black spot between its ears, which are relatively short compared to the eastern cottontail. Additionally, the Appalachian cottontail does not have a white spot on the forehead, which often is present on eastern cottontails.

A more reliable method of distinguishing between Appalachian and eastern cottontails is to compare skulls. When examining the Appalachian cottontail's skull from above, the suture line where the nasal (nose) bones attach to the skull forms an irregular, jagged line. That line is smooth and regular in the eastern cottontail. However, genetic analysis provides the most accurate determination of species.

History and Status

Appalachian cottontails are restricted in distribution to higher elevation mountain locations; typically occurring above 2,500 feet. Little is known about the movement of rabbits between populations. Because the Appalachian cottontail is restricted to higher elevations, it is unlikely that metapopulations interact, as they are separated from nearby populations by lower-elevation valleys inhabited by eastern cottontails. These isolated populations are potentially vulnerable to habitat alterations and development that may make a mountaintop unsuitable to the rabbits.

We also do not understand the mechanism that restricts the population to high elevations. It is possible that they may not be able to cope with warmer temperatures, are out-competed by eastern cottontails, or that the species is unable to

The Appalachian cottontail is one of three rabbit species native to North Carolina.



NC State Parks

Range and Distribution

In North Carolina, the Appalachian cottontail is restricted in distribution to high-elevation forests in western counties. Cottontails encountered above 2,500 feet are likely to be Appalachian cottontails. However, eastern cottontails can infringe on Appalachian cottontail territory if alterations to the landscape create early successional habitat that provides access to higher elevations. The species ranges from central Pennsylvania to the southern extent of the Appalachian mountains in northern Alabama.

Range Map



Appalachian Cottontail

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tolerate some disease or parasitic organism that inhabits lower-elevations.

For more information on this species, including status and any applicable regulations, visit www.ncwildlife.org/AppalachianCottontail.

Habitats & Habits

This species inhabits brushy habitat and woodlands in the high mountains. They can be especially abundant in five to 10-year-old clear-cuts, laurel and rhododendron thickets, and around the brushy edges of mountain balds and pastureland.

Human Interactions

Steep topography, limited access, and cold winter temperatures of high elevations in western North Carolina protect many Appalachian cottontail populations from intense hunting pressure. Appalachian cottontails are hunted and captured using box traps, but the more accessible eastern cottontail populations in mountain valleys receive more hunting pressure. Visitors to high elevations may see the Appalachian cottontail along grassy roadsides and the edges of woodland openings.

For More Information

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- Webster, W. D., J. F. Parnell, and W. C. Biggs, Jr. 2004. *Mammals of the Carolinas, Virginia, and Maryland*. University of North Carolina Press, Chapel Hill, North Carolina, USA.
- Whitaker, J. O., and W. J. Hamilton, Jr. 1998. *Mammals of the Eastern United States*. Cornell University Press, Ithaca, New York, USA.

Wild Facts

Classification

Class: Mammalia

Order: Lagomorpha

Average Size

Length: ~15.5 – 16.7 in. (39.1 – 42.5 cm)

Weight: ~1.75 – 3.1 lbs. (0.8 - 1.4 kg)

Food

Low-growing, herbaceous vegetation, as well as the bark of shrubs and saplings.

Breeding/Young

This species breeds from February through September and females are capable of producing several litters of young per year, with an average of 3.5 young per litter. The typical range is from two to eight young per litter.

Young are placed in shallow nests made from leaves or grasses and lined with fur from the mother. Young are born blind, naked and helpless but grow quickly. They open their eyes at six or seven days, and within two weeks, their weight increases by 400 percent and they are able to leave the nest. After about four weeks, the young are on their own and the female prepares to give birth to a new litter. Early-born young are capable of reproducing during the late summer of their first year.

Life Expectancy

Most Appalachian cottontails live less than one year. As with all rabbits, this species compensates for high mortality rates through prolific reproduction.