

Status: Common Native Game Species

EASTERN, NUTTALL'S, AND DESERT COTTONTAIL

(Sylvilagus floridanus, s. nuttalli, and s. audubonii)

Description

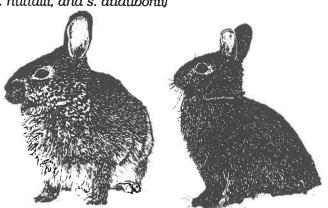
These three species of cottontail rabbits look very similar, but they are actually very different. While an expert may be required to identify a cottontail to species, cottontails often can be identified by their habitat or the area of the state in which they occur. (See the section on distribution for this information).

The eastern cottontail is mostly grayish-brown with scattered black hairs on the back and sides. The belly is mostly white. The nape, or back of the neck, is a dark, rusty color. Total length is from 16 to 18 inches (400-450 mm). Weight ranges from 32 to 53 ounces (900-1500 grams).

The desert cottontail looks very similar to the eastern cottontail but is smaller and paler. Instead of a rusty nape, the desert cottontail has a orangish-brown throat.

Nuttall's cottontail is lighter than the eastern cottontail but darker than the desert cottontail. It is also intermediate in size. The hind feet are densely haired.

The tail of all cottontails is brownish-gray above and white below. The white cottony undertail is the source of the animal's common name. All cottontails can be distinguished from jackrabbits by

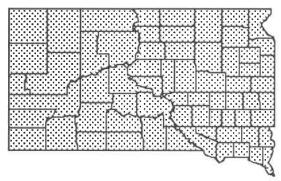


their much smaller size, shorter ears, and preference for running to cover rather than outrunning danger. The fur of jackrabbits turns white in winter, but cottontails remain basically the same color throughout the year. Cottontails are true rabbits. Like other true rabbits, the young are *altricial*, or naked and helpless at birth. Jackrabbits are actually hares, and have *precocial* young. *Precocial* young are born fully furred and are able to leave the nest shortly after birth.

Distribution

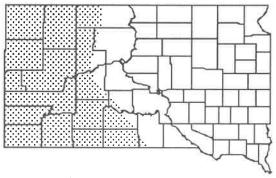
The eastern cottontail is found in shelterbelts, wooded draws, creeks, and river bottoms. *Deciduous* woodlands are its primary habitat. Eastern cottontails are found statewide with the exception of the higher elevations of the Black Hills. They are more common in the east and become less common in the west. In South Dakota, this is the only cottontail

found east of the Missouri River.



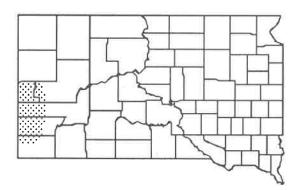
Distribution of Eastern Cottontail (Absent from higher elevations in the Hills)

The desert cottontail is found in the western part of the state. This species prefers drier upland habitats such as badlands, brushy draws, or weedy areas.



Distribution of Desert Cottontail

The range of the Nuttall's cottontail in South Dakota is limited to the Black Hills. It prefers large forested areas or large expanses of brushy habitat.



Distribution of Nuttall's Cottontail

Natural History

Cottontails are well known for their ability to produce young. Eastern cottontails can bear seven or more litters annually, with each litter containing one to nine young. Nuttall's and desert cottontail are not as productive, with three to five litters annually. As a general rule, 75% of the young die before they are old enough to have young. Breeding occurs throughout the warmer months. Females build elaborate nests of grass and leaves, then line the nest with their own fur. After a gestation period of 28 days, the young are born blind, naked and helpless, and are tended by the female. The young leave the nest at about two weeks of age, and are independent of the mother when they are about a month old. Cottontails reach sexual maturity in approximately six months.

Grasses and *forbs* are the preferred foods in summer months. Winter foods are more likely to be twigs, buds, and bark of *deciduous* trees and shrubs. Sagebrush is an important food for Nuttall's and desert cottontails. Moisture is supplied from food sources, and cottontails do not require free water in their habitats.

Cottontails are solitary animals. Although they maintain home ranges and the females set up breeding territories, cottontails are fairly tolerant of each other. Densities of five to seven per acre are common.

Significance

When cottontails are abundant, many predators may feed almost exclusively on them. Owls, coyotes, foxes, hawks, weasels, and eagles are major predators. Cottontails are important links in the web of life.

The cottontail is the most popular game animal in the United States. Cottontail meat is excellent eating and the fur is used in the clothing industry. It is an

underused game species in South Dakota, despite a long season, September 1 through the end of February, and generous bag limits. Early American Indian cultures used cottontails food. especially before development of the Plains Indian horse culture. Archaeological sites in South Dakota, dating from 10,000 years ago to about 400 years ago, indicate that both cottontail rabbits and jackrabbits were important food items. Rabbit drives, which probably were conducted in times of high rabbit numbers, are depicted in some early American Indian rock art.

Conservation Measures

While the factors that affect cottontail

populations are not well known, it is fairly easy to increase populations temporarily. The numbers of cottontails harvested by hunters and predators is not as important as the number of them that survive to breed. Good habitat is very important for survival because it provides cover from predators. Brush piles can be built by landowners, but new brush piles must be made every few years. Cottontails prefer habitats that have numerous habitat edges, such as weedy shelterbelts, meadows, washouts, or brushy draws. Landowners and land managers can best increase cottontail numbers by protecting or creating these types of habitat.

Glossary

Altricial - refers to young that are confined to their nest for some time after hatching because they are born naked and helpless.

Archaeological - a descriptive term referring to archaeology, the scientific study of material remains of past human life and activities.

Bag limit - the number of animals permitted to be taken by a hunter in one day.

Deciduous - those woody plants that lose their leaves each winter.

Forbs - plants other than grasses, shrubs, and trees.

Gestation - the period of pregnancy.

Precocial - refers to young that are born with fur or feathers and are able to leave the nest immediately after birth.

References

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Hall, E. Raymond and Keith R. Kelson, 1959. The Mammals of N. America. Ronald Press Company. Jones, J. Knox, Jr., et al., 1985. Guide to Mammals of the Plains States. University of Nebraska Press, Lincoln and London.

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Selected Resources for Teachers

Cottontails, Little Rabbits of Field and Forest, a book by Ron Fisher, 1989. National Geographic Society.

The Life Cycle of the Cottontail Rabbit, a book by Julian May, 1973. Children's Press, Chicago. Rabbits and Hares by Robert Whitehead, 1976. Franklin Watts, New York.

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