

White Tailed Deer

Odocoileus virginianus



Other common names

None

Introduction

The white-tailed deer is New York's most popular game animal. With few large predators, deer populations can overbrowse, overloading the ability of the forest to support them. This can eventually lead to habitat degradation and deforestation. Deer populations must be managed by humans in the absence of sufficient predators to prevent population explosions and subsequent crashes due to starvation in winter months.

Physical Description and Anatomy

Adult deer stand 3 – 3.5 feet (0.9 – 1.1 m) tall at the shoulder. They weigh between 110 – 300 lbs (49.9 – 136.1 kg), with females averaging around 155 lbs (70.3 kg) and males averaging 203 lbs (92.1 kg). They have long, slender legs and prominent ears. In the summer, their coat is reddish-brown, and it transitions to greyish-brown in the winter. Their winter coat is also longer

and thicker to provide more warmth in the colder months. Both males (bucks) and females (does) have white along their underside and throat. Fawns are a reddish brown at birth, with white spots that serve as camouflage. These spots are lost at 3 – 4 months when the fawn gains its winter coat.

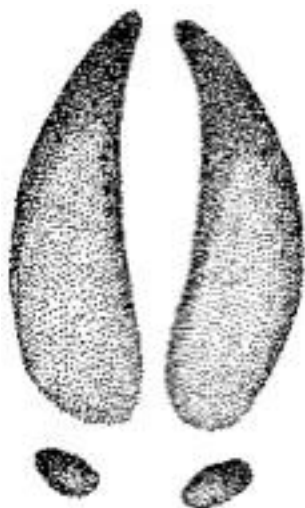


White-spotted fawn in dappled sunlight, hidden in tall grass.

Only male white tailed deer grow antlers. They grow a new set every year, beginning in April, stimulated by longer day length. Antlers emerge from hard plates on the skull called pedicles, and are covered with a soft skin called velvet as they grow. This velvet is full of blood vessels that provide nutrients for antler growth. By the end of September, the velvet dries up and is shed by rubbing the antlers along bushes and trees, because it is an itchy process. Males usually produce their first set of antlers at 1 year. Antler size generally increases with age, but it is also influenced by genetics, food quality, and overall health of the individual.

Identifying features (tracks, scat, calls)

An easy identifying mark of a white tailed deer is the feature that gives it its name. You will often see the white flag of its tail as it bounds away after being startled. Deer tracks are similar to moose tracks, but generally much smaller. Keep an eye out for feeding signs as well as antler rubs along trees and shrubs. White tailed deer use their lower front incisors to scrape bark off trees. During mating season, listen for grunts and the clack of antlers as males compete for mates.



White tailed deer track.

Fawn: 3 – 3.5 inches

Yearling doe: 4 inches

Adult doe + yearling buck: 4.5 inches

2.5 year buck or doe: 5 inches

3.5 – 6.5 year buck or doe: 5.5 – 6 inches



White tail deer scat.



This is the skull of a male white tailed deer. His left antler was somehow damaged, stunting its growth and giving him a lopsided appearance.



The bottom jaw of a white tailed deer. Note the forward pointing incisors and the large gap before the molars.



Deer feeding sign



Deer antler rubs.



Habitat

Deer are highly adaptable animals, and can be found in a wide variety of habitats. They are often found on border areas between forests and fields, or along roadways, farm fields, and waterways. They can also be found in open agricultural areas and dense brushy habitats, and it is becoming more common to see them in urban and suburban areas as well.

White tailed deer generally spend summers in open meadows, moving into hardwood forests in autumn to feed on mast crops. In winter, they gather in coniferous forests, where the evergreen trees provide food and shelter from wind and snow.

Behavior and Diet

White tailed deer are most active in early morning and early evening. They both browse and graze, feeding on grasses, leaves, stems, and buds of woody plants, fruits, vines, mushrooms, hard mast, ornamental plants, and agricultural fields and orchards. They swim well, and often enter water in summer to forage. An adult requires 5 – 7 lbs (2.3 – 3.2 kg) of food every day. They build up their fat reserves by eating more in autumn to compensate for lower food availability in winter. Deer are equipped with a 4-part stomach, which allows them to gorge on a

lot of food quickly, then move to a safe place to chew their cud. Individuals will congregate in herds and “yard up” in winter under conifers where snow is less deep. The thick cover protects them from wind and acts as a food source.

A typical family group is often composed of an adult doe, her current fawn(s), and her yearling daughter(s). They will remain together on and off throughout most of the year. Yearling bucks are driven away before new fawns are born. Fawns may bleat to get the attention of other deer, while adults communicate with scent and body language, as well as vocalizations. They may snort or stomp their hooves when disturbed or frightened.

Human Interactions

Deer are an important attraction for recreation, including tourism and hunting. Every year, 220,000 deer are taken in New York by about 566,000 hopeful hunters. This is a great source of revenue, and hunters are some of the best supporters of conservation actions, as they understand the need for high quality habitat to support game animals. Hunters also assist in managing deer populations, which can become overabundant in the absence of suitable numbers of large predators. White tailed deer support large populations of ticks. Reducing population density of deer reduces populations of ticks, which in turn reduces rates of infection of lyme disease in humans.

Overabundant deer populations can cause serious damage, resulting in habitat degradation and deforestation through overbrowsing. They feed on agricultural crops and ornamental plants, and their ability to jump over tall fences makes keeping them out extremely difficult. Another problem comes when residents feed deer in and around their homes, leading to deer frequenting residential areas. This leads to an increase in deer-vehicle collisions, which is estimated at 70,000 collisions every year in New York alone. It also increases the incidence of vehicle-vehicle collisions. People visiting rural areas will stop their cars in the middle of the road to observe deer, and cause traffic congestion and fender benders. Because of this, in New York it is illegal to intentionally put out food to attract deer.

Reproduction

Breeding season or “rut” for white tailed deer runs from October to January, with a peak in mid-November. Bucks will use their smooth, sharpened antlers to establish social rank and compete for mates. Larger antlers and body size, combined with aggressive behavior, usually favor breeding success.



Sign of deer overbrowsing on hemlock sapling.

Does generally breed for the first time at 1.5 years old, and give birth to one fawn after a gestation period of 200 days. More mature does often have twins, and while rare, triplets and even quadruplets are not unheard of. Fawns are 7 – 8 lbs (3.2 – 3.6 kg) at birth, and they nurse every 4 – 5 hours for the first 3 weeks. They are weaned by late summer or early fall, but they generally stay with the mother through their first winter. Average lifespan is 6 – 14 years.

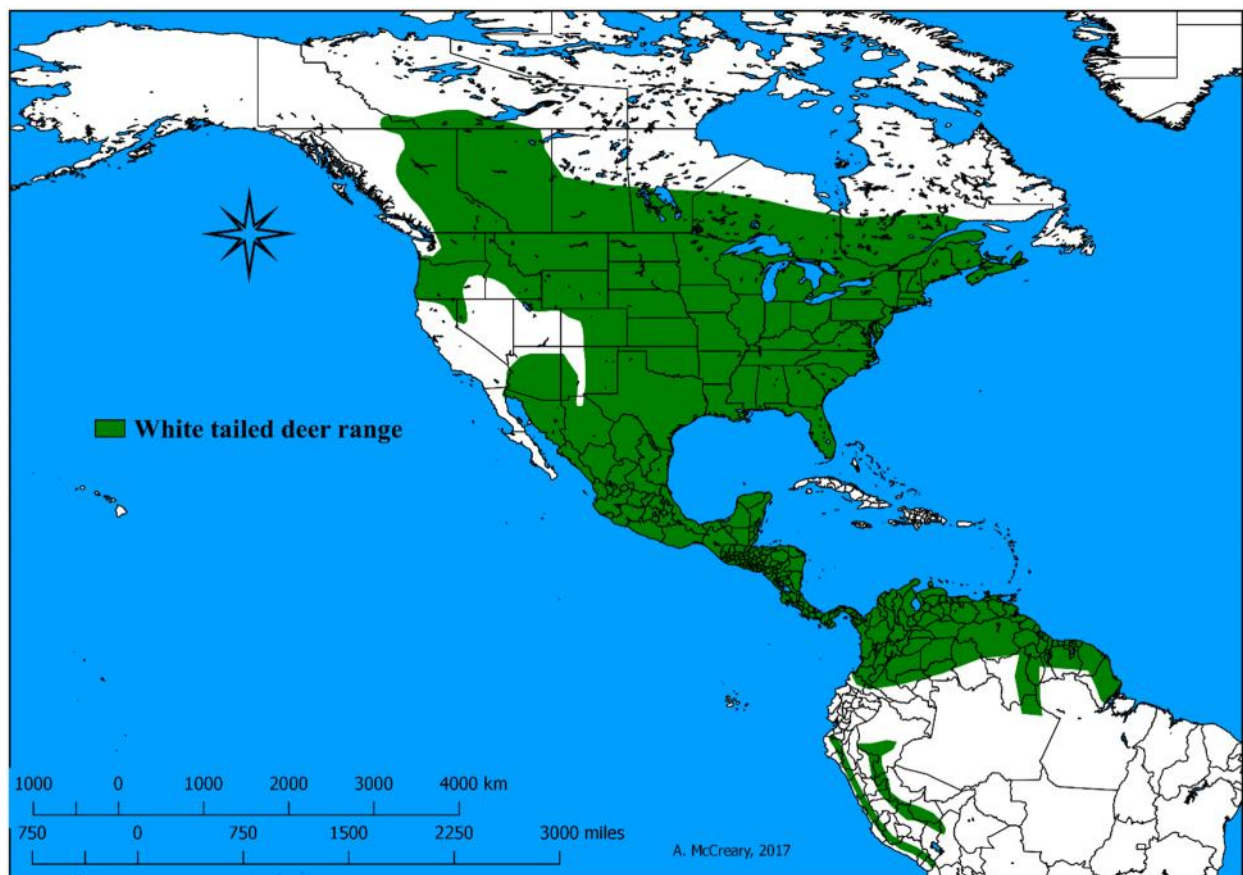
Fun Facts

Deer can run 35 – 40 mph (56.3 – 64.4 kph).

They can jump over an 8 foot (2.4 m) high fence.

Range and Status

White tailed deer are another species that was overhunted and suffered from habitat loss in the 1800s. Populations rebounded dramatically from a combination of careful management and changing landscape resulting in increased forests over the last 100 years. Today deer populations need to be carefully managed to prevent detrimental effects of overcrowding, including deforestation, disease, starvation, and population crashes. In New York, the population is estimated to be around 1 million individuals.



Management and Research in New York

White tailed deer are one of the most important game animals in New York and across the country. Deer hunting provides a boost to the economy by providing recreation, food, jobs, revenue in retail sales and taxes, and impetus for conservation.

Every year during the hunting season, DEC biologists gather information from successful hunters on age, sex, physical condition, and location of animals taken. Combined with data from fieldwork, this information is used to set deer harvest goals for the following season. The DEC works to promote safe and ethical hunting practices for all of its game animals, as well as to ensure to continued sustainable harvest of these animals.

Pictures





At Dyken Pond

White tailed deer are one of the most common animals we see on our trail cameras. We also find tracks and other signs of them on a regular basis during hikes throughout all of our trails. If you're quiet enough, you might even see the animals themselves.

Links

More information on white tailed deer can be found at the following links:

History of the white-tailed deer in New York

http://www.dec.ny.gov/docs/wildlife_pdf/histdeernewyork.pdf

The need for deer population management

http://www.dec.ny.gov/docs/wildlife_pdf/ndmgfin.pdf

New York's deer management program

<http://www.dec.ny.gov/animals/7211.html>

Management plan for white tailed deer in New York State 2012-2016

http://www.dec.ny.gov/docs/wildlife_pdf/deerplan2012.pdf

Sources

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