

NATURE NOTES

WHITE TAIL DEER

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Cradle of Texas Chapter**

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T E X A S

**Master
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White-tailed deer

The **white-tailed deer** (*Odocoileus virginianus*), also known as the **whitetail**, is a medium-sized deer native to the United States, Canada, Mexico, Central America, and South America as far south as Peru and Bolivia.^[2] It has also been introduced to New Zealand, Cuba, Jamaica, Hispaniola, Puerto Rico, Bahamas, Lesser Antilles, and some countries in Europe, such as Finland, the Czech Republic, and Serbia.^{[3][4][5]} In the Americas, it is the most widely distributed wild ungulate.

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Order:	Artiodactyla
Family:	Cervidae
Subfamily:	Capreolinae
Genus:	<i>Odocoileus</i>
Species:	<i>O. virginianus</i>

Binomial name

Odocoileus virginianus

(Zimmermann, 1780)

Due to its size and geologic features such as the **Balcones Fault**, Texas contains diverse **landscapes** that resemble both the **American South** and **Southwest**.^[11] Although popularly associated with the **Southwestern deserts**, less than 10 percent of Texas' land area is **desert**.^[12] Most of the population centers are located in areas of former **prairies**, **grasslands**, **forests**, and the **coastline**. Traveling from east to west, one can observe terrain that ranges from coastal **swamps** and **piney woods**, to rolling plains and rugged hills, and finally the **desert** and mountains of the **Big Bend**.





The white-tailed deer is highly variable in size, generally following [Bergmann's rule](#) that the average size is larger farther away from the Equator. North American male deer (also known as a buck) usually weigh 45 kilograms (100 lb), but in rare cases, bucks in excess of 125 kilograms (275 lb) have been recorded. Mature bucks over 180 kilograms (400 lb) have been recorded in the northernmost reaches of their native range, specifically, Minnesota and Ontario. In 1926, Carl J. Lenander, Jr. took a white-tailed buck near Tofte, MN, that weighed 183 kg (403 lb) after it was field-dressed (internal organs removed) and was estimated at 232 kg (511 lb) when alive.^[9] The female (doe) in North America usually weighs from 40 to 90 kg (88 to 198 lb). White-tailed deer from the tropics and the Florida Keys are markedly smaller-bodied than temperate populations, averaging 35 to 50 kg (77 to 110 lb), with an occasional adult female as small as 25 kg (55 lb).^[10] White-tailed deer from the [Andes](#) are larger than other tropical deer of this species and have thick, slightly woolly looking fur. Length ranges from 95 to 220 cm (37 to 87 in), including a tail of 10 to 36.5 cm (3.9 to 14.4 in), and the shoulder height is 53 to 120 cm (21 to 47 in).^{[11][12]} Including all races, the average summer weight of adult males is 68 kg (150 lb) and is 45.3 kg (100 lb) in adult females.^[13]

Deer have [dichromatic](#) (two-color) vision with blue and yellow primaries;^[14] humans have trichromatic vision. Thus, deer poorly distinguish the oranges and reds that stand out so well to humans.^[15] This makes it very convenient to use deer-hunter orange as a safety color on caps and clothing to avoid accidental shootings during hunting seasons.

Antlers

Although most often thought of as forest animals depending on relatively small openings and edges, white-tailed deer can equally adapt themselves to life in more open prairie, savanna woodlands, and sage communities as in the Southwestern United States and northern Mexico. These savanna-adapted deer have relatively large antlers in proportion to their body size and large tails. Also, a noticeable difference exists in size between male and female deer of the savannas. The Texas white-tailed deer (*O. v. texanus*), of the prairies and oak savannas of Texas and parts of Mexico, are the largest savanna-adapted deer in the Southwest, with impressive antlers that might rival deer found in Canada and the northern United States. Populations of **Arizona** (*O. v. couesi*) and Carmen Mountains (*O. v. carminis*) white-tailed deer inhabit montane mixed oak and pine woodland communities.^[20] The Arizona and Carmen Mountains deer are smaller, but may also have impressive antlers, considering their size. The white-tailed deer of the **Llanos** region of Colombia and Venezuela (*O. v. apurensis* and *O. v. gymnotis*) have antler dimensions similar to the Arizona white-tailed deer.

Diet

White-tailed deer eat large amounts of food, commonly eating **legumes** and foraging on other plants, including **shoots**, leaves, **cacti** (in deserts), prairie forbs,^[24] and **grasses**. They also eat acorns, fruit, and corn. Their special stomachs allow them to eat some things humans cannot, such as **mushrooms** and **poison ivy**. Their diets vary by season according to availability of food sources. They also eat hay, grass, white clover, and other foods they can find in a farm yard. Though almost entirely herbivorous, white-tailed deer have been known to opportunistically feed on nesting songbirds, field mice, and birds trapped in **mist nets**.^[25]

The white-tailed deer is a **ruminant**, which means it has a four-chambered stomach. Each chamber has a different and specific function that allows the deer to eat a variety of different food, digesting it at a later time in a safe area of cover. The stomach hosts a complex set of microbes that change as the deer's diet changes through the seasons. If the microbes necessary for digestion of a particular food (e.g., hay) are absent, it will not be digested.^[26]

Predators

Several natural predators of white-tailed deer occur. **Wolves**, **cougars**, **American alligators**, **jaguars** (in the tropics), and humans are the most effective natural predators of white-tailed deer. These predators frequently pick out easily caught young or infirm deer (which is believed to improve the genetic stock of a population), but can and do take healthy adults of any size. **Bobcats**, **Canada lynx**, **bears**, **wolverines**, and packs of **coyotes** usually prey mainly on fawns. Bears may sometimes attack adult deer, while lynxes, coyotes, and wolverines are most likely to take adult deer when the ungulate





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