

# Bambi: Beauty or the Beast?

What comes to mind when you think of Bambi? What was the message of the story?  
A brief synopsis on white-tailed deer.

November 2012

## Quick Facts



Deer can run up to 30mph



The white spots on fawn help camouflage it. They lose them when the fawn gets its first **molt** (winter coat) in.



**Does** (female deer) weigh 145lbs. **Bucks** (male deer) weigh 170lbs.

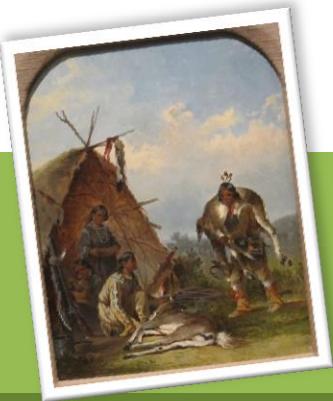


White-tailed refers to the underside of a deer's tail, which it displays and wags when it senses danger.



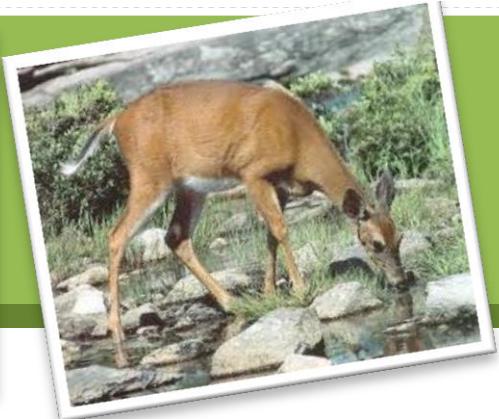
## History

In the late 19<sup>th</sup> century, slaughter by commercial meat and hide hunters (and ignorance of a deer's habitat requirements) almost caused extermination. Improvements were later made to deer habitats by farmers, which consequently caused an increase in population. They cut down areas of woods for food. This created a larger food supply for the deer because smaller plants were encouraged to grow (unlike in thick woods).



## Did you know...?

American Indians used deer for clothing and food. Early colonists traded deer hides. These valuable skins were called "bucks," a nickname we still use today for money.



# What do they need to survive?

Just like humans, all deer need an abundant supply of food and water to maintain their health.

**Eating Habits:** Deer are **browsers**. They eat a variety of foods depending on the time of year. They are also **herbivores**. Deer eat very quickly and hardly chew their food. Later, when they rest, they cough it back up and chew it.

**Tooth Structure:** Their diet is reflected in the structure of their teeth. Unlike canines, they do not have sharp pointy teeth to rip apart their food. They have molars to help chew their food.

\*The primary factor governing antler formation is food supply. As deer grow older and their teeth wear flatter, food becomes harder to chew. Therefore, their body condition will drop and so will antler development.

**Habitat:** They need a safe place to live. During the summertime, deer will inhabit fields and meadows, whereas in the winter, they keep to the forests to protect them from the harsh elements. Deer find a lot of food on the edges of forests, which is where many suburban areas develop. Due to habitat loss of the deer, they are mixing with humans. This causes many problems for residents.

**Alert System:** Deer have eyes on the side of their head. This allows them to have a 310-degree view of their surroundings, without moving an inch. Their oversized ears help them hear incredibly well. Their nose is also 1000 times more sensitive than a human's. Together, these enhancements allow the deer to sense a predator early on.

## Antlers

Antlers serve as a weapon system and display mechanism associated with social hierarchy.

Bucks grow a new set of antlers each spring.

**Early May:** At the beginning of the growing process (stimulated by extended daylight hours), the blood flow lays down a protein base upon which minerals are deposited. The skin/tissue that develops at the top of the pedicel reacts to hormones in the deer body that causes antler growth.

*Velvet Period:* Antlers are soft and tender until late summer. Antlers are covered in velvet (soft hairs that contain blood vessels that supply nutrients to growing antlers).

\*Antlers reach full growth in October: branched, maturity, good nutrition, lack of stress and good genes determine antler size and formation.

**Late December:** The testosterone levels decrease, forming a separation layer at the pedicel. The antlers shed.



## Fun Facts!

- The antlers of deer have the fastest growing living tissue on Earth! They can grow up to  $\frac{1}{2}$  inch per day.
- If antler growth tissue is surgically removed and added to another part of the deer's body, an antler would grow there.



# Overpopulation

**Carrying Capacity:** The maximum number of deer an area (environment) can support, without degradation of the habitat.

- Deer populations tend to increase until they exceed the food supply, (which, in this case, is the limited resource).
- When too many deer are in one area, they are in direct competition for the nutrients and food that are required for their survival. These resources become scarce because there is not enough to sustain the population at hand.

**Limited Resources:** A nutrient, habitat, (resource), that limits how many organisms an environment can support. Without this limited resource, the population will decline.

## Overpopulated deer:

- Alter herbivory on plants they use as food
  - Overpopulation influences abundance of plants. Over-browsing in forests result in no vegetation near ground level.
- Alter the physical habitat, and plant species composition
- Cause increased competition with other species (that use same resources).

## Cars and Deer:

- Over 1.5 million deer-vehicle collisions occur annually in the U.S.
- Estimated losses from these collisions exceed 1 billion dollars.
- Deer related accidents increase five-fold during hunting season because they are scared of loud noises and dart away onto the roads.

**\*Evolutionary maladaptation**—a trait that has become more harmful than helpful.

In the wild, if a deer is browsing in the middle of a field and a predator comes along, it will stand completely still so the predator won't sense its presence. However, this adaptation, (although helpful in the wild), is quite harmful when humans are concerned. If a deer is scared by a car and runs into the middle of the road, it will stand completely still and be shocked instead of running away.



**Disease:** Deer are also carriers of lyme disease. They serve as the host for the tick that transmits the bacterium, *Borrelia burgdorferi*. The deer supply the blood meal for the female tick prior to the production of eggs.



Deer are a part of our environment too. As humans, we must learn to share our space with the nature around us. At the same time, we must take into account the detrimental effects caused by our actions.

