



Ruminations on Deer, the Rut, and the Holidays

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by Randy DeYoung

Much of South Texas experiences the rut during December. Many hunters are in “deer mode” during this time, and their waking (and dreaming) thoughts gravitate to large-antlered bucks. It is also the holiday season, which could cause conflict unless you have an understanding family--or better yet, a hunting family. Holiday decorations sprout like corn feeders this time of year. In addition to Nativity scenes, many lawn displays show Santa Claus and one or more reindeer. As a deer researcher, I never really questioned ‘why reindeer’ until recently.



The Santa Clause we know has an interesting and complex history. The original inspiration derives from the bishop St. Nicholas, who was renowned for giving gifts to the poor. Many cultures had a tradition of gift-giving during the winter solstice or at the New Year, and later merged their traditional acts with celebration of the birth of Jesus upon their conversion to Christianity. In the Dutch tradition, the gift-giver became Sinterklaas, a figure modeled on St. Nicholas who passed out presents for children. The English had a similar figure, Father Christmas, who you might recognize as the inspiration for Dickens’ “Ghost of Christmas Present” in *The Christmas Carol*. However, Father Christmas wore a green coat and embodied the general spirit of good cheer rather than give gifts. This made me wonder why our contemporary Santa wears a red suit. Perhaps Santa realized standing close to animals with antlers during December could be dangerous, making the red suit an early version of blaze orange.

Our Santa Clause grew out of the Dutch and English traditions, which were inspired by the Greek bishop St. Nicholas who lived in what is now Turkey. Sinterklaas rode a horse in the Netherlands, but arrived each year on a steamboat from Spain. Father Christmas didn’t seem to have a preferred mode of transportation, and perhaps didn’t need any because he spent much of his time in the city. How did Santa Claus, who “descended” from a Greek bishop, end up in a sleigh with reindeer? Turkey is far from reindeer country.

A series of children's stories and poems in the early 1800's established the North Pole as Santa's place of residence; thus, the choice of reindeer for transportation begins to make more sense. Reindeer and their first cousins the North American caribou are found throughout the Arctic and are adapted to the harsh conditions. Their coat is composed of an outer layer of hollow hairs and a dense inner layer of fine hairs- excellent insulation from the cold. One especially influential poem by Clement C. Moore gave us additional insights in 1823 about how Santa Clause preferred to travel. You might recognize a few lines:



Caribou are well-adapted to frigid climates and will seek patches of snow in the mild Arctic summer to stay cool and avoid insects.

*“...when, what to my wondering eyes should appear,
but a miniature sleigh, and eight tiny rein-deer,
with a little old driver, so lively and quick,
I knew in a moment it must be St. Nick.*

*More rapid than eagles his coursers they came,
and he whistled, and shouted, and call'd them by name:
"Now, Dasher! Now, Dancer! Now, Prancer, and Vixen!
"On, Comet! On, Cupid! On, Dunder and Blixem!*

*"To the top of the porch! To the top of the wall!
"Now dash away! Dash away! Dash away all!"
As dry leaves that before the wild hurricane fly,
when they meet with an obstacle, mount to the sky;
so up to the house-top the coursers they flew..."*

Moore's poem "A Visit from St. Nicholas" revealed that Santa traveled in a sleigh drawn by eight reindeer, and also told us their names. The now-famous ninth reindeer with the glowing proboscis was attributed to a story written by Robert May and handed out to children in Montgomery Ward stores in the 1940s.

Recently, an often-repeated urban legend has arisen that Santa Clause's reindeer had to be girls. That doesn't sound right- we all know that only males grow antlers, right? No, it's true. Reindeer and caribou are the only species of deer in the world in which females grow antlers. Adult males shed their antlers by November or mid-December, while females and young males may not cast their antlers until April. We know that all depictions of Santa's reindeer have antlers, therefore the reindeer have to be female, or young males, at the very least.



Adult males (L) develop large antlers, while females and young males have smaller antlers (R).

Moore's description of "tiny reindeer" certainly makes them sound dainty. In addition, some of the reindeer names are less than masculine- I have a hard time picturing any self-respecting adult male reindeer named 'Dancer' or 'Prancer' or 'Vixen.' The original Dutch names 'Dunder and Blixem' were later translated to the German 'Donner and Blitzen,' or 'thunder and lightning.' Those are arguably masculine, though 'Comet' and 'Cupid' could be the reindeer equivalent of 'Adrian.'

An all- or mostly female crew makes sense; females would be far less aggressive and easier to handle. In addition, adult males lose much of their body fat during the rutting period, which occurs in October. In fact, the adult males pass the Arctic winter with 5% body fat. The males would have to do some serious carb-loading to pull Santa around the world because they have few internal reserves to draw upon. However, the Sami people might have found a solution to the problem. These reindeer-herders practice a form of castration that inhibits reproduction but allows enough hormone function for the adult males to retain antlers. Regardless, it appears that the urban myth has basis in fact; Santa's team has to be composed of young males, females, or castrated males. Unless Santa has done some intensive management to his herd that we are not privy to. Can't wait for the next poem to clear this up!



Young reindeer are raised in captivity at the secret reindeer training facility, also known as the Large Animal Research Station, University of Alaska-Fairbanks (L). Reindeer calves grow quickly and are able to run shortly after birth (R). Note the well-developed leg muscles in this young calf, good for evading predators and leaping onto rooftops.

Other Cool Caribou Facts:

They can see UV light, one of the only species of mammals that can see in this spectrum

Caribou have one of the longest migrations of any land mammal; some herds cover up to 3,000 miles

Reindeer have been semi-domesticated in parts of Scandinavia and Russia, where they were an important source of meat, hides, milk, and transportation; domestication began as early as 3000 BC

Adult males lose much of their fat reserves during the rut and may go through the winter on 5% body fat; this is less than most endurance athletes (who don't have to live in the Arctic)

Caribou occurred in the US as far south as southern Idaho and the Great Lakes region within the last century

Caribou are more closely related to white-tailed deer and moose than to elk

Tundra herds subsist on lichens for much of the year, a highly digestible forage with less than 5% crude protein.

Mountain caribou eat lichen in trees during winter. Snow that may be more than 20 feet deep by the end of winter lifts the caribou into the trees where they can access the lichen.

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