

THE REINDEER—IMPORTANT TO MAN IN FACT AND FANCY

By PHILIP HERSHKOVITZ
ASSISTANT CURATOR OF MAMMALS

TO MOST of us the reindeer is a fabulous animal and, like Santa Claus, is part of the yuletide legend. Nevertheless, since time immemorial, the reindeer has played a vital role in man's struggle for existence. In the older Stone Age, before metal implements and pottery were invented, the cave man left testimony of his dependence on the reindeer by depicting the animal on stone, slate, and ivory. Indeed, the significance of the animal during the dawn of

there is no manifestation of antlers until the individual, and then only the male, is at least three months old. In the adult caribou the brow tines of the palmate antlers are plate-shaped and extend forward over the nose. Usually only one brow tine is so developed while the other remains stunted. This tine is not used for shoveling or scraping snow away from forage, as is sometimes stated.

The general body color of the caribou is brown; the neck, beard, and underside of tail and surrounding area on the rump, as

are also brought to bear and, acting together, like snowshoes, this combination enables the animal to proceed with ease over crusted snow, frozen lakes, and steep icy slopes. The tread of the caribou is characterized by a peculiar clicking or creaking sound produced by the interplay of bones in the ankle. It may be a signal for keeping the herd together. The caribou can combine endurance with speed so that in a race over any great distance it outruns a wolf or any other kind of deer. It has been clocked crossing a lake at the rate of 45 to 50 miles per hour. If sufficiently frightened, a herd can run as much as 100 miles before regaining enough composure to halt or settle down to a walk. The caribou is also an excellent swimmer and, because of its special coat, floats high in the water. One herd of twenty caribou was observed swimming a distance of 1,000 yards in 8 minutes, 25 seconds, or at a speed of better than 4 miles per hour.

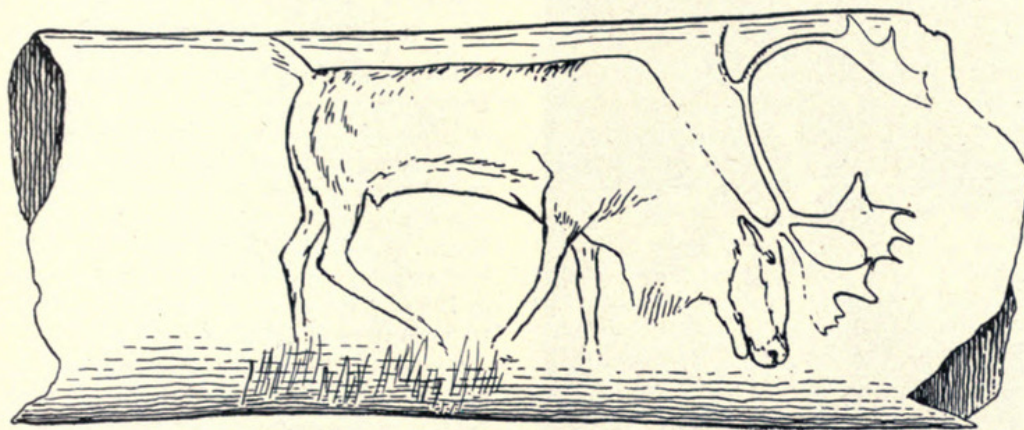
FEEDING HABITS

During the spring and summer a fully mature buck feeds, fattens, and grows antlers for the exhausting activity of the autumn rutting season. The fat that accumulates on his back may be two or three inches thick and, as a result, the animal takes on an ungainly appearance. The does and young bucks also fatten but not nearly so much. Once the breeding season begins, old males indulge in fighting with each other and in rounding up the females. So far as known, bucks do not select and maintain the same partners, or harems, but serve the does indiscriminately. During the rut, bucks eat little or nothing at all, and by the time the season is over their reserve fat is gone, their energy is spent, and they begin the winter in poor flesh.

The year-round food of caribou consists principally of grasses, true mosses and certain lichens called "reindeer moss." Winter is the lean season and the little found to eat consists of twigs of shrubs, lichens, and small clumps of grass and other vegetation that can be smelled out from beneath the snow. When plant growth resumes, caribou change to feeding on green stems, leaves and buds, favoring those of the willow and birch. Antlers that are shed at this time are also eaten for their needed mineral content. The menu of the caribou improves with the advancing season as the quantity and variety of green things and fruits increase. Mushrooms are a favorite food.

SPRING BABIES

The young are born in late spring and, unlike fawns of most other kinds of deer, they are not marked by a pattern of spots. The period of gestation is from 31 to 32 weeks and should twins be born—an unusual event—the mother may destroy one of the two offspring. A few hours after



REINDEER PLAYS DUAL ROLE IN ART

The animal provides both the subject and the medium for this portrait of itself made 18,000 years ago by a Stone-Age artist on a reindeer bone. The drawing is a reproduction of a paleolith found in Kesslerloch Cave, Switzerland. (Illustration by Margaret Bradbury, Artist in Department of Zoology.)

human culture was so great that the whole period is called the "Reindeer Age." Today, no less than yesterday, the reindeer is indispensable to man on the frozen deserts of Europe, Asia, and North America, where life is coldest and crudest.

The native wild reindeer of Canada, Alaska, and Greenland is the caribou. It conserves in full vigor the hereditary features and habits that have degenerated or become suppressed in its domesticated brother. Many kinds of caribou have been described, but it is now agreed that these are local varieties of a single species that occurs throughout most of the tundras, forests, and swamps of the Arctic and North Temperate zones of both the Old and New Worlds. The technical name *Rangifer tarandus* for the typical European reindeer is applied, also, to the American caribou. Reindeer, or caribou, are the only representatives of the deer family in the Arctic. The word "caribou" is of Algonquin Indian origin.

ANTLERS ADORN BOTH SEXES

The most distinctive character of the caribou, or reindeer, is the presence in both sexes of immense and peculiarly shaped antlers, a characteristic not found in any other kind of deer. Antlers appear in the young caribou, both male and female, within four or five weeks after birth. In other deer

well as a band around each foot, are white. There may be a spot or stripe of white on the sides behind the shoulders. Complete or partial albinos occur, especially among the most northern races. In late winter and early spring the pelage is grayish white, a result of bleaching and wearing, and provides camouflage against the snow. The pelage is at its best in autumn and early winter and consists of a coat of oily wool next to the skin and a thick outer covering of coarse hairs and very fine quills. Each of the quills is a true hair specially modified for the winter and filled with air cells. The quills act both as insulators in conserving body heat and as floats when the animal is in water. Caribou or reindeer hairs have been used for making lifebelts, and around 1900 a German invented a reindeer-hair cloth that, when made into suits, was intended to prevent human beings from sinking.

JUST RIGHT FOR SANTA'S SLEIGH

The caribou foot is wonderfully adapted to supporting the animal in traveling over swamps, snow, and ice. The hoof is wide and round in outline, concave on the underside, and capable of considerable lateral spread. When more supporting surface is required the well-developed dew claws, the pastern, and the fetlock of long stiff bristles

birth the extremely precocious offspring is afoot and following its mother. Two days later it is strong enough to keep up with the herd, and when it is about a month old the fawn begins to forage for itself. It continues to suckle regularly, however, for many months more, until the next spring, according to one observer.

GREAT MIGRATIONS

The caribou is highly gregarious and normally is found in herds numbering dozens, hundreds, or even thousands. The largest herds, with hundreds of thousands of caribou, are formed by concentrations of smaller groups that travel together during seasonal migrations. The fall migration is performed by massed herds over well-defined ancestral routes. The spring migration, in the reverse direction, is more gradual and scattered, taking place over individual trails that tend to obscure the mass movement. The primary reason for the migrations is the search for suitable food. Added stimulants may be the general unrest of the rutting activities in the fall and the physiological changes associated with fawning in the spring. In Canada, the general mass movement of caribou is from tundra to forest in the fall and early winter, and vice versa in the spring and early summer. In Alaska, there is a migration from highlands to lowlands in the fall and in the reverse direction in the spring. In Lapland, the domestic breed feels the urge to migrate in summer from inland to coast. Accordingly, the Laplander, with his herds, sojourns for several months in the neighborhood of the sea. In addition, there are many local movements of individual herds that do not conform to any over-all pattern. Segregation of the sexes has been noted in migrating herds of caribou. The does, accompanied by their yearling young, are in the advance. They are followed by young bucks, and old bucks bring up the rear.

HUNTED BY MAN AND WOLF

Human residents of the caribou range, who are in need of meat and hides, use their knowledge of routes taken by the animals for ambushing them. Eskimos have contrived ingenious devices for securing caribou. One of these is the building of a fence or a series of low mounds along each side of the route. The fences or mounds are usually convergent and may lead to a river crossing, a cliff, or a corral. Caribou on such a route may become suspicious but fear to crash through the fence or cross the mounds and thus are led into the trap or ambush.

Next to man, the wolf is the most important predator of the caribou. So close is the relationship between the two animals that predator and prey lead the same nomadic life. Bears sometimes secure calves for food but their depredations are insignificant. Wolverines and foxes frequently eat caribou meat but only as scavengers. The

golden eagle occasionally kills a new-born or very young fawn. However, the most important natural factors in reducing the numbers of caribou are disease and parasites.

PREDISPOSED TO DOMESTICATION

The caribou is instinctively tame, sociable, of a docile disposition, and endowed with a high degree of curiosity. These qualities predispose it to domestication. No attempt was ever made to domesticate the American caribou, but its European and Asiatic relatives have long been completely subjected to man's domination. In Scandinavia, the



MAKING HER OWN FUR COAT

American husbands can envy the mate of this Eskimo woman scraping a caribou or reindeer hide. Many such hides are needed to make her clothing—two large or three small ones for the summer parka and twice as many for the winter double parka. The hides are used also for boots, mittens, blankets, tents, bow lines, fishing nets and snow shoes.

reindeer supplies meat, milk, cheese, clothing, and means of transport in a climate where horse, cow, goat and sheep cannot be utilized. Harnessed to a sledge, the reindeer will travel 100 miles a day over the frozen snow. It is capable of drawing a weight of more than 300 pounds. The northern Asiatic breed is larger than the Lapland form and is used as a mount.

About 1840, the Hudson's Bay Company brought into Canada a few tame reindeer in charge of Norwegian herdsmen. The animals died within a few months. Reindeer of Siberian stock were successfully introduced into Alaska by the United States government in 1892 and during the course of the next eleven years. The original herds flourished and their descendants are numbered in the hundreds of thousands. The domestic reindeer are owned chiefly by Eskimos for whom they were originally imported, but white men have gradually acquired stock.

The Alaskan reindeer industry provides meat for residents and also for exportation. Reindeer or caribou hides are indispensable for the manufacture of many kinds of leather

articles, for tents, and for the type of clothing needed by Eskimos. A fine twine is formed from reindeer gut and the bones serve to make various kinds of tools and primitive weapons. The bone also enters into the construction of sledges and other vehicles. Every part of the animal, except its grunt, is utilized and fact does not end with the fancy of a team of reindeer soaring through the air driven by Santa Claus in a sleigh replete with good things for all men.

Special Exhibit . . .

SOME FLOWERING TREES OF THE CARIBBEAN

Twenty-nine paintings in tempera of the brilliant flowering trees of the coastal shores and islands of the Caribbean will be shown in a special exhibit in Stanley Field Hall of the Museum through December. The paintings are by two young artists of New York, Bernard and Harriet Pertchik, who are husband and wife. They were commissioned in 1950 by the Alcoa Steamship Company to paint these pictures.

The Pertchiks first worked together as fellow students at Pratt Institute and later became well known for their talent in commercial art. The present collection, which has won admiration in art circles both in this country and abroad, is their first major work in the fine arts. Intended as an objective presentation of colorful and exotic flora, the series of paintings required much research at the source. To carry out the assignment, the artists visited many parts of the West Indies and South America and made extensive studies of growing trees. Although their paintings are restricted in conception by the bounds of botanical accuracy, the Pertchiks nevertheless utilized the unusual forms and brilliance of the tropical blossoms with creative ability of first order.

The paintings have been used to illustrate *Flowering Trees of the Caribbean*, an authoritative book on the most spectacular of the region's blooming trees published by Rinehart and Company under the sponsorship of the Alcoa Steamship Company. Some have also been reproduced in the magazine *Holiday*.

Among the plants depicted are both red and white frangipani, rose of Venezuela, Napoleon's button, algodoncillo of the mountain, cannon-ball tree, queen of flowers, wild chestnut, African tulip tree, yellow flamboyant, Long John, pride of Burma, shower of gold, madre de cacao, mountain immortelle, orchid tree, chinaberry, Geiger tree, and *lignum vitae*. Representatives of a number of these are among the exhibits in Martin A. and Carrie Ryerson Hall (Plant Life—Hall 29) and other botany halls of the Museum.



Herskovitz, Philip. 1953. "The Reindeer--Important to Man in Fact and Fancy." *Bulletin* 24(12), 3-4.

View This Item Online: <https://www.biodiversitylibrary.org/item/25709>

Permalink: <https://www.biodiversitylibrary.org/partpdf/371013>

Holding Institution

University Library, University of Illinois Urbana Champaign

Sponsored by

University of Illinois Urbana-Champaign

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the Chicago Field Museum.
For information contact dcc@library.uiuc.edu.

Rights Holder: Field Museum of Natural History

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.