

The Beaver

By Dr. Leonard Lee Rue III

The beaver is classified as a rodent, as are squirrels, porcupines, muskrats, marmots, mice, rats, etc. Rodents are identified by having four incisor teeth in the front of their mouth, two in the top jaw and two in the bottom jaw. These teeth are used for cutting and gnawing wood. These incisors grow throughout the rodent's life and must be worn down by being used. The yellow front surface of the tooth is a very hard enamel; the rear portion is a softer dentine which wears away faster and helps to keep the tooth sharp.

The beaver is the largest rodent in North America with an adult averaging between 40-60 pounds. One beaver taken in Wyoming in 1938, weighed 115 pounds - a record weight. A beaver measures about 40 inches in total length including the 9 to 11 inch scaly tail. With the exception of man, no other mammal can so completely change its habitat. Even though beaver are medium-sized animals, they are not fighters and need deep water to escape from their enemies, such as wolves and bears. Beaver dam up small streams, creating ponds, to insure that they have the deep water needed. The water in the northern regions must be at least five feet deep so that it does not freeze down to the bottom of the pond in winter.

Solitary beaver may live in a den, dug into a bank, but most families of beaver live in a lodge. The lodge may start out as a hole in the bank or it may be built up in shallow water like an island. Everyone knows that beaver cut down trees but most people don't know that the trees are cut mainly for food. After the leaves, twigs and bark have been eaten, the peeled wood that is left, is used as building material in the dam or on the lodge.

Mud and stones are also used in the construction of the lodge and the dam. The mud seals the crevasses between the wood, the stones provide weight to compact all of the material. Both, the bank dens and the beaver lodges have underwater entrances that then slope upward into chambers inside, which are above the water level.

Beaver cannot control the direction a tree falls when they cut it. Most trees fall into the water, where the beaver want them to go, but only because, most trees growing along water have more branches on the water side and lean that way.

Beaver feed heavily upon reeds, sedges, water lilies, berries, mushrooms and other succulent plants and they anchor a ton or more of branches in the mud at the bottom of the pond near the entrance to the lodge. This is their winter food supply that will be eaten when they are imprisoned beneath the frozen surface of the pond. An established beaver colony has 7 to 8 beaver to a lodge. There is usually one adult pair of beaver, three yearlings and three kits. When the yearling beaver become two years old, they are generally forced to leave the lodge and the colony, at which time they will establish colonies of their own. This helps to prevent the adult beavers' food supply from being depleted so that the entire colony would have to move.

Beaver breed in January and February and have a gestation period of about 107 days with the young being born around the latter part of May. Three to five young is the average litter size. The babies are 12 to 15 inches long and weigh about one pound. The babies are fully furred, have their eyes open and can swim when they are 24 hours old. The average life span of the beaver is 10 to 12 years in the wild; captive beavers have lived to be 24 years old.

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| Annihilated | Killed off. |
| Bipedal | Walking on just two feet instead of four. |
| Cash Crop | A crop that can be exchanged for actual money instead of being bartered in trade. |
| Castoreum | A thick yellow, oily liquid produced by a beaver's Castor gland. It has a sweet odor and is used in making perfumes. |
| Chisel Shaped | Named after the carpenter's wood working tool that is flat on one side and sharpened to 45 degree angle on the other. |
| Cloaca | A single body opening that has several glands located there to rid the body of waste material, discharge oil and scent, and for sexual functions. |
| Crevasses | An opening. |
| Dentine | A softer substance found on the inside of a tooth. |
| Depleted | Used up. |
| Enamel | The extremely hard, outer surface of a tooth. |
| Entwined | Wrapped around or bound to. |
| Fallacy | A fact that is not true. |
| Forbs | Broad leafed plants. |
| Frigid | Extremely cold. |
| Gestation Period | The time it takes the young to fully develop in the mother. |
| Gnawing | To chew, usually on wood. |
| Imprisoned | Can't get out. |
| Incisors | The very front teeth in the mouth of mammals. Beaver have four incisors, we humans have eight. |
| Keenest Sense | A creature's most important or primary sense. |
| Litter | When animals give birth to three or more young at one time. The grouping of the young is called a litter. |
| Meander | To wander about. |
| Nictitating Membrane | A transparent third eyelid that covers the eye and protects it like safety goggles or keeps water out of the eye like under-water goggles. Most birds and a few mammals have these membranes. |
| Obstacle | Anything that prevents easy passage. |
| Orifice | A body opening |

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| Pilgrims | The name given to a religious group of people from England who arrived in Massachusetts at Plymouth in 1620. |
| Pre-Columbian | The years in North America before Christopher Columbus arrived here in 1492. |
| Predator | Any creature which feeds upon other creatures. |
| Propulsion | A method of being able to move about. |
| Protrude | Stick out above the surface. |
| Rodents | All rodents belong to the scientific order called RODENTIA. The various species are identified by having four large incisor teeth, two in the top jaw & two in the bottom jaw, in the front of their mouth, which grow continuously. |
| Rudder | A structure by which something is steered or directed. |
| Samoset | A Permaquid Indian who had been captured as a slave and taken to England in 1610. He learned English and returned to this country as a sailor. He became a friend of the Pilgrims when they arrived in 1620. |
| Sapling | A young tree, up to about 4 inches in diameter, is known as a sapling. |
| Scaly Tail | The beaver's flat tail has scales on its surface instead of fur. |
| Scent Glands | Glands in the body that give off various scents or odors. |
| Sedges | Coarse grass-like plants growing in wet areas. |
| Semi-Aquatic | A creature that spends part of its time in water. |
| Solitary | Single, alone. |
| Succulent | Plants having high water content. |
| Sufficient | Having enough of anything. |
| Tailored | Designed to do a special job; a special fit. |
| Valves | A mechanical device to stop a liquid from flowing through a pipe or a muscle that prevents liquid from entering a creature's nose or ears. |
| Vegetarian | One who doesn't eat meat, fish or dairy products. |
| Vulnerable | Exposed to danger. |