Beaver — "The Engineer"

By *Syd Coleman*, Retired Forester

The beaver is one of the few species of mammals who alters his environment to custom fit his needs. Most animals will build or dig out some form of shelter, or will occasionally change the landscape to oblige their eating habits. A beaver will form lakes and ponds for its own protection, all the while creating an environment that makes obtaining food and building supplies readily available. Their engineering feats create great dams on public and private land which may cause flooding of pastureland needed for grazing, destruction of crops, felled timber, destruction of fishing streams, blocked culverts, and flooded roadways. Their work ethic is consistent. Beaver can be a boon or an abomination, depending on whose trees are being cut down, whose land is flooded, or whose streams are "jammed."

We know that much of America was founded on the fur industry. The majority of that fur being beaver pelts, they were heavily trapped in the eighteenth and nineteenth centuries. By the middle of the nineteenth century, the beaver population in a handful of states had been reduced to the point that there were none to be found. These eastern states enacted laws to protect the beaver from being trapped out, and by the late 1940s and early 1950s, the beaver population had recovered to allow trapping on a limited basis.

Beaver are strict vegetarians, eating most any species of shrub or tree. They enjoy a varied diet, with particular favorites being twigs and bark. Generally speaking, the sticks the beaver uses for building its lodge have been debarked and eaten as a meal. They eat anywhere from $1\frac{1}{2}$ to 2 pounds of food each day.

In the spring, "eager beaver" feed on sprouts, roots, assorted grasses, sedges, ferns, and water plants. Algae forming in warm water becomes an important mid-summer high protein food. When beaver venture on to nearby farmlands they will eat wheat, oats, and corn. Adhering to the old adage, "waste not, want not," they will even use the corn stalks to construct dams. Beaver will consume carrots, apples, potatoes, turnips, alfalfa, clover, and a variety of grasses. Here in the Deep South, their preferred diet is sweetgum, yellow popular, pine trees, bushes of privet hedge, and almost anything growing near the stream or pond edge.

Beaver mate for life and form colonies. In their first year together, a couple will have two to four young, which are called "kits." The family doubles in size in the second year. Year three finds the kits leaving the den to set out

on their own to form new colonies. They will search for suitable habitat where they can set up housekeeping, requiring plenty of water and a food supply nearby. When deciding to camp on a stream, they will dam the stream to raise the water level. They will either build their new lodge in the flooded area or construct bank dens. These bank dens are a kind of "safe house" built as an escape from predators who also hang out in shallow water.

Beaver are rodents and are characterized by front teeth which are adapted for gnawing and cheek teeth which are for chewing. They have four incisor teeth in the front of their mouths, two upper and two lower. The foreparts are bright orange in color and as with all rodents, these four teeth continue growth throughout the life cycle. They "work" to keep the teeth worn down, using them to cut wood for building activities. You will seldom see a beaver who is "long in the tooth." A full grown beaver will weigh from 40 to 60 pounds. The heaviest beaver on record (in 1938 in Wyoming) weighed a whopping 115 pounds.

Beaver have few natural enemies. Here in the South, bobcat and coyotes will kill a few who venture too far from the water. In areas where alligators and large snapping turtles exist with beaver, some small beaver will be taken. I have even heard of fishermen seeing alligators go on a raid of beaver dens. Since beaver have few predators, we are having a population boom. When the fur market bottomed out in the South and the majority of trapping ceased, the beaver began replenishing our area in a very abundant way.

When you have a beaver problem on your land, you must first determine if you, as a landowner, can control the population in your own backyard. You must combine vegetation control with use of fences, and clean out drainage ditches. If fruit trees or a variety of other trees are on your property, encircle the trees with wire fencing for protection. To be effective, these fences need to be at least 8 inches away from the trees and at least 3 1/2 feet in height.

If you feel the job is one for a professional, seek a reliable animal damage control specialist. Check for references to learn of their prior experiences and success rates. Some specialists do year-round maintenance control which creates a consistency in controlling the problem. Cost will vary according to the size of the job and distance the professional must travel. If you have a large land area that is affected, a land manager may show interest in learning to do this damage control.

In most cases, removing beaver or reducing their numbers is not a one-time event. Flowing stream or suitable habitat on your property is enticing to the beaver, so keeping them on a manageable level will be an ongoing process.

Sources:

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About the Author

Syd Coleman is a retired forester with over 34 years of service with the US Department of Agriculture. He and wife Jean live in Centreville, Alabama, and are active in the Bibb County Chapter of the TREASURE Forest Association. Since retiring, he has operated Coleman Animal Damage Control Service, specializing in beaver control in the central and western parts of the state.

Beaver bank den.

Beaver den in open water.

Photos by Syd Coleman