

Wildlife Tidbits: Keystone Species

Just what is a Keystone Species? The Beaver, *Castor Canadensis*. American Indians called the beaver the “sacred center” of the land because this species creates rich habitats for other mammals, fish, turtles, frogs, birds, and ducks. Since beavers prefer to dam streams in shallow valleys, much of the flooded area becomes wetlands. Such wetlands are cradles of life with biodiversity that can rival tropical rain forests. Almost half of endangered and threatened species in North America rely upon wetlands.

Beavers are a keystone species. That is, they are a species whose very presence contributes to a diversity of life and whose extinction would consequently lead to the extinction of other forms of life. Keystone species help to support the ecosystem (entire communities of life) of which they are a part. Other examples of keystone species are: Black-Tailed Prairie Dogs, where more than 200 other wildlife species have been observed on or near prairie dog colonies, some of these animals depending on prairie dogs as a food source or for their habitat. Another example is the Elephant in the African grasslands. That is, without elephants, the grasslands actually cease to exist as grasslands. Beavers reliably and economically maintain wetlands. Wetlands act as a sponge to slow the flow of floodwaters, prevent erosion, raise the water table, and act as the “earth’s kidneys” to purify the water. The latter occurs because several feet of silt collect upstream of older beaver dams, and toxics, such as pesticides, are broken down in the wetlands that beavers create. Thus, water downstream of dams is cleaner and requires less treatment.

Beavers’ ability to change the landscape is second only to humans. But that is just one reason why we find the flat-tailed species so fascinating and a major reason why some humans coincidentally find them irritating. Once weaned, their favorite food includes water lily tubers, clover, apples, and the leaves and green bark (cambium) from aspen and other fast-growing trees. Beaver pruning stimulates willows, cottonwood, and aspen to grow bushier the next spring. After eating, beavers use the peeled sticks to build a tee-pee like lodge (house) and to build and maintain dams. By damming streams, beavers raise the water level surrounding their lodge (like a protective moat), and create the deep water needed for winter food storage in northern climes. While other wildlife endures wintertime cold and hunger, beavers stay warm in the lodges with an underwater food cache of branches nearby. A beaver colony can consist of six or more parents including yearlings and kits.

When human and non-human animal conflicts arise, working with the beaver is most often the best solution. If beavers are removed from a good habitat, others will move in the empty habitat. Relocation proves futile as beavers are able to migrate over tens of miles. Besides being a temporary solution, removal is often environmentally disruptive as it leads to the draining of beaver wetlands when beavers are no longer present (for the short term) to repair dams. Like other wild species, surviving beavers respond to persecution with larger litters. And there is no kill trap that currently exists that will reliably cause an instant death under field conditions AND guarantee to only “catch” beavers. Finally, drowning traps are especially inhumane for animals that can hold their breath for 10 to 15 minutes, as is the case with beavers.

Proven, cost-effective devices, such as beaver pipes in dams, are installed to control objectionable flooding. Road flooding is a common beaver/human conflict that can be solved with methods such as Exclosers, Beaver Bafflers, or Beaver Deceivers. By installing flow devices, often most of the beaver wetlands can be saved, while ending the unwanted flooding. Problems with objectionable tree cutting can often be solved with fencing. Charlton is home to several effectively operating Beaver Pipes/Deceivers, and Culvert Exclosers.

Your Charlton Ad-Hoc Wildlife Committee has much more information on beavers and other wildlife species. Please contact us to learn more about “living with wildlife.”

(excerpts taken from <http://www.beaversww.org>)