

April 7 is International Beaver Day

Why Celebrate This Keystone Species?

BY SHARON T. BROWN



Photo: Beavers Wetlands & Wildlife

Beavers are more than intriguing animals with flat tails and lustrous fur. American Indians called this species the land's "sacred center" because beaver damming creates such rich wetland habitat – a half-mile-long dam in Alberta, Canada can be seen from space. Today we know that beavers provide many essential services. Beavers: Wetlands & Wildlife, an educational nonprofit, has designated April 7 as International Beaver Day to spread the word that nature's engineer is our ally in combating major modern environmental problems.

The fur trade had nearly extirpated beavers in the U.S. by the early 1900s, when conservationists raised an alarm about the decline in many wild species due to the massive loss of watery habitat. Because beavers build their stick-and-mud dams in streams flowing through shallow valleys, the flooded area becomes wetlands – cradles of life with biodiversity that rivals tropical rain forests. It was not immediately obvious that people had lost equally vital, but hidden, beaver benefits until houses began floating downstream.

Leaky dams, such as beavers build, naturally moderate downstream flooding and droughts by releasing water slowly – instead of water flowing off the land in

hours, it can take weeks. That long retention time allows the clearing of toxins, such as the pesticide atrazine, and excess nutrients, such as phosphorous, from fertilized croplands. Plus filtering by dams can remove 90% of the silt so that the flow downstream needs much less treatment at drinking water plants.

When beavers were wiped out, most of the nation's wetlands were drained for cropland. Back then, no one understood that freshwater wetlands provide more natural services than any other terrestrial ecosystem. Today, manmade (mitigation) wetlands cost from \$10,000 to \$100,000 per acre to build, while each New York beaver family creates an average of 15 wetlands acres on average – at no charge to taxpayers.

Today *Castor canadensis* has rebounded from the edge of extinction, though we have only 10%, or less, of the original beaver population prior to European colonization. State wildlife agencies remain more philosophically oriented toward "harvesting the resource" than to providing wetlands benefits, and manage beavers to keep their populations low to avoid complaints. Luckily, modern economical methods now exist to solve common beaver problems. For example, a beaver-flooded road no longer means that a community must choose between an expensive project to raise the road and an endless cycle of trapping. Installing a beaver flow device can save money and the ecology; when these were used at the Virginia Dept of Transportation's worst beaver road sites, each \$1 spent saved \$8.37.

As climate change brings more regional floods and droughts, we have a flat-tailed partner who'll work for free to alleviate the damage. People benefit greatly as when beaver wetlands cleanse the water, slow erosion, raise water tables, and slow the flow of streams. No wonder scientists say

that learning to live with beavers could alleviate today's major environmental problems – such as rising extinction, water pollution and extreme weather events from climate change.

More information, including videos, beaver brochures, studies and reports, is available at www.BeaversWW.org. Those who'd like to celebrate International Beaver Day, Thursday, April 7 with a program for their club, class or community can receive a free "Coexisting with Beavers, Teachers' Edition" DVD while supplies last. Tell us your plans and send a check for \$4.95 to cover shipping and handling to BWW, 146 Van Dyke Rd., Dolgeville, NY 13329, or call 518/568-2077 for a credit card order. This DVD contains a half-hour video with exciting action footage of beaver pond wildlife, plus two short ones: an introduction to beavers and BWW, and a bit about the "Beaver Woman" Dorothy Richards.

Consider helping your community learn about these amazing animals on International Beaver Day, April 7th. It's a good time to hike to a beaver pond, arrange a display of beaver books in your library, or have a program about this amazing animal.

Sharon and Owen Brown are the Founders and Directors of Beavers: Wetlands & Wildlife (BWW)
<http://www.beaversww.org/>



Sharon Brown and her friend.