

Beavers

RESOURCE BRIEF

Importance

The beaver (*Castor canadensis*) is a keystone species that greatly affects habitat structure and dynamics through the damming and diverting of streams, and the felling of trees and other woody vegetation. With the subsequent flooding and creation of habitable ponds, beavers help create an environment favorable to willows and aspens, their preferred winter foods. Because their habits tend to affect entire ecosystems, beavers are of particular interest to researchers and park managers. Beaver presence in Yellowstone has been documented only sporadically since the late 1800s when fur-trapping caused a sharp population decline throughout North America, but records indicate that a population has existed in the park continuously since then.



conducted in 1996 and now done every other year, enable park managers to more quickly detect population changes, thus facilitating a better understanding of beavers and their habitat use within Yellowstone. Some of the approximately 50 beavers that were reintroduced to several Gallatin National Forest drainages by the U.S. Forest Service in the mid-1990s eventually moved downstream into the park. While this reintroduction effort helped hasten repopulation on Yellowstone's northern range, trends indicate that beavers from within the park would have eventually re-colonized this area, drawn by the re-growth of willow there. Most of the 127 active beaver colonies found in Yellowstone in 2007 are concentrated in three locations (Fig. 1): (1) the northwest (Madison-Grayling Creek-lower Gallatin River drainages); (2) the southwest corner (Bechler River area); and (3) the upper Yellowstone River from the southeast arm of Yellowstone Lake to the Thorofare.



Figure 1. Yellowstone National Park beaver colonies, 2007.

Discussion

Beavers may not be abundant within Yellowstone, but where they do occur their densities are healthy and comparable to other willow-subsisting beaver populations in North America. All of the colonies observed in 2007 were found amidst willow, and none were cutting aspen. Willow is more common in the park than aspen and a hardier shrub that quickly regenerates after being clipped by beavers. Populations that settle among willow stands seem able to exist in stable numbers for years or even decades in a mutually beneficial relationship.

Status

Although little is known about beaver density and distribution in Yellowstone prior to the late 1980s, present data indicate that the park population has recovered to sustainable numbers. Recent research on beavers began in 1989 with ground surveys covering certain portions of the park as the primary counting methodology. Park-wide aerial censuses of beaver colonies and caches, first

