



Wolves DO help trees survive in Yellowstone National Park

Notable notes in forest research at Oregon State University College of Forestry



When the last wolves were hunted and driven from Yellowstone in the 1920s, the elk were left with no significant predator. With over 17,000 elk in the park in the mid-1990s, the herd was one of the world's largest. Without wolves the elk were safe to graze wherever they wanted, including near streams, where cottonwood often grows. So many elk were grazing that cottonwood could not get established, and most trees that were not already mature did not grow much at all.

The wolves were reintroduced in 1995, and soon elk had to be more careful about where they grazed. Some locations, such as large open landscapes, are safer for elk, while locations where visibility is low or a wolf den is close by are not as safe. The elk keep away from the unsafe areas, enabling cottonwood and willow to grow back in the largest quantities seen in years. Forest scientists William Ripple (Forest Resource) and Robert Beschta (Forest Engineering) discovered

this new growth by studying photographs of the landscape taken up to 30 years ago and comparing them to the landscape today to see if there was any new growth of cottonwood.

The story does not stop here though. More cottonwood means shadier streams that are better for fish and more trees of the right size for beaver to use in building their dams. In fact, where there was only one beaver family in 1995, there are now eight. Beaver ponds, in turn, provide habitat for otters, mink, muskrats, ducks, and even moose.

Wolves are taking the place of human hunters by keeping the herds of elk from growing too large, and as it turns out, they are doing so in a way more beneficial to the ecosystem overall. Hunters usually take the best males, but wolves take the weaker males and females, thus limiting the herd growth and creating a stronger herd at the same time. Also, wolves hunt year-round, providing much needed food to scavengers in the winter.

Unlike bears or mountain lions, wolves do not carefully guard their prey. They gorge themselves on 20 pounds of meat and then go sleep it off, leaving the rest open to birds and small animals like golden eagles, bald eagles, magpies, and coyotes.

Wolves are a "keystone species," meaning they affect the well being of every other species. For more information, visit <http://www.cof.orst.edu/wolves/>.



Before Wolves



After Wolves

