

Yellowstone's Unnatural Disaster

"Yellowstone: Ecological Malpractice" by Charles E. Kay, in *PERC Reports* (June 1997), Political Economy Research Center, 502 S. 19th Ave., Ste. 211, Bozeman, Mont. 59718.

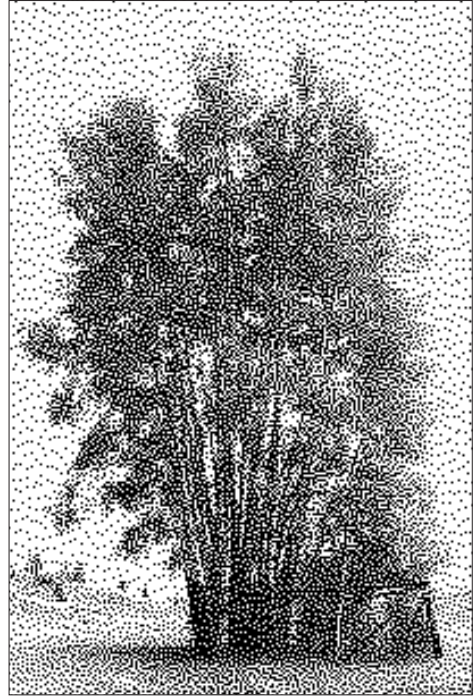
When hundreds of buffaloes from Yellowstone National Park's northern herd roamed outside the park in search of food last winter, they caused a regional uproar. Ultimately, at the insistence of Montana ranchers, worried because many of the animals carried a disease that causes miscarriages in cattle, some 1,100 bison were killed.

But the root problem, argues Kay, a Utah State University political scientist with a Ph.D. in wildlife ecology, has yet to be addressed: overgrazing of Yellowstone's northern range by the park's bison and elk. Wandering buffaloes are the least of the effects. Overgrazing, he maintains, "has denuded the range, destroying plant communities and eliminating critical animal habitat. The result has been a drastic decline in Yellowstone's biodiversity."

Kay blames the overgrazing on the National Park Service's policy of "natural regulation" of the populations of elk, bison, and deer, under which their numbers are left to be determined solely by the available food supply. (The unusually harsh winter of 1997, for example, cut the bison population in half, to less than 2,000.) Until natural regulation was adopted in 1968, the Park Service deliberately thinned the herds.

As evidence that overgrazing has occurred, Kay offers turn-of-the-century photographs of Yellowstone habitat and recent photos he has taken of the same places. Forty-four sets of "repeat" photographs indicate that tall willows on the northern range have declined by more than 95 percent since the park was established in 1872. Other sets of photos show that the area occupied by aspen has shrunk by more than 95 percent. In fenced enclosures, however, the trees are thriving.

The dearth of willows, aspen, and cottonwoods, which beavers need for food and



In 1986, this stand of aspen in Yellowstone, shielded from grazing wildlife, had grown more than 60 feet tall.

to build dams, has prevented the beavers from playing their ecological role, Kay says. As a result, many streams in Yellowstone have cut deeper channels, lowering water tables and helping to destroy vegetation on the banks. Grazing elk and other animals do more damage. A visit to the Lamar River in the park left Oregon State University hydrologist Robert Beschta shocked: "I've seen plenty of examples of streams degraded by domestic livestock. But this is among the worst."

The effects of overgrazing are far-reaching, says Kay. It has even deprived Yellowstone's grizzlies of berries—prompting some bears to leave the park for what frequently turn out to be fatal encounters with the human animal.

The Thief of the Mind

"Plundered Memories" by Zaven S. Khachaturian, in *The Sciences* (July–Aug. 1997), 2 E. 63rd St., New York, N.Y. 10021.

Alzheimer's disease, the most common form of dementia in the elderly, currently afflicts at

least four million Americans, and care for Alzheimer's patients costs \$100 billion a year. If