The Lives and Deaths of Yellowstone’s Grizzlies

By Paul A. Johnsgard

About fifty thousand years ago, as the northern hemisphere was locked in a global deep-freeze and the continental glaciers of the Pleistocene were at a maximum, a large land bridge that connected Asia and North America existed in the general region now occupied by the Bering Sea and Alaska, the so-called "Beringia" region. Across that corridor many mammals migrated from Asia over the millennia, including North America’s ancestral brown bears and, much more recently, the first humans.

One early influx of bears arrived in North America from Asia less than fifty thousand years ago. Some of these ancestral Alaskan brown bears apparently became isolated in island and coastal habitats by the last of the great glaciers, and the polar bear evolved from them. A later influx of bears from Asia produced the modern brown and grizzly bears (Ursus arctos).

These were not the first American bears. As early as seven million years ago, several bear species were already present in North America. The largest mid-Pleistocene bear was the giant short-faced bear. This behemoth probably reached weights in excess of two thousand pounds, or nearly three times the average size of a modern grizzly, and it was perhaps able to subdue some of the largest of Pleistocene mammals. This bear and its contemporary relatives such as the cave bear eventually became extinct, except for one surviving descendant, the South American spectacled bear. A much smaller bear that had evolved in the Old World about 1.5 million years ago and arrived at least eight
thousand years ago in North America became the modern black bear (*Ursus americanus*). From their original area of North American occupation in Beringia, the ancestral brown bears moved south into central North America toward the end of the Pleistocene, or about twenty thousand years ago. At their peak their range extended south into northern Mexico and east to the edge of the prairies in Canada's Prairie Provinces and the Great Plains states. In Alaska these huge bears are called Alaska brown bears, or are sometimes known as "Kodiak" bears. They weigh on average up to a third more than the more southern populations and can rarely exceed one thousand pounds. The generally accepted name for the populations south of Canada is grizzly bear, in reference to the adults' gray-tipped ("grizzled") pelage. There are transitional populations linking these two extreme genetic types, and even a few recent hybrids between Alaskan brown bears and polar bears.

During presettlement times, the grizzly was widespread in western North America from the Cascade and Sierra Nevada mountains east across the Rocky Mountains to the High Plains grasslands. During 1804–05, grizzlies were encountered by the Lewis and Clark expedition in what are now North Dakota and Montana, and were seen again by Clark on his return trip down the Yellowstone River in 1806. The group's narratives of meeting grizzly bears, which they variously called "white bears" or "gray bears," still provide for exciting reading material. Clark's account of chasing a grizzly for two miles while on horseback provides the first evidence of grizzlies in the greater Yellowstone ecosystem.

More recently, as firearms and ammunition have improved, killing a grizzly bear as a unique hunter's trophy has increasingly become one of the ultimate icons of manhood for the most thoroughly gun-addicted Americans. As a result, nearly all the grizzly populations of western North Americas have been extirpated, except in remote areas such as Alaska, and within a few well-monitored sanctuaries such as our western national parks.

With the 1973 passage of the Endangered Species Act, the grizzly bear was classified as a threatened species throughout the lower forty-eight states. In a corollary action, and while I was doing field research in the Teton, the greater Yellowstone region was proposed as critical habitat for grizzlies in 1976. This recommendation initiated nearly as much anger among ranchers, landowners, and developers as do current federal attempts to impose national jurisdiction over so-called "states' rights." As a result of these pressures, the critical habitat designation for Yellowstone was never officially adopted.

Since Yellowstone National Park's formation in 1872, its bears have been theoretically secure because, according to its official 1883 management principles, the only animals that can be legally killed within park boundaries are fish. However, the park's principals have rarely followed these principles. For example, to satisfy fishermen, park personnel regularly destroyed the eggs in a nesting colony of American white pelicans on a small island in Yellowstone Lake, although white pelicans consume almost no fish of sporting value. Until the early decades of the twentieth century, thousands of coyotes, nearly all of the park's mountain lions, and all of the park's wolves were shot or poisoned. The loss of these predators resulted in large population increases in prey species such as elk, and their overgrazing produced widespread habitat deterioration.
I first saw wild bears on a trip to Yellowstone with my parents during the post-war recovery years of the late 1940s; we observed over fifty black bears during a memorable two-day trip through the park. My teenage introduction to bears had occurred during the period when roadside feeding of animals by tourists in national parks was the norm. Two decades later, Yellowstone National Park began a campaign to separate bears from all human encounters and dealt harshly with any bears that failed to cooperate.

This draconian policy had its origins in 1967, after two grizzlies in Glacier National Park killed two young women campers. The women had both been wearing perfume, leading the park to claim that the bears had been attracted by odor rather than as a result of the park’s inadequate bear management. At that time, bear feeding by tourists was a well-established practice at both Glacier and Yellowstone parks, and in both locations the animals had lost all fear of humans.

The two deaths in Glacier represented only the fourth and fifth lethal attacks by grizzlies on humans in the entire history of the national parks but caused the administrators of national parks to reevaluate their bear policy. Yellowstone Park modified its garbage dumps by eliminating anything that might be attractive to bears. This change forced the bears to search elsewhere for food, such as around campgrounds. During 1966, before the garbage dump policy took effect, a total of nine bears that visited a campground near Yellowstone Lake were trapped and removed or killed. In 1968, after a nearby dump had eliminated all access to garbage by bears, the number removed or killed there had risen almost four-fold to thirty-three.

Accurate estimates of bear mortality associated with Yellowstone’s control actions are impossible to obtain. For example, in the thirteen years between 1970 and 1982 Yellowstone officials reported an average annual loss of eighteen grizzly bears that died accidentally, were trapped and euthanized, or were transported to remote locations. However, Frank Craighead reported in his 1979 *Track of the Grizzly* that over the four-year period 1969–1972 an average of thirty-two Yellowstone grizzlies were killed annually.

In 1971 alone well over forty grizzlies were killed near the wild-west town of West Yellowstone, located just outside the western boundary of Yellowstone Park, where snowmobiles have priority over cars and owning lots of firearms is a status symbol. The grizzly deaths included eighteen radio-tagged bears that had been part of the Craighead brothers’ long-term and monumental study on Yellowstone’s grizzly populations and ecology. Park officials did not receive the Craighead’s research results well and tried hard to restrict or terminate their studies.

A 1975 National Academy of Sciences report estimated a greater Yellowstone population of about three hundred grizzlies, a total that was lowered by a team of independent scientists to possibly fewer than two hundred by 1982. By then the Park Service had reassessed and reduced its control activities. It is also becoming increasingly apparent that, because of the very large home ranges of grizzlies, illegal killing of the animals outside the park strongly influences regional bear numbers. Grizzly pelts and other body parts, such as their claws, have high commercial value, making the bears highly attractive targets for poachers.

In recent decades the regional prospects for grizzlies have improved through better-informed park management and slightly improved control of illegal killings. However, in 2012 a record number of fifty-six bears were known to have been killed by humans in the greater Yellowstone region, representing about 10 percent of their estimated total population. By comparison, a total of seven human deaths have been caused by Yellowstone’s grizzlies during the park’s entire 142-year history. Glacier National Park has likewise had seven lethal grizzly attacks over its 104-year history. Yellowstone Park averages well over three million visitors per year, and Glacier slightly under two million, so the chances of being killed by a bear at either park are much less likely than of becoming an astronaut.

By comparison, Yellowstone typically has up to ten bison attacks on humans per year, and during the fifteen years from 1979 to 1994 there were two fatalities and fifty-six injuries caused by bison in Yellowstone Park. Thus, the park’s seemingly tame and lethargic bison are hundreds of times more likely to attack visitors than are its grizzly
bears. (I write from personal experience, having been chased and very nearly trampled by a rutting male bison in the Black Hills during the 1980s.) Closer to home, domestic dogs and cattle each kill an average of roughly twenty Americans annually, while bees, hornets, and wasps average more than sixty.

Yellowstone's grizzly populations have markedly improved lately, in spite of high cub mortality rates and an undisclosed number of bears being euthanized by the park. Of seven females with cubs that a friend monitored in 2013, only two still had any yearlings present in 2014. The bears’ regional annual growth rate from 1983–2001 has been estimated at 4–7 percent, and James Halfpenny estimated in his 2007 *Yellowstone Bears in the Wild* that the greater Yellowstone ecosystem then held five hundred to six hundred grizzly bears. Grizzlies have also recently expanded their ranges south out of Yellowstone into Grand Teton National Park, where visitors are now increasingly likely to see them.

In September of 2013 I visited Grand Teton National Park and with Tom Mangelsen saw many of the places I had come to love during the 1970s. There were many obvious changes. For example, the Teton bison herd, which had consisted of a few dozen animals when I first saw it in the 1940s, had multiplied to nearly 1,000 head, and Yellowstone Park had about 3,500.

Besides seeing all the common Teton birds and mammals, Tom and I also extensively watched three subadult grizzly bears peacefully foraging on plant roots in grassy subalpine meadows near Togwotee Lodge. The bears also scavenged the carcass of a moose that a trophy hunter had killed and left all but the head and antlers behind to rot. Fall grizzly foods in the Yellowstone area often mostly consist of the seeds of whitebark pines dug out of squirrel caches, army cutworm moths, and a wide variety of plant leaves and roots.

For three days Tom and I watched the bears, and at times more than twenty carloads of tourists and local wildlife photographers lined the roadsides. None bothered the bears, and the bears paid little attention to the onlookers. On a few occasions a bear would cross the highway, patiently waiting for the traffic to thin out and provide a safe crossing. One even wandered to within a stone's throw of our parked car, providing me with a heart-stopping sense of awe at seeing such a beautiful animal in its element and imprinting on my mind an incredible lifetime memory.

Tom recently told me that there is now an all-out effort to trap most of Yellowstone's regional grizzlies during this summer and fall. One male (#760) was trapped twice in less than nine months and was fitted with a radio collar. He is one of the few bears that was often seen by park visitors during 2014 and probably has been observed by hundreds of thousands over the past four years. With no history of being aggressive, he nevertheless now conspicuously wears two large yellow ear tags and a big radio collar, reminding one more of a decorated Christmas tree than a wild bear. As Tom said, "The American public does not want to come to their national parks to see Christmas tree bears!"

More ominously, the grizzly will be legally hunted as a trophy species in Wyoming,
Idaho, and Montana if it is regionally delisted from its current threatened status, as has been proposed by the US Fish and Wildlife Service. The Wyoming Game and Fish Department already has made plans for a grizzly bear hunt whenever the species is delisted, with permits ("tags") to be sold at a bargain price of $660 each, and the possible sale of as many as fifteen permits.

Not all big-game hunters are expert marksmen, and over two hundred years ago Lewis and Clark learned the extreme dangers of coping with wounded grizzly bears. With that thought in mind, the greater Yellowstone region may soon become a more dangerous place for both bears and humans, and a far sadder one, in which the sight of free-roaming and relatively tame grizzlies will become nothing but a memory.

References


The number of grizzly bear deaths or removals in the Yellowstone region climbed to an all-time high in 2015, but biologists say they're not worried about the animal's long-term survival in the area. The known or suspected deaths of 55 bears shouldn't interfere with plans to remove the region's grizzlies from protection under the Endangered Species Act, Frank van Manen, leader of the Interagency Grizzly Bear Study Team, said Wednesday. The team of state and federal scientists and biologists estimates more than 700 grizzlies live in the Yellowstone region spanning parts of Wyoming, Montana and Idaho. That's up from about 600 in 2010 and around 200 in the early 1980s. Grizzlies first were listed as a threatened species in 1975.