Wildlife in Yellowstone

Spring 2001

The Grizzly Bear

NPS photo

The Yellowstone ecosystem provides vital habitat for grizzlies in its two national parks (Yellowstone and Grand Teton), six national forests, tribal lands, state lands, and private lands. Some bears live totally inside or outside of Yellowstone National Park; others use portions of various agency holdings.

Because grizzly bears range widely and are usually solitary, they are difficult to count. Biologists estimate their population within the Yellowstone ecosystem to be 280–610 bears.

The Yellowstone ecosystem is unique among areas inhabited by grizzly bears in North America because of the foods it provides. Here, grizzly bears depend more on animals, ranging from ants and moths to elk and bison. Bears here and elsewhere also eat large amounts of plants, but Yellowstone lacks the lush vegetation and berries found in northern Montana.

When Yellowstone grizzly bears emerge from hibernation in March and April, there is still a lot of snow and very little vegetation in most of the park. The bears move to the low country where elk and other ungulates (hoofed mammals) spent the winter. There, the bears feed on carcasses of ungulates that died during the winter. (Never approach a carcass—a bear may be nearby and it will often defend its food source.) Bears are not the only animal that depends on winter-killed ungulates for survival. Wolves, coyotes, wolverines, badgers, foxes, eagles, ravens, magpies, and carrion beetles also feed on the carcasses.

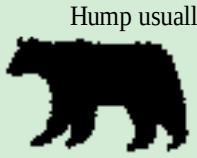
Grizzly bears prey on elk calves in the spring, usually from mid May through early July. By then, most elk calves can outrun bears. Some bears will feed on spawning cutthroat trout in the Yellowstone Lake area during the early summer. Bears also dig for small rodents (primarily pocket gophers), ants, roots, and tubers. Later in the summer, grizzly bears feed on army cutworm moths and whitebark pine nuts at high elevations—important high-protein foods for grizzly bears, especially as autumn approaches.

The restoration of wolves to the park appears to be providing bears more opportunities to obtain meat. During the years since the 1995 release of wolves into the park, bears have been observed successfully taking wolf-killed ungulates away from wolf packs. Will this new opportunity increase the grizzly bear population in Yellowstone? No one knows.

Grizzly or Black Bear?

GRIZZLY BEAR

BLACK BEAR



Look Out for These Exotic Invaders

Lake Trout

Yellowstone Lake is the core of the remaining undisturbed, natural habitat for Yellowstone cutthroat trout, which today survives in about 15% of its historic range. Because cutthroat trout live mainly in near-shore waters and spawn in tributary streams of the lake, as many as 42 species of birds and mammals—such as grizzly bears, raccoons, otters, white pelicans, bald eagles, and osprey—depend on the cutthroat as a food source.

In 1994, this delicate web of life was threatened when a visitor caught a lake trout (or Mackinaw) in Yellowstone Lake. Lake trout, native to the Great Lakes and other northern areas of North America, pose two threats to the ecosystem:

1. They eat cutthroats.
2. They do not spawn in shallow water where predators can catch them.

Since 1994, control efforts have removed approximately 27,000 lake trout. Anglers have had success catching lake trout that are between 15 and 20 inches long because these fish are found in shallow, near-shore waters in June and early July.

New Zealand Mud Snail

This tiny (less than 1/4 inch—see photo at right) black, conical snail occurs in the Firehole, Gibbon, Madison, and Snake rivers. It often forms dense colonies on aquatic vegetation and rocks along streambeds, crowding out native aquatic insect communities that are a primary food source for fish. Scientists are developing strategies for dealing with this invader.

Whirling Disease

This parasitic infection of fish is caused by a microscopic protozoan that destroys the cartilage of juvenile trout, causing them to swim in a whirling motion (as if chasing their tail) when startled. Seriously infected fish have a reduced ability to feed or escape from predators, and many die. The whirling disease parasite is native to Europe. Young rainbow trout and cutthroat trout appear to be very vulnerable to the disease. Older fish and other species of trout are less susceptible (or possibly immune), but may carry the disease.

NPS photo/Tom Cawley

Non-Native Plants

Aggressive non-native plant species are displacing native species at an alarming rate. This invasion could seriously affect the park's native plant communities, wildlife populations, and even geothermal areas.

Non-native plant seeds spread on:

- muddy shoes and boots
- vehicles that have driven through "weedy" areas with seeds
- dirty construction equipment
- weed-infested hay
- contaminated sand and gravel used in road projects

Some of the non-native species of particular concern include dyers woad; purple loosestrife; sulfur cinquefoil; dalmation toadflax; musk thistle; ox-eye daisy; orange hawkweed; and species of knapweed.

You Can Help

Whirling Disease & Mud Snails

- Rinse mud, plants, and debris from all angling gear, footwear, boats, and other items used in the water before you enter Yellowstone and after leaving each water body within the park. Thoroughly inspect your gear.
- Dispose of fish entrails and snails in a waste container where the fish or snails were taken. Do not transport fish parts, except what you will consume, outside the watershed where you caught the fish.

Lake Trout

Fish for lake trout in Yellowstone Lake during June, early July, late September and early October when the fish frequent the north and southeast shores of West Thumb. At these times, many lake trout are in waters that are 10 to 20 feet deep. Lake trout are attracted to medium-sized lures that imitate small fish. ***If you catch a lake trout in Heart Lake or Yellowstone Lake and its tributaries—including the Yellowstone River—you must kill the fish.***

Non-Native Plants

If you see any of the problem plants mentioned, especially in the backcountry, please report them to a ranger at any visitor center or ranger station.