

Cutthroat Trout *Oncorhynchus clarkii*

In the greater Yellowstone ecosystem, cutthroat trout are considered a keystone species, upon which many other species depend. For example, they spawn in shallow water, where they become an important food resource for other Yellowstone wildlife, including the grizzly bear. They are at great risk from hybridization and competition with non-native trout, and predation by non-native lake trout.

Yellowstone Cutthroat Trout*Oncorhynchus clarkii bouvieri*

- Includes two forms of the same subspecies: Yellowstone cutthroat (large spotted form) Snake River cutthroat (fine spotted form)
- Yellowstone cutthroat is native to the Yellowstone River, its tributaries, the Snake River, and the Falls River.
- Snake River cutthroat is native to Snake River drainage in and beyond Yellowstone and Grand Teton national parks.
- Require cold, clean water in streams or lakes.
- Spawn in rivers or streams in early May through mid-July.
- Most important foods are aquatic insects—mayflies, stoneflies, caddisflies, etc.—and other small aquatic animals, plus terrestrial insects that fall into the water.
- Also eat smaller fish, fish eggs, small rodents, frogs, algae and other plants, and plankton.

While the Yellowstone cutthroat trout is historically a Pacific drainage species, it has (naturally) traveled across the Continental Divide into the Atlantic drainage. One possible such passage in the Yellowstone area is Two Ocean Pass, south of the park in the Teton Wilderness. Here, it's possible for a fish to swim across the Continental Divide at the headwaters of Pacific Creek and Atlantic Creek and, thus, swim from the Pacific to the Atlantic watersheds and vice versa.

Management

Yellowstone Lake and Yellowstone River together contain the largest inland population of cutthroat trout in the world. For many years, the fish in Yellowstone Lake have been intensively monitored and studied. In the 1960s, fisheries managers determined that angler harvest was excessive and negatively impacting the fishery. Increasingly restrictive angling regulations were put into place, which helped restore cutthroat trout population numbers and age structure. Whirling disease and illegally introduced lake trout in Yellowstone Lake now pose a serious threat to the cutthroat trout population.

Westslope Cutthroat Trout*Oncorhynchus clarkii lewisii*

- Evolved from a common ancestor of the Yellowstone and Snake River forms of the species, and shares their food and habitat requirements. (*See above.*)
- Originally throughout the Madison and Gallatin river drainages in Yellowstone National Park.
- Currently reduced to small headwater populations due to competition and interbreeding with non-native fish.
- Habitat loss and pollution negligible in the park.

Management

This subspecies is at risk through interbreeding with non-native rainbow trout and transplanted Yellowstone cutthroat trout. Two genetically pure populations of westslope cutthroat trout have been found in Yellowstone: Last Chance Creek, a tributary of Grayling Creek in the Madison River drainage, and the Oxbow/Geode Creek complex in the Yellowstone River drainage. An intensive effort is underway to restore westslope cutthroat trout in Specimen Creek, a tributary of the Gallatin River.

See Chapter 8 for information about fisheries management.