

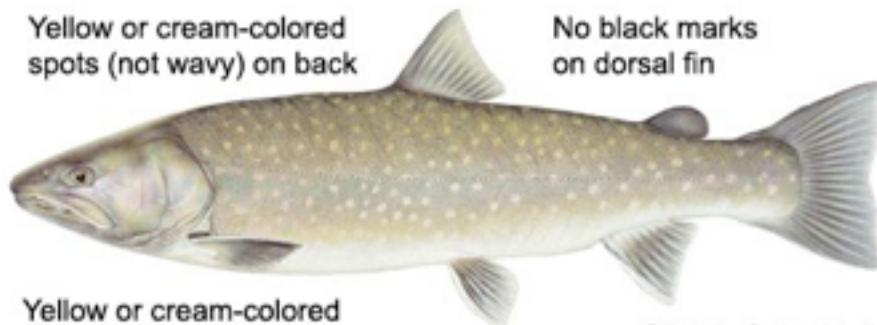
Kokanee Salmon Sheet 3

The five primary game fish in Flathead Lake include two native species: bulltrout and cutthroat trout. The nonnative fish are lake trout, kokanee salmon and lake/mountain whitefish. Since data collection began, scientists have seen distinct periods of domination by fish species. Prior to 1920, the native bulltrout and cutthroat dominated Flathead Lake. From 1920 to 1984, kokanee salmon was the most abundant, with an estimated population of 2.3 million in 1984. During the time of kokanee domination, all other species existed in the lake, but the lack of deep water food sources kept the lake trout population down. Since 1984, lake trout have dominated. Scientists found that captured lake trout between 1980-1988 had eaten kokanee as their main diet and after 1989, their diet consisted of whitefish.

Bull Trout

Yellow or cream-colored spots (not wavy) on back

No black marks on dorsal fin



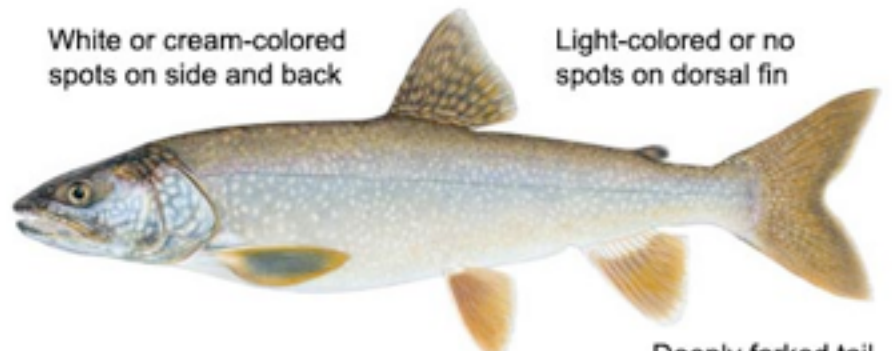
Yellow or cream-colored spots on side - no halos

Slightly forked tail

Lake Trout

White or cream-colored spots on side and back

Light-colored or no spots on dorsal fin



Deeply forked tail

Cutthroat Trout

Uniform black spots



White tips on fins

Mountain Whitefish

no spots on back

scales large



mouth small
no teeth

Discussion:

1. List questions posed by your group.
2. What is the impact of predation of lake trout on kokanee salmon?
3. What other factors could have lead to the decrease of kokanee salmon in Flathead Lake?
4. What additional information is needed to adequately explain the difference in life span?
5. As student scientists, what reasons might you have for the rise in lake trout population after 1984?