



Lake Information

WATERSHED	LAKE CLASS
Central Liard	C
SURFACE AREA	ELEVATION
1170(U), 1080(L) m	623 m
MAXIMUM DEPTH	AVERAGE DEPTH
118(U), 60(L) m	22.8(U), 16.7(L) m
SURFACE TEMP	REGULATIONS
17.3°C(U), 17.3°C(L)	General waters
SAMPLING DATES	NET SETS
July 24 – 28	45(U), 44(L)

Location

The Toobally Lakes (Upper and Lower) are located in the southeastern corner of the Yukon, approximately 140 km east of town of Watson Lake. These lakes lie within the Traditional Territory of the Kaska Dena Council.

Access and Use

The Toobally Lakes are accessible by fly-in only, with an established outfitting lodge operating with cabins at each lake. There is no road access, nor additional private residences on these lakes.

Toobally Lakes 2019

Overall Status

Lake Trout

As estimated from the 2019 survey, the lake trout populations in Upper (U) and Lower (L) Toobally, are healthy and moderately sized.

The oxygen levels were found to be at the low end of optimal for lake trout in Lower Toobally, however there is no indication that this population is currently being limited by these low levels.

Lake Whitefish

The lake whitefish populations in the Toobally Lakes also appear healthy, at a low to moderate level.

Recommendation

The recommendation for future surveys of the Toobally Lakes is to continue working with the sport fishing lodge to determine their angling pressure and to monitor dissolved oxygen levels. Additional age analysis will assist in providing more information on the health of this population.

Lake trout

Population Estimate and Density

The 2019 survey indicated a population in Upper Toobally of **4,564** (estimate range: 2,589 – 6,614) and in Lower Toobally of **4,235** (estimate range: 2,419 – 6,121). This corresponded to densities of 3.9 lake trout /ha in both lakes.

Length and Weight

Sampled lake trout ranged in size from 240 to 915 mm (U), 269 to 876 mm (L), with a mean fork length of 625 mm (U) and 672 mm (L). This resulted in mean lake trout weights of 3243 g (U) and 4342 g (L).

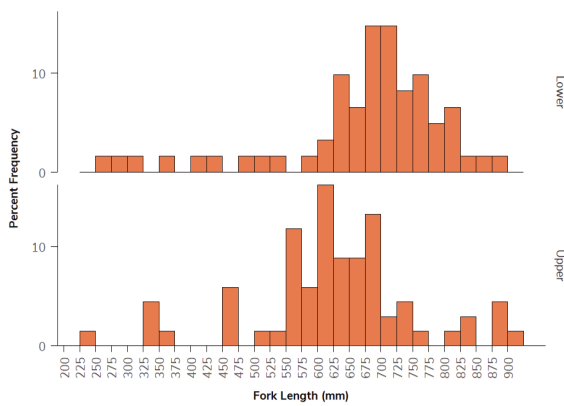


Figure 1. Length frequency distributions of lake trout in Upper (n=68) and Lower (n=61) Toobally Lakes in 2019.

Age and Growth

Ages ranged from 5 to 45, with the mean age in the lower lake of 15 and for the upper lake at 14.

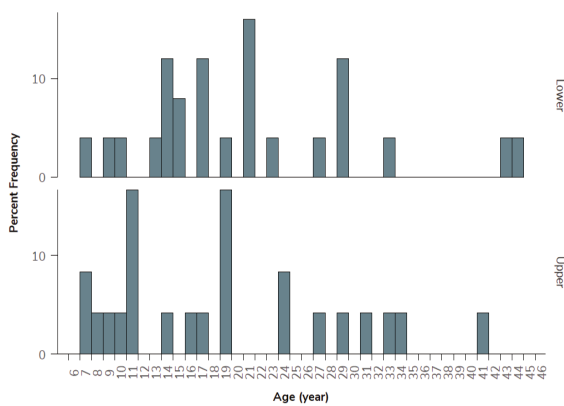


Figure 2. Age frequency distributions of age-analyzed lake trout in Upper (n=24) and Lower (n=25) Toobally Lakes in 2019

Suggested citation:

Government of Yukon. 2024. Lake Trout and Lake Whitefish Monitoring Program: Toobally Lakes 2019. Government of Yukon, Whitehorse, Yukon, Canada.

Lake Whitefish

Overview

A total of 55 (U) and 29 (L) lake whitefish were captured in 2019. These fish ranged in size from 215 to 460 mm (U), 196 to 509 mm (L), with an average fork length of 388 (U) and 509 (L). This resulted in average weights of 859 g (U) and 932 g (L). Ages were interpreted from 68 lake whitefish (24L, 44U). Ages ranged from 5 to 22, with the average age in the lower lake of 9 and the upper lake of 11.

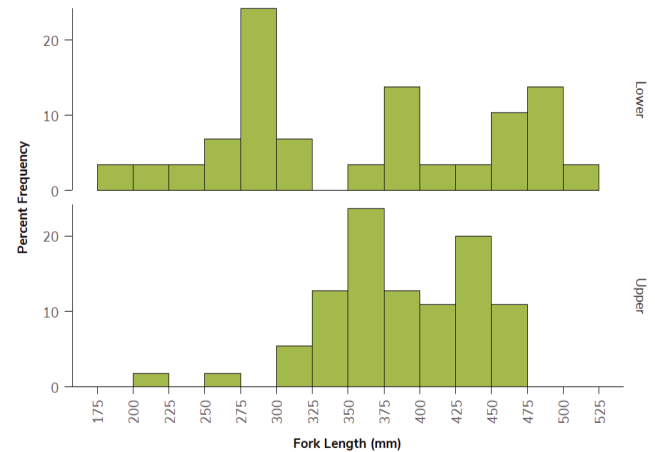


Figure 3. Length frequency distributions of sampled lake whitefish in Upper and Lower Toobally Lakes in 2019.

Temperature and Dissolved Oxygen

Profiles in both lakes display a sharp thermocline from 5 m to 12 m, with temperatures decreasing gradually throughout the rest of the water column. Overall, Upper Toobally provided optimum lake trout habitat from 8 m to lake bottom. Lower Toobally provided suitable habitat from 8 m to 20m, with tolerable but low oxygen levels below 20m.