

ALASKA DEPARTMENT OF FISH AND GAME

102-10-058

DIVISION OF SPORT FISH

LAKE SURVEY SUMMARY

102-10-10600-0010

LAKE Nichols

MAP REF. Dixon Entrance D-1 T R S LAT. 54°45'26"N LONG. 132°11'25"W

LOC. South end Prince of Wales Is., head of Nichols Bay SURF. ELEV. 32 ft.

1. SURF. ACRES 378 MAX. DEPTH est. 90 ft. AVG. DEPTH est. 40 ft. ACRE FT. 15,120
SHOAL AREA 5% WATER COLOR dark muskeg SECCHI READING
AQUATIC VEGETATION Rather sparse nuphar, vallisuarua, potamogeton

2. FISH SPECIES: NATIVE 4 salmon species (no kings), Ct, DV, INTRODUCED None recorded
SH, sticklebacks, cottoids

3. FISHING HISTORY Occasional angler for cutthroat

4. INVERTEBRATES Insects & larvae, some scuds

5. INLETS Several - 2 major on north end of lake DISCHARGE Summer normal 15 & 5 resp. cfs
Others intermittent DISCHARGE cfs
DISCHARGE cfs

BARRIERS Low flows and steep grades

6. OUTLETS No name, flows into Nichols Bay DISCHARGE Summer normal 25 cfs
DISCHARGE cfs

BARRIERS None

7. SPAWNING AREAS Adequate in inlets, some of which drain lakes above

8. WATERSHED TYPE Scrub timber & muskeg DRAINAGE AREA 9,175 ACRES

9. ACCESSIBILITY By plane 45 miles from Ketchikan

10. ACCESS STATUS National Forest

11. USE SITE None FACILITIES None

12. OTHER USE Occasional hunter or mineral prospector

13. POLLUTION None

14. REMARKS A lake generally known to be good sport fishing. The cutthroat have
attracted angler attention. The sockeye run is much depleted from former
years. The lake is too far from Ketchikan to be popular with anglers -
air fare is steep.

BY R.T. Baade

DATE 1972

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## Nichols Lake

Nichols Lake, 54° 45' 26" N lat. 132° 11' 25" W long., is located at the head of Nichols Bay on the southwest end of Prince of Wales Island (Figure 29). Nichols Lake is 2.4 km (1.5 miles) long by 2 km (1.25 miles) wide. Nichols Lake is approximately 74 km (46 miles) south and west of Ketchikan. Its maximum depth has been recorded to be 27.4 meters (90 feet). Nichols Lake lies at an elevation of 9.8 meters (32 feet) above sea level.

Nichols Bay is accessible via float plane and helicopter. There are no developed foot trails to Nichols Lake. Surface access is possible up Nichols Creek 1.2 km (0.75 mile) from Nichols Bay. As Nichols Lake lies at a surface elevation of only 9.8 meters (32 feet), aircraft access is possible in all weather conditions short of heavy fog.

Nichols Lake is a typical low elevation anadromous lake. The water is stained a dark muskeg brown. The surrounding terrain is low rolling hills covered with scrub timber of cedar and hemlock. There are lots of little muskeg ponds feeding into Nichols Lake. The shoreline is narrow and grassy to rocky in places. Adequate areas for shore angling exist. Camp sites can be found around most of Nichols Lake, with the best appearing to be on the northeast shore near the major inlets.

Nichols Lake was surveyed from May 21 to 23, 1984. Two gillnets were set, one near the inlet on the northeast end and the other on a point in the southeast end near the outlet. The nets were fished for 18 hours each before being pulled. A total of 19 cutthroat trout, 21 Dolly Varden, 19 coho salmon smolt, and 7 rainbow-steelhead smolt were captured.

The cutthroat ranged in size from 133 mm to 334 mm (5.2 to 13.1 inches) and averaged 241 mm (9.5 inches). Age data were obtained from a sample of 25 cutthroat. These fish ranged in age from 3 to 9 years, with 44% found to be in the 6 and 7 year-old classes (Table 20).

The Dolly Varden sampled ranged in size from 124 mm to 322 mm (4.9 to 12.7 inches) and averaged 223 mm (8.8 inches). Age data were obtained from 20 Dolly Varden. These fish ranged in age from 2 to 8 years, with 45% found in the 4 and 5 year-old classes (Table 21).

The coho salmon and rainbow-steelhead trout were all presmolt and were not over 180 mm (7.1 inches) in length. These fish are too small to be of interest to the average sport angler.

The cutthroat trout and Dolly Varden sampled from Nichols Lake were examined for sexual maturity. Ten of the 20 Dolly Varden were found to be mature and 13 of 25 cutthroat were mature fish (Table 22).

Nichols Lake is fed by two major inlets and several minor ones. The major inlets originate in higher lakes and provide adequate spawning and rearing for both resident and anadromous fish. The outlet (Nichols

Creek) is of medium size and low gradient most of the way to Nichols Bay. Nichols Creek is used by four species of salmon (no kings), steelhead, cutthroat, and Dolly Varden for spawning and/or rearing.

Nichols Lake is a bit far from Ketchikan to be high on the popularity list with area sportsmen. The salmon and steelhead populations will add a great deal to the use of the area if a cabin or camp is established. The fishery is there, but has not been utilized due to the lack of facilities.