Lake Welcome

Lake Welcome, 54° 58' 53" N lat. 133° 7' 21" W long., is located on the southwest coast of Dall Island (Figure 30). Lake Welcome is approximately 99 km (62 miles) southwest of Ketchikan. Lake Welcome is a rather small lake with only adequate room for fixed wing float plane operation. Lake Welcome is 2.8 km (1.75 miles) long by 0.4 km (0.25 miles) wide. The maximum reported depth of Lake Welcome is 38.1 meters (125 feet). As this is below sea level, there may be a saltwater layer on the bottom. No sampling equipment was available to test this theory. Lake Welcome lies only 11.2 meters (37 feet) above sea level.

Lake Welcome is generally accessible by fixed wing float plane and by helicopter. No developed surface trails exist. Aircraft access will be limited during extreme weather periods. Lake Welcome is deep, with steep banks and exposed rock faces around much of the lake (Figures 31 and 32). There are several small islands and coves that break up the shoreline and add scenic value. The watershed around Lake Welcome is steep and heavily forested in spruce, hemlock, and some cedar. Elevations rise to 447 meters (1,466 feet) within 2 km of the lake. Camp sites are somewhat limited by the steep shoreline. The best spots are to be found at the east and southwest ends. Lack of level ground is the major limiting factor. Float plane beach access areas are also somewhat limited.

Lake Welcome was visited on May 21 and 23, 1984. Two floating gillnets were set. One net was fished at the southeast end and the other was fished near the outlet on the southwest shore. The nets were fished for 40 hours each. Nets are normally fished for no more than 24 hours, however, weather conditions on May 22 were too poor (high winds) to allow flying.

A total of 16 Dolly Varden were captured. These fish ranged in size from 159 mm to 316 mm (6.3 to 12.4 inches), with an average size of 259 mm (10.2 inches). Age-length relationships for the Dolly Varden sampled can be found in Table 23. It was found that these fish ranged from 3 to 7 years of age, with 66% found in ages 4 and 5. The Dolly Varden sampled were examined for sexual maturity. It was found that 69% were mature fish. These Dolly Varden ranged in size from 251 mm to 316 mm (9.9 to 12.4 inches) (Table 24).

Lake Welcome is fed by a number of intermittent small inlets and springs. None of these offer a great deal of spawning or rearing habitat. The outlet to Welcome Cove is rather short, 0.75 km (0.5 mile). No barriers to fish migration are found below Lake Welcome.

Previous surveys have confirmed the presence of four species of salmon in the Lake Welcome system. No cutthroat have ever been sampled from this system. It seems likely that they occur at least in the anadromous form, however, this has not been confirmed.

Lake Welcome has not attracted much interest from area sport fishermen. Much of this lack of interest is attributed to the long flight from Ketchikan, the lack of facilities, and presence of other lakes in the area with proven productivity.

Lake Welcome. This lake lies on Dall Island above Welcome Cove and is 100 km from Ketchikan bearing 247 degrees True. Its surface elevation is approximately 12 M. and the lake surface measures 124 ha. The watershed is 654 ha, mostly steep and forested with some muskeg and peaks at 473 M. The outlet flows a summer normal 140 lps. into Welcome Cove. There are no barriers to migratory fish except possibly low dry period flows and beaver work. Aquatic vegetation is sparse but some nuphar and vallisnaria was noted. The water carries some muskeg stain but is otherwise clear. Spawning grounds are adequate in the inlet and on spring shores. The lake hosts sockeye, silver, pink and chum salmon, cutthroat, dolly varden and steelhead trout, cottoids and stickleback. Access is presently by float plane from Ketchikan and rarely by hiking from salt water the 1 km to the lake.