

ABSTRACT

Since 1990, the Alaska Department of Fish and Game, Division of Sport Fish, has assessed the annual runs of the sockeye salmon *Oncorhynchus nerka* stock of the Buskin River, Kodiak Island, Alaska. This report presents age, sex, length and run-size data collected between 2004 and 2006.

In 2004, the weir count of sockeye salmon at Buskin Lake and Lake Louise was 22,023 and 2,086, respectively. Estimated spawning escapement was 24,109 sockeye salmon. Reported subsistence harvest was 9,034. Age 1.3 and 2.3 fish comprised 60.7% of the escapement and 86.7.0% of the subsistence harvest, but only 48.2% of the Lake Louise escapement. The male-female ratio of the Buskin Lake weir count was 1.0:1.0 and the subsistence harvest 1.2:1.0. The male-female ratio of the Lake Louise weir count was 1.0:1.0.

In 2005, the weir count of sockeye salmon at Buskin Lake and Lake Louise was 15,468 and 2,028, respectively. Estimated spawning escapement was 17,496 sockeye salmon. Reported subsistence harvest was 8,055. Age 1.3 and 2.3 fish comprised 70.6% of the Buskin Lake escapement and 89.0% of the subsistence harvest, but only 28.7% of the Lake Louise escapement. The male-female ratio of the Buskin Lake weir count was 0.9:1.0 and of the subsistence harvest 1.5:1.0. The male-female ratio of the Lake Louise weir count was 1.0:1.0.

In 2006, the weir count of sockeye salmon at Buskin Lake and Lake Louise was 17,734 and 4,586, respectively. Estimated spawning escapement was 22,320 sockeye salmon. The total reported subsistence harvest was not yet available. Age 1.3 and 2.3 fish comprised 55.2% of the Buskin Lake escapement, 67.5% of the subsistence harvest, and 15.2% of the Lake Louise escapement. The male-female ratio of the Buskin Lake weir count was 0.8:1.0 and the subsistence harvest 1.0:1.0. The male-female ratio of the Lake Louise weir count was 0.9:1.0.

Key words: sockeye salmon, *Oncorhynchus nerka*, escapement, Buskin River, age, length, sex composition, sport harvest, spawner recruit, subsistence harvest, stock assessment.