

PERFORMANCE REPORT

STATE: Alaska

GRANT NO.: F-10-33

GRANT TITLE: Sport Fish Investigations in Alaska

PERIOD COVERED: July 1, 2017 - June 30, 2018

STUDY NO. AND TITLE: S-2-32 Buskin River Coho Salmon Studies

STUDY OBJECTIVES:

1. Evaluate and refine a BEG for coho salmon returns to the Buskin River.

Study Tasks

1. Census coho salmon escapement into the Buskin River from August 1 to September 30.
2. Estimate age composition of coho salmon in the Buskin River escapement such that estimates of the proportions of age- 1.1 and 2.1 fish are within 7.5 percentage points of the true value 95 percent of the time.
3. Estimate sex and length composition of coho salmon in the Buskin River escapement.

RESULTS/DISCUSSIONS:

Objective 1: Monitoring the annual inriver run components through the Buskin River weir and subsequently estimating escapements, ensures that the Biological Escapement Goal (BEG) is attained by enabling inseason management of sport, commercial, and subsistence users when necessary. The current BEG of 4,700 to 8,400 was implemented in 2017 with data collected from 1989 through 2016. Results from the 2017 season do not show a significant change in the coho run to warrant re-evaluation of the BEG.

Task 1: During the 2017 run, adult coho salmon were enumerated daily through two weirs operated on the Buskin River between August 1 and September 30, accounting for an estimated total escapement of 5,559 fish.

Task 2: A total of 223 adult coho salmon were sampled from the Buskin River escapement for age between August 25 and September 25. Estimates of age composition have been completed with 67% of the fish returning as age 2.1, 24% as age 1.1 and 8% as age 3.1.

Task 3: A total of 223 adult coho salmon were sampled from the Buskin River escapement for sex and length between August 25 and September 25. Estimates of length and sex composition have been completed for the total coho salmon run with the run comprising 50% males and 50% females. The average length was 545 mm.

FINAL REPORT STATUS:

This is the final performance report for these objectives for the grant period.

Daily cumulative and total coho salmon escapement figures for the 2017 run are presented in 'Kodiak Management Area Commercial Salmon Annual Management Report, 2017' (Fishery Management Report, *in prep*), Kodiak Management Area Weir Descriptions and Salmon Escapement Report, 2017' (Fishery Management Report *in prep*), and 'Area Management Report for the Recreational Fisheries of Kodiak, 2017-18' (Fisheries Management Report, *in prep*). Final project results for the current reporting period, including escapement and estimates of age and sex composition for inriver and total coho salmon runs will be compiled in a Fishery Data Series report, 'Stock Assessment of Buskin River Coho Salmon, 2017-2019', scheduled for publication in 2020.

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DATE: August, 2018



Figure 1.- Coho and pink salmon being counted at the lower Buskin Weir.



Figure 2.- The upper Buskin River weir during coho season.