

#### CHINOOK SALMON Research Initiative

Chinook salmon are an important resource to many Alaskans. At the direction of the Governor, a team of Alaska Department of Fish and Game (ADF&G) scientists and biologists, in collaboration with federal agencies and academic partners, developed a research plan with recommended studies to address low Chinook salmon returns. The Alaska Legislature provided funding for implementation during their 2013 and 2014 sessions. The core of the plan is stock specific, life history-based research focused on 12 indicator stocks from across Alaska.

The Karluk and Chignik Rivers have been selected for study under this plan. ADF&G is sampling Chinook salmon sport and commercial harvests from seven Kodiak and Alaska Peninsula ports. Staff are collecting age, sex and length data and are collecting genetic tissue samples.

Look for the salmon logo (?) to identify CSRI research in this newsletter

More information on the CSRI can be found online at: www.adfg.alaska.gov



# Chinook research a top priority at Island ports

Sampling of Chinook salmon in 2014 took place in the ports of Kodiak, Larsen Bay, Alitak, Chignik, Sand Point, King Cove, and Port Moller. In the Kodiak Management Area, 3,284 Chinook salmon were sampled for age, sex, and length information and genetic tissue. Of those fish, 14% were found to have an adipose fin clip and samples were collected for further analysis. In Chignik and Alaska Peninsula Management areas, 2,071 Chinook salmon were sampled for age, sex, and length information and genetic tissue. Of those fish, 3% were found to have an adipose fin clip and samples were collected for further analysis.

Marine sport sampling took place in Kodiak, Old Harbor and Larsen Bay. Currently, 421 Chinook have been sampled for age, sex, length and genetic information. Of these fish, 64 were found to have coded-wire tags.

Sampling harvest of marine mixed-stock fisheries to collect coded-wire tag and/or genetics data provides information on stock composition in these fisheries including contributions of CSRI indicator stocks. Knowing where fish come from in these mixed-stock fisheries – in concert with other CSRI research projects – improves knowledge about stock productivity, regulations to optimize fishing opportunity and sustained yield, and potential in-season management actions to attain escapement goals.

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# **Biologists eye Lower Karluk for possible coded-wire study**

A survey was conducted of the Lower Karluk River to assess the feasibility of a Chinook salmon coded-wire tagging project. From April 16th through May 11th, a crew of three technicians used minnow traps to capture juvenile Chinook salmon in an effort to see if enough could be caught. The traps caught 31 Chinook salmon, mostly in the lower four miles of the river. Beach seining was also conducted in the Karluk Lagoon on May 16th where 99 juvenile Chinook salmon were caught.

Sampling efforts conducted this summer indicate that a large scale effort should be successful in tagging sufficient Chinook salmon smolt to estimate marine survival, harvest rates and escapement. This information is crucial in estimating the total run size of Chinook salmon returning to the Karluk River.

#### Kodiak

Despite preseason and inseason restrictions to the Karluk and Ayakulik River sport and commercial fisheries, the escapement goals were not met.

The **sockeye salmon** bag limits for the Buskin, Karluk and Ayakulik Rivers, as well as Frazer Lake, were increased inseason, with sockeye salmon escapement goals achieved in all four systems. Sockeye salmon escapement goals were also met on Olga Lakes, Uganik River and the Saltey River. Kodiak sockeye salmon commercial harvest was 2.27 million fish, which is average.

A total of 10.2 million **pink salmon** were harvested in Kodiak commercial fisheries, which is well below the recent even year average of 17.5 million pink salmon. The Kitoi Hatchery pink salmon return was stronger than forecasted.

#### Kodiak Road Zone sport fisheries enhancement:

Chinook salmon stocking goals for the number of released smolt were met in 2014, but brood collection of returning adults fell short. The coho salmon stocking goals were met as coho salmon smolt were released in the spring. Strong returns of coho salmon along the Kodiak road system allowed for the brood collection goal of returning adults to be easily met.

### Chignik

In the Chignik Management Area, salmon escapement objectives were met for all species. The <u>Chi-</u><u>nook salmon</u> sport fishery on the Chignik River was restricted pre-season, then liberalized inseason to meet the escapement goal. Commercial salmon harvests for the 2014 season include 8,373 Chinook; 617,395 sockeye; 131,252 coho; 344,984 pink and 55,934 chum salmon.

## Alaska Peninsula

The Nelson River Chinook salmon sport fishery was prosecuted without restrictions and the escapement goal was met.

Pink and chum salmon runs were poor and below average throughout the **South Peninsula** and minimal fishing time was allowed. The post-June sockeye salmon harvest was above average.

In the **North Peninsula**, commercial salmon harvests are above the most recent five-year average of 1.7 million sockeye salmon and 95,000 chum salmon.

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