

## Long Term Ocean Survival Trends of Chinook Salmon Released at the Little Port Walter Marine Station in Southeast Alaska

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Chinook salmon have been cultured at the National Marine Fisheries Service's Little Port Walter Marine Station since 1976 when broodstock were obtained from Southeast Alaska's Chickamin and Unuk Rivers and spawned. Through 2012, both lines were uniquely maintained by marking every salmon smolt with a coded-wire tag prior to release. These marks were used to positively identify the stock of returning adults for subsequent egg collection and used to identify Little Port Walter origin Chinook salmon caught in (1) Southeast Alaska commercial and recreational fisheries and (2) the salmon bycatch of the Alaska trawl fisheries. Since the 1970s, almost 21 million Chinook salmon eggs were collected at Little Port Walter and most were subsequently cultured for release. This 35-year hatchery data series represents one of the most complete known sources of Alaska stock-specific information regarding the release, survival, and capture of Chinook salmon, a species whose abundance has been declining in Alaska and the subject of various federal and state disaster declarations, including another by the Department of Commerce in 2012. Decreasing trends in survival and age at maturity will be presented and compared with changes in environmental and release conditions to develop correlations that may provide insight into future trends.