

## Summary of Scales Collected from Karluk's Sockeye Salmon

Sockeye salmon scales provide valuable data on age compositions and growth conditions of sampled populations. The collection information has immediate interest, but it also has long-term value as records of past populations and environmental conditions that can be reexamined and reinterpreted when biological questions arise. In addition, future advancements in fisheries research and technologies may extract new information from previously collected scales. Thus, scale collections have value beyond their original purpose and should be organized and preserved at a known location or archival facility.

Sockeye salmon scales have been collected annually at Karluk since the 1920s, and a few samples date back to 1914. Typically, 2,000-4,000 adult fish were sampled each year, but sometimes the number approached 10,000. Less regularly, numerous juvenile and smolt scales were sampled. Federal (USBF, FWS, BCF) and state (ADF, ADFG) agencies collected most sockeye

salmon scales, but during 1948-58, the Fisheries Research Institute, University of Washington, sampled thousands of Karluk's sockeye salmon.

The following table summarizes the sockeye salmon scale collections at Karluk. Two sources supplied most of the table's data: 1) a 1998 inventory by ADFG biologist Patricia A. Nelson of scales and scale impressions located at ADFG Kodiak, NARA, FRI, and ABL, and 2) a 1996 list by ABL biologist Herbert W. Jaenicke of scales and scale impressions stored at NARA, Anchorage.

In addition to sockeye salmon scales collected by fishery biologists since 1914, fish scales, vertebrae, and other parts have been unearthed in archaeological excavations at Karluk and archived at the Alutiiq Museum, Kodiak. These prehistoric materials may have value for understanding past environments and sockeye salmon populations at Karluk.

Year	Storage location	Number collected
1914	Unknown	Some?
1915	Unknown	None?
1916	Unknown	382
1917	Unknown	758
1918	Unknown	None?
1919	Unknown	103
1920	Unknown	None?
1921	Unknown	211
1922	Unknown	2469
1923	Unknown	None?
1924	NARA ABL	5132
1925	NARA ABL	5513
1926	NARA ABL	8172
1927	NARA ABL	4963
1928	NARA ABL	4247
1929	NARA ABL	1602
1930	NARA ABL	3617
1931	NARA ABL	7258
1932	NARA ABL	4700
1933	NARA ABL	3867
1934	NARA ABL	6551
1935	NARA ABL	7152
1936	NARA ABL	7093
1937	NARA ABL	
1938	NARA ABL	
1939	NARA ABL	
1940	NARA ABL	7700
1941	NARA ABL	2700
1942	NARA ABL	
1943	NARA ABL	
1944	NARA ABL	7350
1945	Unknown	
1946	NARA ABL	
1947	NARA ABL	

Year	Storage location	Number collected
1948	NARA ABL FRI	
1949	NARA ABL FRI	
1950	NARA ABL FRI	
1951	NARA ABL FRI	
1952	NARA FRI	
1953	NARA FRI	
1954	NARA FRI	
1955	NARA FRI	
1956	NARA FRI	3236
1957	NARA FRI	
1958	NARA ABL FRI	
1959	NARA	
1960	NARA	
1961	NARA	
1962	NARA	2237
1963	NARA	2022
1964	NARA	2410
1965	NARA	1712
1966	NARA	2233
1967	NARA	1758
1968	NARA	1702
1969	NARA	
1970	ADFG Kodiak	1054
1971	ADFG Kodiak	471
1972	ADFG Kodiak	
1973	ADFG Kodiak	
1974	ADFG Kodiak	
1975	ADFG Kodiak	
1976	ADFG Kodiak	
1977	ADFG Kodiak	none early
1978	ADFG Kodiak	
1979	ADFG Kodiak	none early
1980	ADFG Kodiak	
1981	ADFG Kodiak	

Year	Storage location	Number collected
1982	ADFG Kodiak	
1983	ADFG Kodiak	
1984	ADFG Kodiak	
1985	ADFG Kodiak	2336
1986	ADFG Kodiak	1383
1987	ADFG Kodiak	3086
1988	ADFG Kodiak	2446
1989	ADFG Kodiak	2728
1990	ADFG Kodiak	2960
1991	ADFG Kodiak	2948
1992	ADFG Kodiak	2746
1993	ADFG Kodiak	3252
1994	ADFG Kodiak	2973
1995	ADFG Kodiak	2545
1996	ADFG Kodiak	
1997	ADFG Kodiak	
1998	ADFG Kodiak	
1999	ADFG Kodiak	
2000	ADFG Kodiak	
2001	ADFG Kodiak	
2002	ADFG Kodiak	
2003	ADFG Kodiak	
2004	ADFG Kodiak	
2005	ADFG Kodiak	
2006	ADFG Kodiak	
2007	ADFG Kodiak	
2008	ADFG Kodiak	
2009	ADFG Kodiak	
2010	ADFG Kodiak	

ABL = Auke Bay Laboratory, Auke Bay, AK  
ADFG = Alaska Department of Fish and Game, Kodiak, AK  
FRI = Fisheries Research Institute, University of Washington, Seattle, WA  
NARA = National Archives and Records Administration, Anchorage, AK