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Submitted by R	aechel Allen	l

This RC verifies the history of the commercial salmon fishery in Chignik, beginning in 1888.





History of the Fishery and Summary Statistics of the Sockeye Salmon, Oncorhynchus nerka, Runs to the Chignik Lakes, Alaska, 1888-1966

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Table 1.—Morphometric measurements of Chignik and Black Lakes and Chignik Lagoon (from Dahlberg 1973).

Source		Depth (m)	Water h (m) area Volume faximum (km²) (km²)	Shoreline Length		Flow at outlet			
		MINTIMUM		(km³)	(km)	Development	(m³/s)	Date	
Black Lake Chignik Lake	15 5	3 29	6 64	41.1 22.7	0.10 0.64	27.0 27.7	1.19	17.0	25 June 1963
Total	_	_	-		_	_		79.5 35.8	23 June 1963 13 Aug. 1963
Chignik Lagoon		3	15	63.8 41.8	0.74 0.13	46.7	2.04	_	-

Chignik Lagoon (12 km long) is a nearly enclosed estuary having a sandy or muddy, flat bottom with scattered patches of algae and extensive areas of eel grass (Zostera). Water covers about 42 km² at high tide, and about half that at low tide. Low and high tide salinities range from 10 to 17‰ in the upper lagoon and from 30 to 32‰ at the sand spit near the outlet. The importance of the estuary as a secondary rearing area for juvenile sockeye salmon has been investigated by Phinney (1968); large catches of postsmolt sockeye salmon have been taken by beach seine and surface trawl in the lagoon during June and July (Narver and Dahlberg 1965; Phinney 1968).

The Climate

The climate of the region is strongly maritime because the Alaska Peninsula is a comparatively small body of land between two large water masses, the North Pacific Ocean and the Bering Sea. The weather conditions reported by Atwood (1911) and Knappen (1929) remain typical. The summers are short and cool; although there may be many days of wet weather, the rainfall is seldom excessive. A great many overcast days occur. Violent winds often exceeding 161 km/h (100 mph) have been recorded. Winter temperatures are more moderate than those in Bristol Bay; recording thermometers left in cabins over the winters of 1961-67 showed a low of -27°C (-17°F). Ice breakup on the lakes occurs in April or May, much earlier than in the lakes of the Bristol Bay district. Long-term weather records are not available for the immediate area; Kodiak Island (270 km to the northeast) is the nearest location with extensive weather records, although some data are available from nearby Port Heiden on the north side of the peninsula.

History of the Commercial Fishery

Cannery operations.—Commercial exploitation of Chignik sockeye salmon began in 1888 when the Fishermen's Packing Company of Astoria, Oreg., sent a crew to Chignik Bay to prospect for fish; they returned in the fall with 2,160 barrels of salted salmon. In 1889 canning operations were started in plants of the Fishermen's Packing Company, Chignik Bay Company of San Francisco, and the Shumagin Packing Company from Portland, Oreg. (Moser 1899). Operating agreements between the companies proved so successful in 1890 and 1891 that they joined the pool of canneries of the Alaska

Packing Association in 1892. In 1893 they all became members of the Alaska Packers Association, and only one cannery was operated as a result of increased operation efficiency (Moser 1899).

The ease with which fish were captured at Chignik attracted more investment into the fishery; in 1896 Hume Brothers and Hume, and the Pacific Steam Whaling Company each built a cannery (Cobb 1930). In 1901 these companies became part of the Pacific Packing and Navigation Company, which in turn became part of the Northwestern Fisheries Company in 1905. In 1910 the Columbia River Packers Association built yet another cannery in the area. Competition was intense until 1914 when the three companies then operating—Alaska Packers Association (APA), Columbia River Packers Association (CRPA), and Northwestern Fisheries Company (NFC)—agreed to an equal division of the catch (Rich and Ball 1930).

Industry relationships remained static until 1926 when H. W. Crosby operated a floating salmon cannery, Salmon King, for one season. In 1932 Crosby returned and built a land-based cannery; the same year, CRPA, NFC, and APA made a combined pack at the APA cannery. The following season, 1933, Pacific American Fisheries (PAF) acquired the Northwestern Fisheries Company, and the PAF, APA, and CRPA combined canning operations. The APA acquired the Chignik interests of PAF and CRPA during the ensuing years and continues to operate their cannery at Chignik (Pacific Fisherman Yearbook 1915-67; National Fisherman Yearbook 1968, 1969; Pacific Packers Report 1970-76).

Crosby changed the name of his operation to Chignik Lagoon Packing Company in 1936, and after two other changes gave it the name Chignik Fisheries Company in 1947. Beginning in 1953, APA and Chignik Fisheries Company entered into an agreement to can all fish in the APA cannery; the cannery of the Chignik Fisheries Company serves as a base of supply and operations for its fishing fleet (Roos see footnote 7). In 1968, Columbia-Wards Company purchased the Chignik Fisheries cannery and has continued operations under the same arrangements with the APA (Pacific Packers Report 1976).

Fishing gear.—Pile traps (Scudder 1970) were the principal fishing gear, and beach seines took a small part of the catch before 1900. The water at Chignik was too clear and the channel too narrow for effective gillnetting (Moser 1899). The number of units of gear operated in