

**A BRIEF REVIEW OF THE SALMON FISHERY IN THE
ALEUTIAN ISLANDS AREA**

by

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PREFACE

With the signing of the Convention for the High Seas Fisheries of the North Pacific Ocean in 1953, the salmon found around the Aleutian Islands and in the offshore waters became the subject of immediate concern. In order to provide additional background information for use by the Commission, this brief history of the commercial fishing operations in the Aleutians has been prepared.

Although over 100 references have been examined in the preparation of this report, there undoubtedly are additional references which have been neither located nor examined. Paul Macy, Galen Maxfield, and Leonard Fulton assisted in the review of the literature and preparation of this report.

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Early Exploitation

In the Aleutians, as elsewhere along the Northern Pacific coast, records of the early explorers draw attention to the dependence of the natives on fish for survival. The Aleuts were adept fishermen and continually changed their diet during the year as salmon, cod, herring or other fish became abundant. All species of salmon were reported taken in these early days with their abundance generally decreasing westward (Turner, 1886). Fishing was most commonly done by use of primitive beach seines or hooks, alone or in combination with artificial barriers ("zapors") in the streams. Fish were hung on wooden frames or "laabaas" to dry and to be kept safe from dogs. Few records of catches at these primitive villages are available but Stejneger (1897) notes that from 60,000 to 100,000 red salmon were taken annually at a village¹ on the neighboring Bering Island in the Komandorsky group.

Following a period of exploration of the Aleutian Islands (1748-1761) the Russians carried on regular trading with the Aleutian natives. In the subsequent years a number of trading companies were formed, the most important of which was the Russian American Company chartered on June 8, 1799, with Baranof appointed as its Chief Director. By 1819 the company had five settlements on the Aleutians. With the establishment of permanent posts, salmon became a welcome addition to the normally meager diets of the traders.

In the early 1800's, competition became bitter between the companies of Great Britain, the United States, Spain and Russia, and a number of "incidents" were reported. To resolve the conflict between the American and Russian trading companies, a convention was signed in April, 1824 by the two countries which "provided that the North Pacific should be open to citizens of both nations for fishing, trading and navigation . . ." (Dall, 1870).

There is only one record of attempt by Russia to export fish. In September, 1855, the Russian American Company was awarded a contract for 20 years to deliver ice, fish, coal and timber to a company in San Francisco. The venture was a total failure because of the lack of suitable storehouse facilities in San Francisco.

Even before the United States purchased Alaska from Russia in 1867, American schooners fished for cod in Alaskan waters. Early in the sixties, American vessels discovered and fished on the cod banks in the Okhotsk Sea. It was in 1863 that the schooner *Alert* made a voyage to Bristol Bay and returned with 9 tons of cod. Trips by the *Porpoise* in 1865 to the Shumagin

¹ Population of about 300.

Islands and by three vessels in 1867 to the Shumagin-Simeonoff Banks resulted in large catches of cod. After purchase of Alaska by the United States in 1867, the cod fishery grew rapidly. Considerable importance is attached here to the growth of the cod fishery since the most productive banks were in the Aleutian area and the frequent visits of the schooners were responsible not only for a thorough early exploration of these waters but for some information on the land immediately adjacent to the various shore stations.

In 1878, about a decade after salmon canneries were established on the Columbia and Fraser Rivers, the first two canneries were built in Alaska¹. The salmon fisheries expanded rapidly and ten years later the period of initial expansion had reached a climax with canneries established in all of the important fishing areas of Southeastern, Central and Western Alaska.

Legislation for control of Alaskan fisheries came in 1889 when "An Act to provide for the protection of the salmon fisheries of Alaska" was approved (March 2, 1889)². Briefly, this Act prohibited the erection of dams and barricades, authorized the investigation of the habits, abundance and distribution of salmon, and in general provided for the protection of the salmon fisheries of Alaska.

No large-scale commercial operation, however, was undertaken in the Aleutian area in these early years. From what records are available, the fishing was confined to a native fishery or to a few settlers salting salmon for local use. Although not large, the catch was nevertheless extremely important to the survival of these individuals.

Aleutian Islands Reserve

Perhaps most important in the development of the fisheries in the Aleutian area is the establishment of the Aleutian Island Reservation³, defined to include all islands of the Aleutian Chain, the Sannak Islands and Unimak Island, for the conservation of native birds, reindeer and fur-bearing animals, and for the encouragement and development of the fisheries. The reserve was placed under the authority of the Departments of Commerce and Agriculture which jointly drew up regulations, effective March 15, 1914, for the administration of the area. The following provisions applicable to the control of the fisheries are of interest:

3. Residents of the reservation desiring to engage in commercial fishing . . . must first secure a permit to do so.
5. Anyone desiring to enter the reservation for the purpose of fishing . . . or engaging in commercial fishing, salmon canning, salmon salting, or otherwise curing or utilizing fish or other aquatic products, or for the purpose of engaging in any lawful business, must first obtain a permit to do so.
6. **Fishery permits.** Applications for permission to engage in fishing or fishery operations should give full information on the following points: Name and permanent address of the person or company desiring the

¹ Both canneries were in Southeast Alaska.

² Public Law 158.

³ Executive Order 1733.

permit; character of business proposed, whether fishing, canning, salting, or otherwise curing fish or other aquatic products; character and extent of proposed plant and its location; method and extent of the fishing proposed, place or places where fishing is to be carried on, and when active operations are to begin.

A revision of the joint regulations was placed in effect April 30, 1921. The most important change is in Paragraph 4, which affects licensing of non-residents operating fisheries in the area:

4. **Non-resident permits.** Anyone desiring to enter the reservation for the purpose of fishing . . . of engaging in commercial fishery, salmon canning, salmon salting, or otherwise curing or utilizing fish or other aquatic products, or of engaging in any lawful business, must first obtain a permit to do so, but no permit to engage in any of the activities named above will be granted to an alien or to any corporation more than 50 per cent of which is owned by aliens. Permits to enter the reservation for the purpose of engaging in any business will be granted only when the department concerned is convinced that by so doing the objects for which the reservation was established will not be endangered thereby.

Further revision to the regulations of the Aleutian Islands Reservation was made by Executive Order of February 17, 1922 creating an Alaska Peninsula Fisheries Reservation for the protection of the fisheries and their encouragement and development. Regulations issued on April 18, 1922 and revised December 14, 1922 retain the system of permits, but in addition require a reporting of the previous year's catch before a permit is issued. Because of lack of communication, this provision was not enforced until 1923.

An incomplete list of permits is given in Table 1. Of the 43 permits issued, about 31 include the fishing or processing of salmon. In issuing the permits provision was made that all work in connection with the taking of fish and subsequent preparation for market be performed by Aleuts residing within the reservation. This requirement guaranteed some employment to the natives, whose ordinary means of earning a livelihood were very limited.

Bower and Aller (1915, p.15) report that "The islands of the Aleutian Chain are not regarded as favorable for the location of salmon canneries, for the streams are all comparatively small and not sufficiently productive to provide more than enough fish for salting operations as a food supply for the natives." Concern for the welfare of the natives was further demonstrated in 1916. At that time the Department of Commerce decided that on account of the small size of the streams to which the salmon run in the Aleutian area, the issuance of further permits for salmon fishing operations should be withheld in order to assure an adequate supply of salmon for the natives (Bower and Aller, 1917).

There are no complete records as to the number of salmon taken in the Aleutian area during this period. However, from the number of permits issued (Table 1) as well as the frequent references found in the literature, we must assume that a significant number of salmon were taken, and that the majority of the salmon were either eaten fresh or salted for limited local or export use.

TABLE 1. A partial list of the permits issued for commercial fishing in the Aleutian Area, 1914-1924

No.	Date of Issue	Date of Cancellation	Grantee	Location and Scope of Operation
1				
2	7/28/1915*		Mark Morris**	Unalaska. To take fish for local needs.
3	Dec. 1914		A. C. Goss	Attu Isl., Umnak and Unalaska Isl. To take and sell Atka mackerel and red salmon.
4	3/5/1915		A. B. Somerville	Attu Isl. To take and sell red salmon either fresh or salted. Extended Sept. 7, 1915 to include Atka mackerel.
5				
6	1/15/1916		Pacific Am. Fisheries	Unalaska. Salmon cannery.
7	6/28/1916		Union Fish Co.	Tigalda Isl. Cod station.
8*	—			Umnak Isl. Salting of salmon.
9*	—			Attu Isl. To take Atka fish. Unalaska Isl. To take red salmon.
10	12/9/1916		Pacific Am. Fisheries	Unimak Isl. Salmon cannery.
11	12/11/1916		Sockeye Salmon Co.	Unimak Isl. Salmon cannery.
12	1/4/1917		Paul Buckley	Akutan Isl. Codfish station.
13***				
14***				
15***				
16***				
17***				
18	6/22/1917	1919	Andrew C. Smith	Chernofski Harbor and Kuliliak Bay, Unalaska Isl. Salting cod and salmon.
19	8/8/1917		Alaska Commercial Company	Preserving cod and salmon with the reservation; erection of cannery prohibited.
20	9/19/1917		Umnak Livestock Company	Nikolski, Umnak Isl. Preserving cod and salmon; erection of cannery prohibited.
21	9/19/1917	1920	Paul Buckley	Whaling in reservation.
22	9/25/1917		N. E. Bolshenin	Unalaska Isl. Salting cod and salmon.
23	11/1/1917	5/12/1917	Kuskokwim Fishing & Transp. Co.	Trident Bay, Akun Isl. Preserving cod and salmon; erection of cannery prohibited.
24				
25	1/5/1918	2/9/1921	Northern Fisheries Co.	Unalaska Isl. Cod station.
26				
27				
28	1/10/1918		Edwin H. Larsen	Unalaska Isl. Cod and salmon operations; erection of cannery prohibited.
29	1/24/1918	2/9/1921	Northern Fisheries Co.	Unalaska Isl. Salmon, trout, Atka fish, etc., pickling.
30	2/11/1918		Buckley Livestock, Fisheries & Transp. Co.	Unalaska. Cod station.
31	2/11/1918		Buckley Livestock, Fisheries & Transp. Co.	Unalaska. Plant for canning and salting salmon and other fishes.

* Not positive as to order granted or as to number.

** "Informal permission" granted.

*** Authorized construction of 1 salmon cannery. Most of the permits had reference to the salting of cod and salmon (Bower, 1919).

TABLE 1—Continued

No.	Date of Issue	Date of Cancellation	Grantee	Location and Scope of Operation
32	6/5/1918		Unalaska-Atka Fish Co.	English Bay, Unalaska Isl. Salting or mild-curing Atka fish, codfish, and salmon.
33	6/5/1918		A. C. Goss	Attu Isl. and other points. Commercial fishery operations; erection of cannery prohibited.
34	6/29/1918	2/17/1921	Alaska Fishing Company	Unalaska Isl. Commercial fishery operations; erection of cannery prohibited.
35	11/6/1918	1920	S. Applegate	Umnak Isl. Commercial fishery operations; erection of cannery prohibited.
36	1/13/1919		O. K. Qwean	Commercial fishery operations; erection of cannery prohibited.
37	2/7/1919		H. O. Wick	Tigalda Isl. Cod station.
38	3/25/1919	2/9/1921	T. R. Gawley	Dora Harbor, Unimak Isl. Cod station.
39	4/12/1919		Standard Fish Company	Bay of Islands, Adak Isl. and Chernofski Harbor, Unalaska Isl. Commercial fishery operations; erection of cannery prohibited.
40	9/5/1919		Buckley Livestock, Fisheries & Transp. Co.	Chernofski Harbor and Kuliliak Bay, Unalaska. Cod and salmon operations; erection of cannery prohibited.
41	9/6/1919	1920	Lars Mikkelsen	Six locations on Unalaska Isl., Akun Isl. and Tigalda Isl. Cod stations.
42	4/9/1920	1923	American Whale Products Co.	Udagak Bay, Unalaska Islands. Whaling stations.
43	9/16/1920	1923	American Fish Packing Co.	Bioriki, Rootok, Avantnak, Ugamak, Unalga and Unalaska Islands. Cod stations.
44	10/11/1920	1923	A. C. Goss	Umnak Isl. Commercial fishery operations; erection of cannery prohibited.
45	10/23/1920	1923	Bering Sea Fisheries	Six locations on Unalaska, Akun and Tigalda Islands. Cod stations.
W-1	1923		San Juan Fish & Packing Co.	Unalaska Isl. and Akutan Pass. Cod fishing.
W-2	1923		A. C. Goss	Umnak Isl. and Nikolski Bay. Salmon fishing.
	1923		E. H. Larson	Umnak Isl. Salmon fishing.

Of the several permits issued for canneries, only one was actually placed in operation. The Pacific American Fisheries, Inc., established a cannery at Makushin Bay, Unalaska Island, in 1916, and the following year (1917) packed a total of 3,882 cases (1-lb. talls) of which 2,392 were red, 97 coho, 39 pink, and 1,354 chum (Tarrant, 1953b). Fishing was done in the bays and passes around the island, including Umnak Island. The use of small seine boats and poor weather conditions might be partially responsible for the few fish taken (Tarrant, 1953a). Because of the absence of concentrations of fish, "the Pacific American Fisheries permanently closed its cannery at Nakushin Bay" in 1918 (Bower, 1919).

The Present-Day Fishery

In 1924 the White Act¹ was enacted for the protection of the fisheries of Alaska. In the following years there has been little change in the regulations of the Aleutian salmon fishery.

The types of gear allowed to fish in this area are gill-nets (limited to 200 fathoms in length); purse seines (limited to a length of 150 fathoms, a depth of 150 meshes, and a lead of 25 fathoms), and beach seines. Traps have been specifically prohibited since 1928. Dates for seasonal closure of the fishery have varied from August 10 to August 24 with an extension in recent years to allow gill-nets and beach seines to fish until September 5. The fishery has reopened again for gill-nets and beach seines on October 1 and for purse seines on January 1 of the following year.

Probably of some importance in the development of the fisheries in this area is the Executive Order² of November 23, 1928, which removed Akun, Akutan, Sanuk, Tigalda, Umnak, and Unalaska (incl. Sendanka) Islands from the Aleutian Island reserve. Free of the restrictions of previous orders, industry was now able to develop on the same basis as in other areas in Alaska. Further relaxation of regulations of the Aleutian Island Reserve has taken place in more recent years, so that now there are no restrictions on commercial fishing within the reserve other than those which are applicable in this area outside the reserve.

Unfortunately, catch records from the Aleutian area are not available except for 1951-1954, after the "duplicate ticket" system of reporting was placed in effect. This information is given in Table 2.

In recent years the salmon fisheries of the Aleutian area have been regularly exploited. Pink, red and chum salmon are taken in quantity during July and the first part of August with the peak of abundance occurring during the last two weeks of July (see Fig. 1). A small but relatively stable fishery has supplied the local demand for fresh and salted salmon. In general this fishery is dispersed among the many islands taking advantage of the local runs of salmon. Reports show that in recent years between 4,000 and 5,000 red salmon and from 300 to 600 coho have been salted commercially in the Aleutian area³.

Large-scale commercial operations have been conducted in this area since the early 20's. With the use of "floaters" salmon runs found around virtually every island in the Aleutian Chain have been explored, but only the Unalaska area has been regularly exploited. Unfortunately, we have not been able to locate catch records of these fisheries so that only catch data for specific operations can be presented at this time.

¹ An Act for the Protection of the Fisheries of Alaska and for Other Purposes. (43 Stat. 465; 48 U.S.C.)

² Executive Order 5000.

³ Information from Edwin C. Hinsdale, Supervisory Statistician.

TABLE 2. Summary of number of salmon taken in the Aleutian area, 1951-1954.

<i>Gear</i>	<i>Species</i>	1951	1952	1953	1954*
Purse Seine	King	2	38	0	1
	Red	11,312	4,868	4,881	2,235
	Coho	2	9	0	0
	Pink	0	31,750	62,618	424,695
	Chum	80,677	25,118	776	130
	Total	91,992	61,783	68,275	427,061
Drift Net	King		42		
	Red		19,091		
	Coho		0		
	Pink		0		
	Chum		27		
	Total		19,160		
Set Net	King	2	131		
	Red	246	18,870		
	Coho	0	0		
	Pink	0	1		
	Chum	38	587		
	Total	286	19,589		
Beach Seine	King	0		0	0
	Red	159		0	114
	Coho	391		524	0
	Pink	17,974		6,540	121,334
	Chum	13,800		44	31
	Total	32,324		6,584	121,479
All Gear	King	3	211	0	1
	Red	11,717	42,829	4,881	2,349
	Coho	393	9	524	0
	Pink	17,974	31,751	69,158	546,029
	Chum	94,515	25,732	820	161
	Total	124,602	100,532	75,383	548,540

* Estimates of 1954 catch from Annual Report, Alaska Peninsula Area, 1954, by G. S. Hewitt.

The International Packing Company fished every year in the Aleutian area between 1924 and 1942. The "floater" *Santa Flavia* was first placed in operation in 1924 and operated through 1930¹. "After making a pack of red salmon on the Ugashik River, the International Packing Co. moved its floating cannery, *Santa Flavia*, to Makushin Bay on Unalaska Island." (Bower, 1925, p. 122). In 1928 the company acquired the "floater" *International* which operated in the area until 1941. The fishery in the Aleutian area by these boats was generally confined to two or three weeks in early August.

¹ In 1931 the vessel was chartered and later sold to the Associated Fishermen of Alaska to fish in Bristol Bay; and later operated by the Lowe Packing Co. on the Nushagak; the *Santa Flavia* was destroyed by fire April 7, 1936.

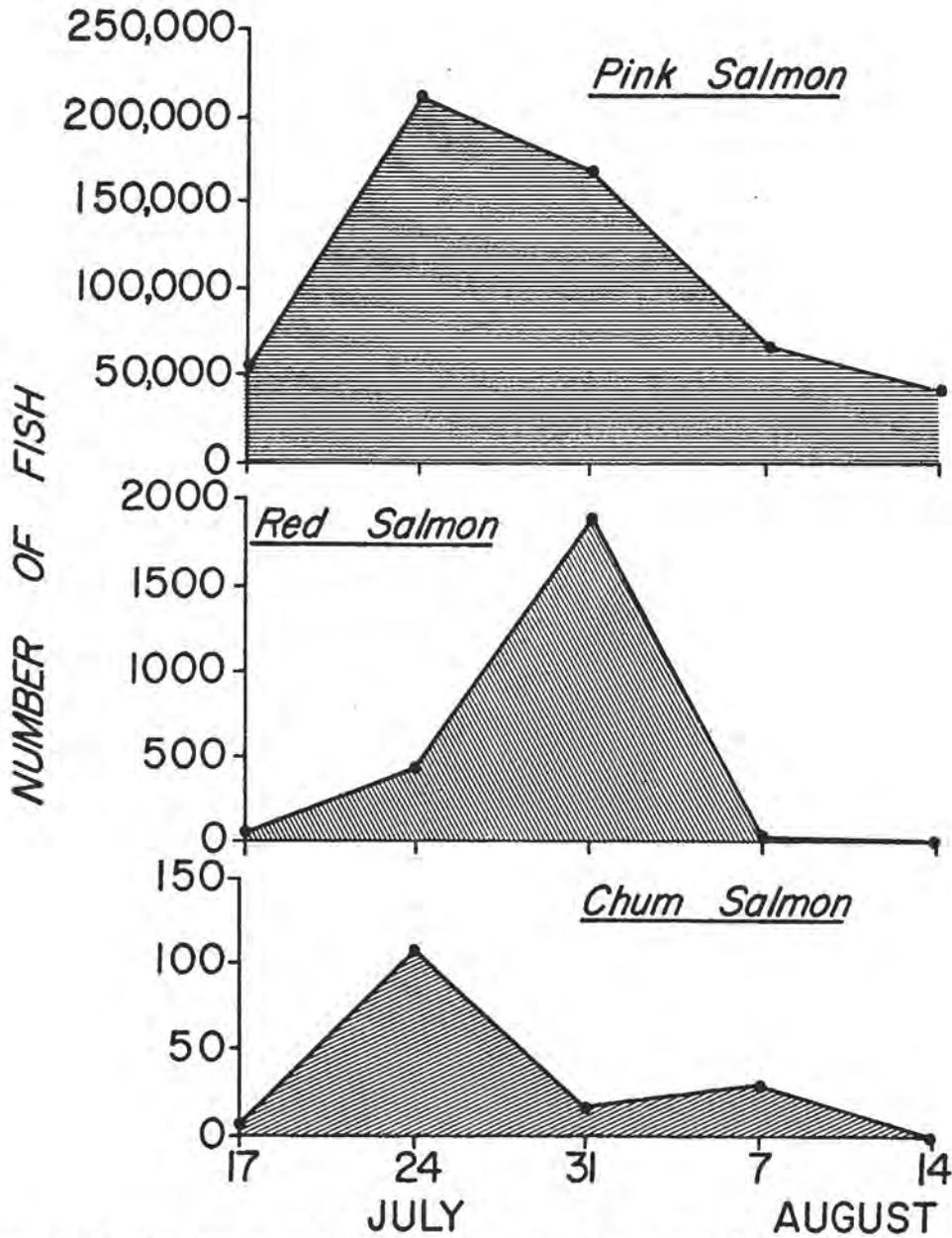


FIGURE 1. Seasonal distribution of the 1954 catch of pink, red and chum salmon in the Unalaska area (from Annual Report, Alaska Peninsula Area, 1954, by G. S. Hewitt).

TABLE 3. Summary of the pack of the floater *International*.

Year	Locality*	Red	Pink	Chum	Coho	King	Total
1930	Bristol Bay						
1931	Unga**	2,752	20,434	11,846		798	65,972
		30,142					
1932	Shumagin**	1,850					
		46,756	61,057	8,918		834	119,415
1933	Shumagin		34,681	1,728			36,409
1934	Shumagin	3,749	37,642	8,002			49,393
1935	Shumagin	4,881	45,980	5,686	3		56,550
1936	Shumagin	8,837	33,761	5,951			48,549
1937	Shumagin	4,141	50,492	3,889		28	58,550
1938	Shumagin	1,523	26,090	6,949		15	34,577
1939	Shumagin						
1940	Shumagin						
1941	Kodiak, S.E.	2,426	7,291	4,103			13,840
1942	Sold						

* Locality is the base of operation. Literature indicates that the Shumagin (and Unga) operations include salmon taken in the Aleutians, although based outside of the area.

** The *International* was under contract to Alaska Pacific Salmon during these years.

The catch of the "floater" *International* since 1930 is given in Table 3. According to Mr. F. Chase, Jr., formerly with the *International*, the catch in the Unalaska area was confined almost entirely to species other than red salmon.

In very recent years several companies have sent boats into the Aleutian area in early August to fish for pink salmon. In spite of the extreme variability of the catches from year to year, the waters around Unalaska are explored every year and if the numbers of salmon warrant a fishery, purse seine boats are sent into the area. A summary of catches for two canneries only is given in Table 4.

TABLE 4. Summary of number of salmon taken by two canneries in the Aleutian area.

Year	No. of Salmon	
	Cannery a	Cannery b
1950.....	0	0
1951.....	7,000	0
1952.....	27,000	0
1953.....	0	74,854

Summary

The salmon fisheries of the Aleutian Islands have been utilized by the natives, settlers and commercial interests of the United States of America since early times.

The commercial fishery in the Aleutian Islands area has been dependent upon two groups of fish: (1) salmon bound for Bristol Bay, the Peninsula and other Alaskan streams which pass through this area enroute to their home stream, and (2) local salmon stocks which spawn in virtually every rivulet on the various islands.

All species of salmon are reported from the Aleutian Islands although pink salmon provide the greatest catches.

Red salmon are taken in waters around Unalaska in greatest numbers in early July and are probably bound for spawning streams in Bristol Bay or elsewhere. Pink salmon on Unalaska are in greatest abundance the first week in August and no doubt many are bound for local spawning streams.

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