

*File F. G. Norton*

*J. W. P.*

ALASKA  
SEP 1 1926  
FISHERIES

A report of operations in the Port Moller district for the season of 1926.

*By Fred G. Norton*

This report deals with operations in connection with the enforcement of the Alaska Fisheries laws and with the survey of the spawning areas of this district.

A dory with outboard motor was used for salmon patrol. This mode of patrol is not practical in this district as the fishing grounds are exposed to heavy seas coming in from the Bering Sea. Camp was established at Bear river for several days at the beginning of the season but had to be abandoned as this affords but a limited view of fishing operations. It is impossible to enter Bear river except at certain stages of the tide. While camped at Bear river prohibitive markers were erected designating closed waters at Bear and Sandy rivers. When weather conditions would not permit the use of the dory, the writer was able to visit the fishing grounds on the local cannery tenders.

The writer wishes at this time to express his appreciation for the assistance, co-operation and many courtesies extended him by the local packers and their employees.

### RUN OF SALMON

The first fish of the season was captured on the 11th. of June. At this date the catch was very small and indications were poor. There was a steady increase in the run until the morning of June 29, at which date a tremendous run struck along the coast-line between Bear and Sandy rivers, the fish however, were not in schools and several hauls were required to load the seine boats. One of the canneries immediately placed their purse seine boats on a 7,500 limit. This run lasted until the night of July 1, and then took a decided drop on the 2nd and 3rd., increasing steadily until July 9th and 10th., at which time it reached about the same high level as the first run. From July 11 the run slackened gradually until August 4th when the last trap was lifted. The majority of the fishing for the season was done along the beach between Bear and Sandy rivers.

Red salmon were in evidence on June 11, when the first fish were taken. At this time about 70 percent of the catch were red salmon, the percentage increasing gradually until June 29th., at this date about 95 percent of the run were red salmon. From June 29 the percentage dropped steadily until the end of the season, at which time the percentage of reds was 85.

The Kings were in evidence from the beginning of the season up to and including July 27, when the last Kings were reported.

The Chum or Dgg salmon run started on June 18th and a steady increase was noted up to and including July 10th, from that date the chum run slackened until the end of the season.

The seine boats were in operation from June 10th until July 20, when all but two boats left for Puget Sound. The remaining two were to fish until the 25th of July but on account of heavy seas on the fishing grounds they never attempted a haul after the 20th. During the season the seine boats lost three days of fishing on account of stormy weather and on three occasions the web crews were unable to reach the traps for closing. The traps, however, were closed an additional 36 hours to make up for the time they were fished. The Bear river trap is exposed to Westerly seas and a heavy sea sometimes washes over the cappings, at such times it is impossible to approach the trap.

#### ESCAPEMENT

The writer in company with two natives, as packers, left Port Moller on the morning of August 1, for the purpose of obtaining an estimate of the salmon in the various spawning areas in the district. Leaving the Pacific American Fisheries Cannery the party walked the beach to Bear river village. A bidarka was obtained at the village for the trip up the river and for use on the lake.

As the water in the lower part of the river was muddy, it would be impossible to estimate intelligently the number of salmon ascending the river. The few fish that were seen jumping proved to be Silver or Coho salmon. At the outlet of the lake the salmon were seen in large schools. This condition was probably due to the heavy seas on the lake. The salmon were noted to leave the lake and drop back into the river when there was a heavy sea on the lake, returning again to the lake immediately after the storm had passed.

Leaving the outlet of the lake the right hand shore was followed. In this way it was possible to obtain an estimate of the salmon along the lake shores as well as of the salmon in the streams. Following herewith is a list of the streams and their estimates:

Creek No. 1	Along shores in vicinity of stream	1,000
	In the stream	300
Creek No. 2	Along shores in vicinity of stream	3,000
	In the stream	500
		4,800

	Brought Forward	4,800
Creek No. 3	Along shores in vicinity of stream (This is a glacial stream. No fish seen in stream)	20,000
Bear river	At outlet of the lake	70,000
Bear Lake	Along shores of lake	10,000
		104,800

Total salmon estimate for Bear River watershed 104,800  
 Note. Red salmon alone included in estimate.

Upon completion of Bear lake survey packs were assembled and the party left for Sandy Lake. This trip, however, had to be abandoned as it was impassible to cross Cole creek. After several attempts were made to cross the stream the party returned to Bear lake. A bidarka was used as a means of transportation from Bear lake to Port Moller, arriving at the Pacific American Fisheries cannery, Port Moller on the morning of August 5.

#### STATISTICS FOR SEASON OF 1926

Ten purse seine boats, five gill net boats and four traps were used for the capture of salmon in this district for the season of 1926.

Gear used and catch is as follows:

#### Operating for the Pacific American Fisheries

Number of seine boats employed -----	5
High Seine boat -----	64,353
Low " " -----	54,959
Average for seine boats -----	58,406
Total catch for seine boats -----	292,031

#### Traps operating for Pacific American Fisheries

26-218 No. 5	Bear River -----	67,134
26-215 No. 1	Port Moller -----	14,287
26-216 No. 2	Nelson Lagoon -----	-----
26-217 No. 3	" " (combined) -----	102,141
		283,562
Total catch for Pacific American Fisheries -----		475,593

Operating for the Everett Packing Company

Number of seine boats -----	5
High seine boat -----	102,067
Low seine boat -----	27,302
Average for seine boats -----	56,776
Total catch for seine boats -----	284,897

Catch of gill nets operating for Everett Pkg. Co.-

Total for five nets operated at Nelson Lagoon --	9,113
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Total catch for Everett Packing Company -----	294,010
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Catch for district:

Pacific American Fisheries -----	475,593
Everett Packing Company -----	<u>294,010</u>
	769,603

Total catch for Port Moller District -----	769,603
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RECOMMENDATIONS

I would recommend that the Bureau furnish a launch for the patrol of this district. As conditions were this year, the Warden had to depend on the use of the cannery tenders when the weather would not permit the use of the dory furnished for patrol. This is not satisfactory as the patrol should be on the fishing grounds, especially when the purse seine boats are in operation.

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Creek No. 2	Along shores in vicinity of stream	3,000
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Creek No. 3	Along shores in vicinity of stream	20,000
	(This is a glacial stream. No fish seen in stream)	
Bear River	At outlet of the lake	70,000
Bear Lake	Along shores of lake	10,000
		<hr/> 104,800

Total salmon estimate for Bear River watershed 104,800  
Note. Red salmon alone included in estimate.

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Bear River	At outlet of the lake	70,000
Bear Lake	Along shores of lake	10,000
		<u>104,800</u>

Total salmon estimate for Bear River watershed 104,800  
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*F. G. Morton  
Port Moller Dist.  
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## DEPARTMENT OF COMMERCE

BUREAU OF FISHERIES

NAKNEK

OPERATIONS IN BRISTOL BAY

DISTRICT OF ALASKA

SEASON OF

1926



Operations by the Bureau Of Fisheries in Bristol Bay, Alaska during the season of 1926 consisted primarily of : the enforcement of the Alaska fisheries laws and regulations, collection of data relating to the commercial fishing and packing of salmon, observation of the salmon run and escapement to the spawning areas, construction and operation of a salmon counting weir on the Ugashik River, and the destruction of predatory fish and bird enemies of salmon. All work was organized by Dennis Winn, Agent, Alaska Service, and under his personal supervision until the first of June after which the writer assumed charge. A report of our work is herewith respectfully submitted.

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Our crew with the exception of one member was of necessity secured in the states. It is the Bureau's policy to use as much local alaskan help as possible but suitable men are not available in this district. Equipment and supplies were purchased in the states and transported north in the spring together with our crew by various cannery companys that operate in Bristol Bay.

Transportation of men, supplies, and equipment was furnished by the different cannery ships as follows :

North-bound : The SS. North King of the Alaska Portland Packers Association carried 6 men, grocery supplies, 1 launch and scow, oils and gasoline, and other equipment from Portland, Oregon. The SS. Memmon of the Columbia River Packers Association carried 3 men from Astoria, Oregon. The SS. General Gorgas of Libby McNeil & Libby carried 2 men from Seattle, Washington. The Sch. Metha Neilson of the Alaska Packers Association carried 1 man from San Francisco, California. The Brk. Star Of Scotland of the Alaska Packers Association carried 4 men from San Francisco California. The Brk. Star Of Zealand of the Alaska Packers Association carried 3 men from San Francisco, California. The SS. Hyades of the Naknek Packing Company carried 1 man from San Francisco, California. The SS. Mount Baker of the Red Balmon Canning Company carried 1 man from San Francisco, California. The SS. Perry L. Smithers of the NorthWestern Fisheries Company carried oil, paint and equipment from Seattle, Washington.

South-bound : The SS.North King of the Alaska Portland Packers Association carried 3 men and empty oil and gasoline drums to Portland, Oregon. The SS.Kvichak of the Alaska Packers Association carried 1 man to San Francisco, California. The Brk.Star Of Zealand of the Alaska Packers Association carried 1 man on the return trip to San Francisco, California. The SS.Hyades of the Naknek Packing Company carried 1 man to San Francisco, California. The SS.Memnon of the Columbia River Packers Association carried 2 men to Astoria, Oregon. The SS.General Gorgas of Libby McNeil & Libby carried 2 men to Seattle, Washington. The SS.Mount Baker of the Red Salmon Canning Company carried 2 men to San Francisco, California. The SS.Perry L. Smithers of the NorthWestern Fisheries Company transported equipment to Seattle, Washington. The SS.Otsego of Libby McNeil & Libby transported equipment to Seattle, Washington. Ten men made the return trip to the states on the regular transportation steamers 5 going out via Kanatak, Alaska and 5 via Iliamna Lake, Alaska.

#### OUTLINE OF OPERATIONS

Operations by the Bureau Of Fisheries in Bristol Bay during the season of 1926 may be divided into 3 phases :

Pre-season operations in which boats and equipment were put in order for the seasons work, a salmon counting weir constructed and installed in the Ugashik River and prohibitive markers placed to define all areas closed to commercial fishing;

Mid-season operations in which fishery waters of the Bristol Bay district were patrolled for the purpose of enforcing the Alaska fisheries laws and regulations, a count made of all salmon passing through the weir on the Ugashik River, data collected relating to the commercial catch and pack of salmon and observations made as to the escapement of salmon to the spawning grounds and;

Post-season operations in which boats and equipment were stored for the winter, the counting of salmon through the weir on the Ugashik River completed, the weir removed and stored for the winter and the work of destroying predatory bird and fish enemies of the salmon carried on in Becherof Lake and the Ugashik Lakes until the end of September.

## PRE-SEASON OPERATIONS

Upon arrival of the crew in the spring May 15 at the Bureau's marine ways and headquarters at Naknek, Alaska, boats were launched, equipment and supplies assembled and crews sent out on different details.

CONSTRUCTION AND INSTALLATION OF WEIR AT UGASHIK, ALASKA:

A party of 10 men consisting of Henry McFadden, foreman, Charles Turner, Arthur Larsen, Clarence Olsen, Henry Loeff, John Monson, Robert Larsen, P.E. Hamm, and Z.V. Hurt together with material, equipment and supplies were dispatched May 25 to Ugashik, Alaska for the purpose of constructing and installing a salmon counting weir on the Ugashik River. The trip was made on the patrol boats "Scoter" and "Number-8" leaving Naknek, Alaska at 10 a.m. and arriving at Ugashik on the Ugashik River at 11:30 a.m. May 26. Ugashik 16 miles above the mouth of the river was as far as it was possible to proceed with the "Scoter" and it was necessary to transport men, material equipment and supplies the remaining 35 miles up river to the weir site on a small scow towed by "Number-8". Both scow and boat were built specially for this work and did good service. Two trips were necessary to transport men, camp equipment and supplies which were completed and camp established at the weir site May 28. The work of transporting material up the river from Ugashik to the weir site was carried on by part of the crew while the remainder took up the construction and installation of the weir. The construction and installation of the weir was completed June 20 and all but 3 members of the crew were transferred from this detail to patrol duty in the different sections of Bristol Bay for the commercial fishing season.

LOCATION OF WEIR:

The location of the weir was selected by Dennis Winn, Agent, Alaska Service, during the spring of 1925. It is on the upper Ugashik River roughly 50 miles up river from Bristol Bay. At this point, which is about 1 mile below the outlet of the first Ugashik Lake into the Ugashik River, the river is 770 feet in width and has an average depth of 3 feet. The bottom is gravel covered and the water is perfectly clear. The largest tides from Bristol Bay barely reach the weir site. Immediately below the weir site the river widens into a shallow mud bottom lagoon in which the water becomes discolored making it impractical to install the weir below the lagoon.

DESCRIPTION OF WEIR:

Starting at a point between a small grass island and a small brush island just below the mouth of the lower finger on the east bank of the Ugashik River

above the lagoon; a 6 foot wire netting fence runs west 350 feet to tripod number 20. This section of the river is shallow and the wire netting is hung on a 2" by 2" belting supported by 4" by 4" posts driven and spaced 10 feet apart. The weir then continues west across the river for a distance of 360 feet with a picket fence placed on stringers supported by tripods. In this section there are 20 tripods spaced about 19 feet apart. The picket fence spans the main current of the river and extends to within 40 feet of the west bank. The gap between tripod number 1 and the west bank of the river is closed by a wing or lead of wire netting 6 foot deep hung on a rope and extends at an angle down river from tripod number 1 to the west bank of the river. This wing is constructed to allow passage for boats up and down the river and also acts as a lead to counting gates number 1 and number 2. The wing is 60 feet in length.

Counting gates number 1 and number 2 are placed between tripods number 3 and number 4. Counting gate number 3 is placed between tripod number 7 and tripod number 8. Counting gate number 4 is placed between tripods number 10 and number 11. Counting gate number 5 is placed between tripods number 17 and number 18. Counting gate number 6 is placed between tripod number 19 and tripod number 20.

When the work of construction and installation of the weir at Ugashik was completed June 20 Henry McFadden, P.E. Hamm and Robert Larsen were detailed to operate the weir during the salmon run and the remainder of the men were transferred to other rivers of Bristol Bay for patrol duty.

#### PREPARATION FOR PATROL:

On June 1 patrolman Eric Fenno with patrol boat "Number 3" was towed by the "Scoter" from the Bureau's station at Naknek to Nushagak, Alaska leaving Naknek at 8 a.m. and arriving at Nushagak at 6:30 p.m. At Nushagak Fenno was joined on "Number-3" by W.J. Kelly and the period preceding the red salmon fishing season was devoted to the work of placing prohibitive markers and patrolling in the waters of the Nushagak section during the king salmon fishing season June 3 to June 25. Nushagak was the only section of Bristol Bay in which the fishing of king salmon was carried on prior to the red salmon fishing season June 25 at 6 a.m.

## PRE-SEASON OPERATIONS

Upon arrival of the crew in the spring May 15 at the Bureau's marine ways and headquarters at Naknek, Alaska, boats were launched, equipment and supplies assembled and crews sent out on different details.

CONSTRUCTION AND INSTALLATION OF WEIR AT UGASHIK, ALASKA :

A party of 10 men consisting of Henry McFadden, foreman, Charles Turner, Arthur Larsen, Clarence Olsen, Henry Looff, John Monson, Robert Larsen, P.E. Hamm, C.M. Hatton and Z.V. Hurt together with material, equipment and supplies were dispatched May 25 to Ugashik, Alaska for the purpose of constructing and installing a salmon counting weir on the Ugashik River. The trip was made on the patrol boats "Scoter" and "Number 8" leaving Naknek at 10 a.m. and arriving at Ugashik on the Ugashik River at 11:30 a.m. May 26. Ugashik 16 miles above the mouth of the river was as far as it was possible to proceed with the "Scoter" and it was necessary to transport men, material, equipment and supplies the remaining 35 miles up river to the weir site on a small scow towed by "Number 8". Both scow and boat were built specially for this work and did good service. Two trips were necessary to transport men, camp equipment and supplies which were completed and camp established at the weir site May 28. The work of transporting material up the river from Ugashik to the weir site was carried on by part of the crew while the remainder began the construction of the weir. The construction and installation of the weir was completed June 20 several days before the first salmon appeared. A detailed report by Henry McFadden on the construction, installation and operation of the weir will appear elsewhere in this report.

When the work of construction and installation of the weir at Ugashik was completed June 20 Henry McFadden, P.E. Hamm and Robert Larsen were detailed to operate the weir during the salmon run and the remainder of the men were transferred to other rivers of Bristol Bay for patrol duty.

PREPARATION FOR PATROL :

On June<sup>1</sup> patrolman Erric Fenno with patrol boat "Number 3" was towed by the "Scoter" from the Bureau's station at Naknek to Nushagak, Alaska leaving Naknek at 8 a.m. and arriving at Nushagak at 6:30 p.m. At Nushagak Fenno was joined on "Number 3" by W.J. Kelly and the period preceding the red salmon fishing season was devoted to the work of placing prohibitive markers and patrolling the waters of the Nushagak section during the king salmon fishing season June 3 to June 25. Nushagak was the only section of Bristol Bay in which the fishing of King salmon was carried on prior to the red salmon fishing season June 26 at 6 a.m.

*attached*

*Went back  
to the  
9/2/26*

Gus Severson and Arthur Mesford Naknek patrolmen were detailed during the period preceding the opening of the red salmon fishing season to the work of erecting prohibitive markers on the Kvichak River and assisting with the work at the Bureau's marine ways at Naknek of placing the patrol boats in condition for patrol duty. Arthur Izett, Ivan Merchant and Hector McAllister were detailed during this time to work at the Bureau's marine ways where buildings were painted, grounds cleaned up and an excavation made for the placing of a bunk scow to be used for a store room.

Other members of the Bristol Bay crew were Alf Christensen, patrolman, who acted as deckhand on the "Scoter" until the opening of the red salmon fishing season; the regular crew of the "Scoter" Joe Paulsean, captain, William Shaw, engineer, and A.M. Gastineau, cook who were on that detail all season; Dennis Winn, in charge of operations and the writer who assumed charge of operations after June 1.

On June 16 patrol boat "Number 4" in charge of Hector McAllister, Igushik patrolman was towed from the Bureau's Naknek station to Nushagak leaving Naknek at 8 a.m. and arriving at Nushagak at 6 p.m. where "Number 4" was outfitted with provision and fuel for patrol duty. On June 18 and 19 "Number 4" was towed from Nushagak to Igushik and established on patrol duty for that section. This towing was done by the "Scoter" leaving Nushagak June 18 at 10 p.m. and arriving at Igushik June 19 at 8 a.m.

On June 22 and 23 patrol boats "Number 5" and "Number 6" were towed by the "Scoter" from the Bureau's station at Naknek to Ugashik leaving Naknek June 22 at 8 a.m. and arriving at Ugashik June 23 at 9 a.m. At Ugashik C.M. Hatton was placed in charge of "Number 6" with Arthur Larsen as assistant and John Monson was placed in charge of "Number 5" with Z.V. Hurt as assistant. "Number 5" and "Number 6" were detailed to patrol the Ugashik section during the red salmon fishing season.

On June 24 Clarence Olsen was established on patrol of the Egegik section with a row boat. A tent was set up on the beach to serve as living quarters.

On June 25 Henry Looff was placed in charge of patrol boat "Number 1" with Charles Turner as assistant and detailed to the patrol of the Kvichak section. June 25 was spent at the Bureau's station at Naknek outfitting with provisions and fuel and on June 26 "Number 1" proceeded to Kvichak under her own power.

On June 25 Alf Christensen was placed in charge of patrol boat "Number 2" with Ivan Merchant as assistant and assigned to the patrol of the Naknek section. On the same day patrol boat "Number 7" in charge of Gus Severson with Arthur Mesford as assistant was detailed to the patrol of waters between Naknek and the Kvichak section.

Mr. O. B. Millet of Iliamna Lake, Alaska was engaged with his launch for patrol duty during the red salmon fishing season. Mr. Millet reported for duty July 1 and was detailed to the patrol of the Kvichak section.

#### MID-SEASON OPERATIONS

##### PATROL

9 launches and 1 row boat were used in the patrol of the waters of Bristol Bay during the fishing season of 1926. These boats cruised a total distance of 11,546 miles. In carrying on this work a total of 2,546 gallons of gasoline and 78 gallons of lubricating oil were used. There were 3 cases of violation of the Alaska fisheries laws reported and tried before the local U.S. Commissioner's court, 2 of which were <sup>boats</sup> owned and operated independently by local Alaskans and the other by Libby McNeil & Libby. Our patrol fleet was assigned to the various sections of Bristol Bay as follows:

Patrol boats "Number 5" and "Number 6" Ugashik River and Bay; 1 row boat with 1 man on Egegik River; patrol boat "Number 2" on Naknek River,; patrol boat "Number 7" on Kvichak Bay between Naknek and Koggiung; patrol boat "Number 1" and launch of O. B. Millet on Kvichak River; patrol boat "Number 3" on Nushagak Bay and River; patrol boat "Number 4" on Igushik River and the patrol boat "Scoter" on all waters of Bristol Bay.

In conjunction with the work of patrol, data was collected relating to the extent of fishing operations and the run of salmon in the different rivers of Bristol Bay. A total of 909 fishing boats were operated by the cannerys. In addition 36 fishing boats were operated by independent fishermen, local whites and natives, who owned the boats and gear and sold their catch to the different cannerys. 100 stake nets were operated by local whites and natives 20 of which were for commercial purposes and their catch sold to the cannerys, and the remainder were for local food and dog feed.

The first red salmon began to appear in all rivers of Bristol Bay on June, 5th. Native stake nets began catching red salmon on that date and took fair numbers during the period preceding the opening of the commercial fishing season June 26 but nothing even slightly approaching a run occurred during that time. An outline of the run of salmon in the different rivers of Bristol Bay during the fishing season follows:

##### KVICHAK RIVER

At the opening, June 26 at 6 a.m., few fish were in evidence and catches were light. The escapement during the weekly closed period of June 26 at 6 p.m. until June 28 at 6 a.m. was small as few fish were running. On June 28 when fishing was resumed catches were small and few fish were in evidence. This condition continued until the beginning of the weekly closed period July 3 at 6 p.m.

On July 4 a heavy run struck in and a good escapement took place during the weekly closed period of July 3 at 6 p.m. until July 5 at 6 a.m.

When fishing was resumed on July 5 large catches were made. The run continued heavy on July 6 and the cannerys placed their boats on a limit. On July 7 and 8 it was noticed that the run had fallen off a little and the cannerys took their boats off limit. On July 9 the run increased again to very heavy. On July 10 the run fell off to light and continued light during the weekly closed period of July 10 at 6 p.m. until July 12 at 6 a.m.

When fishing was resumed on July 12 a heavy run struck in and continued heavy on July 13 but fell off a little on July 14. On July 15 the run fell off to light and continued light until the end of the season July 23 at 6 p.m.

During the heavy run almost the entire catch consisted of red salmon. When the last heavy run was over July 15 a steady increase in the percentage of chum salmon was noticed in the catch until July 21 when fully 40 percent of the catches were chum salmon, the remainder consisting of nearly all red salmon with a few humpback and silver.

#### NAKNEK RIVER

On the opening date catches were for the most part small and few fish were noticed jumping in the river.

On June 27 a good run struck into the river and a good escapement occurred during the weekly closed period of June 26 at 6 p.m. until June 28 at 6 a.m.

On June 28 when fishing was resumed good catches were reported from the outer fishing grounds in the vicinity of the mouth of the Egegik River but few fish were in evidence around the mouth of the Naknek River. Continuation of good fishing was reported from the outer fishing grounds for June 29, and 30 and July 1 and 2 with few fish in evidence around the mouth of the Naknek River. On July 3 a heavy run struck in and a heavy escapement occurred during the weekly closed period of July 3 at 6 p.m. until July 5 at 6 a.m.

When fishing was resumed July 5 the heavy run was still on and on July 6 the cannerys began to fly limit flags. The run continued heavy until July 13 on which date few fish were in evidence around the mouth of the Naknek River although good catches were reported by Naknek boats fishing in the upper Kvichak Bay waters. A heavy escapement took place during the weekly closed period from July 10 at 6 p.m. until July 12 at 6 a.m.

On July 14 few fish were in evidence and catches were small. This condition continued until July 19 when a small run of fish appeared. A fair escapement occurred during the weekly closed period July 17 at 6 p.m. until July 19 at 6 p.m.

When fishing was resumed on July 19 at 6 p.m. the last small run was over and very light catches were reported. This condition continued until the end of the season.

#### EGEGIK RIVER

On this river a heavy run of fish appeared on the opening date June 26 and continue heavy until July 10 on which date a slight falling off was noticed. Few fish were in evidence on July 11 but on July 12 a heavy run was again on which continued until July 20.

On July 20 the run of fish fell off to almost nothing which condition continued until the end of the season.

The escapement of salmon up the Egegik River was enormous.

### UGASHIK RIVER

On the opening date June 26 very few fish were in evidence and catches were small, all fishing being carried on outside of the river north of Cape Greig. Very few fish were noticed during the weekly closed period June 26 at 6 p.m. until June 28 at 6 a.m.

On June 28 most of the fishing fleet was laying to anchor on account of rough weather. On June 29 catches were small with no fish in evidence in the river. On June 30, July 1, 2 and 3 good catches were made on the fishing grounds north of Cape Greig but very few fish appeared in the river. During the weekly closed period July 3 at 6 p.m. until July 5 at 6 a.m. a fair escapement took place.

On July 5 fishing was resumed by most of the fishing fleet on the grounds north of Cape Greig. Good catches were reported and it was evident that a good run of fish was entering the river. On July 6 and 7 a heavy run of fish entered the river. On July 8 the run into the river fell off to light but good catches were reported from the outside fishing grounds. This condition continued until July 13 when a heavy run struck in. The run continued heavy until July 16 when it became apparent that the run was falling off. On July 17 and 18 the run continued to fall off. On July 19 very few fish were in evidence which condition continue until the end of the season.

The commercial catch of salmon in the Egegik section during the season was 885,667 salmon. At the time of the last report from the weir at Ugashik, August 4 over 800,000 red salmon had been counted through.

### NUSHAGAK RIVER

On June 26 the opening of the red salmon fishing season very few fish were in evidence and only light catches were reported. During the weekly closed period June 26 at 6 p.m. until June 28 at 6 a.m. a fair escapement took place.

On June 28 immediately following the opening of fishing a heavy run of fish struck in on the Flounder Flat fishing grounds and heavy catches were reported. This run appeared only on Flounder Flat and no large catches were reported from any other quarter on this date. On July 29 the run was again light in all quarters and only fair catches were reported. This condition continued until July 3 when a heavy run again struck in on Flounder Flat. Several boats delivered 3000 fish on that day from the morning when the run started until 6 p.m. the beginning of the weekly closed period. A heavy escapement took place during the weekly closed period July 3 at 6 p.m. until July 5 at 6 a.m.

When fishing was resumed July 5 it was reported that the run was again light on the outer fishing grounds but good catches were made on the upper fishing grounds. On July 6 a good run of fish set in and continued until July 15 when a noticeable decline in the run was apparent. On July 16 considerable numbers of humpback salmon began to appear with the red salmon. No heavy run of red salmon appeared after July 15 but good catches were made up to the end of the season.

IGUSHIK RIVER

At the opening of the season catches were small and no salmon were noticed in the river. During the weekly closed period of June 26 at 6 p.m. until June 28 at 6 a.m. a few fish were seen jumping in the river.

On June 28 when fishing was resumed light catches were reported and continued so on June 29. On June 30 a fair run of fish began but on July 1 and 2 the run was again slack. On July 3 a heavy run of fish began and a good escapement took place during the weekly closed period of July 3 at 6 p.m. until July 5 at 6 a.m.

On July 5 when fishing was again resumed the heavy run was still on. The run of fish continued heavy until July 14 when it was noticed that the run was falling off. On July 15, 16 and 17 fair catches were made but it was noticed that the heavy run was over. A fair escapement occurred during the weekly closed period of July 17 at 6 p.m. until July 19 at 6 p.m.

When fishing was resumed on July 19 few fish were in evidence and catches were small. This condition continued until the end of the season.

While carrying on the work of patrolling the waters of Bristol Bay observations were made as to the extent of the escapement of salmon to the spawning grounds especially during the weekly closed periods. As a result of these observations we feel that the escapement on all rivers of the Bristol Bay district was heavy.

Exploratory fishing operations were carried on by the Alaska Packers Association in the Togiak section of the Bristol Bay district. For this purpose the Sch. Metha Neilson was towed to Togiak Bay and anchored off the north end of Hagemeister Island and used as a salmon salting station. Two fishing boats were transferred from the Alaska Packers Association's allotment in the Nushagak section to carry on fishing operations in Togiak. Fish were also bought from independent native fishermen who operated 2 fishing boats. All fishing was carried on by drift gill nets and great difficulty was experienced in effectively using this type of gear on account of the clear waters of this section and abundance of rocks. The writer was unable to <sup>go</sup> around to this section during the fishing season but made 1 trip after the end of the fishing season. Fishermen state that a fair run of red and chum salmon passed up the Togiak River during the fishing season. 210 barrels of salmon were salted of which 170 barrels were reds and 40 barrels were chums.

In conjunction with the work of patrol, data was collected relating to the total pack of salmon. A table showing the total pack of all cannerys in the different sections of the Bristol Bay district during the season of 1926 follows:

TOTAL SALMON PACK IN BRISTOL BAY DISTRICT, ALASKA DURING THE SEASON OF 1926 BY EACH COMPANY AND CANNERY IN CASES AND BARRELS.

ALASKA PACKERS ASSOCIATION

DIAMOND NC.	NUSHAGAK	95,000	cases	
DIAMOND J.	KVICHAK	62,589	"	600 BBLs.
DIAMOND X.	KVICHAK	59,630	"	
DIAMOND M.	NAKNEK	90,700	"	
DIAMOND NN.	NAKNEK	71,000	"	
DIAMOND E.	EGEGIK	42,806	"	
DIAMOND U.	UGASHIK	24,414	"	
METHA NEILSON	TOGIAK			210 BBLs.
		<u>4,461.39</u>	cases	<u>810 BBLs.</u>

LIBBY MCNEIL AND LIBBY

IGUSHIK	IGUSHIK			1,150 BBLs.
EKEUK	NUSHAGAK GIVEN			
NUSHAGAK	NUSHAGAK TOGHEATHER	81,767	cases	
LIBBYVILLE	NAKNEK	48,252	"	
GRAVEYARD	KVICHAK	72,116	"	
BRANCH RIVER	KVICHAK	31,339	"	
EGEGIK	EGEGIK	39,000	"	850 BBLs.
		<u>2,724.74</u>	cases	<u>2,000 BBLs.</u>

ALASKA PORTLAND PACKERS ASSOCIATION

SNAG POINT	NUSHAGAK	49,000	cases	
NAKNEK	NAKNEK	62,000	"	
		<u>1,110.00</u>	cases	

NORTHWESTERN FISHERIES COMPANY

NUSHAGAK	NUSHAGAK	40,250	cases	
NAKNEK	NAKNEK	49,731	"	
		<u>899,81</u>	cases	

CARLISLE PACKING COMPANY

CARLISLE	KVICHAK	41,994	cases	
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ATLANTIC AND PACIFIC

SQUAW CREEK	KVICHAK	48,165	cases	
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ALASKA SALMON COMPANY

WOOD RIVER	NUSHAGAK	39,000	cases	
BRISTOL BAY PK. CO.	NAKNEK	119,863	cases	
HALE CREEK	KVICHAK			620 BBLs.
		<u>1,597.63</u>	cases	<u>620 BBLs.</u>

NAKNEK PACKING COMPANY

R.S.C.CO.	UGASHIK	20,000	cases	
R.S.C.CO.	NAKNEK	38,224	"	
N.P. CO.	NAKNEK	67,658	"	

125,872 cases

## COLUMBIA RIVER PACKERS ASSOCIATION

CREEK CANNERY	NUSHAGAK	37,735 cases
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## INTERNATIONAL PACKING COMPANY

SANTA FLAVIA	UGASHIK	21,437 cases
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DESTRUCTION OF PREDATORY BIRDS AND FISH:

The Bureau's different patrol crews were issued shotguns and ammunition for the purpose of destroying terns and a total of 1,216 were killed during the season. On account of the construction and installation of the salmon counting weir on which most of our men were needed no work was undertaken on predatory fish during our pre-season operations. During our mid-season operations all of our men were engaged on patrol duty and the operation of the salmon counting weir. At the close of the commercial fishing season a crew was made up and sent to Becherof Lake for a survey of the salmon spawning grounds of that district and to destroy predatory fish on the salmon spawning grounds. A crew continued the counting of salmon through the weir at Ugashik until the end of the run. The weir was then removed and stored for the winter and the crew proceeded to the headwaters of the Ugashik Lakes where it was joined by the Becherof Lake crew and the destruction of predatory fish was carried on until September 18. After storing all equipment for the winter the party proceeded September 19 to Kanatak, Alaska where the SS. Starr was boarded for the return trip to the states. The party reached Seattle, Washington October 4. As a result of operations by the Becherof Lake and Ugashik Lakes crew a total of 19,687 dolly varden trout were destroyed on salmon spawning grounds of Becherof Lake and the Ugashik Lakes.

## POST-SEASON OPERATIONS

When the commercial fishing season was over in Bristol Bay July 23 all patrol boats were towed to the Bureau's station at Naknek, Alaska and hauled up on the marine ways for the winter. Engines were greased and conditioned for the winter. All equipment not needed for fall operations were transported to the station at Naknek and stored.

Gus Severson, Arthur Mesford, William Shaw and A.M. Gastineau were occupied with the work of storing and conditioning boats and equipment for the winter and removing the marine ways from the water until August 20 and then proceeded to the states via Iliamna Lake and the regular transportation steamers.

Joe Paulsean was detailed to remain in Bristol Bay during to winter to act as watchman at the Bureau's Naknek station.

The remainder of the Bureau's Bristol Bay crew returned to the states on the different cannery ships as shown elsewhere in this report.

## COLUMBIA RIVER PACKERS ASSOCIATION

GREEK CANNERY

NUSHAGAK

37,735 cases

SANTA FLAVIA

INTERNATIONAL PACKING COMPANY

UGASHIK

21,437 cases

DESTRUCTION OF PREDATORY BIRDS AND FISH

The Bureaus different patrol crews were issued shotguns and ammunition for the purpose of destroying terns and a total of 1,200 were killed during the season. On account of the construction and installation of the salmon counting weir on which work most of our crew was needed no work on predatory fish was undertaken during our pre-season operations. During our mid-season operations all of our men were engaged on patrol duty and the operation of the salmon counting weir. At the close of the fishing season crews were made up and sent to Becherof Lake and the Ugashik Lakes for the purpose of destroying predatory fish on the salmon spawning grounds. It is the intention to carry on this phase of the work until late in the fall. A report of these operations will be attached to this report when the work is completed.

## POST-SEASON OPERATIONS

When the commercial fishing season was over July 23 all patrol boats were towed to the Bureau's station at Naknek, Alaska and hauled up on the marine ways for the winter. Engines were greased and conditioned for the winter. All equipment not needed for fall operations was transported to the station at Naknek and stored.

On July 31 at 4 p.m. Henry Looff and Clarence Olsen with supplies and equipment left Egegik, Alaska for Becherof Lake for the purpose of destroying predatory fish on the salmon spawning grounds during the fall months.

Henry McFadden, Erric Fenno and Alf Christensen were detailed to continue the operation of the weir at Ugashik until the end of the salmon run and then to remove and store the weir for the winter. The crew was then to proceed to the Ugashik Lakes for the purpose of destroying predatory fish on the salmon spawning grounds. Both the Becherof Lake crew and the Ugashik Lake crew are to proceed to the states via Kanatak, Alaska during the later part of September.

Gus Severson, Arthur Mesford, William Shaw and A.M. Gastineau were occupied with the work of storing and conditioning boats and equipment for the winter and removing the marine ways from the water until August 20 and then proceeded to Iliamna Lake to join Dennis Winn on a survey of the spawning areas of that district.

Joe Paulsean was detailed to remain in Bristol Bay during the winter to act as watchman at the Bureau's Naknek station.

The remainder of the Bureau's Bristol Bay crew proceeded to the states on the different cannery ships.

*a. J. Looff.*  
*Warden.*

The following is a report of operations by the Becherof Lake crew dealing with the destruction of predatory fish and the escapement of salmon to the spawning grounds in the Becherof Lake district, by H.B. Looff.

On July 31 at 4 p.m. Henry Looff and Clarence Olsen with supplies and equipment in an 18 foot cod fish dory left Egegik, Alaska for the Becherof Lake district for a survey of the salmon spawning grounds and the destruction of predatory fish. Enroute up the Egegik River a stop was made at the rapids just below the outlet of Becherof Lake and measurements were made for a salmon counting weir location. The party then proceeded to Becheroff Lake and the head of Little Becherof Lake. Along the way stops were made at tributary streams that enter Becherof Lake and Little Becherof Lake and the number of salmon noted. Crooked Creek at the head of Little Becherof Lake was reached August 9 where camp was established and work on predatory fish started. Fishing for dolly varden trout in the streams that enter the head of Little Becherof proved poor due to the great number of salmon and the vast amount of salmon spawn in the creeks. Operations were moved August 13 Ugashik Creek a tributary of the Ugashik Lakes where good results were had. On September 7 the Ugashik Crew joined the Becherof Lake crew at Ugashik Creek and started fishing operations. On September 8 the the Becherof Lake crew returned to the Becherof Lake district for a further survey of the salmon spawning grounds. On September 18 camp was broken and September 19 the party proceeded to Kanatak, Alaska for the trip to the states.

#### ESCAPEMENT OF SALMON TO BECHEROF LAKE SPAWNING GROUNDS:

The escapement of salmon to the Becherof lakes this season proved to be the largest one the writer has had occasion to see and is thought to be the largest for many years, judging from reports received from the oldest resident natives. They report that never before had they seen salmon in such numbers, especially in Becherof Lake proper. The large numbers of fish seen there is thought to be due to the crowded conditions in the large Narrows and Little Becherof Lake. All streams passed enroute to our intended base camp at the head of Little Becherof Lake were found to be literally choaked with salmon. In the streams and at their mouths the salmon were in such large numbers that (thousands) were being crowded out of the water (and being killed thereby). On arrival at Crooked Creek we found the same conditions prevailing there also. An attempt was made to make an estimate of the number of salmon ascending this stream but we gave it up as a hopeless task. The writer feels confident that (fully 10) millions of salmon ascended the Egegik River this season.

#### OPERATIONS ON PREDATORY FISH:

A brief survey was made of several streams in Little Becherof Lake. No hopes of finding someplace where operations on trout could be carried on with some degree of success. But few trout were to be seen and due to the horde s of salmon in the streams predatory work here was given up as a hopeless task. The writer walked to Ugashik Creek draining into th Ugashik Lakes to prospect for t trout there. Here the salmon were found in much smaller numbers and the trout plentiful. Arrangements were made with the caretaker of the Associated Oil Companys Camp for the use of one

of their buildings on Ugashik Creek. Mr. Evens of Kanatak, Alaska had purchased all supplies left by the Associated Oil Company. These supplies were at the oil camp. Arrangements were made with Mr. Evens by which we drew supplies from him at Ugashik Creek and payed them back to him from our stores at Becherof Lake. This arrangement saved us the cost of freighting supplies to Ugashik Creek. Operations on trout were at once started. Hand lines were resorted to with excellent results. Good catches were made throughout our stay at Ugashik Creek ~~August~~ 13 until September 8. After the Ugashik crew had joined ours and had been instructed as to the best method of predatory work the writer and assistant returned to Becherof Lake to make a survey of the spawning grounds there and to prepare our boats for winter storage. We were joined by the Ugashik Party on September 16. The entire party left Becherof Lake on September 19 for Kanatak, Alaska where we caught the SS. Starr on September 24. Arrived at Seattle, Washington October 4.

The season's catch of predatory fish by the Becherof Lake crew was 14,037. 36 only of these were taken in Becherof waters; the rest in Ugashik Creek. Equipment was stored for the winter in care of Mr. Frank Stevens at Becherof Lake.

Dolly Varden trout were found spawning from the later part of August until the later part of September. Invariably they were spawning in the small side streams of the main streams and in most cases near their source.

#### COUNT OF SALMON THROUGH THE UGASHIK WEIR:

The counting of salmon through the weir during the commercial fishing season was carried on by Henry McFadden, foreman, P. E. Hamm and Robert Larsen. At the end of the commercial fishing season P. E. Hamm and Robert Larsen were replaced by Erric Fenno and Alf Christensen and the weir was operated until the end of the salmon run August 12. The first salmon passed through the weir on June 15 before all of the counting gates were completed. From that date until the 12 of August salmon appeared at the weir steadily and passed through the counting gates readily. At no time was there crowding below the weir. The following table shows the day by day count of salmon by specie that passed through the weir during the season.

<u>Month</u>	<u>Date</u>	<u>Reds</u>	<u>Chums</u>	<u>Pinks</u>	<u>Kings</u>	<u>Cohoos</u>
June	. . . 15 . . .	5				
"	. . . 16 . . .	4				
"	. . . 17 . . .	0				
"	. . . 18 . . .	72				
"	. . . 19 . . .	9				
"	. . . 20 . . .	91				
"	. . . 21 . . .	567				
"	. . . 22 . . .	442				
"	. . . 23 . . .	725				
"	. . . 24 . . .	170				
"	. . . 25 . . .	0				
"	. . . 26 . . .	41				

Checked for Ugashik weir

<u>Month</u>	<u>Date</u>	<u>Reds</u>	<u>Chums</u>	<u>Pinks</u>	<u>Kings</u>	<u>Cohoes</u>
June	27	68				
"	28	47				
"	29	3625				
"	30	<u>2307</u>				
June	total	8173				
July	1	1910				
"	2	1648				1
"	3	584				
"	4	1702				
"	5	0				
"	6	2354				
"	7	8595				
"	8	14105	4			
"	9	61908	3			
"	10	<del>66773</del>	20			2
"	11	40087				
"	12	17757	3			1
"	13	7961				2
"	14	16118	1			
"	15	26597	13			4
"	16	51779	25			8
"	17	103006				
"	18	56372	9	3		3
"	19	65943	1			1
"	20	76274	10	11		
"	21	53928	17			3
"	22	33534	30			6
"	23	<u>18356</u>	4	2		
"	24	20668	14			3
"	25	6491	4			1
"	26	1503	2			2
"	27	5627	9			
"	28	1424	2			
"	29	113				
"	30	532	1			
"	31	<u>2094</u>	<u>3</u>			
July	total	759743	175	16		35
August	1	7629	72			1
"	2	650				1
"	3	2565	2			3
"	4	<u>1267</u>	2			2
"	5	2424	7	1		2
"	6	1006	6			1
"	7	1059	5			1
"	8	1268	4			
"	9	625	5			18
"	10	245				2
"	11	112				
"	12	<u>9</u>				<u>1</u>
August	total	18859	103	1		11
Grand total of season		786775	278	17		46

REMOVAL AND STORAGE OF WEIR FOR WINTER:

On August 12 the work of dismantling the weir was started. All material was taken ashore and stored for the winter on the west bank of the river. The scow was taken out of the water on the west bank, turned over and covered with canvass. All tools were taken down river to Ugashik and stored for the winter at the cannery of the Red Salmon Canning Company. All work at the weir was completed August 25 and at 11:40 on that date the Ugashik crew broke camp at the weir site and started on the trip to the headwaters of the Ugashik Lakes for the purpose of destroying predatory fish on the salmon spawning grounds.

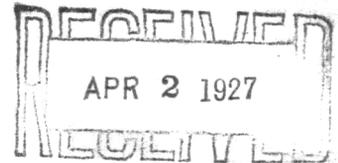
OPERATIONS ON PREDATORY FISH BY UGASHIK CREW:

On August 25 at 3:30 p.m. the party reached the rapids between the upper Ugashik Lake and lower Ugashik Lake where camp was established. Here fishing for Dolly Varden trout was carried on with good results until August 29 when camp was moved to to the mouth of Ugashik Creek a tributary stream that enters the head of the upper Ugashik Lake. August 30 to September 6 was devoted to moving equipment from the mouth of Ugashik Creek, up Ugashik Creek to the camp of the Becherof Lake crew. On September 7 fishing for dolly varden trout was started in Ugashik Creek with hand line. Results were excellent and were continued until September 16 when equipment was stored and the trip to Kanatak, Alaska was started for transportation to the states. As a result of our operations 5,650 dolly varden trout were destroyed on the salmon spawning grounds of the Ugashik Lakes by the Ugashik crew.

Respectfully,

A. J. Looff.  
Warden, Alaska Service.

DEPARTMENT OF COMMERCE  
BUREAU OF FISHERIES



Noted BY  
Helm



Commissioner of Fisheries,  
Washington, D. C.

Sir:

There follows a summary of operations in the Cook Inlet District, for the season 1926.

Departure for Cook Inlet from our winter quarters at Cordova, was made April 8th, on the U.S. F.S. Kittiwake. Enroute we called at Seward where the vessel's fuel tanks were filled to capacity with oils purchased from the Standard Oil Company station. Leaving Seward April 10th, we arrived at Seldovia, Cook Inlet, the following day. A general survey was made of the contemplated fishing operations throughout the district and arrangements were made with local parties regarding temporary employment for the season.

The work of marking stream mouths was started April 13th. Beginning with the closed area, Indian Island to one-half mile south of Fox Creek, Kachemak Bay, a marker was placed on Indian Island. The marker south of Fox Creek having been erected during the season of 1925. After completing the marking of all known Salmon Streams, in Kachemak Bay, we shifted to the outer coast, Point Gore to Windy Bay. Very poor progress was made in this section owing to continued rough weather and inadequate small boat facilities for prosecuting the work along the rough outside coast.

MARKERS ESTABLISHED

The following streams and closed areas were marked:

Closed area, Indian Island to Fox Creek, Kachemak Bay.  
Sadie Cove Stream, at head of Sadie Cove, East shore of Cook Inlet.  
Tutka Bay Lagoon, East shore of Kachemak Bay.  
Wakalof Bay Lagoon, East shore of Kachemak Bay.  
Barabra River, East shore of Kachemak Bay.  
Crescent River, West side Cook Inlet.  
Head of West Arm, Port Dick, two streams.  
Rocky River, Rocky Bay, outer Coast.  
Windy Bay, stream at head of Bay.

PATROL MAINTAINED

A general patrol was maintained with the U.S. F.S. Kittiwake, covering the entire district. Additional patrol work was done in the vicinity of Kachemak Bay, with a small chartered gas boat, owned and operated by Stream Guard Jack Tansy. Sections from Ninilchik to Point Possession were covered with a power dory, property of the Bureau. This patrol was carried on by Stream Guard, H. L. Worcester.

COMPLAINTS AND PROSECUTIONS

Acting on information given by Stream Guard, Jack Tansy, and others, investigation was made of alleged illegal herring fishing by the crews of gas boats "Commodore" and "St. Nicholas", operating for S. Feinson, herring packer at Seldovia. Sufficient definite evidence that would support prosecution was obtained and the alleged violation was reported to the Assistant District Attorney at Anchorage, Alaska.

(A separate report was made to the Bureau in connection with the foregoing).

This case was investigated personally by the U. S. Attorney, whereupon the writer was instructed to seize the gas boats involved and arrest the masters of these vessels, also S. Feinson, operator of the saltery. The seized boats and parties arrested were immediately turned over to the Department of Justice at Seldovia, Alaska. The United States Commissioner, placing the defendants under bond to appear before the U. S. District Court for the Third Division of Alaska.

The gas boats, "Commodore" and "St. Nicholas", after being held for twelve days by the Department of Justice, were released under bond in the amount of twenty six thousand dollars, (\$26,000.00).

The defendants in this case pleaded guilty as charged, at the October term of the United States District Court, held at Valdez, Alaska, and were fined the sum of \$100.00 each, which was paid. The gas boats "Commodore" and "St. Nicholas", were released by the same Court.

STREAM IMPORVEMENT AND INVESTIGATION

The most important piece of stream improvement work was done at Chinik Creek, Kamashak Bay. Two hundred pounds of giant blasting powder was used in cutting a channel at the side of a steep fall, at the mouth of this stream, making it possible for Salmon to enter the stream on the average small tides. However, considerably more blasting work should be done at this point in order to confine all of the flow of water through one channel.

Kalgin Island Stream was cleared out and the small flow of water was confined to the center of the stream bed, thereby permitting a large number of Red Salmon to readh the spawning grounds. Wash gravel and drift wood at times completely block the mouth of this stream, this situation was taken care of by the Stream Guard stationed there, the mouth of the stream being cleared each day.

Streams at the head of Knik Arm were investigated by temporary warden, Mr. J. E. Wilson. In this locality several barriers were found across the stream, which were maintained by local resident farmers. These barriers were ordered removed and the various parties were apprized of the Fishery Regulations pertaining to such obstructions in Salmon Streams.

The writer investigated Russian River Falls, tributary to Kenai Lake, June 9th. Red Salmon were ascending these falls at this time, without serious difficulty, although at a lower stage of the water during the later part of

STREAM IMPROVEMENT AND INVESTIGATION (Contd)

part of the Salmon run, it is quite possible that Salmon would experience some difficulty in getting over these falls. However, the bulk of the Red Salmon run should be above the falls prior to the low stage of water.

While in the Kenai Lake district, Mr. Chas. Lean, and Mr. Duncan Little, local residents, reported beaver dams blocking the stream emptying Jean Lake. This stream flows in to Kenai River, between Skelak and Kenai Lakes. Mr. Lean and Mr. Little were employed to remove these obstructions.

Streams tributary to Tustumena Lake were investigated during the early part of September. The mouths of a few streams in this section were partly blocked by drift wood and gravel, thrown up by the action of the waves from the Lake, although as a whole, the streams were in good order.

ESCAPEMENT

Temporary improvised weirs were established in Kalgin Island Stream, East side of Kalgin Island and at Chinik Creek, Kamishak Bay. These weirs were constructed of miscellaneous drift wood, which was picked up on the beach.

The total count of Red Salmon at Kalgin Island Stream 48,315.  
The total count of Red Salmon at Chinik Creek 32,275

Investigations made on the spawning grounds tributary to Tustumena Lake at the head of Kasilof River, showed a bountiful seeding. The escapement noted at Russian River Falls, Kenai Lake District seemed to be adequate. Investigations made by temporary warden Mr. J. E. Wilson, covering various streams tributary to Knik Arm, indicate a good escapement, although owing to the low stage of water in this section, Salmon experienced serious difficulty in reaching the spawning beds.

Streams tributary to Kachemak Bay, Port Graham, Koyuktolik Bay, (Dog<sup>w</sup> Fish Bay), Seldovia Bay and other lower Cook Inlet areas, showed a very large escapement of Pink and Chum Salmon.

STREAM GUARDS AND OTHER TEMPORARY EMPLOYEES

The following temporary force was employed during the season:

Jack Tansy,	Stationed at English Bay Stream and on Salmon and herring patrol in the vicinity of Kachemak Bay, June 1st to September 25th, On herring patrol November 15th to December 31st.
James Hart,	Stationed at Chinik Creek and Seldovia River, June 3rd to August 10th.
H. L. Worcester,	On patrol Ninilchik River to Point Possession, May 21st to August 10th.
Alex Lind,	Stationed at Kalgin Island Creek, May 21st to September 5th.

STREAM GUARDS AND OTHER TEMPORARY EMPLOYEES, (Contd)

J. E. Wilson, Employed on powder work Chinik Creek and investigating streams tributary to Knik Arm, July 1st to August 21st.

Matt Yuth, Assistant aboard "Kittiwake", May 14th to 31st; June 1st to 8th; August 1st to 21st.

Chas. Lean, Removing beaver dams, Jean Creek, July 26th to 31st.

Dunk Little, Removing beaver dams, Jean Creek, July 28th to 31st.

Andrew Berg, Collecting salmon scales at Kenai River, July 10th to 12th. Assisting with investigation of spawning grounds, Tustumean Lake, September 1st to 15th.

Alex Wilson, Assisting Jack Tansy on patrol, Kachemak Bay area, July 1st to 27th.

Eric Issacson, Assisting with catching salmon for taking scales, July 7th, at Kasilof River.

John Petroff, Removing obstruction at mouth of Indian Creek, 3 days.

Arlo Fulk, Temporary Engineer, "Kittiwake", July 1st and 2nd.

CANNERY OPERATIONS

There were twelve cannery concerns operating in this district, as follows:

<u>NAME OF OPERATOR</u>	<u>LOCATION OF PLANT</u>
Libby, McNeill and Libby	Kenai River
Northwestern Fisheries Company	" "
Gorman and Company	Anchorage
Albin Nordin	Clam Gulch, East Shore Cook Inlet
W. A. Keller	Deep Creek, " " " "
North Coast Packing Company	Ninilchik
Cook Inlet Packing Company	Seldovia
Ralph Sparks	Halibut Cove
Alaska Year Round Canneries, Inc.	Seldovia
Fidalgo Island Packing Company	Port Graham
Alaska General Fisheries	Anchorage
Bogue and Lippincott	Seldovia

NEW CONCERNS (Cannery Operators)

Four of the above are new concerns, as follows:

- Bogue and Lippincott,                      small hand cannery at Seldovia, built primarily for packing clams.
- Albin Nordin,                              small hand outfit operated in a tent, at Clam Gulch, East shore Cook Inlet.
- Ralph Sparks,                              small home outfit at Halibut Cove.
- Alaska General Fisheries,              a one line cannery operated in the Ocean Dock Warehouse at Anchorage. This warehouse formerly used as a saltery by J. A. Magill.

CANNED SALMON PACK

The combined canned salmon pack for this district basis 1 lb. cans, 48 to the case, as per preliminary reports, as follows:

Red or Sockeye - - - - -	121,830 Cases	
Coho or Silver - - - - -	18,799 "	
Chum or Ketah - - - - -	7,120 "	
King or Spring - - - - -	14,532 "	
Pink or Humpback - - - - -	31,223 "	Total all grades, 193,504 Cases.

CANNED CLAM PACK

Basis 48 - 14 oz. Eastern Oyster cans to the case:

Whole Butter Clams - - - - -	42 Cases	
Minced Butter Clams - - - - -	7 "	Total 49 Cases.

SALT SALMON AND MILD CURE OPERATORS

The following concerns engaged in salting and mild curing salmon:

<u>NAME OF OPERATOR</u>	<u>LOCATION OF PLANT</u>
Peterson and Waterbury	Peterson Bay
Leiren and Company	Homer Spit
E. A. Gissberg	Anchor Point
W. E. Ludy	Portlock
Wm. Babis	Halibut Cove
Alaska General Fisheries	Anchorage
A. E. Norstedt	Floating Scow
F. I. Munson	Halibut Cove
Wick and Company	Starichkof Beach
Tollek Ollestad	McDonald Bay
Ralph Sparks	Halibut Cove

SALT SALMON AND MILD CURE PACK

<u>SPECIE</u>	<u>CURE</u>	<u>SIZE BBLs</u>	<u>NUMBER OF BBLs</u>	
Red, Whole	hard salt	200 lb.	251	
Coho, "	" "	"	50	
King, "	" "	"	21	
Pink, "	" "	"	8	Total 330
Coho, Bellies	" "	"	8	
Chum, "	" "	"	86	
Pink, "	" "	"	10.5	Total 104.5
King	" "	800 lb.	10	Total 10
King	mild cure	800 lb.	107	Total 107

IDLE PLANTS (Salmon)

The following salmon canneries were not operated during the season 1926:

Arctic Packing Company,	At English Bay
Snug Harbor Cannery,	At Chisik Island

FISHING GEAR EMPLOYED FOR SALMON

No. of Hand Traps Operated - - - - -	42	
No. of Deep Water Traps - - - - -	30	Total all Traps - - - 72
No. of Beach Seines - - - - -	10	Total No.Fathoms - - 5725
No. of Gill Nets - - - - -	239	Total No.Fathoms - - 5711

INDEPENDENT FISHING GEAR

Of the above enumerated fishing gear, the following is private owned:

No. of Hand Traps - - - - -	20	
No. of Deep Water Traps - - - - -	1	Total all Traps - - - 21
No. of Beach Seines - - - - -	8	Total No.Fathoms - - 605
No. of Gill Nets - - - - -	16	Total No.Fathoms - - 400

SALMON RUN

The salmon run as a whole started approximately ten days earlier than usual, and a steady run continued up to the time of the seasonal closed period, August 10th, making it possible for the small packers with limited equipment to secure unusual large packs. King salmon were taken along Starichkof Beach, North of Anchor Point, during the first week in May. Some canning was done by the North Coast Packing Company, at Ninilchik, May 9th.

The first of the main red salmon run showed up along Bluff Point, Lower Cook Inlet, July 1st and along the Upper Inlet, about July 5th. A good run of Pink and Chum salmon followed with the reds. Areas in the vicinity of Kachemak Bay, Seldovia Bay, Port Graham and lower Inlet Points, were especially well supplied with the Pink and Chum grades.

HERRING FISHERY

The summer herring of a quality suitable for packing showed up much later than usual, in this district. A few small catches were taken at Port Chatham on the opening of the season, July 15th. These however, were not considered of a quality suitable for packing. There were no herring taken at Koyuktolik Bay (Dog Fish Bay). This Bay was a large producer during the early season of 1925.

Herring in quantities suitable for packing, did not show up until the latter part of August and again after the middle of September. These catches lasted only a few days at a time and were taken in Kachemak Bay. The winter catch with gill nets was very limited, although a large amount of gear was operated.

NUMBER OF HERRING CONCERNS OPERATING AND GEAR USED

There were fifty concerns operating for herring in this district. Total fishing gear employed, as follows:

Total Number Gill Nets Operated - - - -	301	Total No. Fathoms - -	15320
Total Number Purse Seines Operated - -	23	" " "	3750

HERRING PACK

Total Herring Pack - - - - - 9,026,550 lbs., all cures.

Page 8, The Commissioner.

In accordance with instructions received from the Juneau Office, the U.S. F.S. "Kittiwake", was layed up for the winter at Seldovia, October 28th. The crew with the exception of the Master and Engineer, was discharged. The writer being detailed to the Seattle Office in connection with the building of the U.S. F.S. "Teal". Departure from Seldovia was made on the Stmr. "Lackinaw", November 1st, arriving at Seattle November 13th, on the Stmr. "Alaska".

Mr. Jack Tansy was detailed to supervise the winter herring fishery from November 15th to the close of the season, December 31st.

Respectfully,

A handwritten signature in cursive script that reads "R. L. Cole".

Master, U.S.F.S. "Kittiwake".