

TAG RETURNS IN 1983 -
UNITED STATES HIGH SEAS SALMON TAGGING

by

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This document reports all recoveries of U.S. high seas salmon tags returned between 13 October 1982 (the date of our last document) and 30 September 1983. There were 24 returns; 8 were 1983 recoveries of 1983 releases, 6 were 1983 recoveries of 1982 releases, 8 were late 1982 recoveries of 1982 releases, 1 was a late 1980 recovery of a 1980 release, and 1 was a late 1979 recovery of a 1977 release.

Recoveries of tagged salmon released in 1983 are listed in Table 1, and illustrated in the top panel of Fig. 1. Tagging in 1983 was done on the TINRO research vessel NPS Nemirov, as part of U.S.-U.S.S.R. cooperative high seas salmonid research. All recoveries to date from 1983 releases were made on the high seas, by the Japanese mothership fishery and a Japanese research vessel. Seven of the eight returns (2 sockeye and 5 pink salmon) were from releases in the North Pacific Ocean in area E7548, recovered slightly northwest of the release sites, in areas E6550, E7050, and E7052. One sockeye salmon was released in the Bering Sea and recovered about 5^o-longitude farther west. The time between release and recovery for seven of these returns ranged from 7 to 25 days.

Current year recoveries of tagged salmon released in 1982 consisted of 4 sockeye and 2 chum salmon (Table 2, bottom panel Fig. 1). The chum recoveries were made by the Japanese mothership fishery. The recoveries of sockeye salmon were made by inshore fisheries in Bristol Bay and Cook Inlet, Alaska, from releases in area 8050, and confirm the known origins of immature sockeye in the central Aleutian Island area in mid-summer.

There was a total of 10 late returns from releases in 1977 (1), 1980 (1), and 1982 (8), listed in Table 3 and illustrated in Fig. 2. Four of these were of chum salmon released in areas E7546 and 8050. One of these, a chum released at $47^{\circ}56'N$, $176^{\circ}23'E$ and recovered in Sidimi Bay near Vladivostok, U.S.S.R., provides the first information on ocean distribution of chum from the southern Primore region of the U.S.S.R. Five of the late recoveries were of coho salmon released and recovered in 1982, and three of them provide information on origins of coho in the area south of $46^{\circ}N$, between $175^{\circ}E$ and $175^{\circ}W$. These three fish were recovered in fisheries of West Kamchatka (Bolshaya River), East Kamchatka (Paratunka River), and Bristol Bay, Alaska (Nushagak River). Interestingly, these three recoveries resulted from releases on two consecutive days within a few miles of each other. The Nushagak River recovery marks the first proven occurrence of North American coho in the area of the pre-1978 Japanese landbased driftnet fishery (two other North American, specifically western Alaska, recoveries have resulted from releases just outside of the old landbased fishery area). The other late report was of a pink salmon released in area E6544 (at $45^{\circ}26'N$, $169^{\circ}14'E$) and recovered in the Ozernaya River of southwest Kamchatka. This recovery extends eastward the known range of west Kamchatka pink salmon (previously $44^{\circ}28'N$, $164^{\circ}31'E$).

Table 1. 1983 recoveries of 1983 releases.

Tag no.	Species	Release/recovery	Date (mo/day)	INPFC area	N. lat.	Long.	Gear	Set no.	Dir. net open	Age ¹	Fork length (mm)	Sex	Body weight (Kg)	Remarks
I-336	Sockeye ²	At release	06/19	E7548	48°13'	175°38'E	Purse seine	N-17	Round haul	2.1	290	-	-	High seas general area 32
		At recovery	-	-	-	-	Drift gillnet	-	-	-	-	-	-	
I-658	Pink	At release	06/24	E7548	48°20'	179°01'E	Purse seine	N-27	Round haul	0.1	410	-	-	-
		At recovery	07/12	E6550	50°31'	167°50'E	Drift gillnet	-	-	-	-	-	-	-
I-686	Pink	At release	06/25	E7548	49°58'	179°16'E	Purse seine	N-30	Round haul	0.1	425	-	-	-
		At recovery	07/07	E7052	52°24'	171°26'E	Drift gillnet	-	-	-	-	-	-	-
I-753	Pink	At release	06/26	E7548	49°56'	177°24'E	Purse seine	N-33	Round haul	0.1	440	-	-	-
		At recovery	07/03	E7050	51°28'	174°03'E	Drift gillnet	-	-	-	-	-	-	-
I-778	Pink	At release	06/26	E7548	49°56'	177°24'E	Purse seine	N-33	Round haul	0.1	400	-	-	-
		At recovery	07/10	E7050	50°15'	172°18'E	Drift gillnet	-	-	-	-	-	-	-
I-835	Pink	At release	06/27	E7548	49°57'	175°16'E	Purse seine	N-35	Round haul	0.1	420	-	-	-
		At recovery	07/12	E7050	50°59'	172°06'E	Drift gillnet	-	-	-	-	-	-	-
I-852	Sockeye	At release	06/27	E7548	49°57'	175°16'E	Purse seine	N-35	Round haul	R.2	430	-	-	-
		At recovery	07/22	E7050	50°00'	174°00'E	Drift gillnet	-	-	-	530	-	0.8	-
J-019	Sockeye	At release	07/01	E7554	54°22'	179°33'E	Purse seine	N-46	Round haul	2.2	495	-	-	-
		At recovery	07/16	E7054	54°47'	174°12'E	Drift gillnet	-	-	-	-	-	-	-

¹"R" means regenerated freshwater portion of scale.

²Tag I-336 was recovered by a catcher boat of the Japanese mothership fishery, and was returned on a pink salmon, 460 mm long, to a U.S. observer. The scale taken at release was examined, and the original identification of sockeye was confirmed. Inquiry revealed that the tag on the pink salmon was attached by a clip near the anterior edge of the dorsal fin, whereas the tag was placed on the sockeye by a pin behind the dorsal fin. We report the recovery as the sockeye must have been captured, although the date and exact location are unknown.

Table 2. 1983 recoveries of 1982 releases.

Tag no.	Species	Release/recovery	Date (mo/day)	INPFC area	N. lat.	Long.	Gear	Set no.	Dir. net open	Age ¹	Fork length (mm)	Sex	Body weight (Kg)	Remarks
K-139	Chum	At release	05/29	E7044	44°37'	173°50'E	Purse seine	L-10	SE	0.2	430	-	-	-
		At recovery	07/16	E7050	51°13'	173°23'E	Drift gillnet	-	-	-	506	M	1.37	-
K-302	Chum	At release	06/14	E7546	47°35'	176°27'E	Purse seine	L-17	E	0.2	445	-	-	-
		At recovery	06/15	E7048	49°41'	173°40'E	Drift gillnet	-	-	-	-	-	-	-
K-856	Sockeye	At release	07/15	W8050	50°23'	176°32'W	Purse seine	L-51	E	1.2	485	-	-	-
		At recovery	07/03	-	58°45'	158°40'W	Drift gillnet	-	-	-	-	-	-	Nushagak District, Alaska
K-872	Sockeye	At release	07/15	W8050	50°23'	176°32'W	Purse seine	L-51	E	2.2	505	-	-	-
		At recovery	07/10	-	58°12'	157°31'W	-	Gillnet	-	-	-	-	-	Egegik R., Alaska (N. Marker)
K-916	Sockeye	At release	07/15	W8050	50°23'	176°32'W	Purse seine	L-51	E	1.2	475	-	-	-
		At recovery	07/27	-	60°33'	151°16'W	-	L-51	-	-	-	-	-	Kenai, Alaska
L-022	Sockeye	At release	07/16	W8050	51°05'	176°32'W	Purse seine	L-55	E	1.3	495	-	-	-
		At recovery	07/11	-	58°57'	158°29'W	Drift gillnet	-	-	-	-	-	-	Nushagak R., Alaska (west channel)

¹"R" means regenerated freshwater portion of scale.

Table 3. Late returns, reported after 13 October 1982.

Tag no.	Species	Release/recovery	Date (mo/day)	INPFC area	N. lat.	Long.	Gear	Set no.	Dir. net open	Age ¹	Fork length (mm)	Sex	Body weight (Kg)	Remarks
A. Late 1982 recovery of 1982 releases														
K-556	Coho	At release	06/22	W8044	45°23'	177°25'W	Purse seine	L-32	SE	1.1	440	-	-	-
		At recovery	09/21	-	52°45'	158°25'E	-	-	-	-	-	500	-	-
K-647	Coho	At release	06/23	W8044	45°25'	177°16'W	Purse seine	L-35	SE	2.1	480	-	-	-
		At recovery	09/01-10	-	52°36'	156°16'E	-	-	-	-	-	-	-	Bolshaya R. W. Kamchatka
K-784	Coho	At release	07/05	E7546	46°58'	176°54'E	Purse seine	L-38	SE	R.1	580	-	-	-
		At recovery	08/18	-	52°36'	156°16'E	-	-	-	-	-	-	-	Bolshaya R., W. Kamchatka
L-223	Coho	At release	07/21	W8050	51°16'	176°25'W	Purse seine	L-63	E	R.1	580	-	-	-
		At recovery	08/28	-	53°04'	158°34'E	-	-	-	-	-	-	-	Avacha R. (mouth), E. Kamchatka
L-236	Chum	At release	07/21	W8050	51°16'	176°25'W	Purse seine	L-63	E	0.2	595	-	-	-
		At recovery	11/05	-	43°56'	144°41'E	Trap net	-	-	-	650	M	3.0	Shari (Okhotsk coast of Hokkaido)
N-888	Chum	At release	06/14	E7546	47°56'	176°23'E	Purse seine	G-11	SE	0.3	575	-	-	-
		At recovery	10/10	-	43°07'	131°55'E	-	-	-	-	-	F	-	Sidimi Bay, near Vladivostok
N-953	Chum	At release	06/14	E7546	47°52'	176°24'E	Purse seine	G-12	E	0.2	475	-	-	-
		At recovery	09/30	-	42°58'	143°58'E	Trap net	-	-	-	525	F	1.8	Atsunai (Pacific coast of Hokkaido, near the mouth of the Tokachi R.)

Table 3. Late returns, reported after 13 October 1982 - cont'd.

Tag no.	Species	Release/recovery	Date (mo/day)	INPFC area	N. lat.	Long.	Gear	Set no.	Dir. net open	Age ¹	Fork length (mm)	Sex	Body weight (Kg)	Remarks
<u>A. Late 1982 recovery of 1982 releases - cont'd.</u>														
0-592	Coho	At release	06/23	W8044	45°24'	177°19'W	Purse seine	G-30	SE	2.1	570	-	-	-
		At recovery	09/20	-	59°22'	157°30'W	-	-	-	-	-	-	-	Nushagak R. (Ekwok, Alaska)
<u>B. Late 1980 recovery of 1980 releases</u>														
G-900	Pink ²	At release	06/21	E6544	45°26'	169°14'E	Purse seine	G-8	Round haul	0.1	485	-	-	-
		At recovery	-	-	52°36'	156°17'E	-	-	-	-	-	-	-	Ozernaya R., West Kamchatka
<u>C. Late 1979 recovery of 1977 releases</u>														
B-997	Chum	At release	07/31	W8050	51°28'	176°25'W	Purse seine	C-26	E	0.1	340	-	-	-
		At recovery	07/12	-	58°43'	157°04'W	-	-	-	-	-	-	-	Naknek R. (mouth), Alaska

¹"R" means regenerated freshwater portion of scale.

²Original recovery information mentioned that this was a sockeye salmon recovered in 1981. Examination of the scale taken at release verified the original identification of pink salmon, and subsequent correspondence from TINRO indicated that it could have been a pink salmon recovered in 1980, as must have been the case.

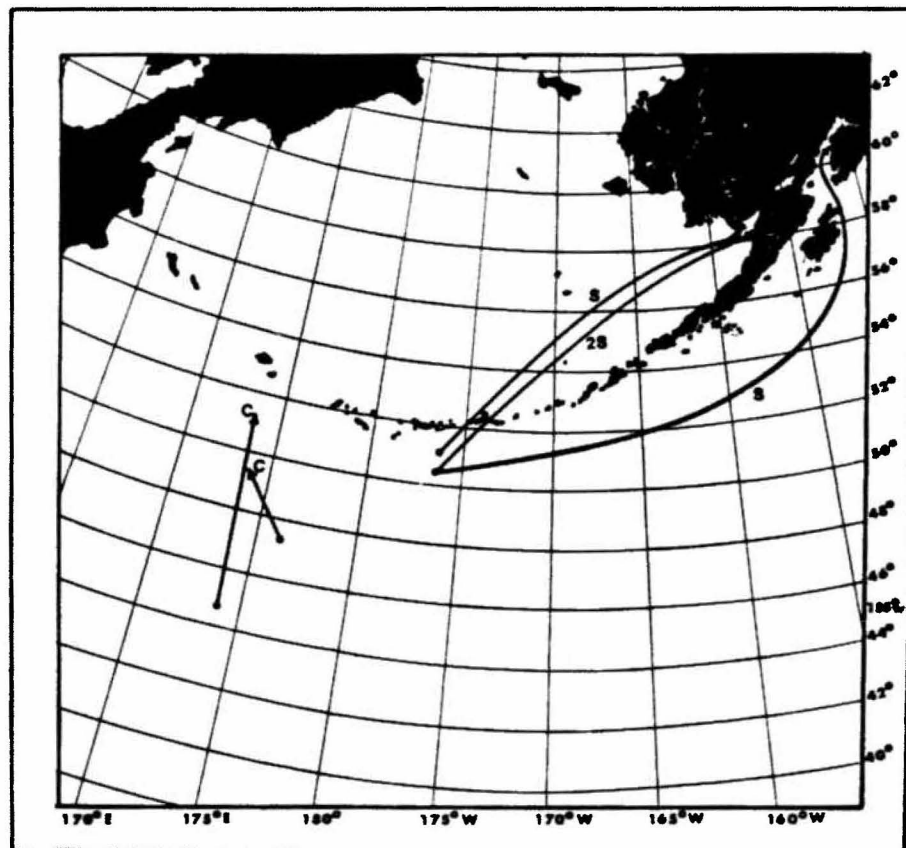
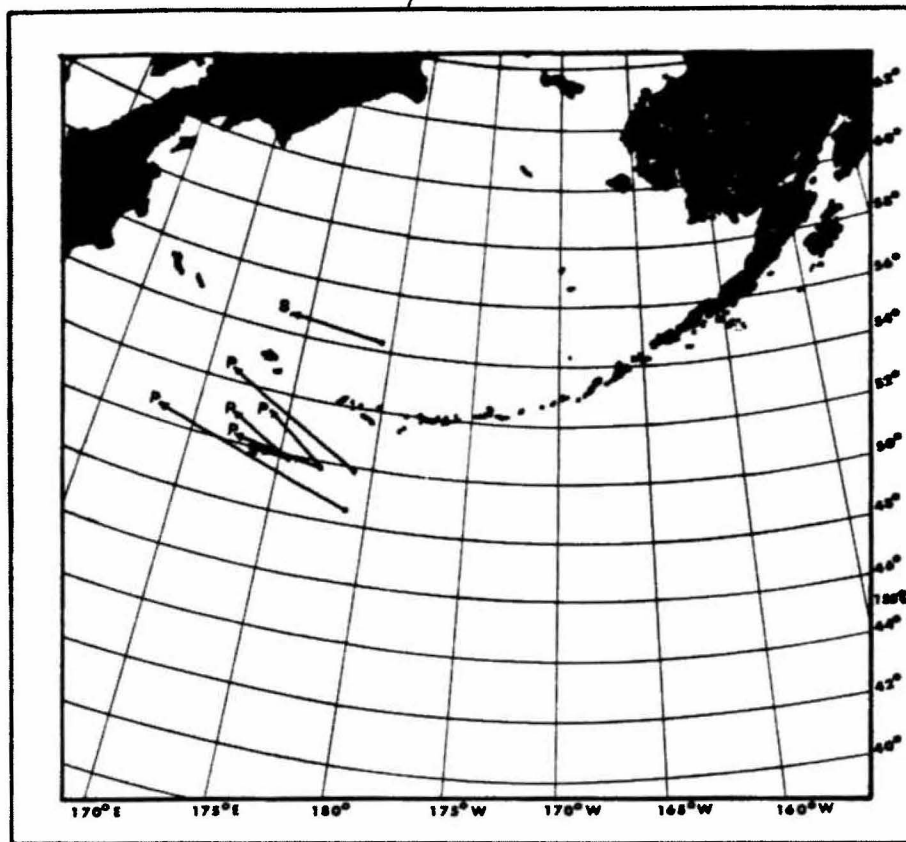


Fig. 1. Release and recovery locations for 13 tagged salmon recovered in 1983. Top figure shows locations for fish tagged in 1983 and recovered in 1983 (i.e., fish in Table 1, less one fish that could not be included because exact recovery location is not known), and bottom figure shows fish released in 1982 and recovered in 1983 (Table 2). Symbols define species: S = sockeye, C = chum, P = pink salmon.

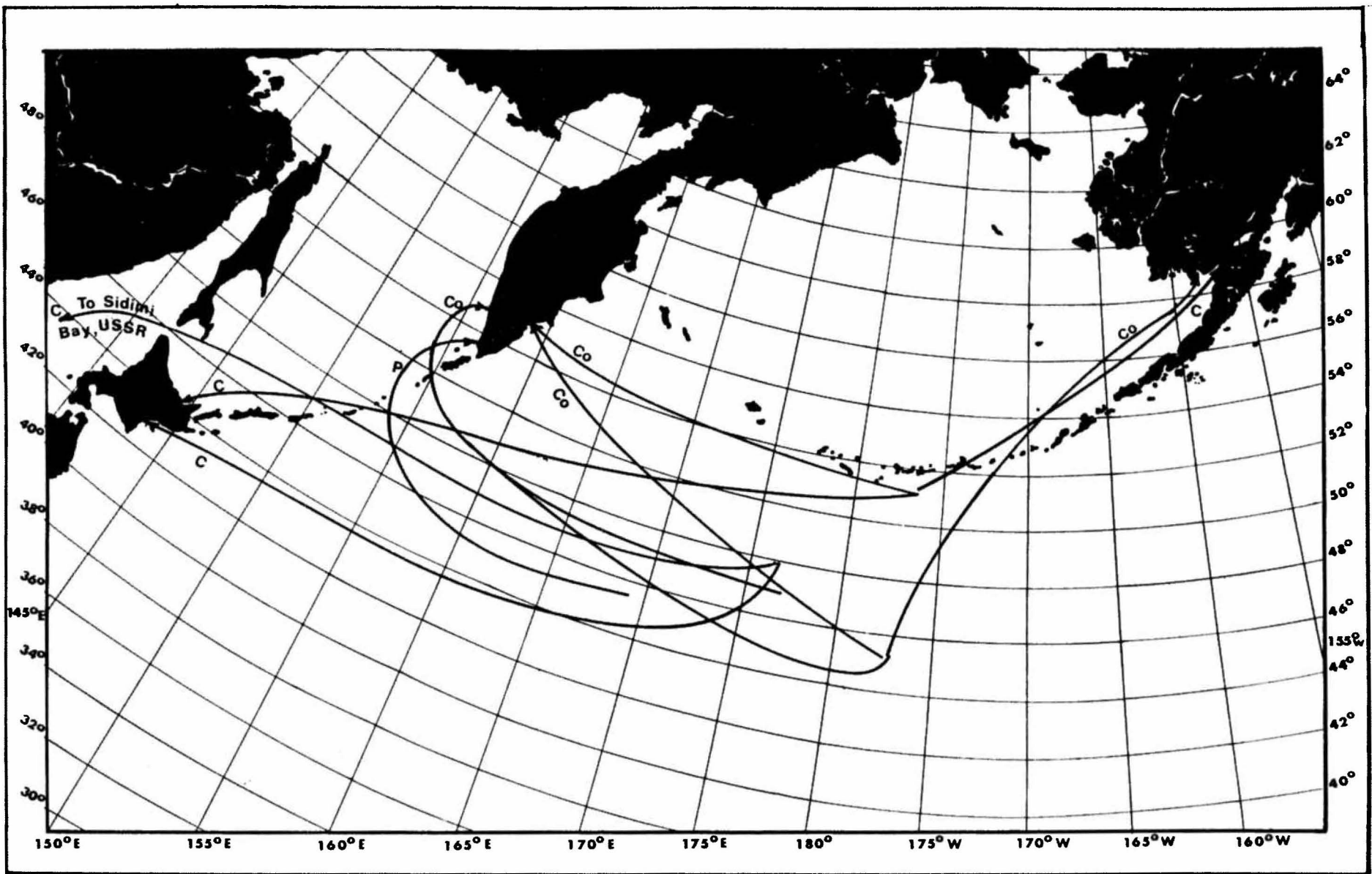


Fig. 2. Release and recovery locations for 10 tagged salmon recovered before 1983 (from Table 3). Symbols near recovery location define species: C = chum, Co = coho, P = pink salmon.