

FRI-UW-9618
September 1996

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by

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**Final Report to National Marine Fisheries Service
NOAA Contract 50ABNF400001**

NPAFC
Doc. 193
Rev. _____

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submitted to the

NORTH PACIFIC ANADROMOUS FISH COMMISSION

by

THE UNITED STATES OF AMERICA

October 1996

THIS PAPER MAY BE CITED IN THE FOLLOWING MANNER:

Myers, K.W., and R.V. Walker. 1996. Tag returns in 1996 - international high-seas salmon tagging. (NPAFC Doc. 193.) 5 pp. FRI-UW-9618. University of Washington, Fisheries Research Institute, Box 357980, Seattle, WA 98195-7980.

ABSTRACT

The Fisheries Research Institute (FRI), School of Fisheries, University of Washington, serves as the processing center for all North American recoveries of Canadian, Japanese, Russian, and U.S. high-seas salmonid (*Oncorhynchus* spp.) tags and recoveries of U.S. high-seas salmonid tags by all nations. By agreement with the National Research Institute of Far Seas Fisheries, Fisheries Agency of Japan (FAJ), FRI also reports recoveries of tagged salmon released during cooperative Japan-U.S. high-seas salmon tagging. An all-agency (Canada, Japan, Russia, and United States) high-seas tag release and recovery computer database (1954-present), maintained and updated by FRI, is available upon request from the parties of NPAFC, so that all member nations can have access to a common database. From 1 September 1995 through 31 August 1996, eight Japan-U.S. tags were returned to FRI (1 sockeye, 2 chum, 4 pink, and 1 coho salmon). These fish were released in 1995 and 1996 during international cooperative tagging operations aboard Japanese research vessels in the central North Pacific, Bering Sea, and Gulf of Alaska in June and July. The tagged fish were recovered in coastal areas around the Pacific Rim from Ketchikan in southeastern Alaska to Miyagi Prefecture on the Pacific coast of Honshu Island, Japan. The recovery of a tagged sockeye salmon in a terminal fishery near the Bear River, Alaska, was a northwestern extension of the known range of North Alaska Peninsula sockeye salmon in the Bering Sea. A tagged coho salmon released south of the Alaska Peninsula in late June and recovered over two months later in the Niukluk River, Norton Sound, Alaska, represents the northernmost coho stock recovered during 41 years of high-seas salmon tagging. All of the recovered salmon were double-tagged with both FAJ and FRI external disk tags. The use of tags with a U.S. address may improve the return of FAJ tags by North American fishermen. In 1997, FRI plans to design a new high-seas disk tag that will make the fish readily identifiable as a salmon tagged and released for international cooperative high-seas tagging research.

INTRODUCTION

This is a report of all high-seas salmon tags returned to the Fisheries Research Institute (FRI), School of Fisheries, University of Washington from 1 September 1995 to 31 August 1996. FRI serves as a processing center for all North American recoveries of Canadian, Japanese, Russian, and U.S. high-seas salmon (*Oncorhynchus* spp.) tags and recoveries of U.S. high-seas salmon tags by all nations. By agreement with the National Research Institute of Far Seas Fisheries, Fisheries Agency of Japan (FAJ), FRI also reports recoveries of tagged salmon released during cooperative Japan-U.S. high-seas salmon tagging. Processing center activities include (1) advertising for tag recoveries, (2) returning tags and original recovery information to the appropriate release agencies, (3) mailing information on tag recoveries and a tag reward to fishermen and processors, (4) maintaining a file of original correspondence, data, and tags of all recoveries of U.S., U.S.-Russia, and Japan-U.S. tags (1956-present), (5) maintaining and updating an all-agency tag release and recovery computer database, and (6) reporting all recoveries of U.S., U.S.-Russia, and Japan-U.S. high-seas tags to the North Pacific Anadromous Fish Commission (NPAFC). In addition, FRI scientists periodically prepare reports and maps based on historical recoveries of high-seas tags that describe the known ocean ranges of major regional stocks of Asian and North American salmonids (for example, Myers et al. 1996b). The complete all-agency (Canada, Japan, Russia, and United States) high-seas tag release and recovery computer database (1954-present) is available from FRI upon request from the parties of NPAFC so that all member nations can have access to a common database.

RESULTS AND DISCUSSION

All recoveries of high-seas tagged salmon returned to FRI from 1 September 1995 through 31 August 1996 were released during cooperative Japan-U.S. high-seas salmon tagging experiments aboard the *Wakatake maru* and *Oshoro maru* in the central North Pacific, Bering Sea, and Gulf of Alaska in 1995 and 1996 (Ito and Ishida 1995, 1996; Myers et al. 1995, 1996a; Davis et al. 1996). Eight tagged salmon (1 sockeye, 2 chum, 4 pink, and 1 coho salmon) were recovered in coastal areas around the Pacific Rim from Ketchikan in southeastern Alaska to Miyagi Prefecture on the Pacific coast of Honshu Island, Japan (Table 1). The recovery of a tagged sockeye salmon (Japan-KK2607/U.S.-EE799) in a terminal fishery near the Bear River, Alaska, was a northwestern extension of the known range of North Alaska Peninsula sockeye salmon in the Bering Sea. A tagged coho salmon (Japan-DD9036/U.S.-KK512) released south of the Alaska Peninsula on 28 June 1995 and recovered on 10 September 1995 in the Niukluk River, Norton Sound, Alaska, represents the northernmost coho stock recovered during 41 years of high-seas salmon tagging.

All of the salmon recovered in 1995-1996 were double-tagged with both FAJ (orange and white, 1.6 cm in diameter) and FRI (red, 2.0 cm in diameter) Petersen disk tags. The FAJ tags were labeled with the word "JAPAN" in English. The FRI tags have FRI's address on one side and identification in Russian (TINRO, which is the acronym for Russia's Pacific Research Institute of Fisheries and Oceanography) on the other side. The use of tags with a U.S. address may improve the return of FAJ tags by North American fishermen. In 1997, FRI plans to design a new high-seas disk tag that will make the fish readily identifiable as a salmon tagged and released for international cooperative high-seas tagging research.

ACKNOWLEDGMENTS

Thanks are given to Japanese and U.S. fishermen, processors, biologists, and fisheries agencies who participated in the 1995-96 high-seas tagging program. Special acknowledgments are given to Captain Y. Hayasaka and the officers, crew, and students aboard the *Wakatake maru*, and Captain G. Anma and the officers, crew, cadets, and graduate students aboard the *Oshoro maru*, Hokkaido University, who cooperated in high-seas salmon tagging experiments in 1995-1996. Nancy D. Davis, University of Washington, Fisheries Research Institute (FRI), managed FRI's tag-return advertisement campaign. Funding was provided by the Auke Bay Laboratory of the Alaska Fisheries Science Center, U.S. National Marine Fisheries Service (NOAA contract No. 50ABNF400001).

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Table 1. Release and recovery information for cooperative Japan-U.S. tags returned from September 1, 1995 to August 31, 1996. F.L. = fork length; B.W. = body weight; G.W. = gonad weight; Rel. = release information; Rec. = recovery information. Release date is Japan date.

a. Japan-U.S. tagged salmon released and recovered in 1996.

Tag No.	Species	Sex	Date		Position		Area Codes	Gear		F.L. (mm)		B.W. (kg)		G.W. (g)		Remarks and area of recovery
			Rel.	Rec.	Rel.	Rec.		Rel.	Rec.	Rel.	Rec.	Rel.	Rec.	Rel.	Rec.	
Japan-AA2042/ U.S.- KK688	Pink	F	7.05	8.17	54-59N 144-57W	60-47N 148-04W	59-2	Long-line	Purse	472	456 ^a	-	-	0.1		Lake Bay, Prince William, Sound (Esther Hatchery special harvest area), central Alaska
Japan-KK2607/ U.S.- EE799	Sockeye	M	7.11	7.30	57-30N 177-30W	56-10N 160-26W	50-3	Long-line	Drift Gillnet	604	578 ^a	-	-	x.x ^b 1.3		Bear River area of the North Alaska Peninsula

^aMid-eye to fork of tail length.
^bRelease scale was regenerated.

b. Japan-U.S. tagged salmon released in 1995 and recovered in 1995.

Tag No.	Species	Sex	Date		Position		Area Codes	Gear		F.L. (mm)		B.W. (kg)		G.W. (g)		Remarks and area of recovery
			Rel.	Rec.	Rel.	Rec.		Rel.	Rec.	Rel.	Rec.	Rel.	Rec.	Rel.	Rec.	
Japan-DD9036/ U.S.- KK512	Coho	M	6.28	9.10	49-35N 161-12W	64-49N 163-27W	41-1	Long-line	Sport Gear	430	559	2.5	1.1	1.1		Niukluk River, tributary to Fish River, Golovin Bay, north side of Norton Sound, Alaska

Table 1b. Japan-U.S. tagged salmon released in 1995 and recovered in 1995. continued.

Tag No.	Species	Sex	Date		Position		Area Codes	Gear		F.L. (mm)	B.W. (g)		Age	Remarks and area of recovery
			Rel.	Rec.	Rel.	Rec.		Rel.	Rec.		Rel.	Rec.		
Japan-JJ6073/ U.S.- KK038	Chum	F	7.08	10.17	58-31N 179-27W	38-22N 141-10E	01-0	Long-line		564	2.0	0.3	Miyagi Prefecture, Pacific Coast, Honshu, Japan	
Japan-JJ6274/ U.S.- KK239	Chum		7.15	10.21	56-29N 177-29E	43-23N 145-17E	02-0	Long-line	Set Net	557		0.4	Bekkai Coast, Hokkaido, Japan	
Japan-DD9118/ U.S.- KK594	Pink		7.11	8.27	55-55N 145-11W	56-30N 134-39W	63-0	Long-line		450		0.1	Chatham District, southeastern Alaska	
Japan-DD9125/ U.S.- KK601	Pink		7.11	8.09	55-55N 145-11W	58-24N 152-29W	55-0	Long-line		512	1.5	0.1	Little Waterfall Bay on west side of Perenosa Bay, north coast of Afognak Island, central Alaska	
Japan-DD9110/ U.S.- KK586	Pink		7.11	8.17	55-55N 145-11W	55-20N 131-38W	66-	Long-line		512	431	0.1	Ketchikan District, southeastern Alaska	