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**Recoveries of High-Seas Tags in Japan in 2003, and Tag
Releases and Recoveries of Fin-Clipped Salmon from
Japanese Research Vessel Surveys in the North Pacific Ocean
in fall of 2003 and summer of 2004**

by

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Recoveries of High-Seas Tags in Japan in 2003, and Tag Releases and Recoveries of Fin-Clipped Salmon from Japanese Research Vessel Surveys in the North Pacific Ocean in fall of 2003 and summer of 2004

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ABSTRACT

During 2003, five tagged chum salmon were recovered from areas along the coast of Japan during fall 2003, and one tagged chum salmon was recovered along the coast of Russia in September, 2003 (Table 1). In addition, one chum salmon was recovered from the Russian EEZ in the Bering Sea in summer of 2003. Four recoveries were from salmon tagged only with disk tags. Two recoveries were the chum salmon tagged with LTD tags, and one was the chum salmon with IB tag. The tag recovery rate for chum salmon released and recovered in 2003 (3.6%) was similar to the recovery rate since 1995 (1.6-3.2%), except for 1998 (8.8%) and 2001 (6.9%). From August 2003 to July 2004, two Japanese research vessels, *Kaiyo maru*, and *Wakatake maru* conducted longline and hook-and-line operations to attach archival and disk tags to salmonids. Addition to these, trawl sampled salmonids by *Kaiyo maru* survey, were also used for the tagging. Total of 1214 salmonids were tagged and released during the period from August 2003 to July 2004. Among of these released salmonids, 332 fish were tagged with an IB temperature tag, a LTD temperature-depth tag or a CTD tag. Total of 28 fin-clipped salmonids were caught by Japanese research Vessel. Nine fin-clipped steelhead trout were recovered by *Oshoro maru*. Nineteen fin-clipped salmonids, including 16 steelhead trout, 2 chinook, and one pink salmon were recovered by *Wakatake-maru*.

INTRODUCTION

Japanese and U.S. cooperative high-seas tagging experiments were conducted in 2003 and 2004. In this report, we summarize tags recovered from salmon that returned to Japanese and Russian coastal areas in 2003. In addition, fall 2003 and summer 2004 releases of high seas tags and collection of fin-clipped salmonids during Japanese salmon research vessel operations in the North Pacific Ocean are summarized.

MATERIALS AND METHODS

Recovery of high seas tags in 2003

In June and July 2003, 145 salmonids (7 sockeye, 31 chum, 74 pink, 28 coho, 1 chinook salmon and 4 steelhead trout) in the central North Pacific, 689 salmon (19 sockeye, 135 chum, 505 pink, 2 coho and 28 chinook salmon) in the Bering Sea, 3 salmon (2 pink and 1 coho salmon) in the western North Pacific, and 2 salmon (2 chum salmon) in the eastern North Pacific were tagged and released by two Japanese research vessels, the *Wakatake maru*, and *Oshoro maru* (Fukuwaka et al. 2003). Of these fish, 134 salmonids with temperature tags (IB tag), or temperature-depth tags (LTD tag).

Fish were tagged with two disk tags: one issued by the Fisheries Agency of Japan (FAJ) and a second disk tag issued by the School of Aquatic and Fishery Sciences, University of Washington (UW). Both disk tags were placed on one plastic cinch strap and applied to the fish anterior to the dorsal fin. A few of the disk-tagged fish were selected for tagging with archival tags. Two types of externally-attached archival tags were used (Walker et al. 2002). One tag, used by UW, is manufactured by Lotek Marine Technologies (model LTD_1100-300) and records temperature and depth data. Another tag used by UW, is a Thermonchron iButton data storage device manufactured by Dallas Semiconductor, Inc., and repackaged for fish tagging by AlphaMach, Inc. (model iB4). These tags record temperature data only. Both UW tags were attached externally in the dorsal musculature of the fish anterior to the dorsal fin.

The National Salmon Resources Center collected archival tags, disk tags, and data on recovery locations from salmon hatcheries, private fishermen, fishing cooperative unions, and prefectural governments along the coast of northern Japan from

chum salmon that returned to Japan coastal areas in fall of 2003.

We compared tag recovery rates (number of recovered fish / number of released fish) from 1995 to 2003 using data from tagging experiments conducted by the *Wakatake maru* in the central North Pacific and Bering Sea (Ito 1995, Myers et al. 1995-1998, Ito and Ishida 1996, 1998, Walker et al. 1998, Ueno and Ishida 1999, Fukuwaka et al. 1999-2003).

Releases of high seas tags in fall of 2003 and summer of 2004

From August 2003 to July 2004, three Japanese research vessels, *Kaiyo maru*, *Wakatake maru* and *Oshoro maru*, conducted 29 longline (870 hachi) and 9 hook-and-line operations to attach archival and disk tags on salmonids. The disk tags used in 2004 were the same types used in 2003. Addition to these, trawl sampled salmonids by *Kaiyo maru* survey, were also used for the tagging. Three archival tag types were used in 2003 and 2004, namely the temperature and depth recording LTD 1100-300 and the temperature recording iBLite (Walker et al. 2003, Fukuwaka et al. 2003) and another type is the CTD tag. Archival tags were placed externally in the dorsal musculature of the fish anterior to the dorsal fin.

Collection of snouts from adipose fin-clipped salmonids in 2004

Three salmon research vessels, the *Wakatake maru*, *Oshoro maru*, and *Kaiyo maru* caught salmonids in the central North Pacific, the Bering Sea, and the Gulf of Alaska from June through August, 2004. Salmon and steelhead trout lacking the adipose fin were recovered during biological measurements. Snout samples were collected from these fish for potential recovery of coded-wire tags (CWT).

RESULTS

Recovery of high seas tags in 2003

Five tagged chum salmon were recovered from areas along the coast of Japan during fall 2003, and one tagged chum salmon was recovered along the coast of Russia in September, 2003 (Table 1). In addition, one chum salmon was recovered from the Russian EEZ in the Bering Sea in summer of 2003. Four recoveries were from salmon tagged only with disk tags. Two recoveries were the chum salmon tagged with LTD tags, and one was the chum salmon with IB tag. The tag recovery rate for chum salmon released and recovered in 2003 (3.6%) was similar to the recovery rate since 1995 (1.6-3.2%), except for 1998 (8.8%) and 2001 (6.9%; Table 2).

Releases of high seas tags

In June and July in 2004, 145 salmonids (7 sockeye, 31 chum, 10 pink, 47 coho, 2 chinook salmon, and 2 steelhead trout) in the central North Pacific, 669 salmonids (30 sockeye, 573 chum, 31 pink, 2 coho, and 33 chinook salmon) in the Bering Sea, were tagged and released by Japanese research vessels, *Wakatake maru* (Tables 3). Of these fish, 158 salmonids with IB tags (75), LTD tags (68) or CTD tags (15) were released (Table 5).

In August and September in 2003, 40 salmonids (14 sockeye, 20 chum, 2 pink, 1 coho and 3 chinook salmon) were tagged and released by the Japanese research vessel, *Kaiyo maru* in the western North Pacific. Of these fish, 27 salmon with IB tags (21) and LTD tags (6) were released (Table 5).

In June and July 2004, 16 salmonids (6 sockeye, 3 chum, 1 pink and 6 coho salmon) in the central North Pacific, 103 salmonids (3 sockeye, 94 chum, 4 pink, 1 coho, and 1 chinook salmon) in the Bering Sea, were tagged and released by Japanese research vessels, *Kaiyo maru* (hook and line operation) (Tables 3). Addition to these, 35 trawl sampled salmonids (2 sockeye, 25 chum, 5 pink and 3 coho salmon) in the central North Pacific, 187 trawl sampled salmonids (18 sockeye, 158 chum, 8 pink, 1 coho, and 2 chinook salmon) in the Bering Sea, were tagged and released by Japanese research vessels, *Kaiyo maru* (Table 4). Of these fish, 147 salmonids with IB tags (94) , LTD tags (48) or CTD tags (5) were released in the central North Pacific and Bering Sea.

Collection of snouts from adipose fin-clipped salmonids in 2004

Total of 28 fin-clipped salmonids were caught by Japanese research Vessel. Nine fin-clipped steelhead trout were recovered by *Oshoro maru* (Table 5). Snout samples were collected from these fish and will be provided to the U.S. for inspection to determine whether the snouts contained CWTs. Nineteen fin-clipped salmonids, including 16 steelhead trout, 2 chinook, and one pink salmon were recovered by *Wakatake-maru* (Table 5). The snouts of these fishes were removed, salted, and sent to the Auke Bay Laboratory (National Marine Fisheries Service, NOAA), Juneau, AK, for dissection and potential recovery of coded-wire tags.

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Table 1. Recoveries of high-seas tagged salmon returning to Japan and Russia in 2003. A hyphen indicates the information is not available. Age designation is the European method, where the first number is the number of freshwater annuli and the second number is the number of ocean annuli. FL: fork length (mm), BW: body weight (g).

Ianan tag #	I I S tag #	Archival tag #	Release						Recovery							
			Date	Lat	Long	Species	FL	Age	Date	Lat	Long	Gear	Sex	FL	BW	Location
Z7327	LL6427		6/29/03	55°30N	180°00	Chum	516	0.3	9/29/03	42°02N	137°07E	Setnet	M	550	1900	Pacific C., Hokkaido
Z7647	LL6747	LTD1603	7/9/03	56°30N	177°00W	Chum	564	0.3	10/11/03	43°33N	145°21E	Setnet	-	-	-	Nemuro St., Hokkaido
Z7606	LL6706	LTD1709	7/7/03	56°30N	179°00E	Chum	595	x.x	9/23/03	44°00N	144°07E	-	-	-	-	Ubarauti R., Hokkaido
Z7355	LL6455		6/30/03	56°30N	180°00E	Chum	588	0.4	9/24/03	44°16N	143°30E	Setnet	F	625	2800	Okhotsk C., Hokkaido
Z7356	LL6456		6/30/03	56°30N	180°00E	Chum	640	0.3	10/25/03	-	-	Trap	F	690	2890	Kushiro R., Hokkaido
Z7571	LL6671	IB32	7/6/03	56°30N	179°00E	Chum	590	0.3	-	43°45N	145°04E	Gillnet	-	-	-	Bering Sea, Russian EEZ
Y9282	LL5288		7/1/02	55°30N	179°56E	Chum	546	0.3	9/15/03	53°45N	136°40E	Setnet	M	-	7-8k	Okhotsk C., Russia

Table 2. Number of tagged chum salmon released in the Bering Sea and the central North Pacific by the research vessel *Wakatake maru*, and recovered along the Japanese coast and in Russia in 1995-2003. In 1995, fish were not tagged and released in the central North Pacific. Numbers in parentheses indicate number or recovery rate of archival-tagged fish.

Year	Region	Number of releases	Number of recoveries	Recovery rate (%)
1995	Bering Sea	128	4	3.1
1996	Bering Sea	619	9	1.4
	Central North Pacific	36	2	5.6
	Total	655	11	1.6
1997	Bering Sea	399	13	3.3
	Central North Pacific	5	0	0
	Total	404	13	3.2
1998	Bering Sea	734 (48)	71 (8)	9.7 (16.7)
	Central North Pacific	75	0	0
	Total	809 (48)	71 (8)	8.8 (16.7)
1999	Bering Sea	226 (31)	6 (3)	2.7 (9.7)
	Central North Pacific	15	0	0
	Total	241 (31)	6 (3)	2.5 (9.7)
2000	Bering Sea	575 (48)	15 (2)	2.6 (4.2)
	Central North Pacific	52 (2)	0	0
	Total	627 (50)	15 (2)	2.4 (4.0)
2001	Bering Sea	406 (7)	31 (1)	7.6 (14.3)
	Central North Pacific	72	2	2.8
	Total	478 (7)	33 (1)	6.9 (14.3)
2002	Bering Sea	956 (45)	27 (3)	2.8 (6.7)
	Central North Pacific	18 (3)	0	0
	Total	974 (48)	26 (3)	2.7 (6.3)
2003	Bering Sea	135 (40)	6(2)	4.4 (5.0)
	Central North Pacific	31 (0)	0	0
	Total	166(40)	6(2)	3.6 (5.0)

*Recovery by the gill-net fisheries in Russian EEZ in 2003 was not included in this table

Table 3. Number of salmon caught by longline and hook-and-line operations, and number of fish tagged and released by the research vessels, *Kaiyo maru*, *Wakatake maru*, and *Oshoro maru* from June 2004 to July 2004. H&L: hook-and-line operation, BS: Bering Sea, WNP: Western North Pacific, CNP: Central North Pacific, ENP: Eastern North Pacific.

Region/ Vessel	Date	Latitude	Longitude	Hachi	Number of fish caught						Number of fish released					
					Sock	Chum	Pink	Coho	Chin	Steel	Sock	Chum	Pink	Coho	Chin	Steel
CNP	6/26/04	51°49'	170°00'W	H&L	5	0	0	0	0	0	5	0	0	0	0	0
<i>Kaiyo maru</i>	7/02/04	51°40'	175°06'W	H&L	1	3	1	6	0	0	1	3	1	6	0	0
	Total				6	3	1	6	0	0	6	3	1	6	0	0
BS	6/27/04	53°05'	170°22'W	H&L	0	4	0	0	0	0	0	4	0	0	0	0
<i>Kaiyo maru</i>	6/29/04	57°08'	175°12'W	H&L	1	5	2	0	0	0	1	5	2	0	0	0
	6/30/04	55°11'	175°00'W	H&L	0	8	1	0	1	0	0	8	1	0	1	0
	7/01/04	53°11'	175°00'W	H&L	0	1	1	0	0	0	0	1	1	0	0	0
	7/04/04	53°22'	179°49'W	H&L	2	37	0	1	0	0	2	37	0	1	0	0
	7/05/04	55°20'	180°00'	H&L	0	30	0	0	0	0	0	30	0	0	0	0
	7/07/04	55°05'	175°14'E	H&L	0	9	0	0	0	0	0	9	0	0	0	0
	Total				3	94	4	1	1	0	3	94	4	1	1	0
CNP	6/16/04	41°00'	180°00'	30	0	1	0	0	0	0	0	1	0	0	0	0
<i>Wakatake maru</i>	6/17/04	42°01'	179°57'W	30	0	7	0	5	0	0	0	5	0	4	0	0
	6/18/04	43°01'	179°59'W	30	0	8	4	16	0	0	0	6	4	12	0	0
	6/19/04	44°00'	179°57'W	30	0	3	0	4	0	0	0	3	0	3	0	0
	6/20/04	45°02'	179°57'W	30	0	3	1	6	0	0	0	2	1	5	0	0
	6/21/04	46°01'	179°54'W	30	0	10	2	12	1	3	0	9	1	10	1	0
	6/22/04	46°57'	179°59'E	30	0	5	1	2	1	0	0	5	1	2	1	0
	6/23/04	47°29'	179°56'E	30	0	3	0	2	0	0	0	2	0	2	0	0
	6/24/04	48°30'	180°00'	30	0	7	2	10	0	1	0	3	1	8	0	0
	6/25/04	49°30'	180°00'	30	0	1	0	1	0	0	0	1	0	1	0	0
	6/26/04	50°30'	179°57'	30	4	10	0	0	0	1	3	6	0	0	0	0
	6/27/04	51°30'	180°00'	30	10	23	4	0	0	0	10	20	2	0	0	0
	Total			360	14	81	14	58	2	5	7	31	10	47	2	0
BS	6/28/04	52°30'	180°00'	30	3	12	1	0	0	0	3	12	1	0	0	0
<i>Wakatake maru</i>	6/29/04	53°30'	180°00'	30	3	47	3	1	0	0	1	35	2	1	0	0
	6/30/04	54°30'	180°00'	30	0	33	1	0	1	0	0	20	1	0	1	0
	7/01/04	55°30'	179°58'E	30	0	30	5	0	0	0	0	15	2	0	0	0
	7/02/04	56°30'	179°58'E	30	1	23	3	0	6	0	1	9	2	0	6	0
	7/03/04	57°30'	179°55'E	30	4	73	9	0	0	0	3	45	5	0	0	0
	7/04/04	58°35'	179°57'W	30	0	15	4	0	17	0	0	5	4	0	9	0
	7/05/04	57°32'	178°58'W	30	0	50	4	1	11	0	0	29	1	1	9	0
	7/06/04	57°34'	177°56'W	30	2	46	2	0	2	0	2	32	1	0	1	0
	7/07/04	56°33'	177°56'W	30	1	144	0	0	1	0	1	87	0	0	1	0
	7/08/04	56°31'	178°54'W	30	2	105	2	0	3	0	2	63	2	0	2	0
	7/09/04	56°32'	178°57'E	30	1	159	0	0	0	0	0	101	0	0	0	0
	7/10/04	56°29'	177°57'E	30	3	34	0	0	1	0	2	23	0	0	1	0
	7/11/04	56°31'	176°59'E	30	0	17	0	0	1	0	0	10	0	0	1	0
	7/12/04	57°32'	177°10'E	30	1	8	0	0	0	0	1	6	0	0	0	0
	7/13/04	57°29'	175°55'E	30	0	11	0	0	0	0	0	9	0	0	0	0
	7/14/04	56°32'	176°02'E	30	1	23	0	1	0	0	1	9	0	1	0	0
	Total			510	36	911	48	61	46	5	30	573	31	2	33	0

Table 4. Number of salmon tagged and released by the research vessels, *Kaiyo maru* in June and July 2004 (corrected with trawl net). BS: Bering Sea, WNP: Western North Pacific, CNP: Central North Pacific, ENP: Eastern North Pacific.

Region/ Vessel	Date	Latitude	Longitude	Number of fish released						
				Sock	Chum	Pink	Coho	Chin	Steel	
CNP	6/26/04	50°53'	170°10'W	1	0	5	0	0	0	
	6/26/04	51°49'	170°00'W	0	9	0	0	0	0	
	<i>Kaiyo</i>	7/02/04	51°40'	175°06'W	1	14	0	1	0	0
	<i>maru</i>	7/03/04	50°38'	180°00'	0	2	0	0	0	0
	7/03/04	51°25'	179°59'W	0	0	0	2	0	0	
	Total			2	25	5	3	0	0	
BS	6/27/04	53°05'	170°22'W	7	6	1	0	0	0	
	6/27/04	54°05'	170°22'W	1	7	0	0	0	0	
	6/28/04	55°04'	170°01'W	2	6	0	0	1	0	
	6/28/04	55°40'	170°05'W	0	3	0	0	0	0	
	<i>Kaiyo</i>	6/29/04	57°58'	174°42'W	0	5	0	0	1	0
	6/29/04	57°08'	175°12'W	1	4	1	0	0	0	
	6/30/04	56°01'	174°42'W	2	21	2	0	0	0	
	<i>maru</i>	6/30/04	55°11'	175°00'W	1	13	0	0	0	0
	7/01/04	54°10'	175°02'W	2	3	0	0	0	0	
	7/01/04	53°11'	175°00'W	0	1	1	1	0	0	
	7/04/04	52°38'	179°51'W	0	2	0	0	0	0	
	7/04/04	53°22'	179°49'W	0	20	2	0	0	0	
	7/05/04	54°35'	179°46'	1	36	1	0	0	0	
	7/05/04	55°20'	180°00'	0	4	0	0	0	0	
	7/06/04	56°21'	179°52'E	0	10	0	0	1	0	
	7/06/04	57°20'	179°53'E	0	3	0	0	0	0	
	7/07/04	55°57'	175°17'E	1	4	0	0	0	0	
7/07/04	55°05'	175°14'E	0	7	0	0	0	0		
7/07/04	53°57'	175°16'E	0	1	0	0	0	0		
7/07/04	52°58'	175°16'E	0	2	0	0	0	0		
	Total			18	162	8	1	2	0	
Total				20	187	13	4	2	0	

Table 5. Tag numbers of disk tags and archival tags released in Aug. – Sept. of 2003 and summer of 2004. BS: Bering Sea, WNP: western North Pacific, CNP: central North Pacific, ENP: eastern North Pacific.

Region	Date	Vessel	Disk tag			Archival tag						
			FAJ tag	FRI tag	No. fish	Tag No.	No. fish					
WNP	8/02/03~8/14/03	<i>Kaiyo maru</i>	BB1728~1764	LL7500~7536	36	IB G01~03	21					
						G05~10, G12						
						K001~007, K009~011, K013						
						LTD 1334, 1337, 1373, 2015, 5908, 5909	6					
	Total				36		27					
BS	9/05/03~9/10/03	<i>Kaiyo maru</i>	BB1765~1770		6		0					
				Total		6		0				
CNP	6/26/03~7/03/04	<i>Kaiyo maru</i>	B1771~1789 B1907~1937	LL7537~7555 LL7637~7703	167	IB K12, 14, 21, 22,26, 27, 40, 61,62,63,64,66 67,68,72,78, LTD , 7485,7487, 7489, 7490, 7490, 7491, 8095, 8099, 8100, 8101, 8102, 8103	16					
						CTD, 1382, 1384	2					
						Total	167	30				
						6/16/04~6/26/04	<i>Wakatake maru</i>	MM2001~2104 BB1907~1937	NN0001~0104 LL7637~7703	104	IB, W125, W129 LTD , 5917 CTD, 1361, 1363	2 1 2
						Total			104		5	
BS	6/26/03~7/03/04	<i>Kaiyo mar</i>	BB1790~1906 BB1938~2500 N4800~4851	LL7556~7672 LL7704~7877	291	IB K15, K17~20 K23~25, K28~39 K41~60, 65, 69, 70, K73~77, K79~99, 101, 102, 104~110, 115 LTD ,7492,7495~7501 7503~7517	78					
						CTD, 1383,1386,1389	3					
						Total	291	117				
						6/27/04~7/14/04	<i>Wakatake maru</i>	MM2105~2720	NN0105~0720	616	IB, W118~124, W126~128, W130~192 LTD , 5927, 5936, 5941,5942,5952,5956, 5963, 5970, 5979, 5980,5981,5985, 5987, 5991, 5996, 5998, 6358,7429~7442,7444~7451, 7453~7461,7464~7471,7473~ 7482, 7484 CTD, 1360,1364~1367, 1369, 1373, 1375,1376, 1378~1381	73 67 13
						Total			616		153	

Table 6. Location and biological data for recovered fin-clipped salmonids caught by Japanese salmon research vessels in summer of 2004.

Research vessel	Date	Location		Mesh (mm)	Species	Fork length (mm)	Body weight (g)	Sex	Gonad weight (g)	Clipped fin
<i>Oshoro maru</i>	Jul 15	50°00N	165°00W	82	steelhead	544	1580	Female	15	Adipose
	Jul 15	50°00N	165°00W	93	steelhead	528	1400	Male	8	Adipose
	Jul 15	50°00N	165°00W	93	steelhead	564	1757	Male	7	Adipose
	Jul 16	49°00N	165°00W	115	steelhead	754	4600	Male	45	Adipose
	Jul 16	49°00N	165°00W	115	steelhead	612	2420	Female	10	Adipose
	Jul 16	49°00N	165°00W	118	steelhead	548	1760	Female	8	Adipose
	Jul 16	49°00N	165°00W	93	steelhead	564	1840	Male	12	Adipose
	Jul 16	49°00N	165°00W	106	steelhead	568	1860	Female	5	Adipose
	Jul 17	48°00N	165°00W	118	steelhead	574	1980	Female	12	Adipose
<i>Wakatake maru</i>	Jun 18	42°00N	180°00	115	steelhead	566	1790	Male	3	Adipose
	Jun 19	43°00N	180°00	115	steelhead	583	2000	Male	5	Adipose
	Jun 20	44°00N	180°00	115	steelhead	550	1570	Male	3	Adipose
	Jun 20	44°00N	180°00	115	steelhead	662	2550	Female	15	Adipose
	Jun 21	45°00N	180°00	157	steelhead	823	6200	Male	15	Adipose
	Jun 21	45°00N	180°00	115	steelhead	650	2550	Male	1	Adipose
	Jun 21	45°00N	180°00	115	steelhead	637	2350	Female	5	Adipose
	Jun 21	46°00N	180°00	L.L	steelhead	715	3580	Female	17	Adipose
	Jun 22	46°00N	180°00	121	steelhead	660	3000	Male	6	Adipose
	Jun 22	46°00N	180°00	115	steelhead	607	2300	Male	5	Adipose
	Jun 22	46°00N	180°00	115	steelhead	693	2550	Female	25	Adipose
	Jun 22	46°00N	180°00	115	steelhead	686	3250	Female	28	Adipose
	Jun 23	47°00N	180°00	115	steelhead	558	1900	Male	5	Adipose
	Jun 24	47°30N	180°00	106	steelhead	538	1520	Male	5	Adipose
	Jun 24	48°30N	180°00	L.L	steelhead	738	3950	Male	5	Adipose
	Jun 26	50°30N	180°00	L.L	steelhead	686	3480	Female	38	Adipose
	Jul 06	57°00N	179°00W	115	pink	459	1360	Male	105	Adipose
	Jul 07	57°30N	178°00W	115	chinook	605	2850	Male	2	Adipose
	Jul 09	56°30N	179°00W	121	chinook	592	2450	Male	25	Adipose