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**HIGH SEAS SALMONID  
CODED-WIRE TAG RECOVERY DATA, 2003**

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## HIGH SEAS SALMONID CODED-WIRE TAG RECOVERY DATA, 2003

### ABSTRACT

Information on high seas recoveries of coded-wire tagged (CWT) salmonids has been reported annually to the International North Pacific Fisheries Commission (1981-1992) and to the North Pacific Anadromous Fish Commission (1993-present). The Regional Mark Processing Center, Pacific States Marine Fisheries Commission, incorporates the CWT recovery data reported in this document into their coastwide, on-line CWT recovery data set (Regional Mark Information System (RMIS), <http://www.rmis.org/index.html>). Starting this year (2003), recoveries of CWT salmon caught by the Pacific hake (*Merluccius productus*) fishery along the U.S. West Coast will no longer be reported to NPAFC. In this document, release and recovery data for 124 CWT salmonids are reported for the first time. Reported recoveries are from U.S. groundfish (trawl) fisheries in the eastern Bering Sea and Gulf of Alaska portions of the U.S. Exclusive Economic Zone (103 recoveries) and from U.S. and Japanese salmon research vessel operations in the Bering Sea, Gulf of Alaska, and central North Pacific Ocean (21 recoveries). U.S. research vessel recoveries of three juvenile (ocean age-.0) Yukon Territory (Whitehorse Hatchery) chinook salmon, caught in the northeastern Bering Sea (Norton Sound) during their first fall (October) at sea, are northern extensions of the known ocean range of Yukon River chinook salmon. Two new groundfish vessel recoveries in the southeastern Bering Sea in February show the overwintering location of Yukon River salmon during their first winter at sea. Two groundfish vessel recoveries of older (ages 0.2 and 0.3) hatchery chinook salmon near the Pribilof Islands in the eastern Bering Sea are northwestern extensions of the known ocean ranges of Columbia River Basin (Washington) and Oregon chinook salmon. Three U.S. research vessel recoveries of juvenile coho salmon (two Cook Inlet wild fish and one Oregon (Columbia River Basin) hatchery fish) demonstrate overlap in the distributions of hatchery and wild juvenile salmon from Alaska and U.S. West Coast production regions in the Shelikof Strait in early August. Three U.S. research vessel recoveries of southeast Alaska coho salmon show that the distributions of northward migrating hatchery and wild juvenile fish and southward migrating hatchery adult fish overlap in the coastal waters off Yakutat Alaska in mid July. One Japanese research vessel recovery of a steelhead trout at 56°N, 145°W is a significant northern extension of the known range of North Washington Coast steelhead trout in the Gulf of Alaska.

## INTRODUCTION

The North Pacific Anadromous Fish Commission (NPAFC) coordinates the examination of high seas commercial and research catches for Pacific salmon and steelhead trout (*Oncorhynchus* spp.) that might contain a coded-wire tag (CWT). Recoveries of coded-wire tagged salmonids in the North Pacific Ocean and Bering Sea have been reported annually to the International North Pacific Fisheries Commission (Dahlberg 1981-1982; Wertheimer and Dahlberg 1983-1984; Dahlberg and Fowler 1985; Dahlberg et al. 1986-1992; Margolis 1985; Margolis et al. 1989; McKinnell et al. 1991) and to the North Pacific Anadromous Fish Commission (Dahlberg et al. 1993-97, Myers et al. 1998-2002). The Regional Mark Processing Center, Pacific States Marine Fisheries Commission, incorporates these data into their coastwide, on-line CWT recovery data set (Regional Mark Information System (RMIS), <http://www.rmis.org/index.html>). Starting this year (2003), recoveries of CWT salmon caught by the Pacific hake (*Merluccius productus*) fishery along the U.S. West Coast are no longer reported to the NPAFC. In this document, we list previously unreported data for CWT recoveries in the salmon bycatch of U.S. groundfish (trawl) fisheries for walleye pollock (*Theragra chalcogramma*) in the eastern Bering Sea and Gulf of Alaska portions of the U.S. Exclusive Economic Zone (EEZ) and from U.S. and Japanese salmon research vessel samples in the Bering Sea, Gulf of Alaska, and central North Pacific Ocean. The results are compared to previous tag recoveries, and significant new information on ocean ranges and migration patterns of Pacific salmon and steelhead trout is discussed.

## RESULTS AND DISCUSSION

Data for 103 CWT chinook salmon (*O. tshawytscha*) recovered in the salmon bycatch of the U.S. groundfish (trawl) fisheries in 2002 and 2003 are listed by recovery region (Bering Sea and Gulf of Alaska) and release location (state, region, and basin) in Table 1. The latitude and longitude of recovery for 18 of these fish could not be determined because the samples were collected at fish processing plants. Data for 21 CWT salmonids recovered during U.S. and Japanese salmon research vessel operations in 2000 and 2002 (12 chinook salmon, 6 coho salmon, and 3 steelhead) are listed in Table 2.

U.S. scientists periodically prepare reports and maps for NPAFC based on historical high-seas salmonid tag recoveries that describe the known ocean ranges and seasonal migration patterns of major regional stocks of Asian and North American salmonids (for example, Myers et al. 1996). The sections that follow are a review by species of significant new information pertaining to ocean ranges, migration patterns, and overlap in spatial and temporal distributions of hatchery and wild salmonids.

### **Chinook salmon**

New and previously reported recoveries of CWT chinook salmon in groundfish trawl fisheries and research vessel operations in the Bering Sea/Aleutian Islands and Gulf of Alaska

are shown by state or province in Figures 1-7. There were no new CWT recoveries from Idaho or California chinook salmon in these northern regions.

There were five new recoveries of Yukon Territory (Whitehorse Hatchery) chinook salmon (Fig. 1). Three of these fish, juvenile (ocean age-.0) chinook salmon recovered in the northeastern Bering Sea (Norton Sound) during their first fall (October) at sea (Table 2), are northern extensions of the known ocean range of Yukon River chinook salmon. The other two fish were young (ocean age-.1) chinook salmon recovered in the southeastern Bering Sea during their first winter (February) at sea (Table 1). The combined results suggest that after initial northward movements in summer and fall, Yukon River juvenile chinook salmon migrate southward and overwinter in the southeastern Bering Sea.

One recovery of an age 0.3 coded-wire tagged hatchery salmon near the Pribilof Islands (56°27'N, 170°01'W) in March is a slight northwestern extension of the known ocean range of Columbia River Basin and Washington chinook salmon in the eastern Bering Sea (Figs. 5 and 6, Table 1).

One recovery of an age 0.2 hatchery salmon at 56°08'N, 170°26'W in September is a northwestern extension of the known ocean range of Oregon chinook salmon in the eastern Bering Sea (Fig. 7).

### **Coho salmon**

There were six recoveries of CWT coho salmon during U.S. research vessel operations in 2002 (Figs. 8-10; Table 2). Two wild juvenile coho salmon released in the Cook Inlet area in late May were caught in the Shelikof Strait in early August (Fig. 8). An Oregon (Columbia River Basin) hatchery juvenile coho salmon, also released in late May, was caught in the same Shelikof Strait research trawl operation as one of the wild Cook Inlet fish (Fig. 10). The body weight of the age-1.0 Columbia River hatchery coho salmon (355 g) was more than double the weight of the age-2.0 wild Cook Inlet fish (167 g; Table 2). Three research vessel recoveries of CWT coho salmon show that the distributions of northward migrating hatchery and wild juvenile fish and southward migrating hatchery adult fish from the southeast Alaska region overlap in the coastal waters off Yakutat in mid July (Fig. 9; Table 2).

### **Steelhead**

There were three Japanese research vessel recoveries of CWT steelhead (Figs. 11-13; Table 2). One recovery at 56°N, 145°W is a significant northern extension of the known range of North Washington Coast steelhead in the Gulf of Alaska (Fig. 13).

## **ACKNOWLEDGMENTS**

Fishermen, processors, observers, and scientists who participated in the 2003 high-seas CWT recovery program are gratefully acknowledged. The North Pacific Groundfish Observer Program, Alaska Fisheries Science Center (AFSC), National Marine Fisheries Service (NMFS), provided snout samples from salmonids lacking the adipose fin and

recovery data collected by observers from the U.S. groundfish fishery. Jerry Berger, AFSC, provided data on catch locations, when observer data accompanying the samples were incomplete or erroneous. Eric Reiter, Auke Bay Laboratory (ABL), NMFS, dissected salmon snouts, read tags, and coded data. The Fisheries Agency of Japan and Hokkaido University provided salmonid head samples and accompanying biological and catch data from Japanese salmon research vessels. Robert Walker and Nancy Davis, School of Aquatic and Fishery Sciences, University of Washington, participated in Japanese salmon research vessel recoveries of CWT salmonids. ABL provided funding for compilation and reporting of CWT release and recovery data (NOAA Contract No. 50ABNF-1-0002).

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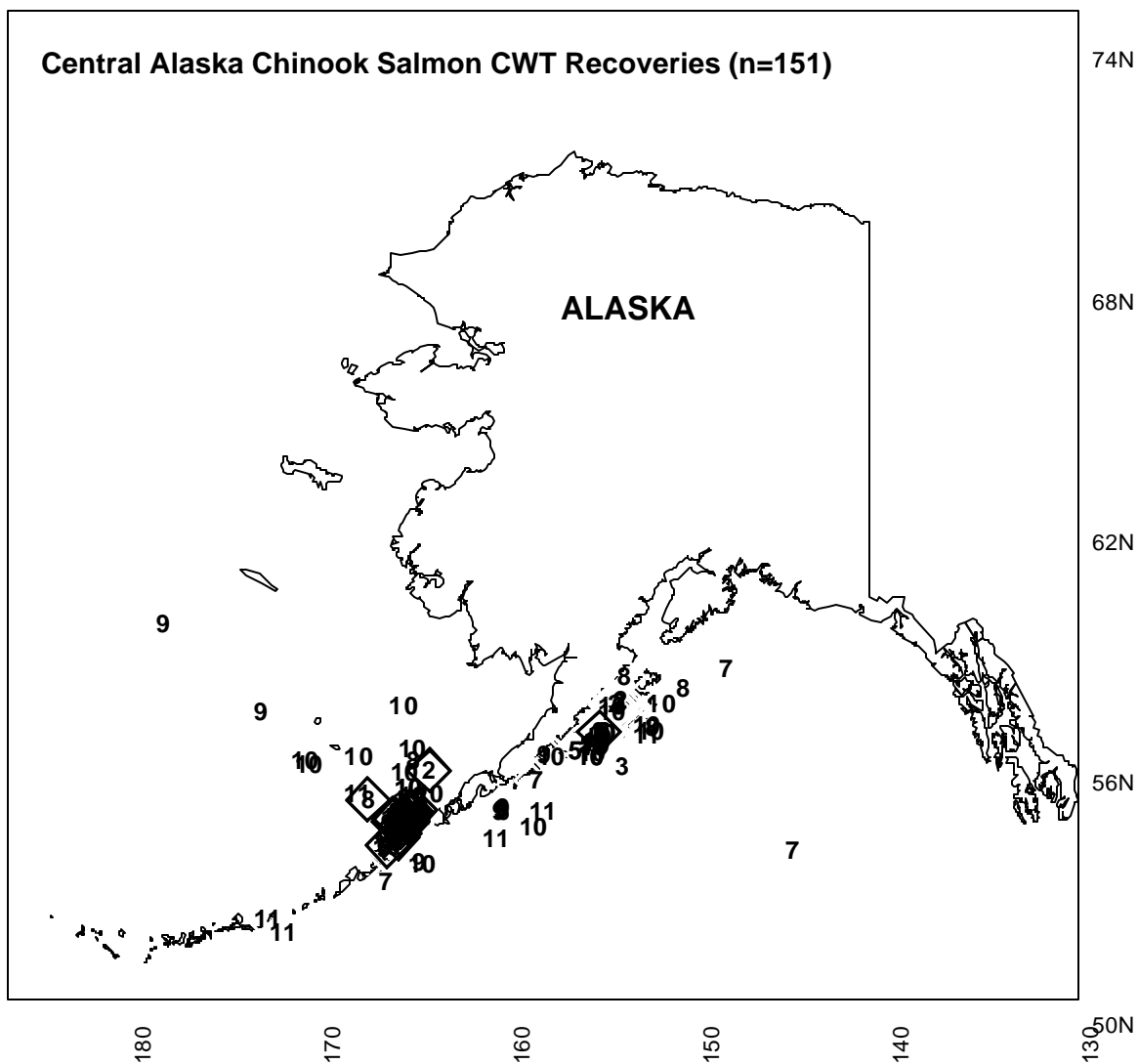


Fig. 2. Recovery locations of coded-wire tagged (CWT) central Alaska (Cook Inlet) chinook salmon caught by U.S. and foreign research vessels and by U.S. and joint-venture groundfish (trawl) fishery vessels in the eastern Bering Sea and Gulf of Alaska, 1981-2002. The numbers at each location indicate the month of recovery. Twenty-one new recoveries reported in this document are indicated by open diamonds.



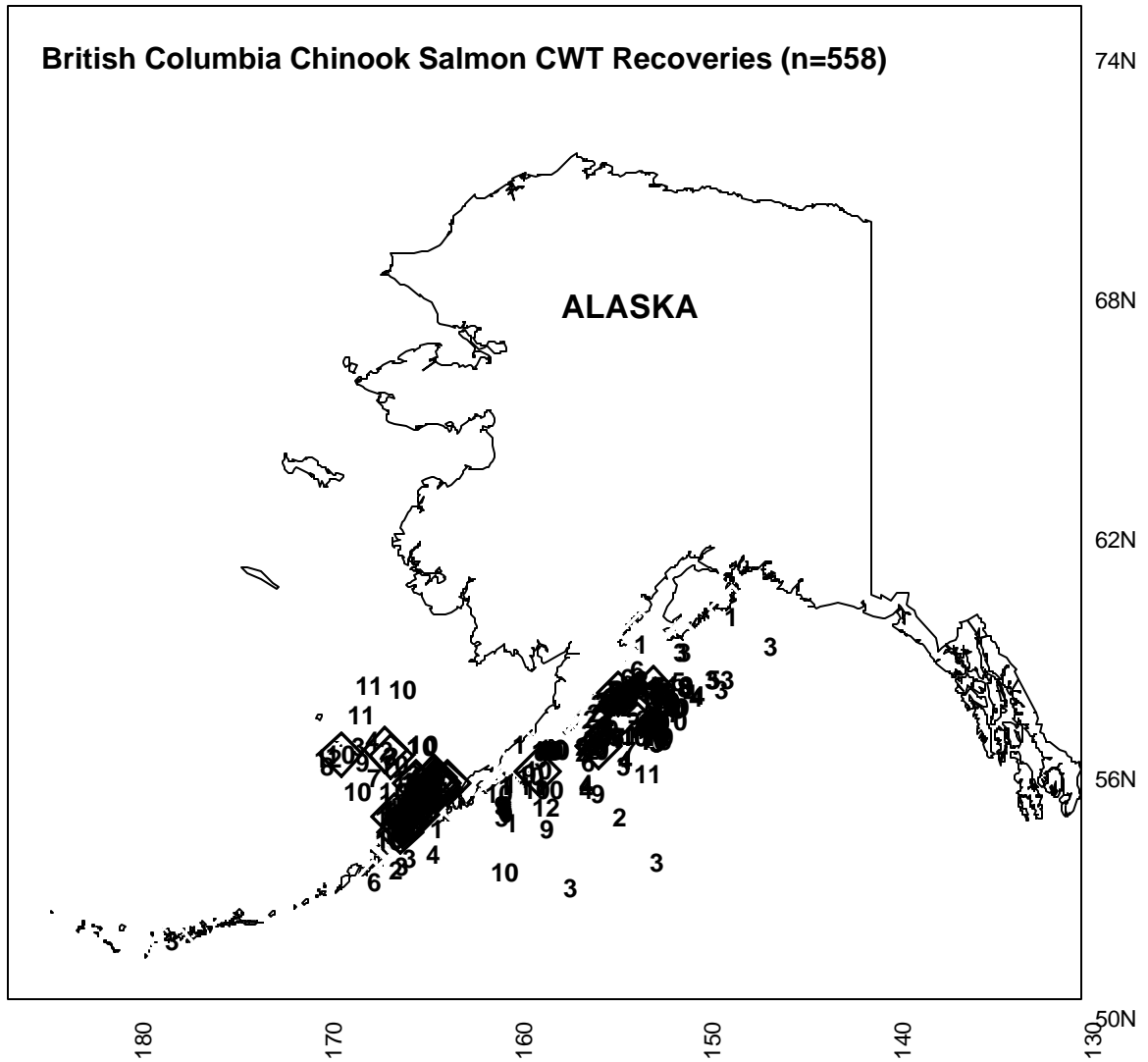


Fig. 4. Recovery locations of coded-wire tagged (CWT) British Columbia chinook salmon caught by U.S. and joint-venture groundfish (trawl) fishery vessels in the eastern Bering Sea and Gulf of Alaska (north of 50°N), 1982-2003. The numbers at each location indicate the month of recovery. Twenty-three new recoveries reported in this document are indicated by open diamonds.

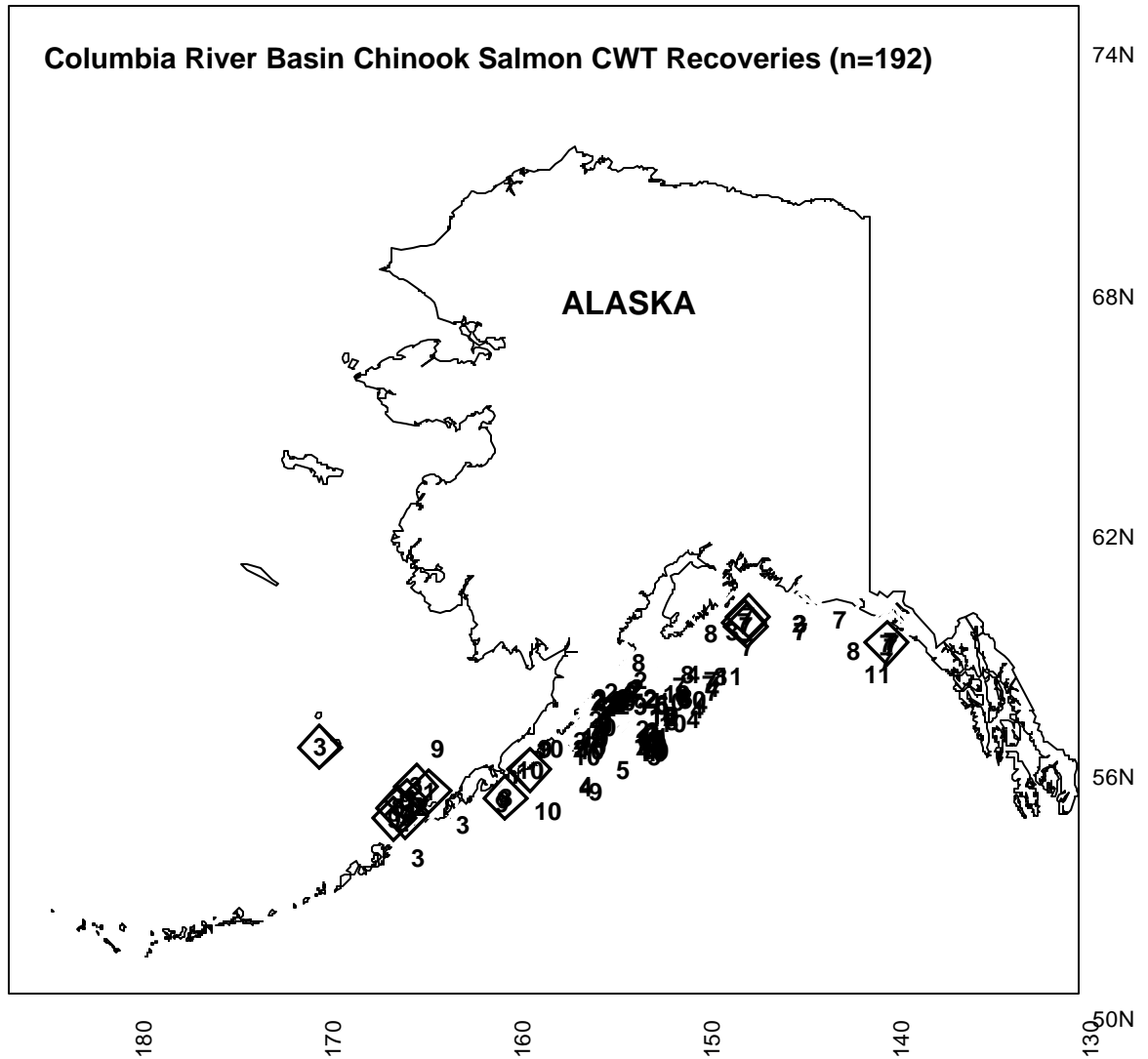


Fig. 5. Recovery locations of coded-wire tagged (CWT) Columbia River Basin chinook salmon caught by U.S. research vessels and by U.S. and joint-venture groundfish (trawl) fishery vessels in the eastern Bering Sea and Gulf of Alaska, 1982-2003. The numbers at each location indicate the month of recovery. Thirteen new recoveries reported in this document are indicated by open diamonds. One recovery of an age 0.3 coded-wire tagged hatchery (Ringold Springs, Washington) salmon at 56°27'N, 170°01'W is a northwestern extension of the known ocean range of Columbia River Basin and Washington chinook salmon (see Fig. 6) in the eastern Bering Sea.

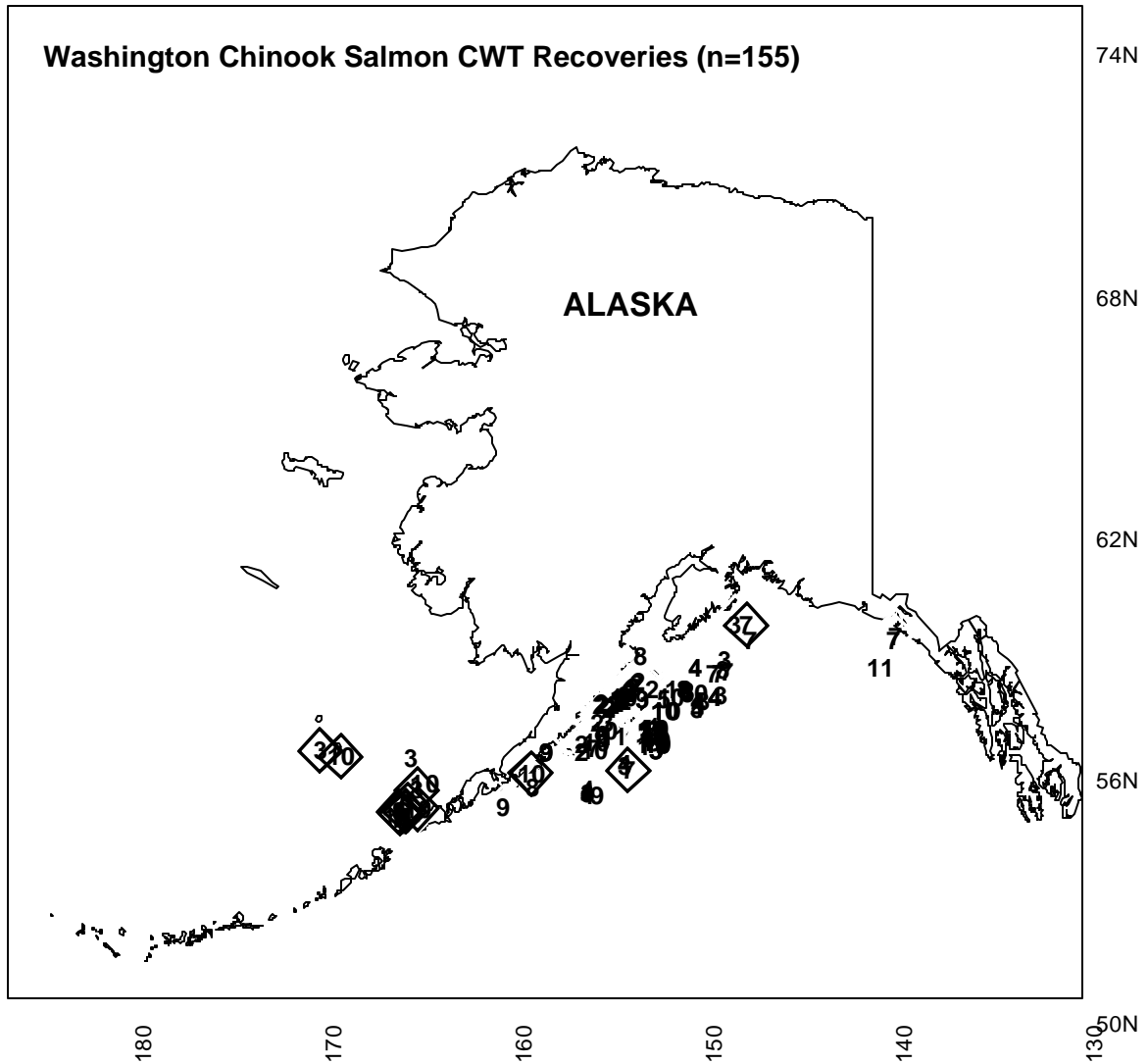


Fig. 6. Recovery locations of coded-wire tagged (CWT) Washington chinook salmon, including recoveries in the Columbia River Basin (Fig. 5), caught by U.S. research vessels and by U.S. and joint-venture groundfish (trawl) fishery vessels in the eastern Bering Sea and Gulf of Alaska, 1984-2003. The numbers at each location indicate the month of recovery. Eleven new recoveries reported in this document are indicated by open diamonds. One recovery of an age 0.3 coded-wire tagged hatchery salmon at  $56^{\circ}27'N$ ,  $170^{\circ}01'W$  in March is a northwestern extension of the known ocean range of Columbia River Basin (see Fig. 5) and Washington chinook salmon in the eastern Bering Sea.

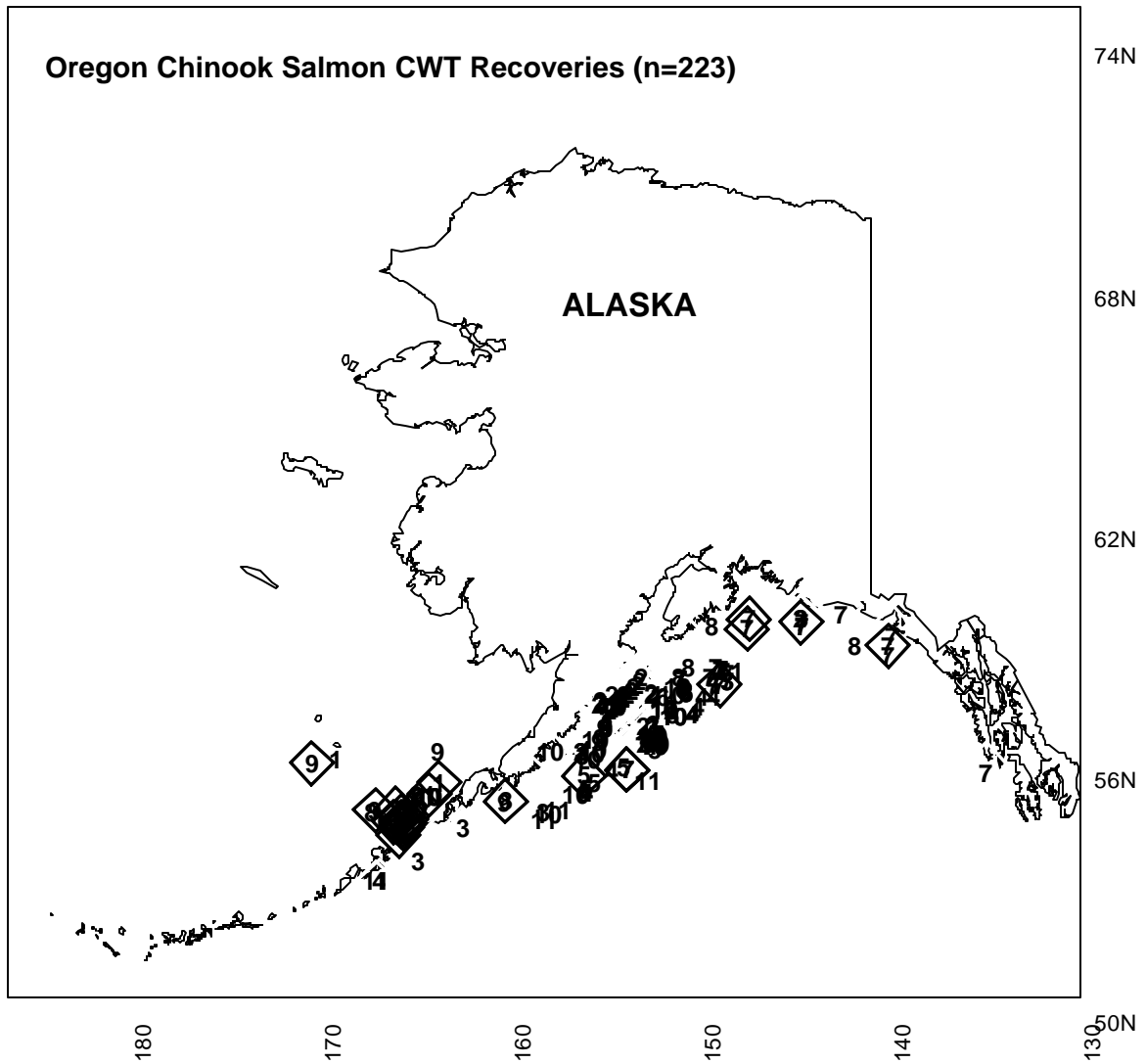


Fig. 7. Recovery locations of coded-wire tagged (CWT) Oregon chinook salmon, including recoveries in the Columbia River Basin (Fig. 5), caught by U.S. research vessels and by U.S. and joint-venture groundfish (trawl) fishery vessels in the eastern Bering Sea and Gulf of Alaska, 1982-2003. The numbers at each location indicate the month of recovery. Twenty-one new recoveries (including recoveries of Columbia River Basin fish) reported in this document are indicated by open diamonds. One recovery of an age 0.2 hatchery salmon at 56°08'N, 170°26'W in September 2002 is a northwestern extension of the known ocean range of Oregon chinook salmon in the eastern Bering Sea.

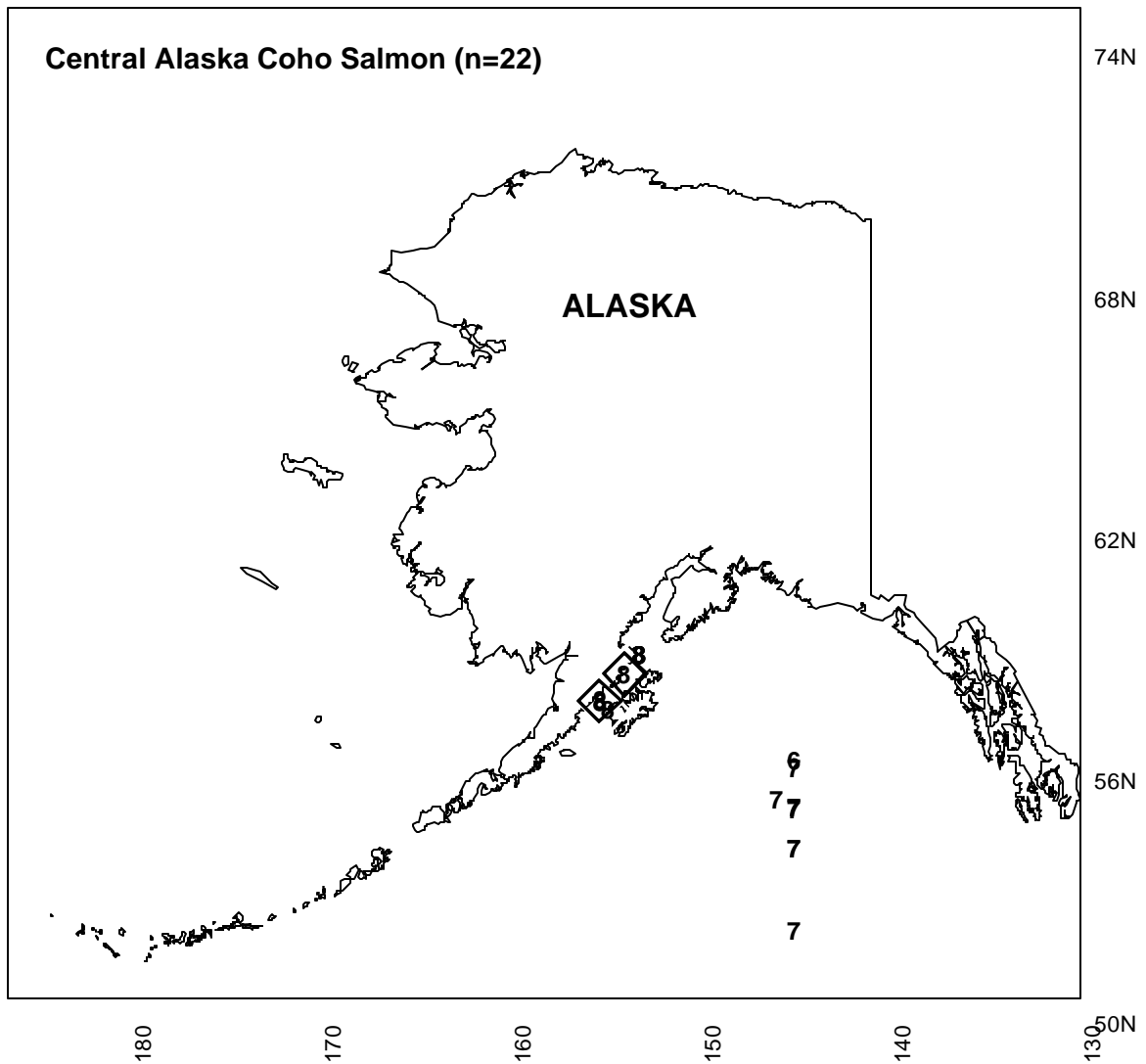


Fig. 8. Recovery locations of coded-wire tagged (CWT) central Alaska (Cook Inlet) coho salmon caught by U.S. and Japanese research vessels in the Gulf of Alaska (north of 50°N), 1993-2002. The numbers at each location indicate the month of recovery. All offshore recoveries in June and July are maturing fish and all inshore recoveries in August are juvenile (ocean age-.0) fish in their first summer at sea. Two new inshore recoveries of juvenile coho salmon reported in this document are indicated by open diamonds.

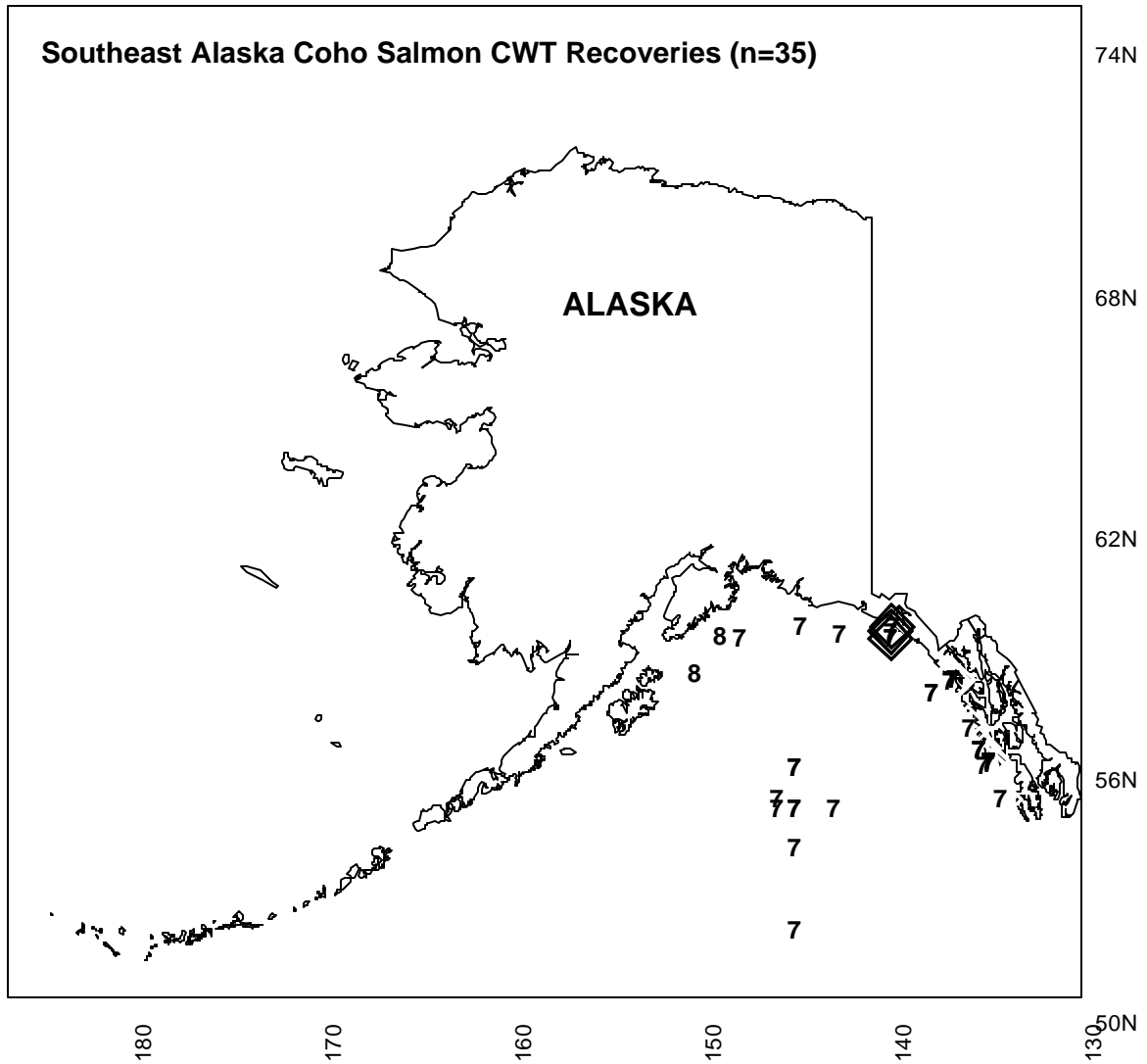


Fig. 9. Recovery locations of coded-wire tagged (CWT) southeast Alaska coho salmon caught by U.S. and Japanese research vessels in the Gulf of Alaska (north of 50°N), 1982-2002. The numbers at each location indicate the month of recovery. All offshore recoveries in July are maturing fish and inshore recoveries are a mixture of juvenile and maturing fish. The locations of three new recoveries in July (2 juvenile and 1 maturing fish) are indicated by open diamonds.

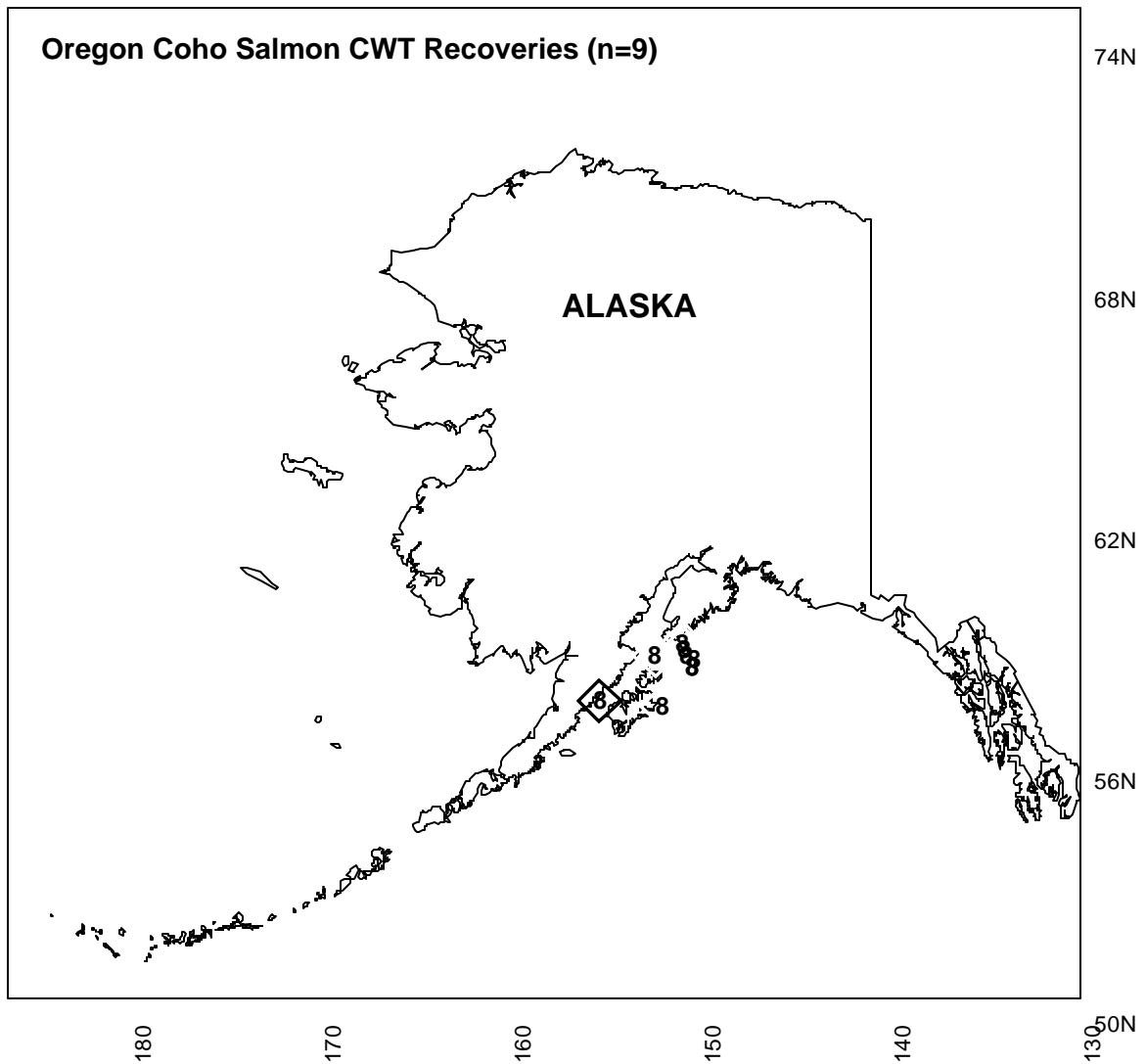


Fig. 10. Recovery locations of coded-wire tagged (CWT) Oregon coho salmon caught by U.S. research vessels in the Gulf of Alaska (north of 50°N), 1996-2002. The numbers at each location indicate the month of recovery. All recoveries are juvenile (ocean age-.0) fish in their first summer at sea. The location of one new recovery in August is indicated by open diamonds.

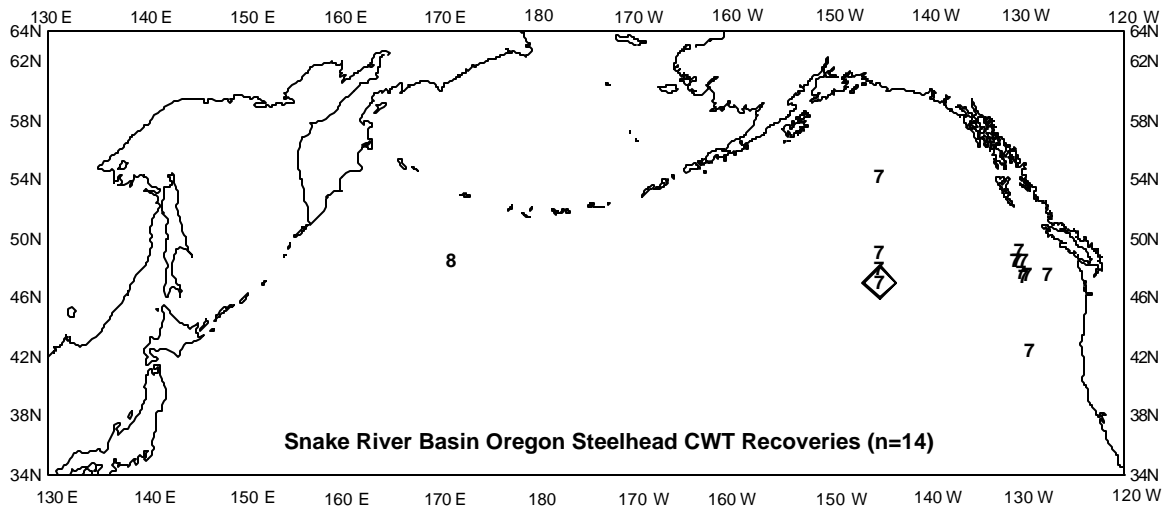


Fig. 11. Recovery locations of coded-wire tagged (CWT) Snake River Basin Oregon steelhead caught by Japanese research vessels in the North Pacific Ocean, 1981-2000. The numbers at each location indicate the month of recovery. The location of one new recovery in July 2000 is indicated by open diamonds.

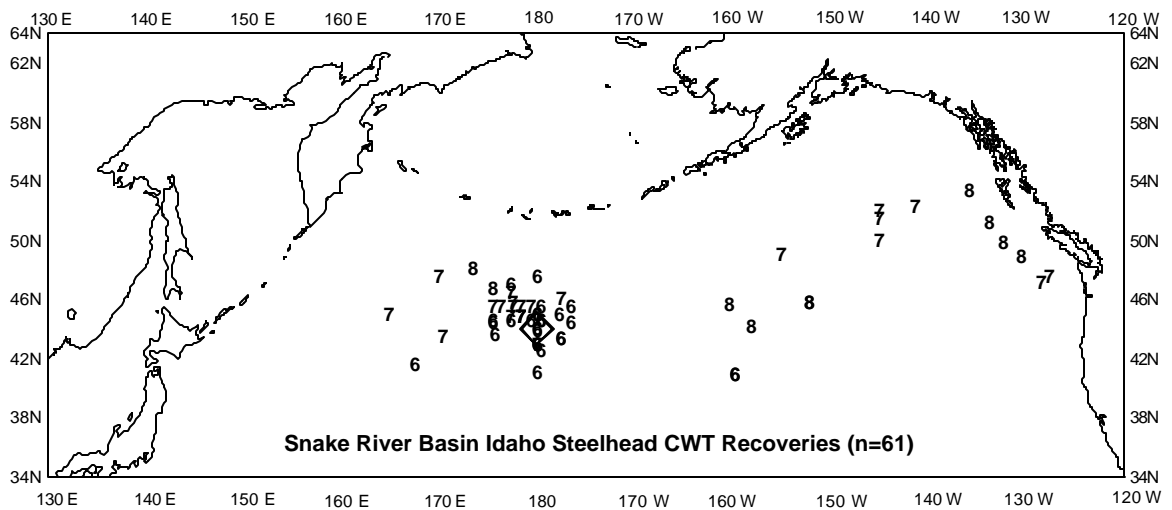


Fig. 12. Recovery locations of coded-wire tagged (CWT) Snake River Basin Idaho steelhead caught by Canadian and Japanese research vessels and salmon and squid driftnet fishery vessels in the North Pacific Ocean, 1980-2002. The numbers at each location indicate the month of recovery. The location of one newly reported research vessel recovery in June 2002 is indicated by open diamonds.

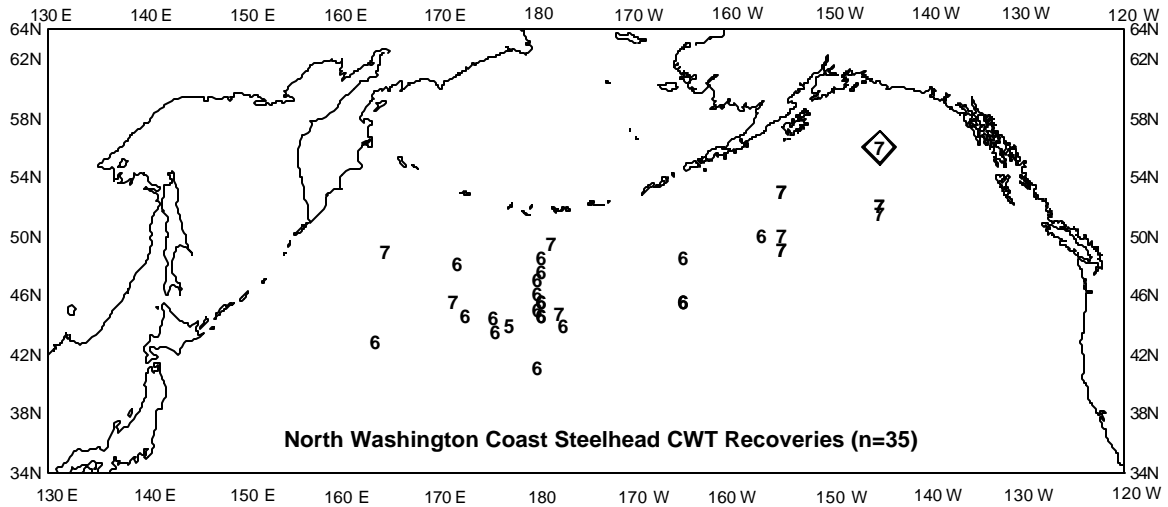


Fig. 13. Recovery locations of coded-wire tagged (CWT) North Washington Coast steelhead caught by Japanese research and driftnet fishery vessels in the North Pacific Ocean, 1982-2002. The numbers at each location indicate the month of recovery. The location of one newly reported research vessel recovery in July 2002 is indicated by an open diamond. This recovery at 56°N, 145°W is a northern extension of the known high seas range of North Washington Coast steelhead.

Table 1. Release and recovery information for coded-wire tagged chinook salmon (*Oncorhynchus tshawytscha*) caught in 2002-2003 U.S. commercial groundfish trawl fisheries for walleye pollock (*Theragra chalcogramma*) in the Bering Sea, Aleutian Islands, and Gulf of Alaska. All recoveries in the table are reported for the first time (1 September 2002-31 August 2003 reporting period). Run type: SP=spring, SU=summer, F=fall, LF=late fall. Rearing type: H=hatchery, M=mixed hatchery and wild, W=wild. State: AK=Alaska, BC=British Columbia, OR=Oregon, WA=Washington, YT=Yukon Territory. TSFT=Tip of snout to fork of tail length. Wt=whole body weight. Sex: M=male, F=female.

Tag code	Species	Stock short name	Run type	Rearing type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
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### 1. Bering Sea Recoveries

18441 2	CHINOOK	S-YUKON R	SP	H	00	YUKN	YUKN	R-MCCLIN-TOCK R	YT	CDFO	01060 8	02021 5	56	10	166	0	W	230	130	
18510 7	CHINOOK	S-YUKON R	F	H	01	YUKN	YUKN	R-MITCHIE CR	YT	CDFO	02061 0	03020 8	56	44	167	0	W	250	160	M
31013 4	CHINOOK	CROOKED CR 244-30	SP	H	99	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	00060 5	02092 3	54	25	165	45	W	650	4030	
31013 4	CHINOOK	CROOKED CR 244-30	SP	H	99	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	00060 5	02080 8	54	50	166	4	W	630	3600	F

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
310135	CHINOOK	CROOKED CR 244-30	SP	H	99	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	000605	020825	54	45	165	26	W	690	4600	M
310142	CHINOOK	SHIP CR		H	98	CNAK	COOK	SHIP CR 247-50	AK	ADFG	990527	020210	56	0	164	10	W	720	5840	M
310144	CHINOOK	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	020803	55	17	167	26	W	600	3100	F
310231	CHINOOK	CROOKED CR 244-30	SP	H	99	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	000605	020910	54	48	165	23	W	660	4200	F
310233	CHINOOK	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	020126	54	43	165	20	W	500	1440	M
310233	CHINOOK	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	000614	021016	54	45	165	24	W	610	3060	F

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
31023 5	CHINOOK	DECEPTION CR 247-41	SP	H	99	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	00060 2	02092 2	54	20	165	50	W	620	3440	
31023 6	CHINOOK	CROOKED CR 244-30		H	00	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	01060 4	02100 2	54	59	165	12	W	450	1270	F
31023 7	CHINOOK	CROOKED CR 244-30		H	00	CNAK	COOK	CROOKED CR 244-30	AK	ADFG	01060 4	02101 0	54	45	165	18	W	460	1340	
31024 1	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 9	02092 2	54	37	165	40	W	440	1050	F
31024 1	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 9	02092 3					W	407	750	M
31024 2	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 9	02100 1	54	8	166	23	W	460	1240	M

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	
31024 2	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 9	02092 2						W	450	1140	M
31024 3	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 9	02100 7	54	57	165	15	W	440	1090	M	
31024 3	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 9	02100 1	55	0	164	54	W	460	1280	F	
31024 4	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 8	02072 3	54	57	165	8	W	360	540		
31024 4	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 8	02083 1	54	52	165	12	W	453	1180	M	

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
31024 4	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 8	02101 3	54	50	166	3	W	450	1180	M
31024 5	CHINOOK	DECEPTION CR 247-41		H	00	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	01061 8	02092 2	54	37	165	40	W	380	750	M
31261 7	CHINOOK	DECEPTION CR 247-41		H	98	CNAK	COOK	DECEPTION CR 247-41	AK	ADFG	99061 7	02012 8	54	45	166	5	W	700	4000	F
03015 1	CHINOOK	UNUK R 101- 75	SP	H	98	SEAK	SEAK	L PORT WALTER 109-10	AK	NMFS	00051 8	02092 3	54	57	165	4	W	710	5300	F
04481 6	CHINOOK	MEDVEJIE		H	98	SEAK	SEAK	BEAR COVE 113- 41	AK	NSRA	00053 0	03020 2	55	24	164	2	W	620	2700	F
18435 7	CHINOOK	S-ATNARKO R UP	SU	H	99	COBC	CCST	R- ATNARKO R UP	BC	CDFO	00060 6	02012 4	55	34	164	59	W	530	1830	F

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
182130	CHINOOK	S-SALMON R/TOMF	SP	H	98	FRTH	TOMF	R-SALMON R/TOMF	BC	CDFO	000412	020917					W	600	3300	M
182205	CHINOOK	S-SHUSWAP R LOW	SU	H	99	FRTH	TOMF	R-SHUSWAP R LOW	BC	CDFO	000519	020919	54	22	165	48	W	630	3400	F
182206	CHINOOK	S-SHUSWAP R LOW	SU	H	99	FRTH	TOMF	R-SHUSWAP R LOW	BC	CDFO	000519	030307	55	30	163	50	W	680	4900	F
183244	CHINOOK	S-BULKLEY R UP	SP	H	98	NASK	SKNA	R-BULKLEY R UP	BC	CDFO	000501	020815					W	650	3700	F
184560	CHINOOK	S-KITSUM BEL CANYON	SU	H	99	NASK	SKNA	R-KITSUM BEL CANYON	BC	CDFO	000523	020205	54	33	165	37	W	540	1890	

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
18456 1	CHINOOK	S-KITSUM BEL CANYON	SU	H	99	NASK	SKNA	R-KITSUM BEL CANYON	BC	CDFO	00052 3	02000 0	54	50	165	27	W	700	5900	
18216 3	CHINOOK	S-ROBERTSON CR	F	H	99	WCVI	SWVI	R-ROBERT- SON CR	BC	CDFO	00060 2	02020 6	54	40	165	28	W	510	1750	M
18221 4	CHINOOK	S-CONUMA R	F	H	99	WCVI	NWVI	R- MOUTCHA BAY	BC	CDFO	00051 5	02021 5	56	15	166	15	W	520	1730	M
18383 6	CHINOOK	S-NITINAT R	F	H	99	WCVI	SWVI	R- NITINAT LK	BC	CDFO	00051 7	02012 8	54	45	166	5	W	490	1500	F
18430 6	CHINOOK	S-KENNEDY R LOW	F	H	99	WCVI	SWVI	R- KENNEDY R LOW	BC	CDFO	00053 0	03021 9	55	34	163	46	W	680	4030	
18430 6	CHINOOK	S-KENNEDY R LOW	F	H	99	WCVI	SWVI	R- KENNEDY R LOW	BC	CDFO	00053 0	03021 9	55	27	163	50	W	500	3010	F

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
184306	CHINOOK	S-KENNEDY R LOW	F	H	99	WCVI	SWVI	R-KENNEDY R LOW	BC	CDFO	000530	030128	55	37	163	53	W	650	3890	F
184307	CHINOOK	S-KENNEDY R LOW	F	H	99	WCVI	SWVI	R-KENNEDY R LOW	BC	CDFO	000530	020217	55	23	164	17	W	460	1150	
184307	CHINOOK	S-KENNEDY R LOW	F	H	99	WCVI	SWVI	R-KENNEDY R LOW	BC	CDFO	000530	030208	56	25	166	34	W	560	2330	F
184516	CHINOOK	S-CONUMAR	F	H	99	WCVI	NWVI	R-CONUMAR	BC	CDFO	000530	021002	56	18	168	55	W	640	3110	
184607	CHINOOK	S-NAHMINT R	F	H	99	WCVI	SWVI	R-NAHMINT R	BC	CDFO	000516	020907	54	42	165	16	W	660	4160	F
184607	CHINOOK	S-NAHMINT R	F	H	99	WCVI	SWVI	R-NAHMINT R	BC	CDFO	000516	030209	55	34	163	18	W	680	4100	F

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
184607	CHINOOK	S-NAHMINT R	F	H	99	WCVI	SWVI	R-NAHMINT R	BC	CDFO	000516	030131	54	48	164	59	W	720	4780	M
184701	CHINOOK	S-KENNEDY R LOW	F	H	00	WCVI	SWVI	R-KENNEDY R LOW	BC	CDFO	010525	030313	55	43	163	59	W	470	1350	F
184703	CHINOOK	S-KENNEDY R LOW	F	H	00	WCVI	SWVI	R-KENNEDY R LOW	BC	CDFO	010525	030203	55	4	164	42	W	500	1540	M
630748	CHINOOK	LEWIS R 27.0168	SP	H	98	LOCR	LEWI	LEWIS R - NF 27.0168	WA	COOP	000318	020806	54	56	165	54	W	620	2950	M
630170	CHINOOK	PRIEST RAPIDS (36)	F	H	99	CECR	KLIC	KLICKITA T R 30.0002	WA	WDFW	000616	020304	55	28	164	54	W	490	1500	F
630177	CHINOOK	WELLS HATCHERY	SU	H	99	UPCR	WACO	COL.R. @ TURTLE ROCK	WA	WDFW	000705	020904	55	7	165	25	W	620	3100	

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
630165	CHINOOK	BONNEVILLE POOL	F	H	99	CRGN	CRNG	COLUMBIAR - GENERAL	WA	WDFW	000619	030321	56	27	170	1	W	690	3890	M
050476	CHINOOK	QUINALT R 21.0398	F	H	00	NWC	QEQU	COOK CR 21.0429	WA	FWS	010713	021001	55	0	164	54	W	410	900	
210165	CHINOOK	QUINALT LK (21)	F	H	99	NWC	QEQU	QUINALT LK (21)	WA	QDNR	000831	020824					W	620	2800	F
210167	CHINOOK	SALMON R 21.0139	F	H	99	NWC	QEQU	SALMON R 21.0139	WA	QDNR	000731	020829					W	610	3100	M
213001	CHINOOK	QUEETS R 21.0016	F	H	98	NWC	QEQU	SALMON R 21.0139	WA	QDNR	990730	020126	54	54	165	48	W	630	3410	F
213001	CHINOOK	QUEETS R 21.0016	F	H	98	NWC	QEQU	SALMON R 21.0139	WA	QDNR	990730	021002	56	18	168	55	W	680	3710	
631318	CHINOOK	WILLAPA R 24.0251	F	H	99	WILP	WILP	WILLAPA R 24.0251	WA	WDFW	000531	020911	54	56	165	32	W	610	2950	F

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
092653	CHINOOK	MCKENZIE HATCHERY	SP	H	98	LOCR	WILL	MCKENZIE R 1	OR	ODFW	000308	020131	55	21	164	14	W	670	4130	
092918	CHINOOK	CLACKAMAS R EARLY	SP	H	98	LOCR	WILL	CLACK-AMAS R	OR	ODFW	000315	020920					W	770	6480	F
054522	CHINOOK	ABERNATHY CR 25.0297	SP	H	99	CECR	DESC	WARM SPRINGS R	OR	FWS	001115	020928	54	43	165	27	W	630	3400	
054522	CHINOOK	ABERNATHY CR 25.0297	SP	H	99	CECR	DESC	WARM SPRINGS R	OR	FWS	001115	020913	54	40	166	5	W	560	1900	M
092712	CHINOOK	TRASK R (TRASK HT)	F	H	99	NOOR	NECA	NECAN-ICUM R	OR	ODFW	000825	020807	54	59	165	58	W	590	2800	F
092712	CHINOOK	TRASK R (TRASK HT)	F	H	99	NOOR	NECA	NECAN-ICUM R	OR	ODFW	000825	020924					W	610	3120	M
092817	CHINOOK	SALMON R	F	H	98	NOOR		SALMON R/OR - COAST	OR	ODFW	990820	020822	54	49	165	40	W	760	6100	F

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yyymmdd)	Recovery date (yyymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
092909	CHINOOK	TRASK R (TRASK HT)	W	H	99	NOOR	WTN	TRASK R	OR	ODFW	000817	021003	54	41	165	40	W	580	1900	
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020927	54	34	165	39	W	630	3340	
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020929	54	57	167	4	W	660	4300	F
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020915	54	20	165	50	W	670	4400	F
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020917					W	600	3200	M
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020211	54	31	165	37	W	520	2200	
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020917	56	8	170	26	W	610	3050	

## 1. Bering Sea Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Long (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020831					W	570	2420	M
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020816					W	587	2560	M
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	020824	54	39	165	32	W	600	2800	M
093053	CHINOOK	BURNT HILL CR PUBLIC	F	H	99	NOOR	SIYA	SALMON R	OR	ODFW	000827	030126	55	38	163	44	W	670	4000	F
092027	CHINOOK	COOS R - PUBLIC	F	H	99	SOOR	COOS	NOBLE CR (COOS R)	OR	ODFW	000619	020923					W	613	3220	F

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region1)	Release site (Basin2)	Release location	State	Release agency3	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
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## 2. Gulf of Alaska Recoveries

310260	CHINOOK	NINILCHIK R 244-20		H	00	CNAK	COOK	NINILCHIK R 244-20	AK	ADFG	010613	020314	56	58	155	12	W	270	520	
032312	CHINOOK	UNUK R 101-75	SP	H	99	SEAK	SEAK	L PORT WALTER 109-10	AK	NMFS	010518	021101	57	46	154	14	W	500	1700	F
040265	CHINOOK	WHITMAN LK		H	99	SEAK	SEAK	HERRING COVE 101-45	AK	SSRA	010518	020909	57	42	154	0	W	540	2060	F
040353	CHINOOK	TAKU R 111-32		W	98	SEAK	SEAK	TAKU R 111-32	AK	ADFG	000615	020721	57	14	151	13	W	590	2400	F
040353	CHINOOK	TAKU R 111-32		W	98	SEAK	SEAK	TAKU R 111-32	AK	ADFG	000615	020908	55	54	158	54	W	700	3900	
040393	CHINOOK	TAHINI R		H	99	SEAK	SEAK	PULLEN CR 115-34	AK	DIPC	010612	021031	57	48	154	10	W	540	2050	F
040393	CHINOOK	TAHINI R		H	99	SEAK	SEAK	PULLEN CR 115-34	AK	DIPC	010612	020905					W	510	1550	

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region1)	Release site (Basin2)	Release location	State	Release agency3	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
042818	CHINOOK	MEDVEJIE		H	99	SEAK	SEAK	BEAR COVE 113-41	AK	NSRA	010523	030321					W	600	2630	F
044816	CHINOOK	MEDVEJIE		H	98	SEAK	SEAK	BEAR COVE 113-41	AK	NSRA	000530	020906					W	700	5350	
044816	CHINOOK	MEDVEJIE		H	98	SEAK	SEAK	BEAR COVE 113-41	AK	NSRA	000530	030515	56	90	152	80	W	680	3800	F
044826	CHINOOK	MEDVEJIE		H	99	SEAK	SEAK	BEAR COVE 113-41	AK	NSRA	010523	021018	57	44	154	2	W	530	1540	F
183802	CHINOOK	S-ATNARKO R LOW	SU	H	98	COBC	CCST	R-ATNARKO R LOW	BC	CDFO	990609	020513	56	30	155	19	W	790	7000	F
184357	CHINOOK	S-ATNARKO R UP	SU	H	99	COBC	CCST	R-ATNARKO R UP	BC	CDFO	000606	020130	57	58	152	30	W	520	1650	M

## 2. Gulf of Alaska Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region1)	Release site (Basin2)	Release location	State	Release agency3	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
182160	CHINOOK	S-ROBERTSON CR	F	H	99	WCVI	SWVI	R-ROBERTSON CR	BC	CDFO	000603	021007	55	53	158	33	W	640	4200	M
183837	CHINOOK	S-NITINAT R	F	H	99	WCVI	SWVI	R-NITINAT LK	BC	CDFO	000607	021021	57	50	154	17	W	640	4100	
184338	CHINOOK	S-CONUMAR	F	H	00	WCVI	NWVI	R-MOUTCHABAY	BC	CDFO	010427	021022	57	41	152	24	W	550	2500	
210167	CHINOOK	SALMON R 21.0139	F	H	99	NWC	QEQU	SALMON R 21.0139	WA	QDNR	000731	020000	57	42	154	22	W	530	2300	
213001	CHINOOK	QUEETS R 21.0016	F	H	98	NWC	QEQU	SALMON R 21.0139	WA	QDNR	990730	020719	55	58	153	48	W	690	3600	F
092523	CHINOOK	SANTIAM R S FK	SP	H	97	LOCR	WILL	SANTIAM R S FK	OR	ODFW	990211	020828	55	11	160	13	W	640	3200	M

## 2. Gulf of Alaska Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region1)	Release site (Basin2)	Release location	State	Release agency3	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
093248	CHINOOK	WILL-AMETTE R MID FK	SP	H	00	LOCR	WILL	WILL-AMETTE R M FK-1	OR	ODFW	011019	030328					W	520	1640	F
630474	CHINOOK	WENATCHEE R 45.0030	SU	H	99	UPCR	WECH	WENATCHEE R 45.0030	WA	WDFW	010427	030214					W	540	2270	F
631061	CHINOOK	WELLS HATCHERY	SU	H	98	UPCR	WECH	COLUMBIA NEAR WELLS	WA	WDFW	000512	021008	55	53	158	54	W	660	3900	F
092712	CHINOOK	TRASK R (TRASK HT)	F	H	99	NOOR	NECA	NECAN-ICUM R	OR	ODFW	000825	020719	55	58	153	48	W	540	1870	F
093315	CHINOOK	SALMON R	F	H	00	NOOR	SIYA	SALMON R	OR	ODFW	010825	030214					W	470	1430	M
093315	CHINOOK	SALMON R	F	H	00	NOOR	SIYA	SALMON R	OR	ODFW	010825	030504	55	49	156	6	W	540	2100	M
091908	CHINOOK	GARDNER CR (UMPQUA R	F	H	98	SOOR		UMPQUA R	OR	ODFW	990703	020719	55	58	153	48	W	740	4600	M

## 2. Gulf of Alaska Recoveries

Table 1. (cont'd)

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region1)	Release site (Basin2)	Release location	State	Release agency3	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex
093050	CHINOOK	GARDINER CR (UMPQUA)	F	H	99	SOOR	UMPQ	GARDINER CR (UMPQUA)	OR	ODFW	000722	020720	58	4	148	55	W	640	2600	F

## 2. Gulf of Alaska Recoveries

<sup>1</sup>Region: CECR=Central Columbia R, CNAK=central Alaska, COBC=Coastal British Columbia, CRGN=Columbia R general, FRTH=Fraser R - Thompson R, LOCR=Lower Columbia R, NASK=Nass R - Skeena R, NOOR=North Coastal Oregon, NWC=North Washington Coast, SEAK=Southeast Alaska, SOOR=South Coastal Oregon, UPCR=Upper Columbia R, WILP=Willapa, WCVI=Western Vancouver Island, YUKN=Yukon Territory (Yukon R in Yukon Territory only).

<sup>2</sup>Basin (if different than region): CCST=Central Coastal BC, COOK=Cook Inlet, COOS=Coos R, CRGNG=Columbia R general, DESC=Deschutes R, KIIC=Klickitat R, LEWI=Lewis R, NECA=Necanicum R, QEU=Queets R - Quinault R, SIYA=Siletz R - Yaquina R, SKNA=Skeena R, SWVI=SW Vancouver I, TOMF=Thompson R North and South Forks, UMPQ=Umpqua, WACO=Wanapum R - Coulee Res, WECH=Wenatchee R - Entiat R - Lk Chelan, WILL=Willamette R, WTN=Wilson, Trask, Nestucca.

<sup>3</sup>Agency: ADFG=Alaska Department of Fish & Game, CDFO=Canadian Department of Fisheries and Oceans, DIPAC=Douglas Island Pink & Chum, Inc., FWS=US Fish & Wildlife Service, NMFS=National Marine Fisheries Service, NSRA=Northern Southeast Regional Aquaculture Association, ODFW=Oregon Department of Fish & Wildlife, QDNR=Quinault Department of Natural Resources, SSRA=Southern Southeast Regional Aquaculture Association, WDFW=Washington Department of Fish & Wildlife

Table 2. Release and recovery information for coded-wire tagged salmonids (*Oncorhynchus* spp.) caught in Japanese and U.S. research gillnets and trawls in the North Pacific Ocean. All recoveries in the table are reported for the first time (1 September 2002 - 31 August 2003 reporting period). Species: CHIN=chinook salmon (*O. tshawytscha*), COHO=coho salmon (*O. kisutch*), STEEL=steelhead trout (*O. mykiss*). Run: F=fall, SP=spring, SU=summer, W=winter. Rearing type: H= Hatchery, W=wild. State: AK = Alaska, BC = British Columbia, ID=Idaho, OR = Oregon, WA = Washington, YT=Yukon Territory. TSFT = Tip of snout to fork of tail length. Wt. = whole body weight. Gear: G=research gillnet, T=research trawl. Sex: M = male, F = female.

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	Release State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	Gear	Vessel type
1. Bering Sea Recoveries																						
18506 1	CHIN	S- YUKON R	F	H	01	YUKN	YUKN	R- MITCHIE CR	YT	CDFO	02061 0	02100 4	63	0	165	58	W	155	49		T	U.S.
18510 2	CHIN	S- YUKON R	F	H	01	YUKN	YUKN	R-WOLF CR/YUKN	YT	CDFO	02060 2	02100 3	64	6	164	31	W	153	43		T	U.S.
18510 6	CHIN	S- YUKON R	F	H	01	YUKN	YUKN	R- MITCHIE CR	YT	CDFO	02061 0	02100 3	64	6	164	31	W	193	79		T	U.S.
2. Gulf of Alaska Recoveries																						
04014 5	CHIN	UNUK R 101- 75			W 99	SEAK	SEAK	UNUK R 101-75	AK	ADFG	01042 4	02072 2	59	28	147	29	W	393	844		T	U.S.
04014 5	CHIN	UNUK R 101- 75			W 99	SEAK	SEAK	UNUK R 101-75	AK	ADFG	01042 4	02072 2	59	41	147	44	W	375	795		T	U.S.
04018 7	CHIN	CRYS- TAL CR			H 99	SEAK	SEAK	CRYSTAL CR 106-44	AK	SSRA	01053 0	02072 2	59	22	147	23	W	376	780		T	U.S.
04039 5	CHIN	CRYS- TAL CR			H 99	SEAK	SEAK	GASTIN- EAU CH 111-40	AK	DIPC	01061 4	02072 6	59	42	149	19	W	421	1065	F	T	U.S.

Table 2. Cont'd

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	Release State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	Gear	Vessel type
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## 2. Gulf of Alaska Recoveries (cont'd)

630469	CHIN	MET-HOW & OKA-NOGAN	SU	H	99	UPCR	MEOK	SIMILK-AMEEN R 490325	WA	WDFW	010425	020722	59	34	147	36	W	428	1090		T	U.S.
093229	CHIN	NES-TUCCAR (CEDAR CR)	SP	H	00	NOOR	WTN	NES-TUCCAR	OR	ODFW	010723	020721	59	37	144	38	W	357	640		T	U.S.
093248	CHIN	WILL-AMETTE R MID FK	SP	H	00	LOCR	WILL	WILL-AMETTE R M FK-1	OR	ODFW	011019	020726	59	42	147	22	W	335	581		T	U.S.
093249	CHIN	SAN-TIAM R S FK	SP	H	00	LOCR	WILL	SANTIAM R S FK	OR	ODFW	011105	020722	59	28	147	29	W	373	719		T	U.S.
093336	CHIN	MC-KENZIE HATCH-ERY	SP	H	00	LOCR	WILL	MC-KENZIE R 1	OR	ODFW	020306	020717	59	3	140	3	W	222	162		T	U.S.
310284	COHO	KENAI R		W	99	CNAK	COOK	MOOSE R 244-30	AK	ADFG	020526	020803	58	22	153	57	W	200	100		T	U.S.
310287	COHO	KENAI R		W	99	CNAK	COOK	MOOSE R 244-30	AK	ADFG	020530	020804	57	42	155	16	W	237	167		T	U.S.
040544	COHO	TAKU R 111-32		W	00	SEAK	SEAK	TAKU R 111-32	AK	ADFG	020513	020717	59	23	139	56	W	220	132		T	U.S.
040647	COHO	WHIT-MAN LK		H	00	SEAK	SEAK	NAKAT INLET 101-11	AK	SSRA	020525	020717	59	13	139	59	W	246	183		T	U.S.

Table 2. Cont'd

Tag code	Species	Stock short name	Run type	Rearing_type	Brood year	Release site (Region <sup>1</sup> )	Release site (Basin <sup>2</sup> )	Release location	Release State	Release agency <sup>3</sup>	Release date (yymmdd)	Recovery date (yymmdd)	Latitude (deg)	Latitude (min)	Longitude (deg)	Longitude (min)	Hemisphere	TSFT (mm)	Wt (gm)	Sex	Gear	Vessel type
044723	COHO	MED-VEJIE		H	99	SEAK	SEAK	CRESC-ENT BAY 113-41	AK	SJ	010601	020717	59	31	139	54	W	590	2888	F	T	U.S.
093357	COHO	BIG CR HATCH-ERY	SU	H	00	LOCR	YOCL	KLASKANINE R S FK	OR	ODFW	020517	020804	57	42	155	16	W	301	355		T	U.S.
<b>2. Gulf of Alaska Recoveries (cont'd)</b>																						
092634	STEEL	IMNA-HA R AND TRIBS	SU	H	98	SNAK	GRIA	LTL SHEEP CR (IMNAHA)	OR	ODFW	990413	000714	47	0	144	59	W	572	2150	M	G	Japan
210336	STEEL	COOK CR 21.0429	W	H	01	NWC	QUHO	HOH R 20.0422	WA	FWS	020419	020724	56	0	145	0	W	334	340	M	G	Japan
<b>3. Central North Pacific Ocean Recoveries</b>																						
104802	STEEL	DWOR B	SP	H	00	SNAK	CLEA	CLEAR CRK:CLW-TR R	ID	IDFG	010426	020619	44	0	180	0	W	540	1620	F	G	Japan

<sup>1</sup>Region: CNAK=central Alaska, LOCR=Lower Columbia R, NOOR=North Coastal Oregon, NWC=North Washington Coast, SEAK=Southeast Alaska, SNAK=Snake R, UPCR=Upper Columbia R, YUKN=Yukon Territory (Yukon R. in Yukon Territory only).

<sup>2</sup>Basin (if different than region): CLEA=Clearwater R, COOK=Cook Inlet, GRIA=Grand Ronde R-Imnaha R-Asotin Cr, MEOK=Methow R - Okanogan R, QUHO=Quillayute R-Hoh R, WTN=Wilson, Trask, Nestucca, YOCL=Youngs Bay-Clatskanie R.

<sup>3</sup>Agency: ADFG=Alaska Department of Fish & Game, CDFO=Canadian Department of Fisheries and Oceans, DIPC=Douglas Island Pink and Chum, Inc., FWS=U.S. Fish and Wildlife Service, IDFG=Idaho Department of Fish and Game, ODFW=Oregon Department of Fish & Wildlife, SJ=Sheldon Jackson College, SSRA=Southern Southeast Regional Aquaculture Association, WDFW=Washington Department of Fish & Wildlife.