

**INCIDENCE OF CODED-WIRE TAGGED SALMONIDS
IN COMMERCIAL CATCHES IN THE NORTH
PACIFIC OCEAN AND BERING SEA,
1997-1998**

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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). In this document, previously unreported release and recovery data for 90 coded-wire tagged chinook salmon recovered in 1996 (21 recoveries), 1997 (57 recoveries), and 1998 (12 recoveries) are listed. All reported recoveries were from incidental catches of chinook salmon by U.S. commercial groundfish vessels operating in the U.S. Exclusive Economic Zone in the Bering Sea (62 recoveries), Gulf of Alaska (2), and northeastern Pacific Ocean (22), and unknown locations (4). The fish originated from releases in the Yukon Territory (1 recovery), Alaska (27), British Columbia (40), Washington (11), Oregon (8), and California (3). Notable recoveries include: (1) the first information on summer (June) distribution of Yukon River chinook salmon in the offshore waters of the eastern Bering Sea shelf, (2) the second and third reported recoveries of Washington-origin chinook salmon in the Bering Sea, and (3) three recoveries off the Washington coast in 1996 of Snake River, Washington, hatchery fish, which are representatives of wild fall chinook salmon listed under the U.S. Endangered Species Act. Recoveries of CWT salmonids from high seas research vessel operations in 1998 will be reported later.

INTRODUCTION

The North Pacific Anadromous Fish Commission (NPAFC) coordinates the examination of high seas commercial and research catches for salmonids 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 1981-82; Wertheimer and Dahlberg 1983-84; Dahlberg and Fowler 1985; Dahlberg et al. 1986-92; Margolis 1985; Margolis et al. 1989; McKinnell et al. 1991) and to the North Pacific Anadromous Fish Commission (Dahlberg et al. 1993-97). The Regional Mark Processing Center, Pacific States Marine Fisheries Commission, incorporates the high seas CWT recovery data into their coastwide, on-line CWT recovery data set (Regional Mark Information System (RMIS); <http://www.psmfc.org/rmpc/>). In this document, we summarize previously unreported data for CWT salmonids recovered by U.S. observers on commercial groundfish vessels operating in the U.S. Exclusive Economic Zone in 1996-98. Recoveries of CWT salmonids from high seas research vessel operations in 1998 will be reported later.

RESULTS AND DISCUSSION

Previously unreported release and recovery data for 90 coded-wire tagged chinook salmon recovered in 1996 (21 recoveries), 1997 (57 recoveries), and 1998 (12 recoveries) are listed in Table 1. All reported recoveries were from incidental catches of chinook salmon by U.S. commercial groundfish vessels operating in the U.S. Exclusive Economic Zone in the Bering Sea (62 recoveries), Gulf of Alaska (2), and northeastern Pacific Ocean (22), and unknown locations (4). Some CWT chinook salmon were recovered in

processing plants from combined catches of several vessels; therefore, in those cases the recovery locations appear as National Marine Fisheries Service (NMFS) statistical areas (Fig. 1). The CWT chinook salmon originated from releases in the Yukon Territory (1 recovery), Alaska (27), British Columbia (40), Washington (11), Oregon (8), and California (3). Notable recoveries include: (1) the first information on summer (June) distribution of Yukon River chinook salmon in the offshore waters of the eastern Bering Sea shelf, (2) the second and third reported recoveries of Washington-origin chinook salmon in the Bering Sea, and (3) three recoveries off the Washington coast in 1996 of Snake River, Washington, hatchery fish, which are representatives of wild fall chinook salmon listed under the U.S. Endangered Species Act.

ACKNOWLEDGMENTS

Fishermen, processors, observers, and scientists who participated in the 1997-98 high-seas CWT recovery program are gratefully acknowledged. Nate Raring, North Pacific Groundfish Observer Program, Alaska Fisheries Science Center (AFSC), NMFS, provided snout samples from salmonids lacking the adipose fin and recovery data collected by observers from the U.S. groundfish fishery. Ryan Scott dissected snouts and read CWTs. Saang-Yoon Hyun, Fisheries Research Institute (FRI), University of Washington, downloaded CWT release data from the on-line RMIS data set. The Oregon Department of Fish and Wildlife provided release data on their CWT tag codes not currently listed in the RMIS CWT release data set. Auke Bay Laboratory, AFSC, NMFS, provided funding to FRI for compilation and reporting of CWT release and recovery data (NOAA contract No. 50ABNF700003).

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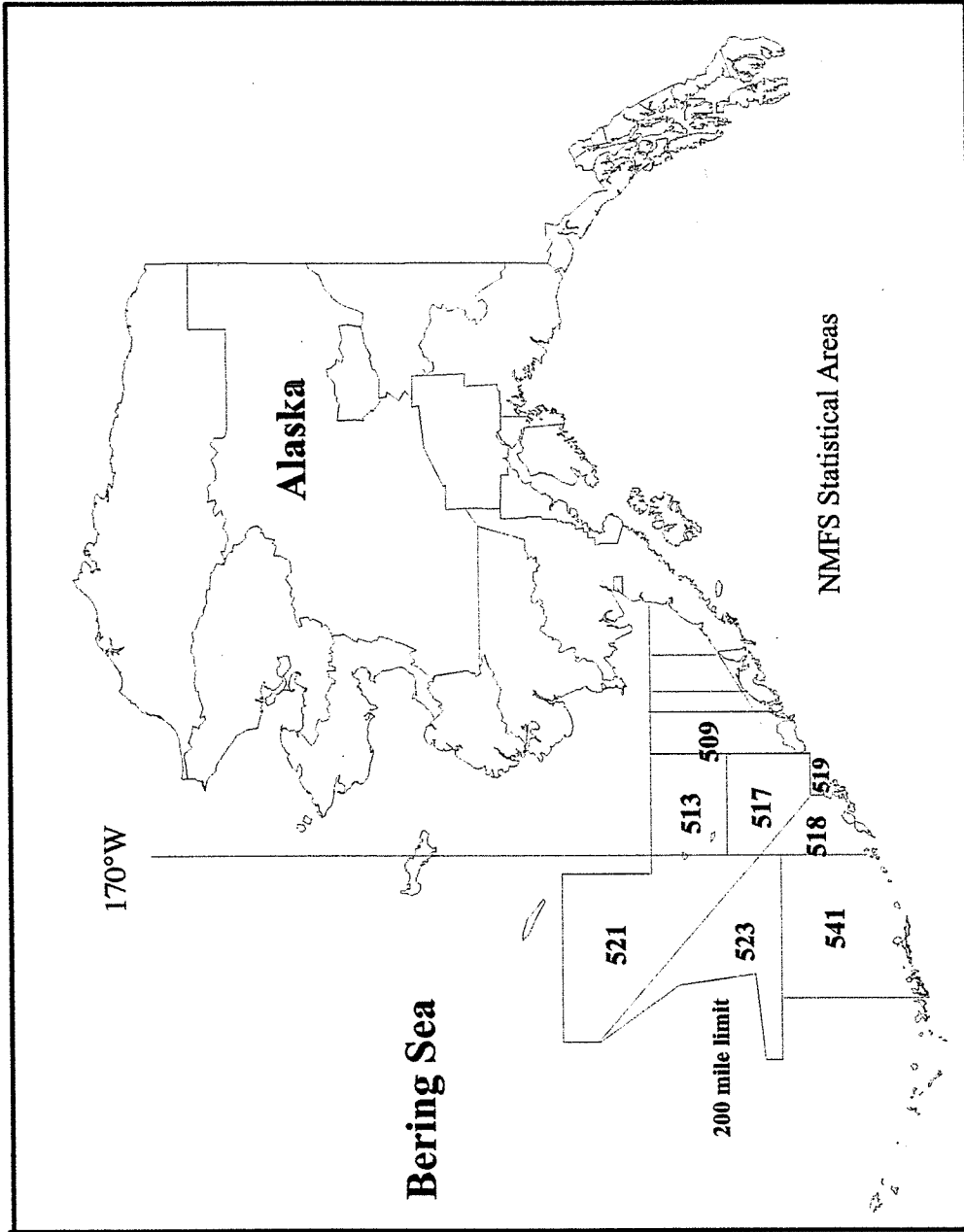


Figure 1. Locations of U.S. National Marine Fisheries Service (NMFS) statistical areas in the eastern Bering Sea portion of the U.S. Exclusive Economic Zone (EEZ).

Table 1. Continued.

TAG CODE	RELEASE										RECOVERY												
	BROOD YEAR	RELEASE SITE	STATE/ PROV	AGENCY	NO. TAGGED	DATE			DATE			L.A.T.			LONG			BODY SIZE			GONAD		
						Y	M	D	Y	M	D	D	M	D	D	M	D	TSFT (mm)	WT (g)	Sex	WT (g)	WT (g)	Sex
181346	95	NITNAT LAKE	BC	CDFO	27741	96	05	04	97	10	07	55	10	164	47	W	490	1700	M	TRAWL	CHINOOK	BERING_SEA	
181347	95	NITNAT LAKE	BC	CDFO	28070	96	06	02	97	10	10	55	38	164	57	W	480	1700	M	TRAWL	CHINOOK	BERING_SEA	
181432	93	DOME CREEK	BC	CDFO	50396	95	04	10	97	10	03	56	03	166	08	W	710	5700	F	TRAWL	CHINOOK	BERING_SEA	
181442	93	BULKLEY R UPPER	BC	CDFO	83981	95	04	21	97	10	08	55	05	164	51	W	750	5700	M	TRAWL	CHINOOK	BERING_SEA	
181442	93	BULKLEY R UPPER	BC	CDFO	83981	95	04	21	97	10	15	54	16	166	02	W	3600	F	TRAWL	CHINOOK	BERING_SEA		
181504	94	DOME CREEK	BC	CDFO	25115	96	04	10	97	10	10	AREAS_509_517_519			510	1900	M	TRAWL	CHINOOK	BERING_SEA			
181525	94	COLDWATER RIVER	BC	CDFO	20826	96	05	02	97	09	29	54	42	165	42	W	500	1600	F	TRAWL	CHINOOK	BERING_SEA	
181641	94	SHUSWAP R LOWER	BC	CDFO	75085	95	05	21	97	10	05	54	41	165	34	W	640	3700	F	TRAWL	CHINOOK	BERING_SEA	
181805	94	SARITA R	BC	CDFO	22306	95	05	15	97	10	02	AREA_517			530	2200	F	TRAWL	CHINOOK	BERING_SEA			
181805	94	SARITA R	BC	CDFO	22306	95	05	15	97	10	17	AREAS_509_517			610	3500	F	TRAWL	CHINOOK	BERING_SEA			
181832	94	NITNAT RIVER	BC	CDFO	36427	95	05	26	97	09	30	55	10	165	10	W	690	5140	F	TRAWL	CHINOOK	BERING_SEA	
182125	94	STAVE RIVER	BC	CDFO	24708	95	05	29	97	10	19	48	07	125	17	W	690	4300	M	TRAWL	CHINOOK	NORTHEASTERN_PACIFIC	
182155	94	KITSUMKALUM R	BC	CDFO	29252	95	06	21	97	10	15	55	18	164	14	W	700	4900	F	TRAWL	CHINOOK	BERING_SEA	
182224	94	ROBERTSON CREEK	BC	CDFO	27873	95	06	14	97	09	30	54	50	165	03	W	630	3320	F	TRAWL	CHINOOK	BERING_SEA	
182462	95	SHUSWAP R LOWER	BC	CDFO	74531	96	05	19	97	10	04	55	10	164	59	W	430	1220	F	TRAWL	CHINOOK	BERING_SEA	
183148	95	ATNARKO SPAWN CH	BC	CDFO	87497	96	06	07	97	10	08	AREA_509			450	1200	M	TRAWL	CHINOOK	BERING_SEA			
212452	93	SALMON R 21.0139	WA	QDNR	170604	94	08	12	97	10	17	AREA_517			760	6200	M	TRAWL	CHINOOK	BERING_SEA			
212740	94	GROVERS CR 15.0299	WA	SUQ	3898	95	06	09	97	10	19	48	07	125	17	W	700	4500	M	TRAWL	CHINOOK	NORTHEASTERN_PACIFIC	
212920	94	QUINAULT LAKE (21)	WA	QDNR	73642	95	06	29	97	10	11	55	38	164	31	W	540	2220	M	TRAWL	CHINOOK	BERING_SEA	
312235	93	DEEP CR 244-20	AK	ADFG	5719	95	07	21	97	10	08	AREAS_509_517_519			630	3300	M	TRAWL	CHINOOK	BERING_SEA			
312427	94	CROOKED CR 244-30	AK	ADFG	38408	95	06	06	97	10	03	54	38	165	35	W	569	2800	F	TRAWL	CHINOOK	BERING_SEA	
312427	94	CROOKED CR 244-30	AK	ADFG	38408	95	06	06	97	10	12	54	42	165	28	W	600	2900	M	TRAWL	CHINOOK	BERING_SEA	
312427	94	CROOKED CR 244-30	AK	ADFG	38408	95	06	06	97	09	12	54	43	165	24	W	600	2700	M	TRAWL	CHINOOK	BERING_SEA	
312429	94	SELDOVIA HBR 241-11	AK	ADFG	40694	95	06	02	97	09	12	54	04	166	36	W	590	3400	F	TRAWL	CHINOOK	BERING_SEA	
312430	94	HALIBUT CV LAG241-15	AK	ADFG	36685	95	06	13	97	09	18	54	04	166	36	W	680	4450	F	TRAWL	CHINOOK	BERING_SEA	
312430	94	HALIBUT CV LAG241-15	AK	ADFG	36685	95	06	13	97	09	28	54	30	165	30	W	610	2720	F	TRAWL	CHINOOK	BERING_SEA	
312431	94	BUSKIN R 259-21	AK	ADFG	38455	95	05	27	97	08	02	54	46	165	50	W	570	2500	F	TRAWL	CHINOOK	BERING_SEA	
312433	94	HOMER SPIT 241-13	AK	ADFG	40479	95	06	15	97	09	08	54	46	165	42	W	610	2720	F	TRAWL	CHINOOK	BERING_SEA	
312434	94	DECEPTION CR 247-41	AK	ADFG	41965	95	05	25	97	10	01	54	43	165	42	W	590	1900	M	TRAWL	CHINOOK	BERING_SEA	
312434	94	DECEPTION CR 247-41	AK	ADFG	41965	95	05	25	97	09	05	54	48	165	25	W	650	3400	M	TRAWL	CHINOOK	BERING_SEA	
312435	94	NINILCHIK R 244-20	AK	ADFG	54353	95	05	31	97	10	17	NO DATA			630	3500	M	TRAWL	CHINOOK	BERING_SEA			
312435	94	NINILCHIK R 244-20	AK	ADFG	54353	95	05	31	97	10	17	AREAS_517_519			485	1900	M	TRAWL	CHINOOK	BERING_SEA			
312507	95	HOMER SPIT 241-13	AK	ADFG	39070	96	06	05	97	09	19	54	45	165	54	W	450	1300	F	TRAWL	CHINOOK	BERING_SEA	
312508	95	SHIP CR 247-50	AK	ADFG	40108	96	06	07	97	10	11	55	57	165	31	W	450	1150	M	TRAWL	CHINOOK	BERING_SEA	
312509	95	BUSKIN R 259-21	AK	ADFG	40681	96	05	23	97	09	15	54	48	165	43	W	430	1200	F	TRAWL	CHINOOK	BERING_SEA	
312513	95	HOMER SPIT 241-13	AK	ADFG	38787	96	06	14	97	10	06	AREAS_509_517_519			510	1800	F	TRAWL	CHINOOK	BERING_SEA			
312513	95	HOMER SPIT 241-13	AK	ADFG	38787	96	06	14	97	10	05	57	37	165	33	W	500	1540	M	TRAWL	CHINOOK	BERING_SEA	
312514	95	DECEPTION CR 247-41	AK	ADFG	42595	96	06	18	97	10	01	54	40	165	35	W	540	2000	M	TRAWL	CHINOOK	BERING_SEA	
312514	95	DECEPTION CR 247-41	AK	ADFG	42595	96	06	18	97	09	27	AREA_517			480	1700	M	TRAWL	CHINOOK	BERING_SEA			
312514	95	DECEPTION CR 247-41	AK	ADFG	42595	96	06	18	97	10	15	55	25	164	10	W	470	1800	F	TRAWL	CHINOOK	BERING_SEA	
312514	95	DECEPTION CR 247-41	AK	ADFG	42595	96	06	18	97	09	28	54	43	166	00	W	470	1800	F	TRAWL	CHINOOK	BERING_SEA	
312515	95	NINILCHIK R 244-20	AK	ADFG	50962	96	06	13	97	09	23	54	40	165	35	W	470	1400	F	TRAWL	CHINOOK	BERING_SEA	

Table 1. Continued.

TAG CODE	BROOD YEAR	RELEASE SITE	STATE/ PROV	AGENCY	NO. TAGGED	DATE			DATE			LAT			LONG			BODY SIZE			SEX	WT (g)	GEAR	SPECIES	OCEANIC REGION
						Y	M	D	Y	M	D	D	M	D	D	M	D	TSFT (mm)	WT (g)	WT (g)					
						Y	M	D	Y	M	D	D	M	D	D	M	D	TSFT (mm)	WT (g)	WT (g)					
071118	95	UMPQUA R	OR	ODFW	48758	96	06	29	98	04	14	58	22	149	17	W	580	2760	M		TRAWL	CHINOOK	GULF_OF_ALASKA		
180220	95	SALMON R/PR,GEORGE	BC	CDFO	27656	96	05	12	98	01	21-22	NO_DATA					530	2000	M		TRAWL	CHINOOK			
180608	94	KITSUMKALUM R	BC	CDFO	10526	95	06	21	98	01	28	55	10	165	15	W	630	5200	M		TRAWL	CHINOOK	BERING_SEA		
181229	94	ATNARKO SPAWN CH	BC	CDFO	58670	95	06	07	98	02	14	55	10	164	40	W	700	4300	F	20.0	TRAWL	CHINOOK	BERING_SEA		
181859	94	NITINAT LAKE	BC	CDFO	21056	95	05	12	98	02	07	55	22	164	05	W	750	5900	M		TRAWL	CHINOOK	BERING_SEA		
181954	94	CONUMA R	BC	CDFO	39203	95	05	24	98	03	11	54	53	164	49	W	660		F		TRAWL	CHINOOK	BERING_SEA		
182156	94	KITSUMKALUM R	BC	CDFO	30170	95	06	21	98	03	11	54	51	164	57	W	640	3100	F		TRAWL	CHINOOK	BERING_SEA		
182251	95	TRANQUILLE EST	BC	CDFO	50229	96	06	19	98	02	19	55	27	164	06	W	460	1150	F	2.5	TRAWL	CHINOOK	BERING_SEA		
183147	95	ATNARKO R UPPER	BC	CDFO	88051	96	06	11	98	02	07	NO_DATA					450	1120	F		TRAWL	CHINOOK	BERING_SEA		
183148	95	ATNARKO SPAWN CH	BC	CDFO	87497	96	06	07	98	02	16	55	10	164	20	W	530	2050	F	5.0	TRAWL	CHINOOK	BERING_SEA		
471705	93	TAMGAS CR	AK	MIC	47627	95	05	22	98	02	20	54	34	165	10	W	770	5500	M		TRAWL	CHINOOK	BERING_SEA		
635762	94	SIMILKAMEEN R	WA	WDFW	212446	96	04	23	98	02	07	NO_DATA					560	2100	F	20.0	TRAWL	CHINOOK			