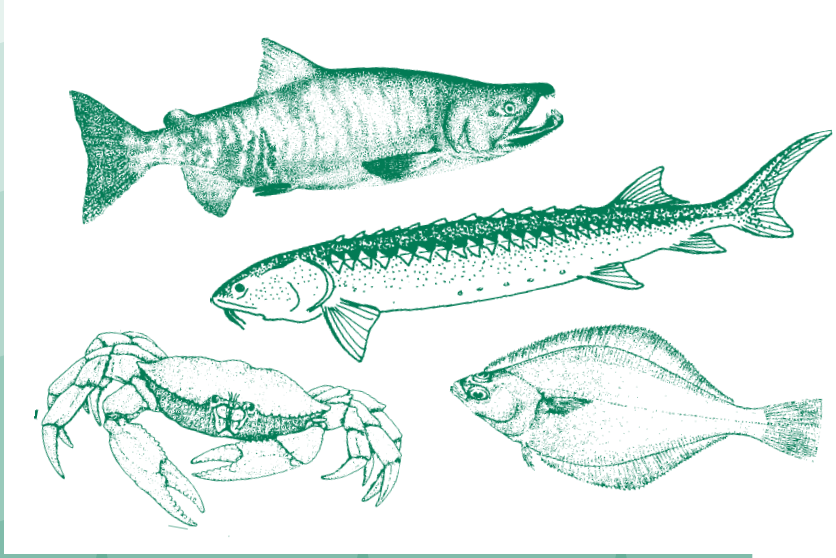
STATE OF WASHINGTON December 1999

Washington State Sport Catch Report 1996



by Kyong Yi and Terrie Manning

Washington Department of
FISH AND WILDLIFE
Science Division

WDFW 635

Washington State Sport Catch Report 1996

By

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December 1999

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Introduction

The Washington State Sport Catch report was first published in 1967 by the former Department of Fisheries. The report originally provided salmon catch estimates which were based on data from catch record cards (punch cards). By 1991, catch record card data were collected for salmon, sturgeon and halibut and supplemented with field or creel survey data where and when possible to improve catch estimate accuracy. Over time the report expanded to include shellfish and marine fish estimates. Food fish (salmon, sturgeon, halibut, marine fish and shellfish) estimates are made on a calendar year basis from January 1 through December 31.

Since 1950, the former Department of Game (renamed Department of Wildlife in 1985) has published steelhead harvest reports based on catch record card data and creel surveys. Game fish (steelhead) estimates are summarized from May 1 of one year through April 30 of the next year. This is to better capture the results of steelhead "run years," which typically span two calendar years.

On March 1, 1994, the former Departments of Fisheries (WDF) and Wildlife (WDW) merged to form the Department of Fish and Wildlife (WDFW). This marks the third combined report covering both "food fish" and "game fish." Delayed due to budget and staffing constraints, the 1996 edition is being published in November of 1999.

Sport Licenses and Catch Record Cards

In 1996, the following licenses and catch record cards were required to fish in Washington:

- A **personal use food fish license** was required for resident anglers over age 14, and for all non-resident anglers, to fish for anadromous fish (except steelhead) and marine fish. This license was available in resident annual, resident senior (free, ages 70 and over), non-resident annual, three-consecutive-day, and one-day formats. In addition, a free **catch record card** was required of all anglers of all ages to fish for salmon, for halibut in Puget Sound and the Strait of Juan de Fuca, and for sturgeon in the Columbia River, Grays Harbor, Willapa Bay and all tributaries of these three systems.

- A **game fish license** was required for resident anglers over age 14, and for all non-resident anglers, to fish for game fish (warm water species such as bass, panfish, whitefish and trout). This license was available in annual, one-day and three-consecutive-day formats. Reduced-fee licenses were available for non-resident juveniles and resident seniors (ages 70 and older). A steelhead license was required in addition to the gamefish license for all those anglers over 14 who wished to fish for steelhead. A free **catch record card** was also required of anglers of all ages to fish for steelhead.

- A **personal use shellfish/seaweed license** was required for resident and non-resident harvesters over age 14. A non-resident reduced-fee three-consecutive day license and a reduced-fee annual license for resident seniors (ages 70 and over) was available. Unlike salmon, sturgeon and steelhead, catch record cards were not issued with shellfish licenses since field sampling and creel surveys were used to estimate total sport shellfish catch.

Table ***1*** shows license sales for 1995 and 1996, based on a direct count of sales. Tables ***2, 3*** and ***4*** show the estimated number of salmon, sturgeon and steelhead catch record cards issued. Note that the number of catch record cards issued shown in these tables are estimated from the catch record card databases, therefore cannot be directly compared to the license sales number. These numbers cannot be compared since anglers under 14 and over 70 are required to obtain a catch record card but not a license. Also, not all dealers return their catch record card stubs, nor do all anglers return their catch record cards, therefore, correction factors are applied.

Methods

Sport harvest estimates are made in Washington State using various methods. These include catch record cards for: salmon and steelhead statewide, sturgeon in the Columbia River, Grays Harbor and Willapa Bay and halibut in Puget Sound and the Strait of Juan de Fuca. Estimates from catch record cards are available six months to one year after the end of the season. Creel and mail surveys are carried out for salmon, sturgeon, steelhead, halibut, and shellfish in areas where management requires more timely estimates. Creel surveys consist of checking anglers who are exiting the fishery and asking specific questions about catch and effort. The creel survey estimates for some species and areas are substituted for catch record card estimates (this is noted in the tables).

The methods used produce estimates of sport harvest which have some level of uncertainty. This uncertainty, or variance, is estimated and expressed with confidence levels which are not provided in this report. These variance estimates are available upon request.

Special Area Fisheries (SAF's)

Special area fisheries (SAF's) for salmon occur within a larger designated management unit to provide increased fishing opportunity. These areas often have separate seasons, bag limits and may or may not require caught fish to be released. Since SAF's are located in a small area within the designated management catch area, the catch estimates do not represent the larger area. Four SAF's for salmon occurred in 1996. The SAF's locations were: South of Restoration from July 5 - October 15, Elliot Bay during the weekends of August 3 - 5 and 10 - 12, Tulalip Bay from August 1 - September 31, and Lake Washington from July 11 - August 13.

Ocean Quota vs True Catch Data

Sport catch data from coastal areas 1 - 4 were reported using "port sampling" (creel survey) catch estimates. Such estimates were derived by monitoring daily landings at four coastal ports: Ilwaco, Westport, La Push, and Neah Bay. Catch is reported in the area where the fish was caught and not the area where it was landed.

Statistical Months and Statistical Weeks

Some catch data (i.e. salmon and bottomfish) are reported using statistical months or statistical weeks. Statistical weeks (defined as Monday-Sunday) are consecutively numbered weeks beginning on January 1st and continuing through week 53 or 54 December 31st. The first and last weeks of any year usually contain less than 7 days. Statistical months are made up of a set number of statistical weeks which approximate calendar months but do not coincide with calendar month start and end dates. For example, in 1996, the statistical month of January begins on January 1st and ends February 4th and the statistical month of February starts on February 5th and ends March 3rd. Since some data is reported using statistical months, as opposed to calendar months, some catch may be reported during what appears to be a closed period.

Salmon

Annual sport salmon catch estimates for 1964 through 1996 are shown in Table ***5***. In 1996 a total of ***230,830*** salmon were caught in marine areas, plus an additional ***161,424*** salmon in freshwater. The marine totals by species for 1996, as shown in Table ***6***, were: ***75,419*** chinook; ***141,777*** coho; ***12,570*** chum; ***54*** pink; ***63*** sockeye; and ***947*** jacks (all species combines). Freshwater species breakdowns show: ***31,901*** chinook; ***31,835*** coho; ***14,088*** chum; ***3*** pink; ***70,424*** sockeye; ***11,296*** jacks (all species combined); and ***1,877*** unknown species.

Catch record cards are used to estimate sport salmon catch in marine and freshwater areas with some exceptions. In marine areas, creel survey estimates were substituted for the catch record card estimates in ocean areas 1-4 (excluding area 2.1 Willapa Bay and area 2.2 Grays Harbor) and in area 10 from July 5 to October 15. Creel surveys were done in the SAF's and the coho retention fishery in area 5 and results are provided in Table ***24***. In freshwater areas, creel survey estimates were sustituted for the catch record card estimates in the Lower Columbia River February - October. All other estimates are from catch record cards.

Sturgeon

There are two species of sturgeon present in Washington state: the green sturgeon *Acipenser medirostris* and the white sturgeon *Acipenser transmontanus*. Both species are anadromous and spawn in large river systems. Green sturgeon spend most of their lives in the marine

environment and are not readily caught in Washington sport fisheries. They are not believed to spawn in any of the Washington river systems although they are seasonally abundant in Washington coastal bays and estuaries. White sturgeon migrate great distances in the ocean as well but, unlike green sturgeon, are able to complete their life cycle in freshwater. White sturgeon are readily caught in sport fisheries and are popular as a game fighting fish and are considered by many as gourmet fare. They are the largest freshwater fish in North America with historical accounts of individuals approaching 20 feet in length and 1 ton in weight. Sturgeon subsist on a variety of foods including Columbia River smelt, anchovies, lamprey eels, clams, shad, and salmon carcasses. They are known for their longevity with individuals sometimes living over 100 years. White sturgeon are also known for their delayed maturation with males reaching sexual maturity at about 15 years of age (4½- 5 feet in length) and females at about 23 years of age (~6 feet in length). White sturgeon spawn throughout the Columbia River basin, although populations farther upstream are generally not as healthy as those living closer to the ocean. They spawn in the spring and early summer months in the mainstem Columbia River in areas where water velocities are highest. This reliance on high velocity, free-flowing river reaches for spawning is largely responsible for the decreased population abundance and productivity farther upstream in the Columbia River basin where hydroelectric development has most affected sturgeon populations.

The distribution of sturgeon harvest and the amount of restriction on sturgeon harvest within the Columbia River basin generally reflects the relative health and productivity of these sturgeon populations. Sturgeon harvest management relies on extensive research to provide an understanding of the population dynamics and the factors limiting productivity of specific sturgeon populations within the Columbia River. Abundance estimates and population simulation models are used to set long term sustainable harvest limits for the most heavily exploited populations. Management goals are based on allowing enough fish to survive harvest to replenish the older-aged spawning population. The most frequently used sport harvest management strategies are population-specific harvest quotas, slot limits, daily bag limits, and annual possession limits for those sturgeon populations that can sustain a harvest. Harvest management responsibilities in the Columbia River are jointly shared by the state of Oregon and the four Columbia River treaty tribes (Yakama, Umatilla, Warm Springs, and Nez Perce) in those river reaches where there is joint jurisdiction. Specifically, Washington and Oregon share management responsibility from the mouth of the Columbia River upstream to a point approximately 14 miles upstream of McNary Dam and, by policy directive, adopt concurrent regulations for fisheries in those areas. Washington, Oregon, and the four Columbia River treaty tribes coordinate sturgeon management in the three reservoirs between Bonneville and McNary dams through the Sturgeon Management Task Force, which is comprised of technical and policy representatives from each agency and tribe.

The white sturgeon population in the lower Columbia River downstream from Bonneville Dam is the healthiest in the species' range. Consequently, most of the sturgeon catch and effort in Washington waters occurs in this river reach. In 1996 Washington and Oregon managed for a catch expectation of about 42,000 white sturgeon in the lower Columbia sport fishery. Sport

regulations for this fishery included a 42-66 inch legal size slot, a daily bag limit allowing anglers to keep one sturgeon less than 48 inches plus one sturgeon 48 inches or greater, and an annual bag limit of 10 sturgeon per angler. The daily bag limit was changed to one sturgeon per angler by emergency regulations in Washington and Oregon as of April 1 to extend harvest opportunity through the year and avoid the early closure to the fishery that occurred in 1995. This strategy worked well with the combined catch for Washington and Oregon anglers in the 1996 lower Columbia sport fishery totaling 42,800 white sturgeon without the need for an early closure.

The three lowermost reservoirs in the Columbia River between Bonneville and McNary dams are intensively managed under the auspices of the Sturgeon Management Task Force (SMTF). Sport regulations in Bonneville Reservoir were the same as those in the lower Columbia River downstream from Bonneville Dam. Regulations were more prohibitive in areas upstream from The Dalles Dam where the legal size slot was 48-66 inches and the daily bag limit was one fish per day within the legal size slot. In 1996 the SMTF set annual sport harvest guidelines for white sturgeon of 1,350 in Bonneville Reservoir, 100 in The Dalles Reservoir, and 100 in John Day Reservoir. Washington and Oregon attempted to manage for a stable fishery season that kept harvest within these guidelines with a sturgeon retention season of January 1- June 30. However, this season was ineffective and the states had to prohibit sturgeon retention from April 1- December 31 in Bonneville Reservoir and from May 1- December 31 in The Dalles and John Day reservoirs to stay within the prescribed guidelines. The resulting harvest by reservoir for Washington and Oregon anglers in 1996 was 1,360, 90, and 80 white sturgeon in Bonneville, The Dalles, and John Day reservoirs, respectively.

The reservoir sport fisheries upstream from McNary Dam operated under the same regulations as The Dalles and John Day reservoirs (48-66 inches, 1 fish daily bag limit), with the exception of Lower Granite Reservoir on the Snake River and Lake Roosevelt on the Columbia River (closed to sturgeon retention year round). Additionally, Washington adopted a new permanent regulation prohibiting retention of white sturgeon in the Columbia River and its tributaries upstream from Priest Rapids Dam to the U.S./Canada border that was implemented on May 1, 1996.

Outside the Columbia River basin, there are relatively productive sturgeon fisheries in most of Washington's coastal bays and estuaries. Most notable are the sturgeon fisheries in Willapa Bay and Grays Harbor (including the Chehalis River system). The white sturgeon caught in Washington's coastal areas are thought to originate in the lower Columbia based on tag recoveries from those fisheries. Sport regulations for these fisheries match those in the lower Columbia.

Total sport sturgeon harvest for 1996, based on creel surveys and catch record card returns, was ***27,258*** fish. Of this total, ***23,564*** white sturgeon and ***38*** green sturgeon came from the Columbia River system (Table ***29***). Another ***318*** white sturgeon were harvested in the Snake River up to Lower Granite Dam, above which all sturgeon were required to be released.

Other areas for which sturgeon harvest is reported are: Willapa Bay — ***1,409*** white, ***24*** green and ***34*** unknown sturgeon; Grays Harbor — ***1,817*** white, ***70*** green and ***22*** unknown sturgeon; Puget Sound — ***28*** white and ***4*** green sturgeon; unknown area — ***177*** white and ***16*** green sturgeon. For monthly catch information, see Table ***29***.

Steelhead

Steelhead harvest estimates are based on statewide catch record card returns and creel surveys for selected areas. Steelhead harvest is reported by "run year," unlike other sport statewide harvest presented in an annual format. For example, steelhead that make up the 1997 winter/spring spawning season enter Washington rivers as early as March or April of ***1996,*** but will not spawn until early 1997. Wild steelhead spawning continues into late May or even June. Some of the 199***6/97*** fish will actually start their spawning run before the 199***5/96*** fish have finished spawning. For record-keeping purposes, May 1 is used as the starting point for each year's run. Steelhead caught during May through October are treated statistically as "summer-run" fish. Steelhead caught November through April are recorded as "winter-run" fish unless they are caught above the Bonneville Dam in the Columbia River; where they are recorded as "summer-run" fish.

In Table ***33***, sport harvest of steelhead for 199***6/97*** is shown geographically by system and stream name. Monthly totals are given for hatchery (***marked*** with adipose fin clip) and wild (***unmarked***) fish. This last designation is reliable only where 100% of the hatchery releases are marked. There occasionally are unmarked hatchery releases, usually from non-WDFW hatcheries. Please consult appropriate hatchery release records to confirm.

Marine Fish

Marine fish are those species commonly called "bottomfish" (though not all are necessarily caught on the bottom). This category includes all the rockfish (9 species are reported here); cabezon; lingcod and kelp greenling; Pacific halibut and other flatfish (sole, flounder, etc.); Pacific cod and other cod-like species (pollock, hake); sea perch (surf and pile); skates and rays; plus miscellaneous species.

Recreational ocean harvest of marine fish in catch areas 1-4, including halibut, is estimated from creel surveys. Table ***37*** shows the 1996 totals. These figures are compiled for the four defined marine fishing areas: Ilwaco (Columbia River mouth), Westport (Grays Harbor and Willapa Bay), La Push (Quillayute River mouth) and Neah Bay (just inside the Strait of Juan de Fuca).

The Puget Sound recreational harvest of marine fish, excluding halibut, is estimated using a statistical model that takes advantage of the previously documented relationship between sport salmon catch and effort, and marine fish catch and effort. These estimates, given in Table ***38***, depend on the salmon catch record card estimates and the field survey sampling for catch per unit of effort for salmon and marine fish.

Sport catch of Pacific halibut in Puget Sound was estimated from halibut catch record cards. These figures can be found in Table ***37***.

Shellfish

Recreational shellfish harvest is estimated based on creel and flight sampling by WDFW personnel. The sport crab pot fishery is surveyed only in odd years, and therefore included in this report only during odd years.

Table ***40*** shows razor clam sport harvest estimates for the following areas: Long Beach Peninsula, Twin Harbors/Grayland, Copalis, Mocrocks (Copalis north to Moclips), and Kalaloch (began in Fall 1995). The 1996 fall season shows ***45,800*** digger trips yielding ***443,000*** clams, for an average of more than ***9.7*** clams per trip. The 1997 spring season produced an estimated ***445,000*** clams for ***32,000*** harvester trips, or ***13.9*** clams per trip.

Puget Sound recreational clam and oyster harvest estimates are shown in Table ***41***. Harvest totals for Manila and native littleneck clams, butter clams, cockles, softshell clams, horse clams, geoducks and oysters are shown for 27 areas. Estimates show ***223,928*** sport harvester trips gathered ***767,376*** total clams, and ***789,542*** oysters in 1996.

The Hood Canal sport shrimp fishery produced an estimated ***100,000*** pounds of shrimp for ***24,710*** pots. This yields an average of ***4.05*** pounds per pot. These estimates are shown in Table ***42***.

The sport crab pot fishery in 19 Puget Sound areas is summarized in Table ***43***. A total ***427,860*** pot days produced an estimated harvest of ***343,140*** Dungeness crabs.

Sport Licenses

Table 1. Number and Value of Sport Personal Use Foodfish, Gamefish and Shellfish Licenses Sold in Washington, 1995 - 1996

Type of License	1995			1996		
	Price	Number	Value [1]	Price	Number	Value [1]
Resident Personal Use Foodfish (Ages 15-69)	$8.00	236,725	$1,894[2]	$8.00	299,596	$1,837[2]
Resident Senior Foodfish	$3.00	16,204	$49[2]	$3.00	15,600	$47[2]
Non-Resident Personal Use Foodfish (All Ages)	$20.00	6,366	$127[2]	$20.00	6,756	$135[2]
Three Consecutive Day Foodfish (Resident or Non-Resident)	$5.00	81,895	$409[2]	$5.00	107,002	$535[2]
Resident Gamefish (Ages 15-69; includes combination Hunt and Fish)	$29.00 $17.00	99,682 400,169	$2,891 $6,803	$29.00 $17.00	96,019 383,584	$2,785 $6,521
Resident Senior Gamefish	$3.00	33,821	$102	$3.00	31,965	$96
Resident,Three Consecutive Day Gamefish	$9.00	12,850	$116	$9.00	12,645	$114
Resident One-day Gamefish	$3.00	20,113	$60	$3.00	25,069	$75
Non-Resident Gamefish (Ages 15 and Older)	$48.00	8,323	$400	$48.00	7,562	$363
Non-Resident,Three Consecutive Day Gamefish	$17.00	17,401	$296	$17.00	15,757	$268
Non-Resident, One-day Gamefish	$7.00	22,377	$157	$7.00	23,841	$167
Resident and Non-resident Steelhead Permit (Adult Ages 15-69)	$18.00	82,138	$1,478	$18.00	83,462	$1,502
Resident and Non-Resident Steelhead Permit (Juvenile under 15)	$6.00	6,544	$39	$6.00	5,931	$36
Resident, Personal Use Shellfish (Ages 15-69)	$5.00	208,074	$1,040	$5.00	209,815	$1,050
Non-Resident, Personal Use Shellfish (All Ages)	$20.00	4,905	$98	$20.00	4,556	$91
Three Consecutive Day Shellfish (Resident or Non-Resident)	$5.00	16,721	$84	$5.00	18,634	$93
Resident Senior Shellfish (Ages 70 and Older)	$3.00	15,801	$47	$3.00	15,619	$47
Recreational Fisheries Puget Sound Enhancement Stamp	$10.00	137,161	$1,372	$10.00	142,345	$1,424
TOTAL	**N/A**	**1,427,270**	**$17,462**	**N/A**	**1,505,758**	**$17,186**

Note: Catch Record Cards (also known as "Punch Cards") are issued free to anglers. A Foodfish License is required for each new Salmon Catch Record Card obtained except for residents under 15 years of age.

[1] Value in thousands.

[2] The Regional Fisheries Enhancement Account receives $1.00 from each foodfish license sale.

Table 2. Number of Sport Salmon Catch Record Cards Issued 1965-1996

Year	Number of Catch Record Cards Issued
1965	387,875
1966	392,850
1967	472,225
1968	456,675
1969	471,525
1970	591,025
1971	541,600
1972	536,750
1973	568,825
1974	562,375
1975	576,075
1976	660,150
1977	641,050
1978	580,375
1979	487,875
1980	433,700
1981	463,561
1982	481,915
1983	481,025
1984	364,286
1985	403,523
1986	431,898
1987	475,459
1988	486,356
1989	509,534
1990	497,215
1991	489,394
1992	419,986
1993	447,986
1994	244,629
1995	416,707
1996	333,773

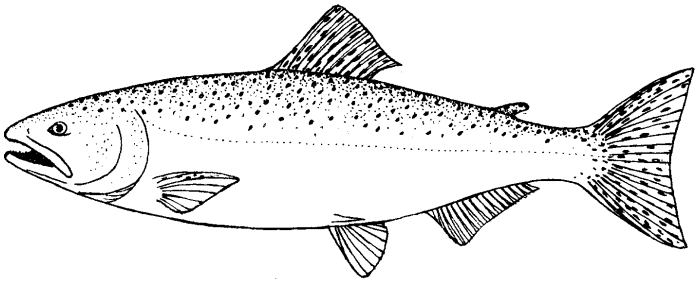
Table 3. Number of Sport Sturgeon Catch Record Cards Issued 1988-1996

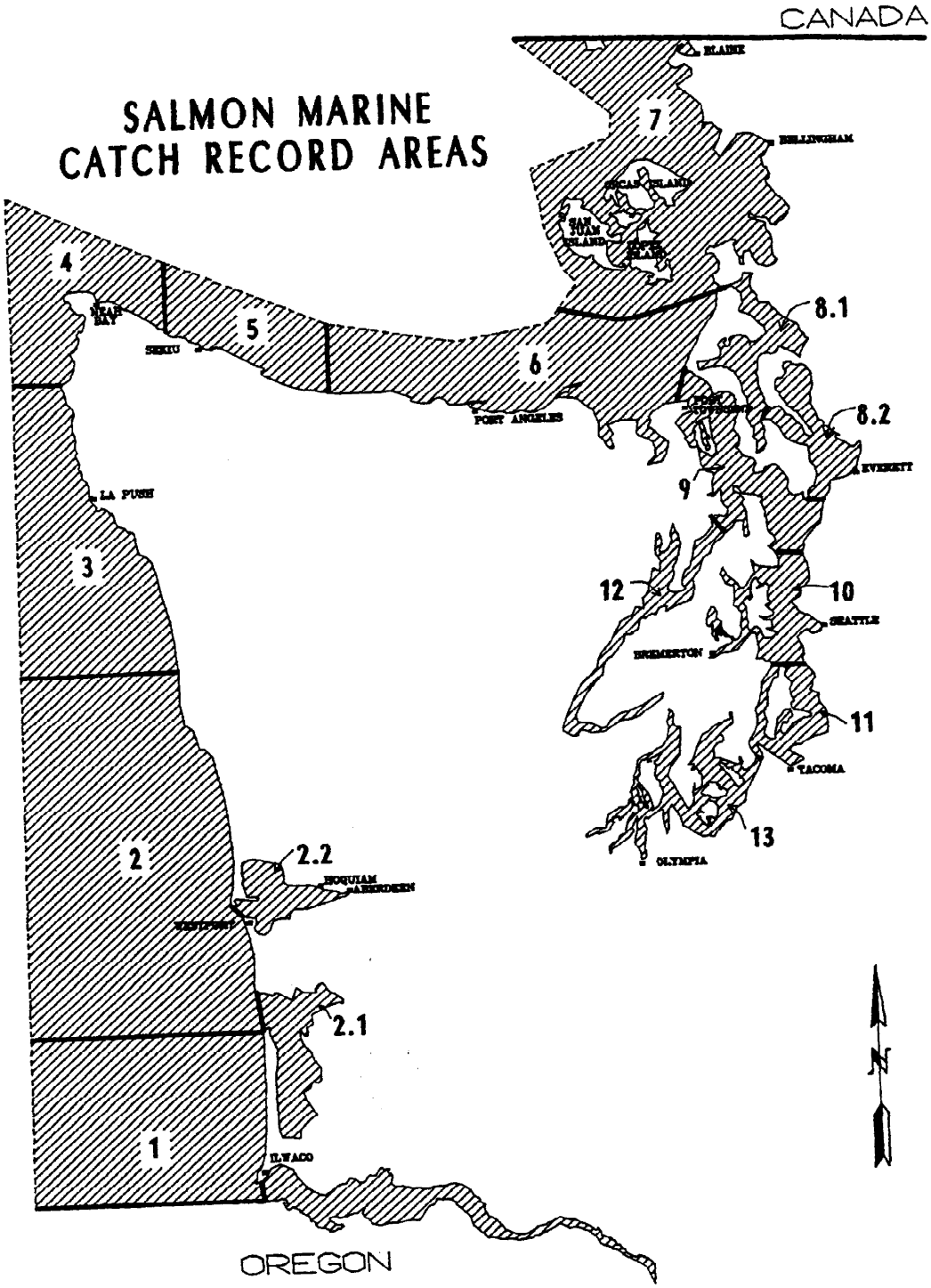
Year	Number of Cards Issued
1988	33,195
1989	35,576
1990	32,421
1991	32,396
1992	37,615
1993	43,067
1994	54,837
1995	62,572
1996	69,639

Table 4. Number of Sport Steelhead Catch Record Cards Issued 1948-1996

Year	Number of Catch Record Cards Issued
1948-49	40,000
1949-50	50,000
1950-51	50,000
1951-52	62,500
1952-53	77,500
1953-54	89,341
1954-55	90,392
1955-56	88,500
1956-57	85,350
1957-58	85,425
1958-59	84,461
1959-60	87,878
1960-61	93,350
1962	144,980
1963	151,692
1964	160,375
1965	171,400
1966	187,525
1967	202,666
1968	202,750
1969	200,050
1970	142,610
1971	145,647
1972	153,977
1973	165,671
1974	145,051
1975-76	missing
1976-77	missing
1977-78	missing
1978-79	130,000
1979-80	136,000
1980-81	139,500
1981-82	132,000
1982-83	100,000
1983-84	101,800
1984-85	133,400
1985-86	121,500
1986-87	100,500
1987-88	102,000
1988-89	108,182
1989-90	106,666
1990-91	98,362
1991-92	98,328
1992-93	98,933
1993-94	94,913
1994-95	87,093
1995-96	101,303
1996-97	92,858

Salmon




CANADA
SALMON MARINE
CATCH RECORD AREAS
BLAINE
BELLINGHAM
7
4
5
6
8.1
8.2
9
10
11
12
13
3
2
2.2
2.1
1
LA PUSH
PORT ANGELES
EVERETT
SEATTLE
BREMERTON
TACOMA
OLYMPIA
HOQUIAM
ILWACO
OREGON

Description of Salmon Catch Record Card Areas

1.	**ILWACO**	West of Megler-Astoria Bridge, north to Leadbetter Point.
2.	**WESTPORT-OCEAN SHORES**	From Leadbetter Point, north to the Queets River, excluding Willapa Bay and Grays Harbor.
2.1	**WILLAPA BAY**	East of line from Leadbetter Point to Buoy 8 and then to Cape Shoalwater Light.
2.2	**GRAYS HARBOR**	East of the true north-south line through Grays Harbor Channel Marker 13.
3.	**LA PUSH**	From the Queets River, north to Cape Alava.
4.	**NEAH BAY**	From Cape Alava, north and inside Juan de Fuca Strait to the Sekiu River.
5.	**SEKIU & PILLAR POINT**	From the mouth of the Sekiu River, east to Low Point, mouth of the Lyre River.
6.	**EAST JUAN DE FUCA STRAIT**	From Low Point, east to the Partridge Point-Point Wilson Line, North to the line from Trial Island (near Victoria, B.C.), Navigation Buoy BW "R" Smith Island , Point Colville, Langley Point, and West of the Initiative 77 Line fronting Deception Pass.
7.	**SAN JUAN ISLANDS**	All marine waters north of the Trial Island Line described under Area 6 to the United States - Canadian boundary.
8.1.	**DECEPTION PASS, HOPE ISLAND**	East of line from West Pt. on Whidbey Island to Reservation Head on Fidalgo Island through Deception Pass, south of railroad bridges at north end of Swinomish Channel, north of Hwy 535 Bridge between Camano Island and mainland, and west of line from East Pt. Light on Whidbey Island to light on Camano Island (Saratoga Pass Light #2 Fl Red 4 Sec.).
8.2.	**PORT SUSAN/PORT GARDNER**	East of line from East Pt. Light on Whidbey Island to light on Camano Island (Saratoga Pass Light #2 Fl Red 4 Sec.) and north of line from south tip Possession Pt. 110 degrees true to shipwreck on opposite shore.
9.	**ADMIRALTY INLET**	All waters inside and south of Partridge Point - Point Wilson Line, south and west of a line from Possession Point 110 degrees true to the shipwreck, north of the Hood Canal Bridge, and north of the Apple Cove Point - Edwards Point line.
10.	**SEATTLE-BREMERTON AREA**	From the Apple Cove Point - Edwards Point line to the line through the north tip of Vashon Island east - west.
11.	**TACOMA-VASHON ISLAND**	From the north tip of Vashon Island to the Tacoma Narrows Bridge.
12.	**HOOD**	All waters south of the Hood Canal Bridge.
13.	**SOUTH PUGET SOUND**.	All waters south of the Tacoma Narrows Bridge.

FRESHWATER AREAS:	**RIVERS, STREAMS OR LAKES** -Name of river, stream or lake, **except** for the **Columbia River**
BUOY 10	From Buoy 10 Line to Megler-Astoria Bridge
LOWER COLUMBIA	From Megler-Astoria Bridge to Bonneville Dam
MID-COLUMBIA	From Bonneville Dam to McNary Dam
UPPER COLUMBIA	Above McNary Dam

Table 5. Annual Sport Salmon Catch

Year	Total	Freshwater	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9	Area 10	Area 11	Area 12	Area 13
1964	475,662	28,988	111,385	103,094	11,055	45,051	46,309	13,912	16,186	5,528	40,289	21,466	24,476	7,923	-------
1965	942,223	54,509	279,225	275,457	23,694	57,606	53,620	23,477	18,803	10,253	58,004	28,368	43,077	14,130	--------
1966	756,896	52,948	203,806	176,447	28,262	78,016	33,887	23,748	23,575	5,729	60,135	22,533	24,235	23,575	--------
1967	1,063,440	135,250	315,594	214,661	53,325	84,871	55,401	32,601	29,878	6,125	61,662	18,564	20,861	34,303	--------
1968	877,276	61,663	210,693	284,923	23,075	73,556	67,734	36,245	25,489	3,621	45,511	17,785	19,135	7,846	--------
1969	876,648	79,905	200,379	270,777	21,054	80,945	75,902	46,227	23,748	3,695	28,059	16,589	19,976	9,392	--------
1970	978,395	135,974	269,232	303,372	36,894	46,659	30,579	26,027	21,842	5,690	43,648	23,200	24,265	11,013	--------
1971	1,344,818	145,904	342,928	446,738	39,682	87,184	71,947	39,573	28,355	5,189	54,920	35,225	27,332	19,841	--------
1972	1,138,926	121,432	307,938	353,113	31,278	61,704	45,446	45,058	29,536	3,097	42,968	32,942	35,962	28,452	--------
1973	1,095,360	147,554	236,385	348,406	49,900	48,645	33,347	40,308	14,852	3,966	52,935	42,574	61,919	14,569	--------
1974	1,320,420	88,048	334,664	320,467	74,832	80,362	50,319	53,222	36,318	5,491	76,518	69,341	105,110	25,728	--------
1975	1,399,375	101,531	308,475	331,565	57,356	59,451	48,975	74,336	37,626	7,726	100,089	78,832	162,072	31,341	--------
1976	1,749,560	100,601	433,026	543,295	70,133	68,670	63,966	102,639	55,396	21,688	88,737	62,607	61,562	24,405	52,835
1977	1,191,414	96,843	248,518	321,888	38,359	86,186	73,106	61,568	31,709	17,792	64,651	39,372	44,657	22,020	44,745
1978	1,107,852	86,845	220,548	269,338	24,439	52,270	59,400	68,849	36,293	13,229	73,187	56,479	48,018	26,801	72,156
1979	1,123,809	88,659	167,478	174,365	24,160	53,840	134,354	70,839	48,101	33,835	104,619	71,167	71,495	20,006	60,891
1980	852,879	105,461	158,883	163,748	19,146	29,500	39,587	52,663	24,457	18,432	60,072	52,128	57,751	17,138	53,913
1981	760,115	58,139	142,879	151,301	1,734	36,883	55,900	56,318	21,826	16,986	67,838	42,602	42,175	14,989	50,545
1982	749,995	91,849	115,838	158,005	9,857	42,716	67,611	33,870	12,947	9,940	49,853	49,727	51,975	8,672	47,135
1983	860,623	108,783	98,599	100,791	7,318	58,469	62,486	74,311	29,844	23,268	98,485	54,228	72,772	11,756	59,513
1984	561,428	142,170	79,792	16,631	167	6,604	39,276	67,246	29,985	17,442	79,526	24,130	28,781	5,158	24,520
1985	686,333	107,734	93,927	93,620	2,062	26,878	101,920	45,342	23,798	25,427	75,193	33,019	38,157	4,897	14,359
1986	830,644	115,469	156,275	98,421	2,553	25,027	138,951	71,544	27,550	26,822	79,730	33,686	33,891	3,460	17,265
1987	744,284	110,636	123,441	71,458	3,005	29,418	107,138	82,377	27,152	31,421	86,270	42,179	32,753	8,947	26,639
1988	719,409	168,594	142,979	62,001	3,341	19,576	107,935	47,483	22,225	16,514	47,109	28,020	22,202	2,420	12,689
1989	834,426	121,417	157,701	100,000	2,405	44,600	164,580	64,766	19,078	23,165	63,724	36,748	24,561	4,588	7,093
1990	824,171	107,934	114,722	102,984	5,809	48,329	223,012	54,848	12,797	14,865	57,875	47,519	25,555	1,618	6,304
1991	932,371	153,719	230,582	107,362	5,615	43,357	216,816	42,812	16,602	20,337	40,390	32,229	15,549	3,225	3,866
1992	573,102	90,032	86,754	71,684	2,332	25,906	108,876	30,894	12,515	15,131	47,157	51,338	18,198	6,303	5,982
1993	599,381	145,579	67,582	60,993	3,469	31,154	80,496	44,174	35,697	24,320	41,949	36,699	14,130	3,540	9,599
1994	156,825	61,142	1,069	4,545	Closed	Closed	518	1,184	8,322	5,218	6,978	23,279	25,360	8,905	10,305
1995	526,232	190,158	28,697	31,857	1,990	15,604	53,553	20,617	23,801	66,403	22,920	28,560	29,242	5,200	6,630
1996	392,254	161,424	21,391	29,059	1,901	8,750	40,605	18,103	15,486	16,318	20,343	20,501	25,417	6,408	6,548

NOTE: In 1976, several area boundary lines were changed resulting in thirteen catch areas instead of twelve. The changes were mostly reflected in catch areas 8, 9,10,and new area 13. In 1989, catch Area 8 was subdivided into Areas 8.1 and 8.2 and catch Area 2 was subdivided into Areas 2, 2.1 and 2.2. For comparative purposes, the catch for Areas 8.1 and 8.2 are totaled and entered under Area 8. Similarly, the catch in Areas 2, 2.1 and 2.2 are included in the total catch for Area 2.

Table 6. Total 1996 Sport Salmon Catch

Marine Area	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Number of Jacks	Number of Unknown	Total Salmon	Marine Angler Trips	Salmon per Trip
Ilwaco-Ocean (Area 1)	92	17,788		2				17,882	15,593	1.15
Ilwaco-Buoy 10 (Area 1)	931	2,578						3,509	9,448	0.18
Westport (Area 2)	16	23,073						23,089	15,494	1.49
Willapa Bay (Area 2.1)	1,045	1,240	137			75		2,497	N/A	N/A
Grays Harbor (Area 2.2)	1,197	1,387	17			872		3,473	N/A	N/A
LaPush (Area 3)	11	1,890						1,901	1,501	1.27
Neah Bay (Area 4)	58	8,682	5	2	3			8,750	10,673	0.82
Subtotal Coast	**3,350**	**56,638**	**159**	**4**	**3**	**947**	**0**	**61,101**	**52,709**	***1.05**
Sekiu-Pillar Point (Area 5)	2,670	37,731	198	6				40,605	39,769	0.96
East Juan de Fuca (Area 6)	2,155	15,903	45					18,103	18,295	0.78
San Juan Islands (Area 7)	12,674	2,704	80		28			15,486	52,908	0.37
Deception Pass, Hope Island (Area 8.1)	1,810	532	8					2,350	12,218	0.33
Port Susan & Port Gardner (Area 8.2)	4,398	9,316	233	21				13,968	43,681	0.35
Admirality Inlet (Area 9)	18,023	1,945	375					20,343	65,157	0.39
Seattle-Bremerton (Area 10)	12,244	6,732	1,516		9			20,501	68,279	0.30
Tacoma-Vashon Island (Area 11)	15,316	8,746	1,309	23	23			25,417	106,928	0.24
Hood Canal (Area 12)	380	46	5,982					6,408	9,032	0.45
South Puget Sound (Area 13)	2,399	1,484	2,665					6,548	36,678	0.26
Subtotal Puget Sound	**72,069**	**85,139**	**12,411**	**50**	**60**	**947**	**0**	**169,729**	**452,945**	**0.38**
Marine Area Totals	75,419	141,777	12,570	54	63	947	0	230,830	505,654	0.45
Freshwater Totals	31,901	31,835	14,088	3	70,424	11,296	1,877	161,424	----------	------
Grand Totals	**107,320**	**173,612**	**26,658**	**57**	**70,487**	**12,243**	**1,877**	**392,254**	**505,654**	**------**

***** Salmon per trip is calculated using the coast salmon subtotal minus Grays Harbor and Willapa Bay catch.

Table 7. 1996 SPORT SALMON CATCH, Area 1 - Ilwaco: Ocean

Week Ending	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Trip
July 28	15	2,155		2		2,172	1,457	1.49
August 4	7	2,510				2,517	1,795	1.40
August 11	12	2,305				2,317	1,753	1.32
August 18	6	2,198				2,204	1,911	1.15
August 25	22	3,195				3,217	2,630	1.22
September 1		2,577				2,577	2,451	1.05
September 8	2	1,893				1,895	2,057	0.92
September 15	15	830				845	1,128	0.75
September 22		82				82	252	0.33
September 29	13	43				56	159	0.35
TOTAL	**92**	**17,788**		**2**		**17,882**	**15,593**	**1.15**

Note: Catch by species is presented by actual catch area and therefore may not correspond with catch by quota area statistics reported prior to 1995.

Table 8. 1996 Sport Salmon Catch, Area 1 - Ilwaco: River

Week Ending	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Trip
August 4		13				13	361	0.04
August 11		42				42	364	0.12
August 18		225				225	1,004	0.22
August 25		117				117	780	0.15
September 1	399	991				1,390	2,645	0.53
September 8	476	921				1,397	2,702	0.52
September 15	53	240				293	1,137	0.26
September 22	1	24				25	264	0.10
September 29	2	5				7	169	0.04
September 30 - Oct. 6						0	22	0.00
October 13						0	0	0.00
TOTAL	**931**	**2,578**	**0**	**0**	**0**	**3,509**	**9,448**	**0.37**

Note: Catch by species is presented by actual catch area and therefore may not correspond with catch by quota area statistics reported prior to 1995.
Note: Some Catch from August-October in Area 1 - Ilwaco River comes from above Meglar-Astoria Bridge.

Table 9. 1996 Sport Salmon Catch, Area 2 – Westport

Week Ending	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Trip
July 28	8	3,182				3,190	2,329	1.37
August 4		2,793				2,793	2,129	1.31
August 11		3,097				3,097	2,455	1.26
August 18	3	4,412				4,415	2,501	1.77
August 25		4,345				4,345	2,568	1.69
September 1	5	3,042				3,047	2,114	1.44
September 8		2,202				2,202	1,392	1.58
September 15						0	6	0.00
September 22						0	0	0.00
September 29						0	0	0.00
TOTAL	**16**	**23,073**	**0**	**0**	**0**	**23,089**	**15,494**	**1.49**

Note: Catch by species is presented by actual catch area and therefore may not correspond with catch by quota area statistics reported prior to 1995.

Table 10. 1996 Sport Salmon Catch, Area 2.1 - Willapa Bay

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Number of Jacks	Total Salmon
August	251	231					482
September	627	699	43			56	1,425
October	167	200	20			19	406
November		110	74				184
TOTAL	**1,045**	**1,240**	**137**	**0**	**0**	**75**	**2,497**

Table 11. 1996 Sport Salmon Catch, Area 2.2 - Grays Harbor

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Number of Jacks	Total Salmon
August	56	56					112
September	538	780				223	1,541
October	549	441	17			630	1,637
November	36	110				19	165
December	18						18
TOTAL	**1,197**	**1,387**	**17**			**872**	**3,473**

Table 12. 1996 Sport Salmon Catch, Area 3 – La Push

Week Ending	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Trip
August 11	4	393				397	409	0.97
August 18		281				281	217	1.29
August 25	2	244				246	187	1.32
September 1		170				170	187	0.91
September 8	3	369				372	244	1.52
September 15		242				242	137	1.77
September 22	2	86				88	57	1.54
September 29		105				105	63	1.67
TOTAL	**11**	**1,890**	**0**	**0**	**0**	**1,901**	**1,501**	**1.27**

Note: Catch by species is presented by actual catch area and therefore may not correspond with catch by quota area statistics reported prior to 1995.

Table 13. 1996 Sport Salmon Catch, Area 4 – Neah Bay

Week Ending	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Trip
August 11	25	3,852	5		3	3,885	5,270	0.74
August 18	13	1,131		2		1,146	1,645	0.70
August 25	9	617				626	1,149	0.54
September 1	6	1,338				1,344	1,508	0.89
September 8	3	1,737				1,740	1,096	1.59
September 15	2	7				9	5	1.80
September 22						0	0	0.00
September 29						0	0	0.00
TOTAL	**58**	**8,682**	**5**	**2**	**3**	**8,750**	**10,673**	**0.82**

Note: Catch by species is presented by actual catch area and therefore may not correspond with catch by quota area statistics reported prior to 1995.

Table 14. 1996 Sport Salmon Catch, Area 5 - Sekiu - Pillar Point

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	180					180	604	0.30
February	401					401	1,348	0.30
March	325	51				376	1,445	0.26
April	309	3				312	1,154	0.27
May	265	3				268	990	0.27
June	726	8				734	2,712	0.27
July	0	18				18	67	0.27
August	26	1,456				1,482	1,435	1.04
September	421	36,176	198	6		36,802	29,938	1.25
October	4	2				6	22	0.27
November	9					9	18	0.49
December	4	14				18	36	0.49
TOTAL	2,670	37,731	198	6	0	40,605	36,769	1.12

Note: Estimates in this table are a combination of creel and catch record card estimates. Estimates from September 1 - 20 are from creel surveys . During all other time periods estimates are from catch record cards. Refer to Table 24 for creel survey estimates during the coho retention fishery, September 1- 20.

Table 15. 1996 Sport Salmon Catch, Area 6 - East Juan de Fuca Strait

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	395					395	726	0.54
February	518					518	1,225	0.42
March	273					273	664	0.41
April	296	10				306	1,488	0.21
May	267	9				276	1,346	0.21
June	104	3				107	522	0.20
July	8	13				21	102	0.21
August	6	1,846				1,852	1,063	1.74
September	58	14,022	39			14,119	10,594	1.33
October	17		6			23	85	0.27
November	137					137	278	0.49
December	76					76	201	0.38
TOTAL	**2,155**	**15,903**	**45**	**0**	**0**	**18,103**	**18,295**	**0.99**

Table 16. 1996 Sport Salmon Catch, Area 7 - San Juan Islands

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	624					624	924	0.68
February	946					946	1,585	0.60
March	564					564	1,330	0.42
April	511	9				520	1,768	0.29
May	793	13				806	2,744	0.29
June	1,437	11				1,448	6,777	0.21
July	1,964	141			28	2,133	10,723	0.20
August	3,262	616				3,878	13,564	0.29
September	1,016	1,622				2,638	7,869	0.34
October	634	292	63			989	3,045	0.32
November	498		17			515	1,163	0.44
December	425					425	1,416	0.30
TOTAL	**12,674**	**2,704**	**80**	**0**	**28**	**15,486**	**52,908**	**0.29**

Table 17. 1996 Sport Salmon Catch, Area 8.1 - Deception Pass/Hope Island

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	259					259	1,198	0.22
February	214					214	989	0.22
March	107					107	493	0.22
April	152					152	702	0.22
May	30					30	139	0.22
June		30				30	139	0.22
July	30	15				45	208	0.22
August	30					30	139	0.22
September	46	76				122	1,313	0.09
October	278	411				689	4,759	0.14
November	328		8			336	796	0.42
December	336					336	1,344	0.25
TOTAL	**1,810**	**532**	**8**	**0**	**0**	**2,350**	**12,218**	**0.19**

Table 18. 1996 Sport Salmon Catch, Area 8.2 - Port Susan/Port Gardner

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	228					228	725	0.31
February	321					321	1,272	0.25
March	353					353	2,566	0.14
April	148	27				175	1,279	0.14
May	9					9	75	0.12
June	7	3				10	84	0.12
July	184	262		12		458	1,490	0.28
August	2,113	1,522		9		3,644	17,436	0.18
September	176	5,465	25			5,666	10,777	0.52
October	318	2,037	187			2,542	4,167	0.61
November	268		21			289	3,237	0.09
December	273					273	572	0.48
TOTAL	**4,398**	**9,316**	**233**	**21**	**0**	**13,968**	**43,681**	**0.32**

Note: Estimates in this table are a combination of creel and catch record card estimates. Estimates for August 1 - September 30 are from creel surveys. During all other time periods estimates are from catch record cards. Refer to Table 24 for creel survey estimates in the Tulalip Bay Special Area Fishery (SAF), August 1 to September 30, 1996.

Table 19. 1996 Sport Salmon Catch, Area 9 - Admiralty Inlet

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	1,064	17				1,081	3,302	0.33
February	935	15				950	2,900	0.33
March	1,096	49				1,145	2,706	0.42
April	1,264	51				1,315	4,490	0.29
May	3,375	184				3,559	12,767	0.28
June	3,209	1,317				4,526	15,320	0.30
July	839	0				839	6,469	0.13
August	183	75				258	1,990	0.13
September	77	198				275	2,121	0.13
October	3,122	39	212			3,373	7,765	0.43
November	1,529		163			1,692	3,222	0.53
December	1,330					1,330	2,104	0.63
TOTAL	**18,023**	**1,945**	**375**	**0**	**0**	**20,343**	**65,157**	**0.31**

Table 20. 1996 Sport Salmon Catch, Area 10 - Seattle/Bremerton

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	423	35				458	2,435	0.19
February	452	37				489	2,603	0.19
March	252	23				275	1,300	0.21
April	513	65				578	2,559	0.23
May	441	46				487	2,853	0.17
June	413	923			6	1,342	4,344	0.31
July	1,616	823			3	2,442	8,780	0.28
August	4,852	951	75			5,878	22,250	0.26
September	278	2,509	153			2,940	7,489	0.39
October	288	1,274	1,081			2,643	6,220	0.43
November	2,045	23	184			2,252	4,067	0.55
December	671	23	23			717	3,379	0.01
TOTAL	**12,244**	**6,732**	**1,516**	**0**	**9**	**20,501**	**68,279**	**0.30**

Note: Estimates in this table are a combination of creel and catch record card estimates. Estimates for July 5-October 15 are from creel surveys. During all other time periods estimates are from catch record cards. Refer to Table 24 for creel survey estimates in Special Area Fisheries.

Table 21. 1996 Sport Salmon Catch, Area 11 - Tacoma/Vashon Island

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	207	22				229	2,095	0.11
February	301	32				333	3,051	0.11
March	386	41				427	3,906	0.11
April	371	40				411	3,759	0.11
May	647	69				716	6,550	0.11
June	839	90				929	8,501	0.11
July	3,282	1,094		23	23	4,422	17,958	0.25
August	6,768	981	204			7,953	32,306	0.25
September	1,552	4,912	435			6,899	20,812	0.33
October	364	1,435	645			2,444	5,782	0.42
November	352	19	25			396	1,169	0.34
December	247	11				258	1,039	0.25
TOTAL	**15,316**	**8,746**	**1,309**	**23**	**23**	**25,417**	**106,928**	**0.24**

Table 22. 1996 Sport Salmon Catch, Area 12 - Hood Canal

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	15					15	109	0.14
February	137					137	977	0.14
March	30					30	215	0.14
June	30					30	215	0.14
July	46					46	328	0.14
August	76					76	543	0.14
September	46	46	92			184	1,311	0.14
October			1,433			1,433	2,287	0.63
November			4,289			4,289	2,868	1.50
December			168			168	179	0.94
TOTAL	**380**	**46**	**5,982**	**0**	**0**	**6,408**	**9,032**	**0.71**

Table 23. 1996 Sport Salmon Catch, Area 13 - South Puget Sound

Statistical Month	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon	Marine Angler Trips	Salmon Per Angler
January	14	17				31	257	0.12
February	70	83				153	1,281	0.12
March	70	83				153	1,281	0.12
April	125	148				273	2,294	0.12
May	70	83				153	1,285	0.12
June	21	25				46	384	0.12
July	252	299				551	4,623	0.12
August	1,386	137				1,523	11,840	0.13
September	371	541	1,070			1,982	9,320	0.21
October	20	68	785			873	2,624	0.33
November			547			547	1,028	0.53
December			246			246	461	0.53
TOTAL	**2,399**	**1,484**	**2,665**	**0**	**0**	**6,548**	**36,678**	**0.18**

Table 24. 1996 Sport Catch: Puget Sound Special Area Fisheries and Area 5 Coho Retention Fishery

Catch Area	Month/Day	Number of Boats	Number of Anglers	Number of Chinook	Number of Coho	Number of Chum	Number of Pink	Number of Sockeye	Total Salmon
Area 5									
Coho Retention Fishery	September 1-20	12,538	30,359	447	37,632	198	6	0	38,283
AREA 8-2									
Tulalip	August 1 - September 30	10,940	22,733	2,791	460	0	52	0	3,303
AREA 10									
East Kitsap - South of Restoration Point	July 5 - October 15	17,891	35,277	5,148	4,094	646	0	0	9,888
Elliott Bay	August 3-5 and 10-12	2,638	5,494	1,265	458	2	0	2	1,727
TOTAL	July 5 - October 15	20,529	40,771	6,413	4,552	648	0	2	11,615
Lake Washington									
Lake Washington	July 13 - August 11	N/A	N/A	N/A	N/A	N/A	N/A	70,205	70,205

Note: Estimates in this table are from creel surveys.

Table 26. 1996 Washington Sport Salmon Fishing, by Residence

County of Residence	Number of Catch Record Cards	Population of County	Percentage of Catch Record Card Holders	Total Freshwater Salmon Catch	Total Marine Salmon Catch	Total Salmon	Average Catch Per Catch Record Card
Adams	250	15,400	1.62	41	146	187	0.75
Asotin	103	19,600	0.53	0	0	0	0.00
Benton	4,549	131,000	3.47	2,402	837	3,239	0.71
Chelan	1,295	61,300	2.11	489	400	889	0.69
Clallum	8,288	65,000	12.75	1,547	18,846	20,393	2.46
Clark	17,268	303,500	5.69	6,880	2,692	9,572	0.55
Columbia	44	4,200	1.05	0	0	0	0.00
Cowlitz	8,627	90,800	9.5	4,845	2,256	7,101	0.82
Douglas	810	30,400	2.66	590	164	754	0.93
Ferry	74	7,200	1.03	81	73	154	2.08
Franklin	1,340	43,700	3.07	631	36	667	0.50
Garfield	74	2,400	3.08	0	0	0	0.00
Grant	1,030	66,400	1.55	122	146	268	0.26
Grays Harbor	10,849	68,200	15.91	9,527	5,330	14,857	1.37
Island	6,919	70,300	9.84	285	6,676	6,961	1.01
Jefferson	3,033	25,700	11.8	448	5,239	5,687	1.88
King	76,521	1,628,800	4.7	51,664	51,299	102,963	1.35
Kitsap	15,649	224,700	6.96	1,059	16,081	17,140	1.10
Kittitas	869	30,800	2.82	468	528	996	1.15
Klickitat	1,030	18,700	5.51	631	18	649	0.63
Lewis	4,416	66,700	6.62	1,995	1,910	3,905	0.88
Lincoln	177	9,800	1.81	102	473	575	3.25
Mason	4,019	46,700	8.61	936	3,966	4,902	1.22
Okanogan	368	37,500	0.98	61	255	316	0.86
Pacific	3,459	21,100	16.39	2,606	1,728	4,334	1.25
Pend Oreille	74	11,100	0.67	0		0	0.00
Pierce	41,278	665,200	6.21	14,901	36,164	51,065	1.24
San Juan	1,855	12,400	14.96	41	1,892	1,933	1.04
Skagit	9,201	95,500	9.63	3,664	5,803	9,467	1.03
Skamania	368	9,800	3.76	794		0	0.00
Snohomish	32,048	538,100	5.96	14,473	23,740	38,213	1.19
Spokane	3,106	406,500	0.76	997	1,674	2,671	0.86
Stevens	74	36,600	0.2	0		0	0.00
Thurston	12,498	193,100	6.47	7,104	7,877	14,981	1.20
Wahkiakum	471	3,800	12.39	81	73	154	0.33
Walla Walla	721	53,400	1.35	285	364	649	0.90
Whatcom	9,230	152,800	6.04	6,799	4,220	11,019	1.19
Whitman	250	41,000	0.61	142	18	160	0.64
Yakima	7,125	207,600	3.43	5,863	1,637	7,500	1.05
Unknown WA	59	N/A	N/A	0		0	0.00
Washington Total	289,419	5,516,800	5.25	142,554	203,198	344,958	1.19
Other State Total	33,505	N/A	N/A	6,066	15,354	21,420	0.64
Canada	824	N/A	N/A	0	55	0	0.07
Unknown	10,025	N/A	N/A	12,804	12,860	25,664	3.50
Grand Total	333,773	N/A	N/A	161,424	230,830	392,254	1.18

Table 27. 1996 Frequency Distribution of Estimated Salmon Catch Record Cards and Catch

Number of Salmon per Catch Record Card	Number of Cards	Cumulative Number of Cards	Percent Cards	Cumulative Percent Cards	Total Catch	Cumulative Total Catch	Percent Catch	Cumulative Percent Catch
0	218,066	218,066	65.33	65.33	0	0	0.00	0.00
1	32,515	250,581	9.74	75.08	27,864	27,864	7.10	7.10
2	27,924	278,505	8.37	83.44	47,860	75,724	12.20	19.30
3	11,967	290,472	3.59	87.03	30,767	106,491	7.84	27.15
4	10,809	301,281	3.24	90.27	37,050	143,541	9.45	36.59
5	6,129	307,410	1.84	92.10	26,260	169,801	6.69	43.29
6	5,661	313,071	1.70	93.80	29,105	198,906	7.42	50.71
7	3,410	316,481	1.02	94.82	20,454	219,360	5.21	55.92
8	2,897	319,378	0.87	95.69	19,862	239,222	5.06	60.98
9	2,295	321,673	0.69	96.37	17,704	256,926	4.50	65.50
10	2,117	323,790	0.63	97.01	18,143	275,069	4.63	70.12
11	1,515	325,305	0.45	97.46	14,285	289,334	3.64	73.76
12	1,493	326,798	0.45	97.91	15,355	304,709	3.92	77.69
13	1,137	327,935	0.34	98.25	12,662	317,371	3.23	80.91
14	1,047	328,982	0.31	98.56	12,566	329,937	3.20	84.11
15	4,613	333,595	1.38	99.95	59,299	389,236	15.12	99.23
16	67	333,662	0.02	99.97	917	390,153	0.23	99.46
18	22	333,684	0.01	99.97	344	390,497	0.09	99.55
20	45	333,729	0.01	99.99	764	391,261	0.20	99.75
21	22	333,751	0.01	99.99	401	391,662	0.10	99.85
31	22	333,773	0.01	100.00	592	392,254	0.15	100.00
Total	**333,773**		**100.00**		**392,254**		**100.00**	

Note: The figures do not accurately multiply across because of a bias adjustment factor.

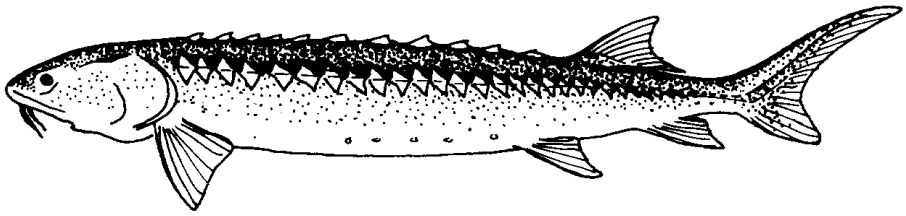
Table 28A. 1996 Sport Salmon Technical Catch Data

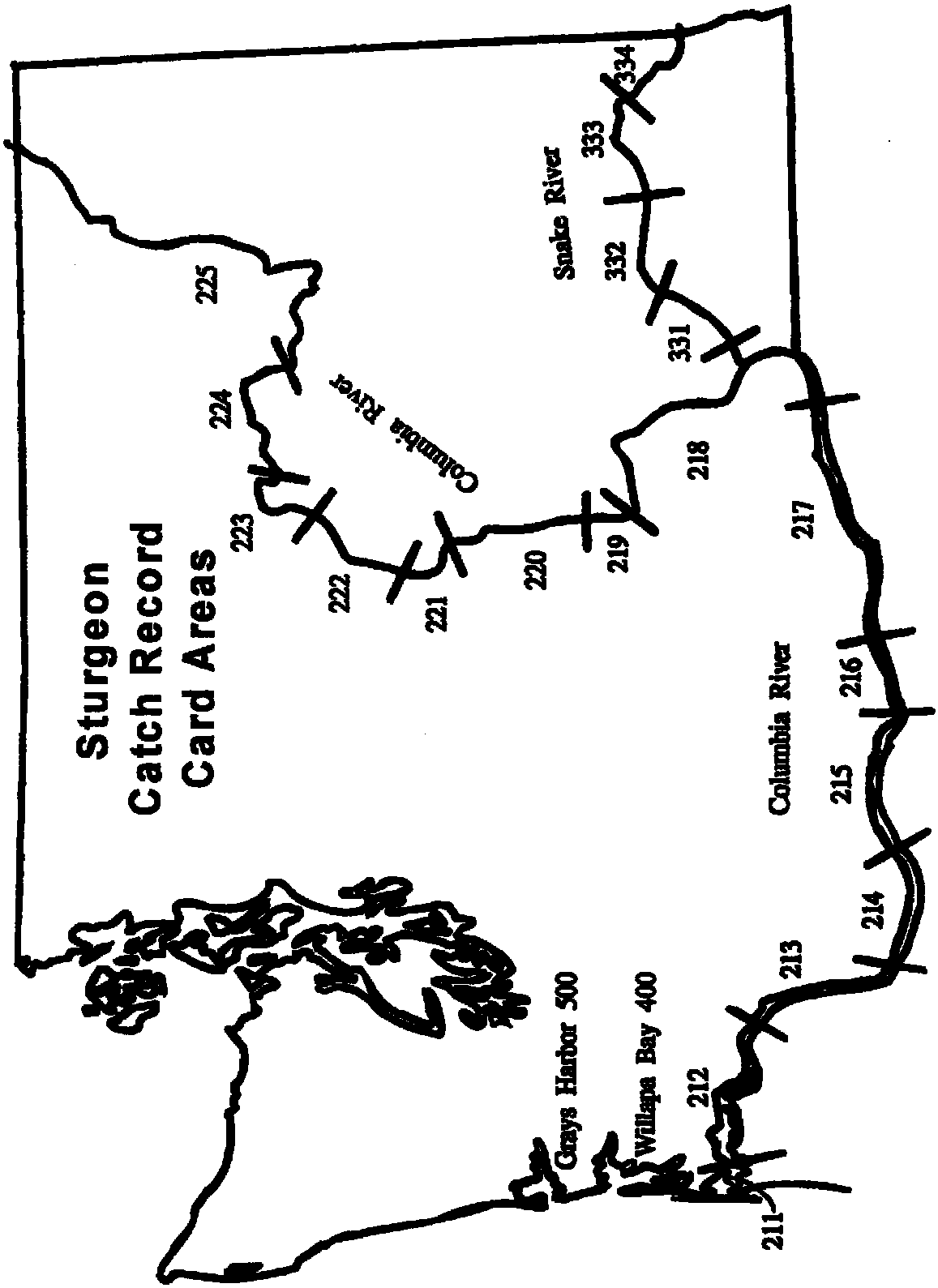
Records on File	Estimates and Calculations
Name and Address File	23,103
Catch Record Cards In Sample Returns (Totinsrt)	14,993
Correction Data	
Correction Factor (Corrfctr) (Percentage of voluntarily returned catch records with matching names and addresses Num_Mtc / Totvol)	4687 / 5316 = .882 (88%)
Name/Addresses Corrected for Dealer Non-Response (Cor_n_F1) (Num_F1 / Corrfctr)	23,103 / .882 = 26,194
Estimated Number of Catch Records Issued (Tot_crc) (Numbook / Corrfctr *avg book * 4 books sampled)	13,787 x 24.21 = 333,773
Catch Expansion Factor (Exp_Fctr) Tot_Crc issued / Total in sample returns	333,773 / 14,993 = 22.26

Table 28B. 1996 Inventory of Catch Record Cards Received

Number of Cards With Catch		Number of Cards Without Catch			Number of Salmon			Catch Per Card		
Catch Records	Reminder Letters	Catch Records	Reminder Letters	Total Cards	Catch Records	Reminder Letters	Total Salmon	Catch Records	Reminder Letters	Total
3,554	1,648	4,009	5,776	14,977	4,707	2,264	6,971	0.31	0.15	0.47

Sturgeon




Sturgeon
Catch Record
Card Areas
Columbia River
Snake River
Columbia River
Grays Harbor 500
Willapa Bay 400
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
331
332
333
334

Description of Sturgeon Catch Record Card Areas

Columbia River

211 Buoy 10 to Astoria Bridge
212 Astoria Bridge to Longview Bridge
213 Longview Bridge to I-5 Bridge
214 I-5 Bridge to Bonneville Pool
215 Bonneville Pool to the Dalles Pool
216 The Dalles Pool to John Day Pool
217 John Day Pool to McNary Pool
218 McNary Pool to Priest Rapids Pool
219 Priest Rapids Pool to Wanapum Pool
220 Wanapum Pool to Rock Island Pool
221 Rock Island Pool to Rocky Reach Pool
222 Rocky Reach Pool to Wells Pool
223 Wells Pool to Chief Joseph Pool
224 Chief Joseph Pool to Grand Coulee Pool
225 Grand Coulee Pool to Canadian Border

Snake River

331 Ice Harbor Pool to Lower Monumental Pool
332 Lower Monumental Pool to Little Goose Pool
333 Little Goose Pool to Lower Granite Pool
334 Lower Granite Pool to Idaho Border

Other

400 Willapa Bay
500 Grays Harbor
299 Unknown Area (Statewide)

Table 29. 1996 Sport Sturgeon Catch, by Area and Month

Catch Area	Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Fish
Columbia River System														
	White	58	48	146	239	388	1,498	1,510	823	383	25	7	37	5,162
Buoy 10 to	Green	0	0	0	0	0	2	9	19	8	0	0	0	38
Astoria Bridge ✳	**Total**	**58**	**48**	**146**	**239**	**388**	**1,500**	**1,519**	**842**	**391**	**25**	**7**	**37**	**5,200**
Astoria Bridge to	White	131	108	331	540	880	3,392	3,418	1,864	867	58	16	84	11,689
Longview Bridge ✳	**Total**	**131**	**108**	**331**	**540**	**880**	**3,392**	**3,418**	**1,864**	**867**	**58**	**16**	**84**	**11,689**
Longview Bridge to	White	406	5	237	109	52	43	2	9	0	34	25	25	947
I-5 Bridge ✳	**Total**	**406**	**5**	**237**	**109**	**52**	**43**	**2**	**9**	**0**	**34**	**25**	**25**	**947**
I-5 Bridge to	White	228	359	833	579	445	293	300	229	378	538	130	9	4,321
Bonneville Dam ✳	**Total**	**228**	**359**	**833**	**579**	**445**	**293**	**300**	**229**	**378**	**538**	**130**	**9**	**4,321**
Bonneville Dam to	White	111	34	343	27	34	38	12	12	42	4	8	0	665
The Dalles Dam	**Total**	**111**	**34**	**343**	**27**	**34**	**38**	**12**	**12**	**42**	**4**	**8**	**0**	**665**
The Dalles Dam to	White	4	4	19	15	4	0	4	8	0	0	0	0	58
John Day Dam	**Total**	**4**	**4**	**19**	**15**	**4**	**0**	**4**	**8**	**0**	**0**	**0**	**0**	**58**
John Day Dam to	White	0	23	15	23	0	0	4	0	0	0	0	0	65
McNary Dam	**Total**	**0**	**23**	**15**	**23**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**65**
McNary Dam to	White	4	8	11	19	23	65	168	134	84	30	11	0	557
Priest Rapids Dam	**Total**	**4**	**8**	**11**	**19**	**23**	**65**	**168**	**134**	**84**	**30**	**11**	**0**	**557**
Priest Rapids Dam to	White	0	0	0	0	0	0	0	0	8	4	0	0	12
Wanapum Dam	**Total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**4**	**0**	**0**	**12**
Wanapum Dam to	White	0	0	0	0	4	0	0	0	0	4	0	0	8
Rock Island Dam	**Total**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**8**
Rock Island Dam to	White	0	0	0	0	0	0	4	0	4	0	0	0	8
Rocky Reach Dam	**Total**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**4**	**0**	**0**	**0**	**8**
Grand Coulee Dam to	White	0	0	0	0	0	8	11	11	4	0	0	0	34
Canadian Border	**Total**	**0**	**0**	**0**	**0**	**0**	**8**	**11**	**11**	**4**	**0**	**0**	**0**	**34**
	White	942	589	1,935	1,551	1,830	5,337	5,433	3,090	1,770	697	197	155	23,526
COLUMBIA RIVER	Green	0	0	0	0	0	2	9	19	8	0	0	0	38
SYSTEM	**Total**	**942**	**589**	**1,935**	**1,551**	**1,830**	**5,339**	**5,442**	**3,109**	**1,778**	**697**	**197**	**155**	**23,564**

Note 1 :✳ Areas with an asterisk are creel survey estimates. All other area estimates are from catch record cards.
Note 2: All areas above Priest Rapids to the Canadian Border and above Lower Granite Dam to the Idaho border are catch and release only.

Table 29. 1996 Sport Sturgeon Catch, by Area and Month (continued)

Catch Area	Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Fish
Snake River System														
Ice Harbor Dam to	White	0	0	0	0	12	4	8	11	4	0	0	0	39
Lower Monumental Dam	**Total**	**0**	**0**	**0**	**0**	**12**	**4**	**8**	**11**	**4**	**0**	**0**	**0**	**39**
Lower Monumental Dam to	White	0	0	0	0	30	34	23	23	4	4	0	0	118
Little Goose Dam	**Total**	**0**	**0**	**0**	**0**	**30**	**34**	**23**	**23**	**4**	**4**	**0**	**0**	**118**
Little Goose Dam to	White	0	0	0	11	38	34	31	23	8	0	0	0	145
Lower Granite Dam	**Total**	**0**	**0**	**0**	**11**	**38**	**34**	**31**	**23**	**8**	**0**	**0**	**0**	**145**
Lower Granite Dam to	White	0	0	0	0	0	0	0	8	8	0	0	0	16
Idaho border	**Total**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**8**	**0**	**0**	**0**	**16**
	White	0	0	0	11	80	72	62	65	24	4	0	0	318
SNAKE RIVER SYSTEM	**Total**	**0**	**0**	**0**	**11**	**80**	**72**	**62**	**65**	**24**	**4**	**0**	**0**	**318**
Grays Harbor System														
	White	99	156	156	88	103	255	404	259	145	91	42	19	1,817
	Green	0	0	4	4	0	15	19	4	8	8	8	0	70
	Unknown	0	0	0	0	0	0	11	11	0	0	0	0	22
GRAYS HARBOR SYSTEM	**Total**	**99**	**156**	**160**	**92**	**103**	**270**	**434**	**274**	**153**	**99**	**50**	**19**	**1,909**
Willapa Bay System														
	White	53	88	213	423	156	137	95	65	34	19	50	76	1,409
	Green	0	0	0	4	4	0	8	8	0	0	0	0	24
	Unknown	0	0	0	11	8	11	0	0	0	0	0	4	34
WILLAPA BAY SYSTEM	**Total**	**53**	**88**	**213**	**438**	**168**	**148**	**103**	**73**	**34**	**19**	**50**	**80**	**1,467**
Statewide Catch Areas														
	White	1,094	841	2,319	2,084	2,207	5,847	6,028	3,502	1,992	830	289	250	27,283
	Green	0	0	8	8	4	25	36	31	20	12	8	4	152
	Unknown	0	0	0	11	8	11	11	11	0	0	0	4	56
STATEWIDE CATCH AREAS	**Total**	**1,094**	**833**	**2,308**	**2,092**	**2,181**	**5,829**	**6,041**	**3,521**	**1,989**	**819**	**297**	**254**	**27,258**

Table 30. 1996 Washington Sport Sturgeon Fishing, by Residence

County of Residence	Number of Catch Record Cards	Population of County	Percentage of Catch Record Card Holders	Total Sturgeon	Average Catch Per Catch Record Card
Adams	128	15,400	0.83	51	0.40
Asotin	121	19,600	0.62	13	0.11
Benton	3,049	131,000	2.33	392	0.13
Chelan	194	61,300	0.32	79	0.41
Clallam	157	65,000	0.24	98	0.63
Clark	15,049	303,500	4.96	6,155	0.41
Columbia	80	4,200	1.90	6	0.08
Cowlitz	8,060	90,800	8.88	3,550	0.44
Douglas	164	30,400	0.54	3	0.02
Ferry	9	7,200	0.13	0	0.00
Franklin	915	43,700	2.10	114	0.13
Garfield	80	2,400	3.33	9	0.11
Grant	429	66,400	0.65	85	0.20
Grays Harbor	4,736	68,200	6.94	1,016	0.22
Island	37	70,300	0.05	22	0.60
Jefferson	37	25700	0.14	6	0.16
King	3,496	1,628,800	0.21	1,699	0.49
Kitsap	513	22,4700	0.23	240	0.47
Kittitas	164	30,800	0.53	16	0.10
Klickitat	564	18,700	3.02	89	0.16
Lewis	2,716	66,700	4.07	1,013	0.37
Lincoln	37	9,800	0.38	9	0.24
Mason	776	46,700	1.66	402	0.52
Okanogan	137	37,500	0.37	66	0.48
Pacific	3,496	21,100	16.57	4,174	1.20
Pend Oreille	18	11,100	0.16	6	0.40
Pierce	3,065	665,200	0.46	1,234	0.41
San Juan	9	12,400	0.07	0	0.00
Skagit	114	95,500	0.12	47	0.41
Skamania	335	9,800	3.42	206	0.62
Snohomish	1,048	538,100	0.19	278	0.27
Spokane	870	406,500	0.21	168	0.19
Stevens	126	36,600	0.34	6	0.05
Thurston	3,209	193,100	1.66	1,199	0.37
Wahkiakum	420	3,800	11.05	174	0.41
Walla Walla	749	53,400	1.40	180	0.24
Whatcom	128	152,800	0.08	44	0.34
Whitman	110	41,000	0.27	41	0.37
Yakima	3,305	207,600	1.59	386	0.12
Washington Total	58,650	5,309,200	1.06	23,475	0.40
Other State Total	7,949	N/A	N/A	3,528	0.44
Canada	59	N/A	N/A	9	0.15
Foreign	2	N/A	N/A	0	0.00
Unknown	2,981	N/A	N/A	443	0.15
Grand Total	69,639	N/A	N/A	27,258	0.39

Table 31. 1996 Frequency Distribution of Estimated Sturgeon Catch Record Cards and Catch

Number of Sturgeon Per Catch Record Card	Number of Cards	Cumulative Number of Cards	Percent Cards	Cumulative Percent Cards	Total Catch	Cumulative Total Catch	Percent Catch	Cumulative Percent Catch
0	53,047	53,047	76.17	76.17	0	0	0.00	0.00
1	9,320	62,367	13.38	89.56	7,018	7,018	25.75	25.75
2	3,107	65,474	4.46	94.02	4,678	11,697	17.17	42.91
3	1,334	66,808	1.92	95.93	3,014	14,711	11.06	53.97
4	919	67,727	1.32	97.25	2,767	17,478	10.15	64.12
5	572	68,299	0.82	98.07	2,153	19,631	7.90	72.02
6	465	68,764	0.67	98.74	2,101	21,732	7.71	79.73
7	320	69,084	0.46	99.20	1,688	23,420	6.19	85.92
8	210	69,294	0.30	99.50	1,263	24,683	4.63	90.55
9	168	69,462	0.24	99.74	1,137	25,820	4.17	94.72
10	152	69,614	0.22	99.96	1,148	26,968	4.21	98.93
11	4	69,618	0.01	99.97	32	27,000	0.12	99.05
12	8	69,626	0.01	99.98	69	27,069	0.25	99.30
14	4	69,630	0.01	99.98	40	27,109	0.15	99.45
15	4	69,634	0.01	99.99	43	27,152	0.16	99.61
17	4	69,638	0.01	99.99	49	27,201	0.18	99.79
20	4	69,642	0.01	100.00	57	27,258	0.21	100.00
	69,642		100.00		27,258		100.00	

Note: The figures do not accurately multiply across because of a bias adjustment factor.

Table 32A. 1996 Sturgeon Technical Catch Data

Records on File	Estimates and Calculations
Name and Address File (Num_F1)	29,352
Catch Record Cards In Sample Returns (Totinsrt)	18,270
Correction Data	
Correction Factor (Corrfctr) (Percentage of voluntarily returned catch records with matching names and addresses Num_Mtc / Totvol)	1,225 / 1,454 = 0.843
Name/Addresses Corrected for Dealer Non-Response (Cor_n_F1) (Num_F1 / Corrfctr)	29,352 / 0.843
Estimated Number of Catch Records Issued (Tot_crc) (Cor_n_F1 * 2 books sampled)	34,819 x 2 = 69,639
Catch Expansion Factor (Exp_Fctr) Tot_Crc issued / Total in sample returns	69,639 / 18,270 = 3.81

Table 32B. 1996 Sport Sturgeon Inventory of Catch Record Cards Received

Response Code*	Number of Cards With Catch		Number of Cards Without Catch		Total Catch*	Number of Sturgeon			Catch Per Card		
	Catch Records	Reminder Letters	Catch Records	Reminder Letters		Catch Records	Reminder Letters	Total Sturgeon	Catch Records	Reminder Letters	Total
1 and 2	1,570	989	2,913	5,756	11,228	1,570	989	2,559	0.35	0.15	0.23
4	233	596	443	3,061	4,333	233	598	831	0.34	0.16	0.19
7	934	0	1,774	0	2,708	934	0	934	0.34	0.00	0.34
8	0	0	0	1	1	0	0	0	0.00	0.00	0.00
Total	2,737	1,585	5,130	8,818	18,270	2,737	1,587	4,324	0.35	0.15	0.24

*** Response Codes**
1 Prior to any reminder sent
2 After first reminder
4 After second reminder
7 From sporting goods dealers
8 Unknown return date

Note: *This table covers all reported sturgeon.

Steelhead

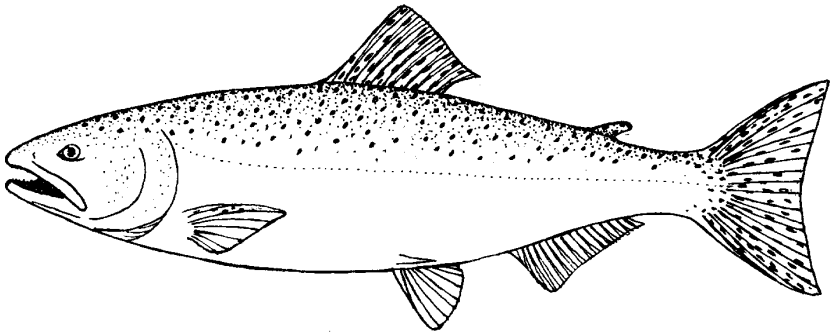


Table 33. 1996-97 Steelhead Sport Catch, by Area and Month

COLUMBIA RIVER AND TRIBUTARIES

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
ABERNATHY CREEK SYSTEM	Abernathy Creek	Marked			16	44					4				60	4
		Unmarked			0	0					0				0	0
		Total			16	44					4				60	4
COAL CREEK SYSTEM	Coal Creek	Marked						4							4	
		Unmarked						0							0	
		Total						4							4	
COLUMBIA RIVER SYSTEM	Below Bonneville Dam	Marked	88	1,171	2,703	3,473	499	28		13	15	2		11	7,962	41
		Unmarked	0	21	4	60	11	0		2	0	0		2	96	4
		Total	88	1,192	2,707	3,533	510	28		15	15	2		13	8,058	45
	Bonneville Dam to Dalles Dam	Marked			25	109	70	14	11						229	
		Unmarked			0	4	11	4	0						19	
		Total			25	113	81	18	11						248	
	The Dalles Dam to John Day Dam	Marked		7	49	130	39	60	18	70	21		42		436	
		Unmarked		0	0	0	17	7	0	4	0		0		28	
		Total		7	49	130	56	67	18	74	21		42		464	
	John Day Dam to McNary Dam	Marked		4		14	42	91	120	53					324	
		Unmarked		0		0	0	11	7	0					18	
		Total		4		14	42	102	127	53					342	
	McNary Dam to Hwy 395	Marked			4	25	120	488	495	130	14	7		4	1,287	
		Unmarked			0	0	7	18	11	4	0	0		0	40	
		Total			4	25	127	506	506	134	14	7		4	1,327	
	Hwy 395 to Priest Rapids Dam	Marked	67	306	418	672	777	257	144	63	25	4	11	4	2,748	
		Unmarked	3	0	14	21	46	7	0	0	0	0	3	0	94	
		Total	70	306	432	693	823	264	144	63	25	4	14	4	2,842	
	Priest Rapids Dam to Wanapum Dam	Marked			4	4	4	4							16	
		Unmarked			0	0	0	0							0	
		Total			4	4	4	4							16	
	Wanapum Dam to Rock Island Dam	Marked				11	4	7	4					4	30	
		Unmarked				0	0	0	0					0	0	
		Total				11	4	7	4					4	30	
	Rock Island Dam to Rocky Reach Dam	Marked			7	25	109	112	18	28	4				303	
		Unmarked			0	0	4	4	0	4	0				12	
		Total			7	25	113	116	18	32	4				315	
	Rocky Reach Dam to Wells Dam	Marked				28	127	105	35	14	7	4	46	53	419	
		Unmarked				0	0	0	0	0	0	0	0	3	3	
		Total				28	127	105	35	14	7	4	46	56	422	

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
COLUMBIA RIVER SYSTEM (Continued)	Wells Dam to Chief Joseph Dam	Marked			4	60	253	309	141	25	7	7	4		810	
		Unmarked			0	0	0	0	0	0	0	0	0		0	
		Total			4	60	253	309	141	25	7	7	4		810	
	Chief Joseph Dam to Grand Coulee Dam	Marked					4								4	
		Unmarked					3								3	
		Total					7								7	
	Columbia River System	Marked	155	1,488	3,214	4,551	2,048	1,475	986	396	93	24	103	76	14,568	41
		Unmarked	3	21	18	85	99	51	18	14	0	0	3	5	313	4
		Total	158	1,509	3,232	4,636	2,147	1,526	1,004	410	93	24	106	81	14,881	45
COWLITZ RIVER SYSTEM	Coweeman River	Marked		3	3	3				3	46	23			9	72
		Unmarked		0	0	0				0	3	0			0	3
		Total		3	3	3				3	49	23			9	75
	Cowlitz River	Marked	198	973	2,588	2,531	1,655	1,328	1,057	1,926	443	314	437	521	9,273	4,698
		Unmarked	15	57	97	79	39	49	26	52	15	6	6	20	336	125
		Total	213	1,030	2,685	2,610	1,694	1,377	1,083	1,978	458	320	443	541	9,609	4,823
	Green River	Marked		90	165	102	57	12		3	3	3	3	6	426	18
		Unmarked		3	3	3	0	0		0	0	0	0	0	9	0
		Total		93	168	105	57	12		3	3	3	3	6	435	18
	Olequa Creek	Marked			6	3					3				9	3
		Unmarked			0	0					0				0	0
		Total			6	3					3				9	3
	Tilton River	Marked								20	92	43				155
		Unmarked								3	0	0				3
		Total								23	92	43				158
	Toutle River	Marked		6		3	3				3				12	3
		Unmarked		0		0	0				0				0	0
		Total		6		3	3				3				12	3
	Toutle River, North Fork	Marked									3					3
		Unmarked									0					0
		Total									3					3
	Toutle River, South Fork	Marked		548	269	132	192	102	98	9	9	6	3		1,243	125
		Unmarked		0	0	3	3	0	0	0	0	3	0		6	3
		Total		548	269	135	195	102	98	9	9	9	3		1,249	128
	Cowlitz River System	Marked	198	1,620	3,031	2,774	1,907	1,442	1,155	1,961	602	389	443	527	10,972	5,077
		Unmarked	15	60	100	85	42	49	26	55	18	9	6	20	351	134
		Total	213	1,680	3,131	2,859	1,949	1,491	1,181	2,016	620	398	449	547	11,323	5,211

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month

COLUMBIA RIVER AND TRIBUTARIES

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
ELOCHOMAN RIVER SYSTEM	Elochoman River	Marked		42	30	8	9	12	120	487	363	57	18	9	101	1,054
		Unmarked		1	0	0	0	0	0	27	9	18	0	0	1	54
		Total		43	30	8	9	12	120	514	372	75	18	9	102	1,108
ENTIAT RIVER SYSTEM	Entiat River	Marked					51	136				85	34		306	
		Unmarked					0	0				0	0		0	
		Total					51	136				85	34		306	
GERMANY CREEK SYSTEM	Germany Creek	Marked		4							22	4			4	26
		Unmarked		0							0	3			0	3
		Total		4							22	7			4	29
GRANDE RONDE RIVER SYSTEM	Grande Ronde River	Marked	9				95	463	406	345	392	662	709	241	3,322	
		Unmarked	0				0	24	0	0	0	0	9	0	33	
		Total	9				95	487	406	345	392	662	718	241	3,355	
GRAYS RIVER SYSTEM	Grays River & WF	Marked					8		25	25	32	36	4		8	122
		Unmarked					0		0	0	0	4	0		0	4
		Total					8		25	25	32	40	4		8	126
HAMILTON CREEK SYSTEM	Hamilton Creek	Marked							4	4						8
		Unmarked							0	0						0
		Total							4	4						8
KALAMA RIVER SYSTEM	Gobar Creek	Marked					9	34	24	21	6	12	3		43	66
		Unmarked					0	14	6	0	0	0	0		14	6
		Total					9	48	30	21	6	12	3		57	72
	Kalama River	Marked	102	296	307	125	97	42	33	54	72	36	9	114	969	318
		Unmarked	3	0	3	9	3	6	0	0	0	18	3	6	24	27
		Total	105	296	310	134	100	48	33	54	72	54	12	120	993	345
	Kalama River System	Marked	102	296	307	125	106	76	57	75	78	48	12	114	1,012	384
		Unmarked	3	0	3	9	3	20	6	0	0	18	3	6	38	33
		Total	105	296	310	134	109	96	63	75	78	66	15	120	1,050	417
KLICKITAT RIVER SYSTEM	Klickitat River	Marked	3	76	96	238	132	40	13					10	608	
		Unmarked	0	0	0	7	7	0	0					0	14	
		Total	3	76	96	245	139	40	13					10	622	
LEWIS RIVER SYSTEM	Cedar Creek	Marked			4	4	4	4			4				16	4
		Unmarked			0	0	0	0			0				0	0
		Total			4	4	4	4			4				16	4
	Lewis River	Marked		11	14		18	4		12					47	12
		Unmarked		0	0		0	3		0					3	0
		Total		11	14		18	7		12					50	12

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
LEWIS RIVER SYSTEM (Continued)	Lewis River, East Fork	Marked	113	198	127	53	28	18	27	76	142	42	4	23	537	314
		Unmarked	11	7	4	21	4	3	8	8	19	4	0	0	50	39
		Total	124	205	131	74	32	21	35	84	161	46	4	23	587	353
	Lewis River, North Fork	Marked	14	431	396	244	71	42	42	323	307	161	84	61	1,198	978
		Unmarked	4	11	7	4	0	0	4	15	0	0	0	0	26	19
		Total	18	442	403	248	71	42	46	338	307	161	84	61	1,224	997
	Lewis River System	Marked	127	640	541	301	121	68	69	411	453	203	88	84	1,798	1,308
		Unmarked	15	18	11	25	4	6	12	23	19	4	0	0	79	58
		Total	142	658	552	326	125	74	81	434	472	207	88	84	1,877	1,366
LITTLE WHITE SALMON RIVER SYSTEM	Little White Salmon River	Marked		3	82	900	697	27							1,709	
		Unmarked		0	0	36	18	0							54	
		Total		3	82	936	715	27							1,763	
METHOW RIVER SYSTEM	Methow River	Marked			3	8	160	104	3			5	20		303	
		Unmarked			0	0	0	3	0			0	0		3	
		Total			3	8	160	107	3			5	20		306	
OKANOGAN RIVER SYSTEM	Okanogan River	Marked					24	85	4						113	
		Unmarked					0	12	12						24	
		Total					24	97	16						137	
	Similkameen River	Marked					8	16			4		113		141	
		Unmarked					0	0			0		0		0	
		Total					8	16			4		113		141	
	Okanogan River System	Marked					32	101	4		4		113		254	
		Unmarked					0	12	12		0		0		24	
		Total					32	113	16		4		113		278	
ROCK CREEK SYSTEM	Rock Creek	Marked							4						4	
		Unmarked							0						0	
		Total							4						4	
SALMON CREEK SYSTEM	Salmon Creek	Marked								7	36	29				72
		Unmarked								0	0	0				0
		Total								7	36	29				72
SKAMOKAWA CREEK SYSTEM	Skamokawa Creek	Marked						4							4	
		Unmarked						0							0	
		Total						4							4	
SNAKE RIVER SYSTEM	Below Ice Harbor Dam	Marked					12	37	32	4					85	
		Unmarked					0	0	5	0					5	
		Total					12	37	37	4					90	

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month

COLUMBIA RIVER AND TRIBUTARIES

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
SNAKE RIVER SYSTEM (Continued)	Ice Harbor Dam to L. Monumental Dam	Marked				4	220	546	644	575	29	4	4	4	2,030	
		Unmarked				0	0	0	29	12	0	0	0	0	41	
		Total				4	220	546	673	587	29	4	4	4	2,071	
	L. Monumental Dam to Little Goose Dam	Marked					1,235	1,533	1,064	811	41	61	163		4,908	
		Unmarked					21	16	33	12	0	0	4		86	
		Total					1,256	1,549	1,097	823	41	61	167		4,994	
	Little Goose Dam to Lower Granite Dam	Marked					196	224	163	212	12		8		815	
		Unmarked					4	4	4	4	0		0		16	
		Total					200	228	167	216	12		8		831	
	Lower Granite Dam To Clarkston	Marked			4	8	497	501	411	98		4	33		1,556	
		Unmarked			0	0	45	102	33	12		0	0		192	
		Total			4	8	542	603	444	110		4	33		1,748	
	Snake River above Clarkston	Marked					216	1,647	1,125	265	4		24	4	3,285	
		Unmarked					0	37	29	8	0		0	0	74	
		Total					216	1,684	1,154	273	4		24	4	3,359	
	Snake River System	Marked			4	12	2,376	4,488	3,439	1,965	86	69	232	8	12,679	
		Unmarked			0	0	70	159	133	48	0	0	4	0	414	
		Total			4	12	2,446	4,647	3,572	2,013	86	69	236	8	13,093	
TUCANNON RIVER SYSTEM	Tucannon River	Marked					106	202	108	182	164	35	28	5	830	
		Unmarked					0	0	3	0	3	0	0	0	6	
		Total					106	202	111	182	167	35	28	5	836	
WALLA WALLA RIVER SYSTEM	Mill Creek	Marked								4	8	28	53	8	101	
		Unmarked								0	0	0	0	0	0	
		Total								4	8	28	53	8	101	
	Touchet River and North Fork	Marked							45	4	12	53	151	20	285	
		Unmarked							0	0	0	4	0	0	4	
		Total							45	4	12	57	151	20	289	
	Walla Walla River	Marked					183	293	227	257	248	142	85	28	1,463	
		Unmarked					0	12	25	28	0	0	0	0	65	
		Total					183	305	252	285	248	142	85	28	1,528	
	Walla Walla River System	Marked					183	293	272	265	268	223	289	56	1,849	
		Unmarked					0	12	25	28	0	4	0	0	69	
		Total					183	305	297	293	268	227	289	56	1,918	
WASHOUGAL RIVER SYSTEM	Washougal River	Marked	85	196	88	8	38	8		22	97	68	7	4	423	198
		Unmarked	0	0	0	0	4	0		0	7	11	0	3	4	21
		Total	85	196	88	8	42	8		22	104	79	7	7	427	219

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COLUMBIA RIVER AND TRIBUTARIES

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
WASHOUGAL RIVER SYSTEM (Continued)	Washougal River, West Fork	Marked	4	50	19	15	23	15	7		11				126	18
		Unmarked	0	0	0	0	0	0	0		0				0	0
		Total	4	50	19	15	23	15	7		11				126	18
	Little Washougal River	Marked		8	4										12	
		Unmarked		0	0										0	
		Total		8	4										12	
	Washougal River System	Marked	89	254	111	23	61	23	7	22	108	68	7	4	561	216
		Unmarked	0	0	0	0	4	0	0	0	7	11	0	3	4	21
		Total	89	254	111	23	65	23	7	22	115	79	7	7	565	237
WENATCHEE RIVER SYSTEM	Icicle Creek	Marked											4		4	
		Unmarked											0		0	
		Total											4		4	
	Wenatchee River	Marked		4		17	77	64	103	94	51	60	47		517	
		Unmarked		0		0	0	0	0	0	0	0	9		9	
		Total		4		17	77	64	103	94	51	60	56		526	
	Wenatchee River System	Marked		4		17	77	64	103	94	51	60	51		521	
		Unmarked		0		0	0	0	0	0	0	0	9		9	
		Total		4		17	77	64	103	94	51	60	60		530	
WHITE SALMON RIVER SYSTEM	Big White Salmon River	Marked	5		290	1,435	701	23		5					2,459	
		Unmarked	0		0	33	5	0		0					38	
		Total	5		290	1,468	706	23		5					2,497	
WIND RIVER SYSTEM	Wind River	Marked		41	93	208	115	37	15	7		4		15	535	
		Unmarked		0	0	19	0	0	0	0		0		0	19	
		Total		41	93	227	115	37	15	7		4		15	554	
YAKIMA RIVER SYSTEM	Yakima River	Marked								8	12				20	
		Unmarked								0	0				0	
		Total								8	12				20	
COLUMBIA RIVER AND TRIBUTARY SYSTEMS TOTALS		Marked	688	4,468	7,818	10,644	8,985	9,082	6,790	6,259	2,768	2,001	2,151	1,149	54,491	8,312
		Unmarked	36	100	132	299	252	336	235	195	56	71	34	34	1,469	311
		Total	724	4,568	7,950	10,943	9,237	9,418	7,025	6,454	2,824	2,072	2,185	1,183	55,960	8,623

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COAST RIVERS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
BEAR RIVER SYSTEM	Bear River	Marked									3	3				6
		Unmarked									0	0				0
		Total									3	3				6
CEDAR CREEK SYSTEM*	Cedar Creek	Marked								3	5					8
		Unmarked								0	0					0
		Total								3	5					8
CHEHALIS RIVER SYSTEM*	Chehalis River	Marked			3	5		5	10	15	125	117	61	3	13	331
		Unmarked			0	0		0	0	0	5	0	0	2	0	7
		Total			3	5		5	10	15	130	117	61	5	13	338
	Chehalis River, South Fork	Marked							3							3
		Unmarked							0							0
		Total							3							3
	Cloquallam Creek	Marked									3	3				6
		Unmarked									0	2				2
		Total									3	5				8
	Newaukum River and North Fork	Marked							3		3	31	61			98
		Unmarked							0		0	0	0			0
		Total							3		3	31	61			98
	Satsop River and Middle Fork and East Fork	Marked		3	5	5			5	5	10	28	5		13	53
		Unmarked		0	0	0			0	0	0	0	0		0	0
		Total		3	5	5			5	5	10	28	5		13	53
	Satsop River, West Fork	Marked							3			10				13
		Unmarked							0			0				0
		Total							3			10				13
	Skookumchuck River	Marked	16			3				8	18	153	415	319	19	913
		Unmarked	0			0				0	5	0	0	15	0	20
		Total	16			3				8	23	153	415	334	19	933
	Wishkah River	Marked								3	10	18	3			34
		Unmarked								0	0	5	0			5
		Total								3	10	23	3			39
	Wynoochee River	Marked		220	252	234	210	116	112	273	397	408	142	3	1,032	1,335
		Unmarked		8	3	5	0	3	0	5	18	15	3	0	19	41
		Total		228	255	239	210	119	112	278	415	423	145	3	1,051	1,376
	Chehalis River System	Marked	16	223	260	247	210	121	136	304	566	768	687	325	1,077	2,786
		Unmarked	0	8	3	5	0	3	0	5	28	22	3	17	19	75
		Total	16	231	263	252	210	124	136	309	594	790	690	342	1,096	2,861

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COAST RIVERS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
COPALIS RIVER SYSTEM*	Copalis River	Marked			13										13	
		Unmarked			0										0	
		Total			13										13	
ELK RIVER SYSTEM*	Elk River	Marked								10	10					20
		Unmarked								3	0					3
		Total								13	10					23
GOODMAN CREEK SYSTEM*	Goodman Creek	Marked				23			25	60	75	15			23	175
		Unmarked				0			0	5	25	10			0	40
		Total				23			25	65	100	25			23	215
HOH RIVER SYSTEM*	Hoh River	Marked		11	31	96	54	3	12	98	279	276	118		195	783
		Unmarked		14	0	6	0	0	0	24	45	105	105		20	279
		Total		25	31	102	54	3	12	122	324	381	223		215	1,062
HOQUIAM RIVER SYSTEM*	Hoquiam River	Marked								3	10					13
		Unmarked								0	0					0
		Total								3	10					13
HUMPTULIPS RIVER SYSTEM*	Humptulips River	Marked		3	6	6	17	17	29	142	218	131	29		49	549
		Unmarked		0	0	0	0	0	0	11	14	0	11		0	36
		Total		3	6	6	17	17	29	153	232	131	40		49	585
	Humptulips River, East Fork	Marked					3	3		4	11	4			6	19
		Unmarked					0	0		0	0	0			0	0
		Total					3	3		4	11	4			6	19
	Humptulips River, West Fork	Marked			3							4			3	4
		Unmarked			0							3			0	3
		Total			3							7			3	7
	Humptulips River System	Marked		3	9	6	20	20	29	146	229	139	29		58	572
		Unmarked		0	0	0	0	0	0	11	14	3	11		0	39
		Total		3	9	6	20	20	29	157	243	142	40		58	611
JOHNS RIVER SYSTEM	Johns River	Marked								41	8					49
		Unmarked								3	0					3
		Total								44	8					52
KALALOCH CREEK SYSTEM*	Kalaloch Creek	Marked				17				3	5	3			17	11
		Unmarked				0				0	0	0			0	0
		Total				17				3	5	3			17	11
MOSQUITO CREEK SYSTEM*	Mosquito Creek	Marked									15	5				20
		Unmarked									3	5				8
		Total									18	10				28

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COAST RIVERS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
NASELLE RIVER SYSTEM	Naselle River	Marked					11			20	108	28	10	3	11	169
		Unmarked					0			8	39	78	91	0	0	216
		Total					11			28	147	106	101	3	11	385
	Salmon Creek	Marked								5	3	3				11
		Unmarked								0	0	0				0
		Total								5	3	3				11
	Naselle River System	Marked					11			25	111	31	10	3	11	180
		Unmarked					0			8	39	78	91	0	0	216
		Total					11			33	150	109	101	3	11	396
NEMAH RIVER SYSTEM	Nemah River, North & Middle & South Forks	Marked								8	13	16	10			47
		Unmarked								0	21	10	0			31
		Total								8	34	26	10			78
	Williams Creek	Marked					4								4	
		Unmarked					0								0	
		Total					4								4	
	Nemah River System	Marked					4			8	13	16	10		4	47
		Unmarked					0			0	21	10	0		0	31
		Total					4			8	34	26	10		4	78
NORTH RIVER SYSTEM	North River	Marked					4			28	34	29	5		4	96
		Unmarked					0			8	57	67	0		0	132
		Total					4			36	91	96	5		4	228
	Smith Creek	Marked						4	3	3	5	10			4	21
		Unmarked						0	0	0	5	13			0	18
		Total						4	3	3	10	23			4	39
	North River System	Marked					4	4	3	31	39	39	5		8	117
		Unmarked					0	0	0	8	62	80	0		0	150
		Total					4	4	3	39	101	119	5		8	267
OZETTE RIVER SYSTEM*	Big River	Marked		4		4			3						8	3
		Unmarked		0		0			0						0	0
		Total		4		4			3						8	3
PALIX RIVER SYSTEM	Palix River	Marked					4				3	10			4	13
		Unmarked					0				0	0			0	0
		Total					4				3	10			4	13
QUEETS RIVER SYSTEM*	Clearwater River	Marked							4	4	8	16	8	4		44
		Unmarked							8	0	8	37	33	33		119
		Total							12	4	16	53	41	37		163

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COAST RIVERS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
QUEETS RIVER SYSTEM* (Continued)	Queets River	Marked					8	15	57	45	4	4	4	4	23	118
		Unmarked					0	0	0	28	37	77	0	0	0	142
		Total					8	15	57	73	41	81	4	4	23	260
	Salmon River	Marked							73	85	65	20				243
		Unmarked							33	49	57	8				147
		Total							106	134	122	28				390
	Queets River System	Marked					8	15	134	134	77	40	12	8	23	405
		Unmarked					0	0	41	77	102	122	33	33	0	408
		Total					8	15	175	211	179	162	45	41	23	813
QUILLAYUTE RIVER SYSTEM*	Calawah River & South Fork	Marked		18	26	22	72	120	202	132	66	0	0	11	258	411
		Unmarked		0	0	0	0	4	7	5	9	16	11	57	4	105
		Total		18	26	22	72	124	209	137	75	16	11	68	262	516
	Dickey River	Marked							4		3	1	1			9
		Unmarked							0		0	2	3			5
		Total							4		3	3	4			14
	Quillayute River & Bogachiel River	Marked		6	6	8	14	28	393	650	423	74	12	21	62	1,573
		Unmarked		0	0	2	2	0	14	49	126	322	418	270	4	1,199
		Total		6	6	10	16	28	407	699	549	396	430	291	66	2,772
	Sol Duc River	Marked		2	4	8	30	22	47	16	49	29	14	25	66	180
		Unmarked		4	0	4	0	6	0	31	178	336	446	220	14	1,211
		Total		6	4	12	30	28	47	47	227	365	460	245	80	1,391
	Quillayute River System	Marked		26	36	38	116	170	646	798	541	104	27	57	386	2,173
		Unmarked		4	0	6	2	10	21	85	313	676	878	547	22	2,520
		Total		30	36	44	118	180	667	883	854	780	905	604	408	4,693
QUINAULT RIVER SYSTEM*	Quinault River, Lower & Cook Creek	Marked							15	528	224	38	30	1		836
		Unmarked							1	2	1	25	80	17		126
		Total							16	530	225	63	110	18		962
	Quinault River, Upper	Marked								17	4	42	25			88
		Unmarked								0	17	47	140			204
		Total								17	21	89	165			292
	Quinault River System	Marked							15	545	228	80	55	1		924
		Unmarked							1	2	18	72	220	17		330
		Total							16	547	246	152	275	18		1,254
SUEZ (SOOES) RIVER SYSTEM*	Suez (Sooes) River	Marked							3	5						8
		Unmarked							0	0						0
		Total							3	5						8

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

COAST RIVERS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
WILLAPA RIVER SYSTEM	Willapa River	Marked					6		3	63	58	64	11		6	199
		Unmarked					0		0	11	8	40	18		0	77
		Total					6		3	74	66	104	29		6	276
	Willapa River, South Fork	Marked					6		5	5	13	8	5		6	36
		Unmarked					0		0	0	3	0	0		0	3
		Total					6		5	5	16	8	5		6	39
	Willapa River System	Marked					12		8	68	71	72	16		12	235
		Unmarked					0		0	11	11	40	18		0	80
		Total					12		8	79	82	112	34		12	315
MARINE CATCH AREAS*	Area 2: Westport	Marked			8	3									11	
		Unmarked			0	0									0	
		Total			8	3									11	
	Area 3: Quillayute River	Marked							8			4				12
		Unmarked							0			0				0
		Total							8			4				12
	Marine Catch Areas Totals	Marked			8	3			8			4			11	12
		Unmarked			0	0			0			0			0	0
		Total			8	3			8			4			11	12
COASTAL RIVER SYSTEMS AND MARINE CATCH AREA TOTALS		Marked	16	267	357	434	443	333	1,022	2,282	2,288	1,605	969	394	1,850	8,560
		Unmarked	0	26	3	17	2	13	63	242	681	1,223	1,359	614	61	4,182
		Total	16	293	360	451	445	346	1,085	2,524	2,969	2,828	2,328	1,008	1,911	12,742

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
BURLEY CREEK SYSTEM*	Burley Creek	Marked				9	4						3		13	3
		Unmarked				0	0						0		0	0
		Total				9	4						3		13	3
CHUCKANUT RIVER SYSTEM*	Chuckanut River	Marked						9	3						9	3
		Unmarked						0	0						0	0
		Total						9	3						9	3
CLALLAM RIVER SYSTEM*	Clallam River	Marked				18				11	19	11			18	41
		Unmarked				0				0	0	16			0	16
		Total				18				11	19	27			18	57
COULTER CREEK SYSTEM*	Coulter Creek	Marked		13	13	4				5					30	5
		Unmarked		0	0	0				0					0	0
		Total		13	13	4				5					30	5
CURLEY CREEK SYSTEM*	Curley Creek	Marked		4	14	9		4			3	3			31	6
		Unmarked		0	4	0		0			0	0			4	0
		Total		4	18	9		4			3	3			35	6
DAKOTA CREEK SYSTEM*	Dakota Creek	Marked						4							4	
		Unmarked						0							0	
		Total						4							4	
DEEP CREEK SYSTEM*	Deep Creek	Marked			4										4	
		Unmarked			0										0	
		Total			4										4	
DESCHUTES RIVER SYSTEM*	Deschutes River	Marked				9	13	4		3					26	3
		Unmarked				0	0	0		0					0	0
		Total				9	13	4		3					26	3
	Percival Creek	Marked									3					3
		Unmarked									0					0
		Total									3					3
	Deschutes River System	Marked				9	13	4		3	3				26	6
		Unmarked				0	0	0		0	0				0	0
		Total				9	13	4		3	3				26	6
DOSEWALLIPS RIVER SYSTEM*	Dosewallips River	Marked		4								3			4	3
		Unmarked		0								0			0	0
		Total		4								3			4	3
DUCKABUSH RIVER SYSTEM*	Duckabush River	Marked							3	3	3					9
		Unmarked							0	0	0					0
		Total							3	3	3					9

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
DUNGENESS RIVER SYSTEM*	Dungeness River	Marked		5				18	11	55	19	41			23	126
		Unmarked		4				0	0	0	0	0			4	0
		Total		9				18	11	55	19	41			27	126
EAST TWIN RIVER SYSTEM*	East Twin River	Marked									3					3
		Unmarked									0					0
		Total									3					3
ELWHA RIVER SYSTEM*	Elwha River	Marked		39	11	11	6	6	47	166	32	26	3		73	274
		Unmarked		6	17	6	0	0	0	115	15	71	0		29	201
		Total		45	28	17	6	6	47	281	47	97	3		102	475
GREEN-DUWAMISH RIVER SYSTEM*	Green-Duwamish River	Marked		95	301	315	273	223	253	226	175	87	59		1,207	800
		Unmarked		9	13	9	16	22	41	15	48	10	13		69	127
		Total		104	314	324	289	245	294	241	223	97	72		1,276	927
HOKO RIVER SYSTEM*	Hoko River	Marked							3	75	44	31	5			158
		Unmarked							2	13	41	91	67			214
		Total							5	88	85	122	72			372
KENNEDY CREEK SYSTEM*	Kennedy Creek	Marked				4									4	
		Unmarked				0									0	
		Total				4									4	
LAKE WASHINGTON SYSTEM*	Cedar River	Marked			4										4	
		Unmarked			0										0	
		Total			4										4	
	Issaquah Creek	Marked		4											4	
		Unmarked		0											0	
		Total		4											4	
	Lake Washington	Marked			4										4	
		Unmarked			0										0	
		Total			4										4	
	Sammamish River	Marked						4		3	3				4	6
		Unmarked						0		0	2				0	2
		Total						4		3	5				4	8
	Lake Washington System	Marked		4	8			4		3	3				16	6
		Unmarked		0	0			0		0	2				0	2
		Total		4	8			4		3	5				16	8
LYRE RIVER SYSTEM*	Lyre River	Marked		7	100	114	44	96	277	374	169	61			361	881
		Unmarked		0	0	0	0	0	0	7	4	0			0	11
		Total		7	100	114	44	96	277	381	173	61			361	892

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
MCLANE CREEK SYSTEM*	McLane Creek	Marked								3						3
		Unmarked								0						0
		Total								3						3
MISSION CREEK SYSTEM*	Mission Creek	Marked								3						3
		Unmarked								0						0
		Total								3						3
MORSE CREEK SYSTEM*	Morse Creek	Marked				4			8	52	60	27			4	147
		Unmarked				0			0	0	3	0			0	3
		Total				4			8	52	63	27			4	150
NISQUALLY RIVER SYSTEM*	Nisqually River	Marked								5						5
		Unmarked								0						0
		Total								5						5
NOOKSACK RIVER SYSTEM*	Nooksack River, Middle Fork	Marked								3	19	3	3			28
		Unmarked								0	0	0	0			0
		Total								3	19	3	3			28
	Nooksack River, North Fork	Marked								3	3	3	3			12
		Unmarked								0	0	0	0			0
		Total								3	3	3	3			12
	Nooksack River, mainstem only	Marked						9		5	8	35	11		9	59
		Unmarked						0		0	0	14	5		0	19
		Total						9		5	8	49	16		9	78
	Nooksack River System	Marked						9		11	30	41	17		9	99
		Unmarked						0		0	0	14	5		0	19
		Total						9		11	30	55	22		9	118
PUYALLUP RIVER SYSTEM*	Carbon River	Marked			3	2	1				10	13	3		6	26
		Unmarked			1	1	0				0	0	0		2	0
		Total			4	3	1				10	13	3		8	26
	Puyallup River	Marked					1	4	15	56	116	53	28		5	268
		Unmarked					10	0	0	18	8	10	0		10	36
		Total					11	4	15	74	124	63	28		15	304
	South Prairie Creek	Marked										3				3
		Unmarked										0				0
		Total										3				3
	Stuck River	Marked							5		3	10				18
		Unmarked							0		0	0				0
		Total							5		3	10				18

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
PUYALLUP RIVER SYSTEM* (Continued)	Puyallup River System	Marked			3	2	2	4	20	56	129	79	31		11	315
		Unmarked			1	1	10	0	0	18	8	10	0		12	36
		Total			4	3	12	4	20	74	137	89	31		23	351
PYSHT RIVER SYSTEM*	Pysht River	Marked							5	14	14	19				52
		Unmarked							0	8	16	112				136
		Total							5	22	30	131				188
SALT CREEK SYSTEM*	Salt Creek	Marked					18	13	5	5	5				31	15
		Unmarked					0	0	0	0	0				0	0
		Total					18	13	5	5	5				31	15
SAMISH RIVER SYSTEM*	Samish River	Marked								14	24	19	11			68
		Unmarked								5	3	3	3			14
		Total								19	27	22	14			82
SEKIU RIVER SYSTEM*	Sekiu River	Marked		4				4		3	8	11			8	22
		Unmarked		0				0		2	11	3			0	16
		Total		4				4		5	19	14			8	38
SIEBERT CREEK SYSTEM*	Siebert Creek	Marked									3					3
		Unmarked									0					0
		Total									3					3
SKAGIT RIVER SYSTEM*	Cascade River	Marked		5	5				14	63	100	77			10	254
		Unmarked		0	0				0	5	0	5			0	10
		Total		5	5				14	68	100	82			10	264
	Sauk River	Marked		10	5	19	5	6	5	5	72	50	5	5	45	142
		Unmarked		0	0	5	0	13	0	9	23	209	0	0	18	241
		Total		10	5	24	5	19	5	14	95	259	5	5	63	383
	Skagit River	Marked		34	19	82	39	10	36	340	658	336	73		184	1,443
		Unmarked		10	0	5	0	0	14	41	209	1,026	68		15	1,358
		Total		44	19	87	39	10	50	381	867	1,362	141		199	2,801
	Skagit River System	Marked		49	29	101	44	16	55	408	830	463	78	5	239	1,839
		Unmarked		10	0	10	0	13	14	55	232	1,240	68	0	33	1,609
		Total		59	29	111	44	29	69	463	1,062	1,703	146	5	272	3,448
SKOKOMISH RIVER SYSTEM*	Skokomish River & South Fork & North Fork	Marked				4		22		3	3	3	3	8	26	20
		Unmarked				0		0		0	0	2	0	0	0	2
		Total				4		22		3	3	5	3	8	26	22
	Vance Creek	Marked								3						3
		Unmarked								0						0
		Total								3						3

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
SKOKOMISH RIVER SYSTEM* (Continued)	Skokomish River System	Marked				4		22		6	3	3	3	8	26	23
		Unmarked				0		0		0	0	2	0	0	0	2
		Total				4		22		6	3	5	3	8	26	25
SKOOKUM CREEK SYSTEM*	Skookum Creek	Marked									3		14			17
		Unmarked									0		0			0
		Total									3		14			17
SNOHOMISH RIVER SYSTEM*	Pilchuck River	Marked								18	17	22				57
		Unmarked								7	27	26				60
		Total								25	44	48				117
	Raging River	Marked						44	34	29	38	8	8		44	117
		Unmarked						0	0	0	0	2	0		0	2
		Total						44	34	29	38	10	8		44	119
	Skykomish River	Marked	4	311	468	1,140	600	427	316	298	570	240	65	4	2,950	1,493
		Unmarked	0	24	24	49	41	8	4	3	36	54	0	0	146	97
		Total	4	335	492	1,189	641	435	320	301	606	294	65	4	3,096	1,590
	Skykomish River, North Fork	Marked		4	32	56	28	4	12	15	17	10	8		124	62
		Unmarked		0	0	0	0	4	11	0	0	2	0		4	13
		Total		4	32	56	28	8	23	15	17	12	8		128	75
	Skykomish River, South Fork	Marked		4	4	12	32		4	14	2				52	20
		Unmarked		0	0	0	4		4	0	0				4	4
		Total		4	4	12	36		8	14	2				56	24
	Snohomish River	Marked		48	85	8	8	12	84	45	112	12			161	253
		Unmarked		0	0	0	0	0	0	0	48	35			0	83
		Total		48	85	8	8	12	84	45	160	47			161	336
	Snoqualmie River	Marked		8	69	145	133	52	42	279	269	59	30		407	679
		Unmarked		0	8	12	0	4	0	4	9	11	4		24	28
		Total		8	77	157	133	56	42	283	278	70	34		431	707
	Sultan River	Marked			4				4	10	30	12	4		4	60
		Unmarked			0				0	5	9	4	0		0	18
		Total			4				4	15	39	16	4		4	78
	Tokul Creek	Marked								27	73	32	15			147
		Unmarked								0	0	2	0			2
		Total								27	73	34	15			149
	Tolt River	Marked					4	12		40	28	26			16	94
		Unmarked					0	0		0	3	2			0	5
		Total					4	12		40	31	28			16	99

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
SNOHOMISH RIVER SYSTEM* (Continued)	Wallace River	Marked							8	9	10	2				29
		Unmarked							7	0	0	0				7
		Total							15	9	10	2				36
	Woods Creek & West Fork	Marked					4		4						4	4
		Unmarked					0		0						0	0
		Total					4		4						4	4
	Snohomish River System	Marked	4	375	662	1,361	809	551	508	784	1,166	423	130	4	3,762	3,015
		Unmarked	0	24	32	61	45	16	26	19	132	138	4	0	178	319
		Total	4	399	694	1,422	854	567	534	803	1,298	561	134	4	3,940	3,334
SQUALICUM CREEK SYSTEM*	Squalicum Creek	Marked												3		3
		Unmarked												0		0
		Total												3		3
STILLAGUAMISH RIVER SYSTEM*	Canyon Creek	Marked		3	7	10	10			16	33	16			30	65
		Unmarked		0	0	0	0			4	0	12			0	16
		Total		3	7	10	10			20	33	28			30	81
	Jim Creek	Marked										4				4
		Unmarked										0				0
		Total										4				4
	Pilchuck Creek	Marked					3	10	16	4					13	20
		Unmarked					0	0	0	0					0	0
		Total					3	10	16	4					13	20
	Stillaguamish River	Marked				3	3	3			8	4			9	12
		Unmarked				0	0	0			0	33			0	33
		Total				3	3	3			8	37			9	45
	Stillaguamish River, North Fork	Marked		21	80	62	114	69	37	175	138	121	12		346	483
		Unmarked		3	3	3	3	0	0	4	12	42	0		12	58
		Total		24	83	65	117	69	37	179	150	163	12		358	541
	Stillaguamish River, South Fork	Marked		3	14	28	31	31	12		8	4			107	24
		Unmarked		0	0	0	0	0	0		0	53			0	53
		Total		3	14	28	31	31	12		8	57			107	77
	Stillaguamish River System	Marked		27	101	103	161	113	65	195	187	149	12		505	608
		Unmarked		3	3	3	3	0	0	8	12	140	0		12	160
		Total		30	104	106	164	113	65	203	199	289	12		517	768
WEST TWIN RIVER SYSTEM*	West Twin River	Marked					4					5			4	5
		Unmarked					0					3			0	3
		Total					4					8			4	8

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

PUGET SOUND AND STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total	
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Summer	Winter
WHATCOM CREEK SYSTEM*	Whatcom Creek	Marked								5	5	5				15
		Unmarked								0	0	0				0
		Total								5	5	5				15
MARINE CATCH AREAS*	Area 5: West Juan de Fuca	Marked				8	8			5	5	10			16	20
		Unmarked				0	0			0	0	0			0	0
		Total				8	8			5	5	10			16	20
	Area 6: East Juan de Fuca	Marked								5	5	10				20
		Unmarked								5	19	0				24
		Total								10	24	10				44
	Area 9: Admiralty Inlet	Marked					8		5	122	73	34	5		8	239
		Unmarked					0		0	0	0	0	0		0	0
		Total					8		5	122	73	34	5		8	239
	Area 10: North Puget Sound	Marked		8											8	
		Unmarked		0											0	
		Total		8											8	
	Area 11: Mid-Puget Sound	Marked					38			5					38	5
		Unmarked					0			0					0	0
		Total					38			5					38	5
	Area 13: South Puget Sound	Marked								5		5				10
		Unmarked								0		0				0
		Total								5		5				10
	Marine Catch Areas	Marked		8		8	54		5	142	83	59	5		70	294
		Unmarked		0		0	0		0	5	19	0	0		0	24
		Total		8		8	54		5	147	102	59	5		70	318
PUGET SOUND, STRAIT OF JUAN DE FUCA RIVER SYSTEMS AND MARINE CATCH AREAS		Marked	4	634	1,246	2,076	1,432	1,100	1,268	2,627	3,023	1,556	371	20	6,492	8,875
		Unmarked	0	56	70	90	74	51	83	270	546	1,853	160	0	341	2,912
		Total	4	690	1,316	2,166	1,506	1,151	1,351	2,897	3,569	3,419	531	20	6,833	11,787

Table 33. 1996-97 Steelhead Sport Catch, by Area and Month (continued)

STATEWIDE STEELHEAD HARVEST SUMMARY, 1996-1997

System	Catch Area	Marked/ Unmarked	Summer 1996						Winter 1996-97						Total
			May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
NON-BOLDT CASE AREAS	SUMMER 1996	Marked	688	4,468	7,826	10,647	9,020	9,086	5,353	3,254	1,055	1,165	1,579	400	54,541
		Unmarked	36	100	132	299	252	336	191	88	3	4	25	3	1,469
		Total	724	4,568	7,958	10,946	9,272	9,422	5,544	3,342	1,058	1,169	1,604	403	56,010
	WINTER 1996-97	Marked							1,448	3,178	1,961	1,007	613	752	8,959
		Unmarked							44	137	186	275	118	31	791
		Total							1,492	3,315	2,147	1,282	731	783	9,750
BOLDT CASE AREAS*	SUMMER 1996	Marked	20	901	1,595	2,507	1,840	1,429							8,292
		Unmarked	0	82	73	107	76	64							402
		Total	20	983	1,668	2,614	1,916	1,493							8,694
	WINTER 1996-97	Marked							2,279	4,736	5,063	3,000	1,299	411	16,788
		Unmarked							146	482	1,094	2,868	1,410	614	6,614
		Total							2,425	5,218	6,157	5,868	2,709	1,025	23,402
TOTAL	SUMMER 1996	Marked	708	5,369	9,421	13,154	10,860	10,515	5,353	3,254	1,055	1,165	1,579	400	62,833
		Unmarked	36	182	205	406	328	400	191	88	3	4	25	3	1,871
		Total	744	5,551	9,626	13,560	11,188	10,915	5,544	3,342	1,058	1,169	1,604	403	64,704
	WINTER 1996-97	Marked							3,727	7,914	7,024	4,007	1,912	1,163	25,747
		Unmarked							190	619	1,280	3,143	1,528	645	7,405
		Total							3,917	8,533	8,304	7,150	3,440	1,808	33,152
TOTAL RIVERS[4]			13	51	61	70	85	79	86	115	121	109	72	35	897

* Boldt case area river/stream (Western Washington only).

1 The majority of the Columbia River System steelhead are summer-runs.

2 Winter creel surveys conducted.

3 Winter steelhead catch estimates are from angler surveys conducted by the Quinault Indian Nation.

4 Total number of rivers where steelhead were harvested during that month.

Table 34. 1996 Washington Sport Steelhead Fishing, by Residence

County of Residence	Number of Catch Record Cards	Population of County	Percentage of Catch Record Holders	Total Steelhead	Average Catch Per Catch Record Card
Adams	204	15,400	1.32	194	0.95
Asotin	935	19,600	4.77	1,805	1.93
Benton	3,467	131,000	2.65	3,752	1.08
Chelan	686	61,300	1.12	1,179	1.72
Clallam	2,935	65,000	4.52	4,357	1.48
Clark	6,073	30,3500	2.00	3,820	0.63
Columbia	368	4,200	8.76	433	1.18
Cowlitz	4,855	90,800	5.35	4,260	0.88
Douglas	487	30,400	1.6	1,082	2.22
Ferry	91	7,200	1.26	15	0.16
Franklin	1309	43,700	3.00	2,201	1.68
Garfield	113	2,400	4.71	127	1.12
Grant	397	66,400	0.60	298	0.75
Grays Harbor	2,414	68,200	3.54	2,022	0.84
Island	516	70,300	0.73	366	0.71
Jefferson	272	25,700	1.06	239	0.88
King	13,269	1,628,800	0.81	11,899	0.90
Kitsap	1,909	224,700	0.85	1,410	0.74
Kittitas	204	30,800	0.66	246	1.21
Klickitat	504	18,700	2.70	343	0.68
Lewis	1,921	66,700	2.88	2,469	1.29
Lincoln	221	9,800	2.26	164	0.74
Mason	771	46,700	1.65	410	0.53
Okanogan	187	37500	0.50	90	0.48
Pacific	652	21,100	3.10	485	0.74
Pend Oreille	85	11,100	0.77	37	0.44
Pierce	6,277	665,200	0.94	4707	0.75
San Juan	23	12,400	0.19	22	0.96
Skagit	1,887	95,500	1.98	1,582	0.84
Skamania	193	9,800	1.97	82	0.42
Snohomish	6,753	538,100	1.25	4,968	0.74
Spokane	3,156	406,500	0.78	2,633	0.83
Stevens	323	36,600	0.88	343	1.06
Thurston	3,218	193,100	1.67	2,909	0.90
Wahkiakum	431	3,800	11.34	1,238	2.87
Walla Walla	1955	53,400	3.66	3,820	1.95
Whatcom	1,479	152,800	0.97	1,261	0.85
Whitman	923	41,000	2.25	1,216	1.32
Yakima	4,153	207,600	2.00	3,558	0.86
Washington Total	**75,616**	**5,516,800**	**1.37**	**75,042**	**0.95**
Other State Total	4,906	N/A	N/A	4,931	1.01
Canada	49	N/A	N/A	0	0.00
Unknown	12,289	N/A	N/A	20,881	0.70
Grand Total	**92,858**	**N/A**	**N/A**	**97,856**	**1.05**

Table 35. 1996 Frequency Distribution of Estimated Steelhead Catch Record Cards and Catch

Number of Steelhead Per Catch Record Card	Number of Cards	Cumulative Number of Cards	Percent Cards	Cumulative Percent Cards	Total Catch	Cumulative Total Catch	Percent Catch	Cumulative Percent Catch
0	65,402	65,402	70.43	70.43	0	0	0.00	0.00
1	10,869	76,271	11.70	82.14	10,776	10,776	11.01	11.01
2	5,228	81,499	5.63	87.77	10,366	21,142	10.59	21.61
3	2,982	84,481	3.21	90.98	8,871	30,013	9.07	30.67
4	1,999	86,480	2.15	93.13	7,929	37,942	8.10	38.77
5	1,419	87,899	1.53	94.66	7,032	44,974	7.19	45.96
6	972	88,871	1.05	95.71	5,781	50,755	5.91	51.87
7	748	89,619	0.81	96.51	5,194	55,949	5.31	57.18
8	469	90,088	0.51	97.02	3,721	59,670	3.80	60.98
9	458	90,546	0.49	97.51	4,087	63,757	4.18	65.15
10	402	90,948	0.43	97.94	3,987	67,744	4.07	69.23
11	357	91,305	0.38	98.33	3,898	71,642	3.98	73.21
12	201	91,506	0.22	98.54	2,392	74,034	2.44	75.66
13	190	91,696	0.20	98.75	2,447	76,481	2.50	78.16
14	145	91,841	0.16	98.91	2,016	78,497	2.06	80.22
15	190	92,031	0.20	99.11	2,824	81,321	2.89	83.10
16	134	92,165	0.14	99.25	2,126	83,447	2.17	85.28
17	112	92,277	0.12	99.37	1,883	85,330	1.92	87.20
18	89	92,366	0.10	99.47	1,595	86,925	1.63	88.83
19	67	92,433	0.07	99.54	1,263	88,188	1.29	90.12
20	67	92,500	0.07	99.62	1,329	89,517	1.36	91.48
21	89	92,589	0.10	99.71	1,861	91,378	1.90	93.38
22	67	92,656	0.07	99.78	1,462	92,840	1.49	94.88
23	89	92,745	0.10	99.88	2,038	94,878	2.08	96.96
24	22	92,767	0.02	99.90	532	95,410	0.54	97.50
25	22	92,789	0.02	99.93	554	95,964	0.57	98.07
26	11	92,800	0.01	99.94	288	96,252	0.29	98.36
27	11	92,811	0.01	99.95	299	96,551	0.31	98.67
29	22	92,833	0.02	99.98	642	97,193	0.66	99.32
30	22	92,855	0.02	100.00	664	97,857	0.68	100.00
Total	92,855		100.00		97,857		100.00	

Note: The figures do not accurately multiply across because of a bias adjustment factor and rounding of numbers.

Table 36A. 1996-97 Sport Steelhead Technical Catch Data

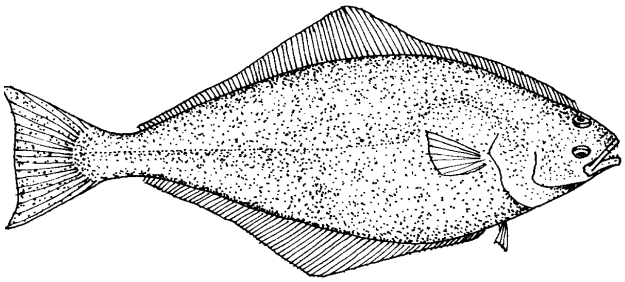
Records on File	Estimates and Calculations
Name and Address File (Num_F1)	14,544
Catch Record Cards In Sample Returns (Totinsrt)	8,630
Correction Data	
Correction Factor (Corrfctr) (Percentage of voluntarily returned catch records with matching names and addresses Num_Mtc / Totvol)	762 / 953 = .80 (80%)
Name/Addresses Corrected for Dealer Non-Response (Cor_n_F1) (Num_F1 / Corrfct)	14,544/ .80 = 18,180
Estimated Number of Catch Records Issued (Tot_crc) (Numbook/Corrfctr *avg book * 4 books sampled)	865 / .80 x 21.47 = 23,214 x 4 = 92,858
Catch Expansion Factor (Exp_Fctr) Tot_Crc issued / Total in sample returns	92,858 / 8630 = 10.76
Non-response bias adjustment based on telephone survey	1.05

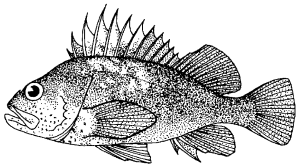
Table 36B. 1996 - 97 Inventory of Catch Record Cards Received

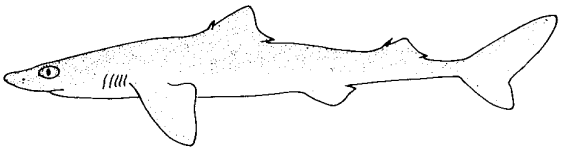
Response Code*	Number of Cars With Catch		Number of Cards Without Catch		Total Catch	Number of Steelhead			Catch Per Card		
	Catch Records	Reminder Letters	Catch Records	Reminder Letters		Catch Records	Reminder Letters	Total Steelhead	Catch Records	Reminder Letters	Total
1	467	0	500	0	967	2,286	0	2,286	2.36	0.00	2.36
2	876	388	1,421	1,931	4,616	3,472	1,373	4,845	1.51	0.59	1.05
4	148	170	261	775	1,354	486	517	1,003	1.19	0.55	0.74
7	700	0	956	0	1,656	3,463	0	3,463	2.09	0.00	2.09
8	37	0	0	0	37	172	0	172	4.65	0.00	4.65
Total	2,228	558	3,138	2,706	8,630	9,707	1,890	11,597	1.81	0.58	1.34

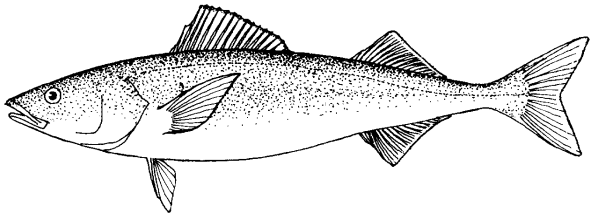
*** Response Codes**
1 Prior to any reminder sent
2 After first reminder
4 After second reminder
7 From sporting goods dealers
8 Unknown return data

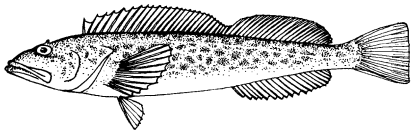
Marine Fish











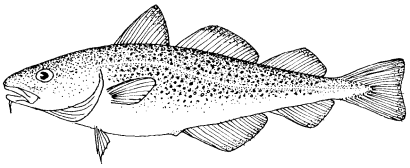


Table 37. 1996 Coastal Sport Bottomfish Catch					
Species	**Ilwaco**	**Westport**	**La Push**	**Neah Bay**	**Total**
Black Rockfish	8,702	162,940	7,119	53,469	232,230
Canary Rockfish	1,047	3,679	423	4,543	9,692
China Rockfish	48	89	72	2,583	2,792
Yelloweye Rockfish	279	1,789	622	1,825	4,515
Blue Rockfish	135	1,694	88	2,754	4,671
Yellowtail Rockfish	683	15,273	640	3,694	20,290
Copper Rockfish	39	43	14	1,722	1,818
Quillback Rockfish	75	304	79	2,737	3,195
Bocaccio Rockfish	47	57	5	90	199
Vermillion Rockfish	22	12	0	351	385
Tiger Rockfish	7	38	29	142	216
Cabezon	122	316	114	1,797	2,349
Lingcod	770	7,692	1,374	10,068	19,904
Kelp Greenling	63	411	207	5,719	6,400
Pacific Halibut	52	811	125	14,424	15,412
Flatfish (general)	40	59	6	439	544
Pacific Cod	1	3	10	328	342
Cod (general)	1	42	0	2	45
Surfperch (general)	609	264	0	13	886
Skates & Rays	6	217	0	25	248
Rockfish (general)	28	30	0	210	268
Tuna	34	5,015	0	0	5,049
Miscellaneous	27	1,547	203	1,248	3,025
TOTAL	**12,837**	**202,325**	**11,130**	**108,183**	**334,475**

Table 38. 1996 Washington Recreational Pacific Halibut Catch		
Year	**South Coast Catch Areas 1-2**	**North Coast Catch Areas 3-4**
1989	368	11,373
1990	392	4,958
1991	433	4,823
1992	1,740	6,870
1993	539	5,009
1994	651	2,876
1995	884	4,224
1996	887	4,431

Table 39. 1996 Sport Bottomfish Catch by Boat-Based Anglers in Puget Sound

Species	Catch Record Area 5	6	7	8	9	10	11	12	13	Puget Sound Total
Pacific halibut										1,587
Flatfishes except halibut	433	189	2,293	22,134	18,389	31,083	6,794		12,891	94,206
Sablefish			7							7
Lingcod	628	116	389	355	105	130	212		420	2,355
Rockfishes	16,409	3,061	8,972	5,000	64,423	5,193	2,960	89	806	96,913
Pacific cod	263	9	3			60				335
Walleye pollock						9				9
Surfperches			80	6,524		2,109			9	8,722
Sculpins	321		261	117	70	306	237		200	1,512
Spiny dogfish		76	208	92		539	190		59	1,164
Misc. bottomfish	6,231	4,722	3,641	3,057	86	506	219		120	18,582
Total	**24,285**	**8,173**	**15,854**	**32,279**	**73,073**	**39,935**	**10,612**	**89**	**14,505**	**225,392**

Note: The catch of Pacific halibut is estimated by a catch report for halibut, and catches are not available for individual Catch Areas. The Puget Sound catch of halibut includes fish caught between Sekiu and Cape Flattery (Catch Record Area 4B). Since 1994, extensive seasonal closures of the recreational salmon fishery in Puget Sound have prevented the estimation of bottomfish catch during many peak months in many catch areas.

Shellfish

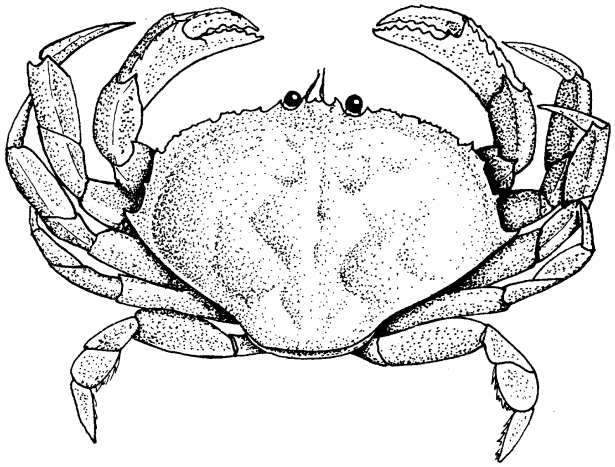


Table 40. Seasonal Summary of Sport Razor Clam Digging on the Ocean Beaches (1)

Location	Fall 1996				Spring 1997			
	Digger Trips	Clams Per Trip	Percent Wastage (2)	Number of Clams (4)	Digger Trips	Clams Per Trip	Percent Wastage (2)	Number of Clams (4)
Long Beach	29,000	8.2	N/A	236,000	0	0	N/A	0
Twins Harbors	10,000	12.9	N/A	126,000	29,000	13.7	4.3%	417,000
Copalis	0	0		0	0	0		0
Mocrocks	5,300	12.7	N/A	67,000	0	0		0
Kalaloch(3)	1,500	8.7	N/A	14,000	3,000	9.4	N/A	28,000
Total	**45,800**	**9.7**		**443,000**	**32,000**	**13.9**		**445,000**

Note:
1. Seasonal summary from Fall of one year through Spring of the next year. Detailed information available in WDFW Razor Clam progress reports.
2. Percent wastage is the percent of damaged/dead clams found in holes.
3. Data collection at Kalaloch began in the Fall of 1995.
4. Total number of clams includes wastage.

Table 41. 1996 Recreational Use and Harvest Estimate from Intertidal Areas East of Dungeness Spit (1)

Catch Area Code and Description (2)		User Trips (3)	Pounds of Clams Harvested								Number of Oysters	Pounds of Oysters (4)
			Manila Littleneck	Native Littleneck	Butter	Cockle	Soft Shell	Horse	Geoduck	Total Clams		
20A	Gulf of Georgia	17,893	2,257	21,145	27,569	2,513	280	6,945	0	60,709	38,436	1,751
20B	North San Juan Islands	358	65	401	747	47	4	265	0	1,529	415	19
21A	Bellingham Bay	282	38	273	630	16	0	211	0	1,168	169	8
21B	Samish Bay	2,491	264	2,749	3,619	204	61	1,376	0	8,273	2,553	116
22A	South San Juan Islands	3,446	169	5,061	3,417	364	177	1,607	0	10,795	660	30
22B	Padilla Bay	2,351	167	3,256	3,996	433	86	2,050	0	9,988	569	28
23B	Northwest Whidbey Island	250	13	308	495	70	7	317	0	1,210	0	
24A	Skagit Bay	3,509	51	4,387	5,896	1,008	8	640	0	11,990	87	4
24B	Port Susan	2,653	51	3,247	5,208	825	4	363	0	9,698	0	
24C	Saratoga Passage	33,580	378	47,558	72,968	10,575	44	3,398	0	134,921	2,397	109
24D	Holmes Harbor	2,310	53	3,422	5,539	860	4	378	0	10,256	40	2
25A	Eastern Juan de Fuca Strait	10,012	929	17,748	12,606	3,726	426	5,443	0	40,878	4,605	210
25B	Admiralty Inlet	11,262	1,458	16,498	18,662	6,778	125	7,248	0	50,769	4,435	202
25C	North Hood Canal	14,874	11,940	7,692	10,821	5,003	503	4,420	21	40,400	101,759	4,635
25D	Port Townsend Bay	1,219	318	1,276	570	123	4	392	0	2,683	3,302	150
25E	Discovery Bay	701	69	1,041	1,432	506	9	482	0	3,537	180	8
26A	Useless Bay/Possession Sound	16,773	375	23,038	31,276	3,603	36	1,601	0	59,929	923	42
26B	Seattle/Elliot Bay/Pt Madison	9,523	248	14,421	21,878	2,833	23	1,342	0	40,745	1,790	82
26C	Port Orchard	9,600	205	12,193	15,127	2,136	41	971	0	30,673	14,609	665
26D	Vashon/Commencement Bay	5,303	86	6,690	11,049	1,000	16	531	0	19,372	1,682	77
27A	North Central Hood Canal	41,721	47,063	5,783	9,691	3,700	1,314	3,865	85	71,501	344,291	15,682
27B	Central Hood Canal	11,023	7,100	2,905	3,859	1,565	301	1,339	9	17,078	104,621	4,765
27C	South Hood Canal	27,275	6,041	4,911	5,298	1,848	611	780	5	19,494	146,093	6,654
28A	Nisqually/Fox Island	6,321	2,981	2,616	17,648	327	224	7,407	3,407	34,610	77	4
28B	Carr Inlet	5,868	2,228	3,471	7,355	137	600	2,206	593	16,590	3,529	161
28C	Case Inlet	10,098	3,917	8,222	14,637	311	972	5,844	1,947	35,850	9,003	410
28D	Budd, Eld, & Totten Inlets	4,801	1,214	3,331	10,834	296	522	3,973	2,073	22,243	2,369	108
Total		**223,928**	**89,759**	**223,927**	**322,899**	**50,816**	**6,400**	**65,435**	**8,140**	**767,376**	**789,542**	**35,962**

Notes:
1. Includes both pubic and private tidelands.
2. Boundaries of geographic areas are those prescribed by catch area.
3. Includes combined clam and oyster users.
4. Estimated weight of shucked meats.

Table 42. 1996 Hood Canal Sport Shrimp Fishery

Date	Pots Fished	Pounds	CPUE
May 18	6,280	21,970	3.50
May 22	2,470	10,190	4.13
May 25	5,350	20,530	3.84
May 29	2,480	11,100	4.48
June 1	4,160	18,760	4.51
June 8	1,760	7,430	4.23
June 16	1,160	5,120	4.41
June 22	1,060	4,900	4.63
Total	24,710	100,000	4.05

Table 43. 1996-97 Sport Crab Pot Fishery

Catch Code and Catch Area		Pot Days	Number of Dungeness Crabs
20A	Gulf of Geogia	42,130	51,020
20B	North San Juan Islands	2,660	3,220
21A	Bellingham Bay	10,460	3,080
21B	Samish Bay	6,240	1,840
22A	San Juan Islands	37,030	44,850
22B	Anacortes	8,410	5,780
24A	Skagit Bay	45,260	29,110
24B	Port Susan	11,880	7,530
24C	Saratogo Passage	33,940	36,450
24D	Holmes Harbor	9,210	3,380
25A	Dungeness & Sequim Bays	31,480	32,680
25B	Admiralty Inlet	170	70
25C	Port Ludlow/Port Gamble Area	19,370	8,530
25D	Port Townsend	13,990	8,540
25E	Discovery Bay	3,220	2,600
26A	Useless Bay, Port Gardner	11,390	4,780
27A	Upper Hood Canal	63,280	27,870
27B	Central Hood Canal	17,160	13,790
27C	Lower Hood Canal	60,580	28,020
	Total	**427,860**	**343,140**

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