

CHINOOK SALMON HARVEST AND EFFORT ESTIMATES IN IDAHO SPORT FISHERIES FROM 1954 TO 1996

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ABSTRACT

An earlier report summarized Chinook Salmon sport harvest, effort, and released fish estimates from 1997 to 2021 in Idaho. This report summarizes the Chinook Salmon sport harvest and effort estimates from previously published Idaho Department of Fish and Game harvest reports from 1954 to 1993 when there was an open sport season. There was no sport fishing in Idaho for Chinook Salmon from 1994 to 1996. Estimates of released Chinook Salmon were not routinely made until 1997 and none are provided in this report. The surveys were designed to provide harvest and effort estimates at the statewide spatial scale, however the authors of these reports also provided estimates at finer spatial and time scales in some years. Monthly harvest estimates were made from 1970 to 1985 when there was an open sport season for Chinook Salmon. Harvest and effort estimates were entered into a statewide harvest database as integers at the finest spatial and time scale possible. These finer spatial and time scale estimates were adjusted so the sum of all river section estimates equaled the statewide estimate.

INTRODUCTION

The first available sport harvest estimate for Chinook Salmon in Idaho is from 1954 (Table 1). A previously published report presented the Idaho sport Chinook Salmon harvest estimates from 1997 to 2020 (Byrne 2022). This report summarizes harvest, and when possible, effort estimates from 1954 to 1996. Harvest and effort were estimated with a postal survey from 1954 to 1978. The harvest estimates after 1978 were derived from a telephone survey, creel surveys, or from a check station. After the completion of the Lower Granite Dam in 1975, fishing for Chinook Salmon was closed in 1975 and 1976; 1979 to 1984; 1989, 1991, and 1994 to 1996. Chinook Salmon sport fishing from 1986 to 1993, when open, was mostly limited to a brief season in the Little Salmon River that targeted hatchery fish returning to Rapid River Hatchery. A brief history of sport fishing for Chinook Salmon from 1954 to 1996 in Idaho follows:

- 1954 to 1978: open sport season every year except 1965, 1975, and 1976.
- 1958: Brownlee Dam completed followed by Oxbow Dam in 1961 and Hells Canyon Dam in 1967 in the Snake River which blocked fish passage.
- 1961: Ice Harbor Dam completed. This was the first dam constructed in the Snake River downstream of Lewiston, Idaho.
- 1963: Harpster Dam on the SF Clearwater River was removed restoring fish passage upstream of the dam. It was built in 1903 by Grangeville Power and Light Company.
- winter of 1964 1965: major flooding in most rivers. There were extensive landslides in the South Fork (SF) Salmon River drainage, resulting in a huge sediment load into the river. There was no sport Chinook Salmon season in Idaho in 1965.
- 1973: Dworshak Dam completed on the North Fork (NF) Clearwater River which blocked fish passage.
- 1973: Lewiston Dam on the Clearwater River was removed. It was built in 1927 by Inland Power and Light Company. Fish ladders were built but they were not effective for Chinook Salmon.
- 1974: last sport season in Middle Fork (MF) Salmon River tributaries.
- 1974: last sport season in SF Salmon River until 1997.
- 1975 Lower Granite Dam completed. This was the last of four dams built in the Snake River downstream of Lewiston, Idaho.
- 1978: last sport season in mainstem MF Salmon River and Lemhi River.
- 1979 to 1984: no Chinook Salmon sport season.
- 1985: Little Salmon River and the Snake River from Wild Sheep Rapids to Hells Canyon Dam were open for spring Chinook Salmon sport fishing.
- 1986: Little Salmon River and the Snake River from Wild Sheep Rapids to Hells Canyon Dam were open for spring Chinook Salmon sport fishing. Excess Pahsimeroi Hatchery fish were outplanted in Panther Creek for a sport season.
- 1987, 1988, 1992, 1993: the Little Salmon River was open for spring Chinook Salmon sport fishing.
- 1990: the Little Salmon River, Clearwater River, and NF Clearwater River were open for spring Chinook Salmon sport fishing.
- 1989, 1991, 1994, 1995, and 1996: no Chinook Salmon sport season.

METHODOLOGY FOR HARVEST AND EFFORT ESTIMATES

The original data and analysis used to make the Chinook Salmon harvest and effort estimates from 1954 to 1993 are no longer available, however all original harvest reports are available to download as a pdf file from the IDFG website. Harvest and effort were estimated with a postal survey from 1954 to 1978. The harvest estimates from 1954 to 1964 were found to be biased high, as the estimates were based on voluntary replies to the postal survey (Bjornn 1967 and 1968). The statewide total Chinook Salmon harvest estimates from 1954 to 1964 were reduced by approximately 50% and rounded to the one-thousand fish (Keating 1969a) to account for the survey response bias. The Keating adjusted estimates for 1954 to 1964, have been reported by IDFG since the adjustment was made as the statewide Chinook Salmon total harvest for those years. Beginning in 1966 (no season in 1965) and continuing until 1978, harvest and effort estimates were made from the responses of randomly chosen permit buyers. The harvest estimates from 1985 to 1993 (no season from 1979 to 1984) were made with a telephone survey of randomly chosen permit buyers, creel surveys, or check stations. Harvest was reported for the entire season in all years and monthly estimates were also reported from 1970 to 1974, 1977, and 1978. Harvest was assumed to be for adult sized fish from 1954 to 1969, 1974, and 1978. In the years 1970 to 1973 and 1977 separate harvest estimates were made for adult and jack sized fish. In the years 1985 to 1993 harvest estimates include both adult and jack sized fish. Fall Chinook Salmon were likely included in the statewide harvest estimates prior to the completion of the Hells Canyon dams on the Snake River.

Jacks were defined in fishing regulations, from 1954 to 1993, as Chinook Salmon whose total length was 20" or less. Jacks were not counted against an angler's daily, possession, and season limits if harvested from 1954 to 1984. Jack sized Chinook that were harvested from 1985 to 1993 counted against the anglers daily, possession, and season limits. During the time period covered in this report Chinook Salmon sport fisheries in Idaho were not mark selective and harvest was not reported as wild or hatchery origin or adipose clipped/unclipped. Wild fish likely made up all of the harvest prior to 1968 as the first recent hatchery Chinook Salmon smolt release occurred in 1966 from Rapid River Hatchery (Parrish and Hays 1972). Wild fish were harvested as late as 1978 in the MF Salmon River and elsewhere in the state. The Chinook Salmon seasons from 1985 to 1993 were designed to specifically target hatchery origin Chinook Salmon for harvest.

The postal and telephone surveys were designed to get statewide total harvest and effort estimates for the entire year. Harvest estimates were based on a stratified survey design where the population total of each stratum was known and the survey estimated the mean catch per angler for the season within each stratum. Since the total number of individuals in each stratum was known, the total statewide Chinook Salmon harvest for the year was:

$$H_T = \sum_{i=1}^i N_i * c_i$$

 H_T = statewide harvest total,

i = number of strata.

 N_i = total number of salmon anglers (or salmon permit buyers) in stratum i,

 C_i = mean catch of Chinook Salmon per angler (or permit buyer) in stratum i.

Effort estimates used the same method except that mean effort per angler replaced the mean catch per angler in the above equation. The methodology to make estimates at finer spatial and/or temporal scales was not usually provided in the annual harvest reports. I scaled the finer spatial and/or temporal scale river section estimates so the sum of all river section estimates equals the statewide estimates.

Different measurement units were used for the effort estimates from 1954 to 1993 including: angler trips, number of anglers, number of successful anglers, number of permits sold, hours fished, and days fished. The effort estimates for the years 1954 to 1964 were not adjusted for survey bias. The effort was estimated statewide in the years 1954 to 1958 and 1966 to 1974.

The harvest and effort estimates were entered into the statewide harvest database as integers at the finest spatial/time scale possible. River section estimates were scaled and adjusted for rounding error so the sum of all river sections equals the statewide total for the year. Section boundaries were assigned a numbered zone when data was entered in the statewide harvest database. The zone numbers are specific to the Clearwater, Salmon (includes the MF and SF Salmon), and Snake drainages (for example, there can be a zone x in each drainage each year, however there is only a distinct zone x within each drainage each year). Zone numbers and section boundaries in each drainage can change from year to year.

In the remainder of this methodology section, the table numbers and page numbers are the table or page numbers in the harvest report that I reference in each time period.

1954 to 1959

Harvest was estimated by Hauck (Hauck, 1956a, 1956b, 1957, 1958, and 1959) for Chinook Salmon, steelhead, trout, and other species using voluntarily returned postal survey responses in Table 5. Hauck also reported the percentage of the statewide harvest that was from counties from 1954 to 1958 for each species in Table 6. To calculate the 1954 to 1958 Chinook Salmon harvest by county, I multiplied the percentage of the Chinook Salmon harvest in each county by the statewide estimate. I then rounded all estimates and adjusted for round error so sum of all counties equaled the statewide harvest estimate. In 1959, harvest was reported by river sections (Hauck 1960) in Table 5 and the sum of all river sections equaled the statewide harvest estimate of 39,978 fish.

I entered Hauck's original estimates in the statewide harvest database. The database queries that output the harvest estimates from 1954 to 1959 and the harvest estimates in this report are the bias adjusted estimates (original estimate reduced by 50% and rounded to nearest integer). When reporting the county and river estimates in this report, the bias adjusted estimates were checked for rounding error so the sum of all counties or rivers equaled the statewide estimate reduced by 50% and rounded to nearest fish. I added or subtracted fish from the "Unknown" or "Other" county or river to account for the rounding error (Appendix A). The bias adjusted estimates in this report, when rounded to the nearest one-thousand fish, may not equal the bias adjusted estimates reported by Keating (1969a).

Effort was estimated statewide each year and it was not adjusted for bias in the database or this report.

1960 to 1966

There was not an open sport season for Chinook Salmon in 1965 in Idaho. In the other years, Bjornn (1961, 1962, 1964a, 1964b, and 1968) and Bjornn and Ortmann (1996) estimated Chinook Salmon harvest and effort statewide and in river sections. The harvest estimates from 1960 to 1964 were based on voluntarily returned survey responses and were corrected for response bias. The 1966 harvest estimate was based on a random sample of responses and does not require an adjustment for bias.

To calculate the 1960 to 1964 Chinook Salmon effort in each river section, I calculated the percentage of the Chinook Salmon effort in each river section using the section estimates provided in Table 3 (years 1962 and 1963) or Table 4 (years 1960, 1961, and 1964) in Bjornn's reports. I then multiplied the percent of effort in each section by the statewide total effort estimate and adjusted for round error so the sum of all river section effort estimates equals the statewide effort estimate (Appendices B, C, D, E, and F). I did not make a correction for survey bias for the effort estimates.

I entered the re-scaled original harvest and effort estimates for 1960 to 1964 into the database. The database queries that output the harvest estimates for 1960 to 1964 and the harvest estimates in this report are the bias adjusted estimates (original estimate reduced by 50% and rounded to nearest integer) and adjusted as needed for rounding error so the sum of all river sections equals the statewide bias adjusted harvest estimate. The bias adjusted estimates in this report, when rounded to the nearest one-thousand fish, may not equal the bias adjusted estimates reported by Keating (1969a).

The Chinook Salmon harvest by river section in 1966 was based on a random sample of permits and reported in Table 11. I added an "Unknown" section in the Salmon drainage with a harvest of 560 fish so the sum of all river sections equals the statewide harvest estimate of 8,515 fish. I used the statewide effort estimate of 3,743 successful anglers from Table 11 and did not make an effort estimate for each river section.

1967 to 1970

Keating (1969a and 1969b) reported the Chinook Salmon harvest in each river for 1967 and 1968 in Table 6. I entered the listed harvest in each river (I did not use the harvest estimate for the Clearwater River and Salmon River drainages). The sum of all rivers equaled the statewide estimate of 7,667 and 11,269 in 1967 and 1968, respectively. I used the statewide effort estimate for both years that was in Table 6.

Keating reported the Chinook Salmon harvest in each river section for 1969 in Table 5 (Keating 1970). I used the reported harvest in the river or river section from the table including the harvest from "Unknown Streams". I did not include the harvest from the unknown sections listed for the Salmon, Clearwater, or Snake rivers as the sum of all remaining river sections equals the statewide harvest total of 13,142 fish. I used the statewide effort estimate that was reported in Table 2.

Keating (1971) reported the adult Chinook Salmon harvest in each river section by month for 1970 in Table 8. This was the first year that Chinook Salmon harvest estimates were also reported by month. I used the reported monthly adult harvest in this table for each river section, however I omitted the harvest from Jan-Apr, as these were likely steelhead, hence the statewide

harvest estimate was 5,708 adults. I adjusted the Unknown Stream harvest so the sum of all river sections equals the statewide harvest total of 5,708 adults. I used the statewide effort estimate for successful anglers (Caught Chinook) that was reported in Table 1 and the statewide jack harvest estimate of 3,366 that was reported on page 3.

1971 and 1972

Mallet (1972a and 1972b) reported the adult Chinook Salmon harvest in each river section by month for 1971 and 1972 in Table 8. I used the reported monthly adult harvest in Table 8 for each river section, however I omitted the harvest from Jan-Apr, as these were likely steelhead, hence the statewide total harvest estimate was 5,555 and 6,662 adults in 1971 and 1972, respectively. I adjusted the harvest in the Unknown Stream so the sum of all river sections equals the statewide total in each year. I used the statewide jack harvest estimate (3,647 in 1971 and 2,376 in 1972) from Table 11 and the statewide effort estimate (1,529 successful anglers in 1971 and 11,880 permits sold in 1972) from Table 1 for both years.

1973 and 1974

Ortmann (1974) reported the 1973 adult Chinook Salmon harvest by river section and month in Table 5. I omitted the Jan-Apr harvest as these were likely steelhead, hence the statewide harvest total was 9,701 fish. I put the EF Salmon August harvest in July. I then parsed the Unknown month harvest in each section in proportion to the estimated harvest in May, June, and July and adjusted for rounding error so the sum of all monthly estimates equals the statewide estimate of 9,701 after subtracting the 20 fish caught in Jan-Apr (Appendix G). I used the statewide effort estimate of 18,925 permits sold from Table 1 and the statewide jack harvest of 1,514 from page 3.

Ortmann (1975) reported the 1974 Chinook Salmon harvest by river section and month in Table 5. I omitted the Jan-Apr harvest from the Salmon Unknown section and the MF Salmon as these were likely steelhead, hence the statewide harvest total was 1,542 fish. I assumed that the harvest estimate was for adult sized fish. I put the Salmon section 8 Unknown month harvest in July; the MF Salmon August and Unknown month in July; and the EF Salmon Unknown month in July. The Little Salmon Unknown month was parsed to June (2 fish) and July (18 fish). I then summed all monthly harvest estimates to get a statewide total of 1,542 fish. Ortmann did not provide an estimate of jack harvest in 1974. I used the statewide effort estimate of 6,211 permits sold from Table 1.

1975 and 1976

There were no open Chinook Salmon sport seasons in these years in Idaho.

1977 and 1978

Ortmann (1978) reported the 1977 statewide adult Chinook Salmon harvest in Table 1 and adult harvest by river section and month in Table 2. I took the 34 fish from the Salmon Unknown section in Table 2 and parsed them to the Unknown harvest in the Salmon 1-8 sections in proportion to each section's contribution to the total Salmon River harvest in sections 1-8. I

then parsed the total Unknown harvest in each Salmon section 1-8 (the Unknown listed for each section in Table 2 plus the parsed number of the 34 fish from the Unknown Salmon section) to the May, June, and July estimates in each section. In the Clearwater drainage, MF Salmon River, and Little Salmon River I parsed the Unknown harvest in Table 2 for each river in proportion to its May, June, and July harvest. All monthly estimates were rounded to the nearest fish and adjusted so the sum of all months equals the statewide adult harvest estimate of 3,682 fish (Appendix H). The statewide jack harvest estimate of 474 fish was from Table 10. Effort estimates (days fished) for each drainage were taken from Tables 4, 5, and 6. The Clearwater effort estimate was adjusted for rounding error so that the sum of the drainage estimates equals the statewide effort estimate of 51,533 days fished in Table 3.

Ortmann (1979) reported the 1978 statewide Chinook Salmon harvest in Table 1 and harvest by river section and month in Table 2. I assumed that these were all adult sized fish. I took the 21 fish from the Clearwater Unknown section in Table 2 and parsed them to the other four Clearwater sections Unknown harvest in proportion to each section's contribution to the total Clearwater harvest in zones 1 - 4. I then parsed the total Unknown harvest in each Clearwater zone (the Unknown listed for each section in Table 2 plus the parsed number of the 21 fish from the Unknown Salmon section) to the June and July estimates in each section. I took the 32 fish from the Salmon Unknown section in Table 2 and parsed them to the Salmon 1 - 8 sections Unknown harvest in proportion to each section's contribution to the total Salmon River harvest in sections 1 - 8. I then parsed the total Unknown harvest in each Salmon section 1 - 8 (the Unknown listed for each section in Table 2 plus the parsed number of the 32 fish from the Unknown Salmon section) to the June and July estimates in each section. For the MF Salmon River, Lemhi River, and Little Salmon River I parsed the Unknown harvest in Table 2 for each river in proportion to its June and July harvest. All monthly estimates were rounded to the nearest fish and adjusted so the sum of all months equals the statewide adult harvest estimate of 6,921 fish (Appendix I). Effort estimates (days fished) for each drainage were taken from Tables 4, 5, and 6. The sum of the drainage effort estimates equals the statewide effort estimate of 73,605 days fished in Table 3.

1979 to 1984

There were no open Chinook Salmon sport seasons in these years in Idaho.

1985

Hall-Griswold and Cochnauer (1987) estimated the Chinook Salmon sport harvest in 1985 with a telephone survey. This was the first year a telephone survey was used to estimate Chinook Salmon harvest and effort. Chinook Salmon fishing was limited to the Little Salmon River and the Snake River. Harvest estimates for those rivers were provided in Table 2. These estimates include adult and jack sized fish and equal the statewide estimate of 2,328 fish reported in page 8. Effort was reported as days fished in each river and was taken from Table 2. The sum of the effort in the Little Salmon River and Snake River equals the statewide total of 7,193 days fished that was reported on page 8.

1986 to 1988

The Chinook Salmon harvest estimates for all years include adult and jack sized fish. In 1986, Chinook Salmon fishing was limited to the Little Salmon River, Snake River, and Panther Creek. Excess hatchery fish were outplanted in Panther Creek to provide a fishing opportunity for anglers. The Little Salmon River harvest and effort (hours fished) season estimates were taken from Hassemer (1991, Table 1) and were derived from a creel survey. The Panther Creek and Snake River harvest and effort estimates (days fished) were taken from McArthur (1988, Tables 4 and 5) and were derived from a telephone survey. Using these harvest estimates, the statewide harvest in 1986 was 2,290 adult and jack sized fish. The statewide effort in 1986 was measured in two units: 16,997 hours fished in the Little Salmon River and 3,683 days fished in Panther Creek and the Snake River.

Chinook Salmon sport fishing was open in the Little Salmon River in 1987 and 1988. Harvest and effort were estimated using a creel survey Hassemer (1991, Table 1). The harvest estimates for both years include adult and jack sized fish. No other Idaho rivers were open for Chinook Salmon sport fishing in 1987 and 1988.

1989

There was no open Chinook Salmon sport season in Idaho.

1990

Chinook Salmon harvest and effort estimates in the Little Salmon River were derived from a creel survey and reported by Hassemer (1991, Table 1). There was also a short Chinook Salmon season in the Clearwater River and NF Clearwater River. Anglers that kept a Chinook Salmon in the Clearwater drainage were required to bring the fish to a check station. Ball (1992, page 9) reported that 743 anglers were interviewed at the check stations and they caught 369 adult and jack sized Chinook Salmon in the Clearwater drainage.

1992 and 1993

Chinook Salmon sport fishing was open in the Little Salmon River in 1992 and 1993. The harvest and effort estimates were made using a creel survey (Janssen 1992 and 1993, Table 1 both years). The harvest estimate includes adult and jack sized fish. No other Idaho rivers were open for Chinook Salmon sport fishing in 1991 and 1992.

1994 to 1996

There were no open Chinook Salmon sport seasons in these years.

RESULTS

The estimated statewide yearly Chinook Salmon harvest from 1954 to 1993 is provided in Table 1. The yearly Chinook Salmon harvest and effort estimates by major river drainages is provided in Table 2 and 3. The yearly Chinook Salmon harvest and effort (if made) by river

sections from 1954 to 1993 is provided in Table 4. I also provide the monthly river section Chinook Salmon harvest estimates from 1970 to 1974 in Tables 5 to 9. The monthly river section Chinook Salmon harvest estimates for 1977 and 1978 are provided in Tables 10 and 11.

The details of the Chinook Salmon harvest and effort (when done) adjustments made to the original estimates in the IDFG harvest reports for the years 1954 to 1964, 1973, 1974, and 1978 can be found in Appendices A to I.

LITERATURE CITED

- Ball, Kent. 1992. Evaluation of the Hatchery and Wild Composition of Idaho Salmon and Steelhead Harvest. Period Covered: October 1, 1989 to December 31, 1990. Idaho Department of Fish and Game, Volume 084 Article 02.
- Bjornn, Ted C., 1961, Statewide Fishing Harvest Survey 1960. Idaho Department of Fish and Game, Annual Progress Report.
- Bjornn, Ted C., 1962, Statewide Fishing Harvest Survey 1961. Idaho Department of Fish and Game, Annual Progress Report.
- Bjornn, Ted C., 1964a, Statewide Fishing Harvest Survey 1962. Idaho Department of Fish and Game, Annual Progress Report.
- Bjornn, Ted C., 1964b, Statewide Fishing Harvest Survey 1963. Job1, The Harvest of Salmon and Steelhead as Determined from Postal Card Questionnaires, Idaho Department of Fish and Game, Annual Completion Report.
- Bjornn, Ted C. and David Ortmann, 1966, Statewide Fishing Harvest Survey 1964, Job 1. The Harvest of Salmon and Steelhead as Determined from Postal Card Questionaries Idaho Department of Fish and Game, Annual Completion Report.
- Bjornn, Ted C., 1967, Statewide Fishing Harvest Survey 1965. Job1, The Harvest of Salmon and Steelhead as Determined from Postal Card Questionnaires and Salmon and Steelhead Permits, Idaho Department of Fish and Game, Job Completion Report.
- Bjornn, Ted C., 1968, Statewide Fishing Harvest Survey 1966. Job1, The Harvest of Salmon and Steelhead as Determined from Postal Card Questionnaires and Salmon and Steelhead Permits, Idaho Department of Fish and Game, Annual Completion Report.
- Byrne, Alan, 2022, Chinook Salmon Harvest, Release, and Effort Estimates in Idaho Sport Fisheries from 1997 to 2020. Idaho Department of Fish and Game Report Number 22-102.
- Hall-Griswold, Judy and Tim Cochnauer 1987. Estimates of the 1985 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- Hassemer, Peter F., 1991. Little Salmon River Spring Chinook *Oncorhynchus tshawytscha* Sport Harvest, 1986 to 1990. Idaho Department of Fish and Game.
- Hauck, Forrest R., 1956a, Statewide Fishing Harvest Survey 1954, Idaho Department of Fish and Game, Annual Progress Report.
- Hauck, Forrest R., 1956b, Statewide Fishing Harvest Survey 1955, Idaho Department of Fish and Game, Annual Progress Report.
- Hauck, Forrest R., 1957, Statewide Fishing Harvest Survey 1956, Idaho Department of Fish and Game, Annual Progress Report.

- Hauck, Forrest R., 1958, Statewide Fishing Harvest Survey 1957, Idaho Department of Fish and Game, Annual Progress Report.
- Hauck, Forrest R., 1959, Statewide Fishing Harvest Survey 1958, Idaho Department of Fish and Game, Annual Progress Report.
- Hauck, Forrest R., 1960, Statewide Fishing Harvest Survey 1959, Idaho Department of Fish and Game, Annual Progress Report.
- Janssen, Paul. 1992. 1992 Little Salmon River, Idaho Spring Chinook *Oncorhynchus tshawytscha* Sport Harvest Report. Idaho Department of Fish and Game.
- Janssen, Paul. 1993. 1993 Little Salmon River, Idaho Spring Chinook *Oncorhynchus tshawytscha*Sport Harvest Report. Idaho Department of Fish and Game
- Keating, James F., 1969a, Statewide Fishing Harvest Survey. Job1. The Harvest of Salmon and Steelhead as Determined from Salmon and Steelhead Permits 1967, Idaho Department of Fish and Game.
- Keating, James F., 1969b, Statewide Fishing Harvest Survey. Job 1. The Harvest of Salmon and Steelhead as Determined from Salmon and Steelhead Permits 1968, Idaho Department of Fish and Game.
- Keating, James F., 1970, Statewide Fishing Harvest Survey. Job 1. Annual Survey of the Salmon and Steelhead Sport Fishery Harvest in Idaho 1969, Idaho Department of Fish and Game.
- Keating, James F., 1971, Statewide Fishing Harvest Survey. Job 1. Annual Survey of the Salmon and Steelhead Sport Fishery Harvest in Idaho 1970, Idaho Department of Fish and Game.
- Mallet, Jerry, 1972a, Statewide Fishing Harvest Survey. Job 1. Estimates of the 1971 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- Mallet, Jerry, 1972b, Statewide Fishing Harvest Survey. Job 1. Estimates of the 1972 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- McArthur, Tom J., 1988, Salmon and Steelhead Investigations. Job1., Estimates of the 1986 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- Ortmann, David W., 1974. Annual Survey of the Salmon and Steelhead Sport Fishery Harvest in Idaho. Job 1. Estimates of the 1973 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- Ortmann, David W., 1975. Annual Survey of the Salmon and Steelhead Sport Fishery Harvest in Idaho. Job 1. Estimates of the 1974 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- Ortmann, David W., 1978. Annual Survey of the Salmon and Steelhead Sport Fishery Harvest in Idaho. Job 1. Estimates of the 1977 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.

- Ortmann, David W., 1979. Annual Survey of the Salmon and Steelhead Sport Fishery Harvest in Idaho. Job 1. Estimates of the 1978 Harvest of Salmon and Steelhead (Survey), Idaho Department of Fish and Game.
- Parrish, Evan and Fenton Hays. 1972. Evaluation of Spring Chinook Salmon Emigration, Harvest, and Returns to Rapid River Hatchery (project IPC-17). Idaho Department of Fish and Game.

Table 1. Estimated statewide sport fishing harvest and effort for Chinook Salmon by year in Idaho from 1954 to 1996. NL harvest includes adults and jacks. Effort units are: TRP = number of angler trips; DAY= number of angler days fished; NUA = number of anglers; SA = number of successful anglers; NP = number of permits sold; HRS = hours fished.

Year	Adult harvest	Jack harvest	NL harvest	Effort	Effort unit
1954	14,775			47,100	TRP
1955	19,439			97,236	DAY
1956	21,344			99,238	DAY
1957	39,098			157,349	DAY
1958	24,706			105,672	DAY
1959	19,989			82,682	TRP
1960	21,662			26,901	NUA
1961	12,893			22,921	NUA
1962	12,050			22,523	NUA
1963	12,176			21,455	NUA
1964	8,623			6,269	SA
1965	no open season				
1966	8,515			3,743	SA
1967	7,667			3,125	SA
1968	11,269			4,990	SA
1969	13,142			5,386	SA
1970	5,708	3,366		2,552	SA
1971	3,555	3,647		1,529	SA
1972	6,662	2,376		11,880	NP
1973	9,701	1,514		18,925	NP
1974	1,542			6,211	NP
1975 and 1	1976, no open season				
1977	3,682	474		51,533	DAY
1978	6,921			73,605	DAY
1979 to 19	84, no open season				
1985			2,328	7,193	DAY
1986			2,290	18,756a	HRS
1987			422	16,997	HRS
1988			692	19,044	HRS
1989	no open season				
1990			934	13,676	HRS
1991	no open season				
1992			499	9,691	HRS
1993			423	7,073	HRS
1994 to 19	96, no open season				

^a Effort shown in the table was for the Little Salmon River. Additional effort was estimated in Panther Creek (3,551 angler days fished) and the Snake River (132 angler days fished).

Table 2. Chinook Salmon sport harvest estimates by year and drainage. The Salmon drainage includes the Middle Fork (MF) and South Fork (SF) Salmon drainages from 1954 to 1958. Harvest estimates from 1954 to 1978 were for adults. Harvest estimates from 1985 to 1993 were for adults and jacks. CS = closed to sport fishing for salmon.

Year	Clearwater	MF Salmon	Salmon	SF Salmon	Snake	Unknown	State Total
1954			13,905			870	14,775
1955			16,349		719	2,371	19,439
1956			18,143		1,110	2,091	21,344
1957			35,071			4,027	39,098
1958			22,927			1,779	24,706
1959	70	3,118	11,402	4,315	1,016	68	19,989
1960	16	3,111	12,596	5,313	626		21,662
1961	80	3,343	7,775	1,568	127		12,893
1962	0	2,854	6,307	2,786	103		12,050
1963	50	2,924	6,113	3,006	83		12,176
1964	17	2,274	3,975	2,290	67		8,623
1965		-	en season sta				,
1966	147	2,384	5,397		587		8,515
1967	0	1,994	5,314	8	65	286	7,667
1968	26	2,909	7,567	341	162	264	11,269
1969	56	3,396	8,926	9	321	434	13,142
1970	0	1,571	3,979	0	7	151	5,708
1971	2	1,114	2,418	8	10	3	3,555
1972	0	1,420	5,236	0	3	3	6,662
1973	20	2,340	7,274	5	0	62	9,701
1974	0	450	1,088	4	a		1,542
1975 a	nd 1976	No op	oen season st	atewide			
1977	512	404	2,763	CS	3		3,682
1978	629	1,724	4,568	CS	0		6,921
1979 to	1984	No op	oen season st	atewide			
1985	CS	CS	2,313	CS	15		2,328
1986	CS	CS	2,264	CS	26		2,290
1987	CS	CS	422	CS	CS		422
1988	CS	CS	692	CS	CS		692
1989		No op	en season sta	tewide			
1990	369	CS	565	CS	CS		934
1991		•	en season sta	tewide			
1992	CS	CS	499	CS	CS		499
1993	CS	CS	423	CS	CS		423
1994 to	1996	No op	oen season st	atewide			

^a No regulations were found and there were no effort or harvest estimates made for the Snake River.

Table 3. Estimated sport fishing effort for Chinook Salmon by year and drainage in Idaho from 1954 to 1996. Effort units are: TRP = number of angler trips; DAY= number of angler days fished; NUA = number of anglers; SA = number of successful anglers; NP = number of permits sold; HRS = number of hours fished. CS = closed to sport fishing for salmon

		MF		SF			Effort
Year	Clearwater	Salmon	Salmon	Salmon	Snake	State Total	unit
1954						47,100	TRP
1955						97,236	DAY
1956						99,238	DAY
1957						157,349	DAY
1958						105,672	DAY
1959	1,141	10,384	47,188	17,845	5,818	82,682a	TRP
1960	74	4,068	13,651	7,482	1,626	26,901	NUA
1961	697	4,317	12,035	4,987	885	22,921	NUA
1962	0	4,205	12,024	5,870	424	22,523	NUA
1963	473	4,552	10,314	5,326	790	21,455	NUA
1964	29	1,668	2,733	1,753	86	6,269	SA
1965	no open seas	on					
1966						3,743	SA
1967						3,125	SA
1968						4,990	SA
1969						5,386	SA
1970						2,552	SA
1971						1,529	SA
1972						11,880	NP
1973						18,925	NP
1974						6,221	NP
1975 a	nd 1976, no ope	en season					
1977	7,894		42,632	CS	1,007	51,533	DAY
1978	8,929		63,905	CS	771	73,605	DAY
1979 to	1984, no open	season					
1985	CS	CS	3,551	CS	112	3,663	DAY
1986	CS	CS	18,756	CS		18,756 ^b	HRS
1987	CS	CS	16,997	CS	CS	16,997	HRS
1988	CS	CS	19,044	CS	CS	19,044	HRS
1989	no open seas	on					
1990	c	CS	13,676	CS	CS	13,676	HRS
1991	no open seas	on					
1992	CS	CS	9,691	CS	CS	9,691	HRS
1993	CS	CS	7,073	CS	CS	7,073	HRS
1994 to	1996, no open	season					

^a Includes 306 trips in Unknown drainages.

^b Total effort is for the Little Salmon River. Additional effort was in Panther Creek (3,551 angler days fished) and the Snake River (132 angler days fished)

^cCheck stations were used to estimate harvest. 743 anglers were interviewed.

Table 4. The yearly Chinook Salmon harvest and effort estimates in river sections where harvest estimates were made from 1954 to 1996. The NL harvest column is the harvest estimate when it included adults and jacks. IR = river was included in harvest report but no harvest or effort estimate was made. Effort units are: TRP = number of angler trips; DAY= number of angler days fished; NUA = number of anglers; SA = number of successful anglers; NP = number of permits sold; HRS = hours fished.

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1954	Salmon	1	Blaine County	1,035					all waters open	all waters open
1954	Salmon	2	Custer County	7,861					all waters open	all waters open
1954	Salmon	4	Lemhi County	1,640					all waters open	all waters open
1954	Salmon	5	Valley County	3,369					all waters open	all waters open
1954	statewide	100	statewidea				47,100	TRP	all waters open	all waters open
1954	Unknown	3	Idaho County	680					all waters open	all waters open
1954	Unknown	6	Other Counties	190					all waters open	all waters open
1955	Salmon	1	Custer County	6,182					all waters open	all waters open
1955	Salmon	3	Lemhi County	3,830					all waters open	all waters open
1955	Salmon	4	Valley County	6,337					all waters open	all waters open
1955	Snake	5	Washington County	719					all waters open	all waters open
1955	statewide	100	statewide ^a				97,236	DAY	all waters open	all waters open
1955	Unknown	2	Idaho County	2,236					all waters open	all waters open
1955	Unknown	6	Other Counties	135					all waters open	all waters open
1956	Salmon	1	Custer County	7,300					all waters open	all waters open
1956	Salmon	3	Lemhi County	4,098					all waters open	all waters open
1956	Salmon	4	Valley County	6,745					all waters open	all waters open
1956	Snake	5	Washington County	1,110					all waters open	all waters open
1956	statewide	100	statewidea				99,238	DAY	all waters open	all waters open
1956	Unknown	2	Idaho County	1,708					all waters open	all waters open
1956	Unknown	6	Other Counties	383					all waters open	all waters open
1957	Salmon	1	Custer County	12,590					all waters open	all waters open
1957	Salmon	4	Lemhi County	8,758					all waters open	all waters open
1957	Salmon	5	Valley County	13,723					all waters open	all waters open
1957	statewide	100	statewide ^a				157,349	DAY	all waters open	all waters open
1957	Unknown	2	Idaho County	2,151	-		-		all waters open	all waters open

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1957	Unknown	3	Nez Perce County	274					all waters open	all waters open
1957	Unknown	6	Other Counties	1,602					all waters open	all waters open
1958	Salmon	1	Blaine County	667					all waters open	all waters open
1958	Salmon	2	Custer County	9,932					all waters open	all waters open
1958	Salmon	4	Lemhi County	4,274					all waters open	all waters open
1958	Salmon	5	Valley County	8,054					all waters open	all waters open
1958	statewide	100	statewidea				105,672	DAY	all waters open	all waters open
1958	Unknown	3	Idaho County	1,458					all waters open	all waters open
1958	Unknown	6	Other Counties	321					all waters open	all waters open
1959	Clearwater	1	Clearwater River	70			1,141	TRP	Mouth	entire drainage
1959	Salmon	1	Salmon River	835			4,649	TRP	Mouth	MF Salmon River
1959	Salmon	2	Salmon River	7,489			27,116	TRP	MF Salmon River	mainstem headwaters
1959	Salmon	3	SF Salmon River	4,315			17,845	TRP	Mouth	entire drainage
1959	Salmon	6	MF Salmon River	3,118			10,384	TRP	Mouth	confluence Marsh and Bear Valley creeks
1959	Salmon	7	Lemhi River	1,156			6,431	TRP	Mouth	entire drainage
1959	Salmon	8	Pahsimeroi River	98			863	TRP	Mouth	entire drainage
1959	Salmon	9	EF Salmon River	1,824			8,129	TRP	Mouth	entire drainage
1959	Snake	1	Snake River	320			2,227	TRP	Clearwater River	Oxbow Dam
1959	Snake	2	Snake River	501			1,893	TRP	Brownlee Dam	Swan Falls Dam?
1959	Snake	3	Weiser River	195			1,698	TRP	Mouth	entire drainage
1959	Unknown	10	Unknown	68			306	TRP	Unknown	Unknown
1960	Clearwater	1	Clearwater River	16			74	NUA	Lewiston Dam	entire drainage
1960	Salmon	1	Salmon River	1,641			1,759	NUA	Mouth	MF Salmon River
1960	Salmon	2	Salmon River	8,287			7,927	NUA	MF Salmon River	mainstem headwaters
1960	Salmon	3	SF Salmon River	3,554			4,674	NUA	Mouth	entire drainage
1960	Salmon	4	EF SF Salmon River	761			1,811	NUA	Mouth	entire drainage
1960	Salmon	5	Secesh River	998			997	NUA	Mouth	entire drainage
1960	Salmon	6	MF Salmon River	3,111			4,068	NUA	Mouth	confluence Marsh and Bear Valley creeks
1960	Salmon	7	Lemhi River	1,489			2,154	NUA	Mouth	entire drainage
1960	Salmon	8	EF Salmon River	1,179			1,811	NUA	Mouth	entire drainage
1960	Snake	1	Snake River	119			525	NUA	Clearwater River	Oxbow Dam

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1960	Snake	2	Snake River	406			787	NUA	Brownlee Dam	Swan Falls Dam?
1960	Snake	3	Weiser River	101			314	NUA	Mouth	entire drainage
1961	Clearwater	1	Clearwater River	16			214	NUA	Mouth	Lewiston Dam
1961	Clearwater	2	Clearwater River	64			483	NUA	Lewiston Dam	entire drainage
1961	Salmon	1	Salmon River	507			1,715	NUA	Mouth	MF Salmon River
1961	Salmon	2	Salmon River	5,225			7,452	NUA	MF Salmon River	mainstem headwaters
1961	Salmon	3	SF Salmon River	1,077			3,512	NUA	Mouth	entire drainage
1961	Salmon	4	EF SF Salmon River	380			1,126	NUA	Mouth	entire drainage
1961	Salmon	5	Secesh River	111			349	NUA	Mouth	entire drainage
1961	Salmon	6	MF Salmon River	3,343			4,317	NUA	Mouth	confluence Marsh and Bear Valley creeks
1961	Salmon	7	Lemhi River	1,520			1,956	NUA	Mouth	entire drainage
1961	Salmon	8	EF Salmon River	523			912	NUA	Mouth	entire drainage
1961	Snake	1	Snake River	95			484	NUA	Clearwater River	Oxbow Dam
1961	Snake	2	Snake River	32			401	NUA	Oxbow Dam	Brownlee Dam?
1961	Snake	3	Weiser River	IR					Mouth	entire drainage
1962	Salmon	1	Salmon River	838			1,863	NUA	Mouth	MF Salmon River
1962	Salmon	2	Salmon River	3,845			6,774	NUA	MF Salmon River	Headwaters
1962	Salmon	3	SF Salmon River	2,034			4,150	NUA	Mouth	entire drainage
1962	Salmon	4	EF SF Salmon River	462			1,157	NUA	Mouth	entire drainage
1962	Salmon	5	Secesh River	290			563	NUA	Mouth	entire drainage
1962	Salmon	6	MF Salmon River	2,854			4,205	NUA	Mouth	confluence Marsh and Bear Valley creeks
1962	Salmon	7	Lemhi River	1,248			2,513	NUA	Mouth	entire drainage
1962	Salmon	8	EF Salmon River	376			874	NUA	Mouth	entire drainage
1962	Snake	1	Snake River	103			424	NUA	Clearwater River	Oxbow Dam?
1963	Clearwater	1	Clearwater River	50			473	NUA	Mouth	Unknown
1963	Salmon	1	Salmon River	412			1,473	NUA	Mouth	MF Salmon River
1963	Salmon	2	Salmon River	4,396			5,999	NUA	MF Salmon River	mainstem headwaters
1963	Salmon	3	SF Salmon River	2,560			3,853	NUA	Mouth	entire drainage
1963	Salmon	4	EF SF Salmon River	380			1,079	NUA	Mouth	entire drainage
1963	Salmon	5	Secesh River	66			394	NUA	Mouth	entire drainage

Table 4 (continued)

					Harvest					
		_					- 	Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1963	Salmon	6	MF Salmon River	2,924			4,552	NUA	Mouth	confluence Marsh and Bear Valley creeks
1963	Salmon	7	Lemhi River	529			1,816	NUA	Mouth	entire drainage
1963	Salmon	8	EF Salmon River	776			1,026	NUA	Mouth	entire drainage
1963	Snake	1	Snake River	83			790	NUA	Clearwater River	Oxbow Dam?
1964	Clearwater	1	Clearwater River	17			29	SA	Mouth	entire drainage
1964	Salmon	1	Salmon River	236			230	SA	Mouth	MF Salmon River
1964	Salmon	2	Salmon River	2,963			1,927	SA	MF Salmon River	mainstem headwaters
1964	Salmon	3	SF Salmon River	1,684			1,207	SA	Mouth	entire drainage
1964	Salmon	4	EF SF Salmon River	320			230	SA	Mouth	entire drainage
1964	Salmon	5	Secesh River	286			316	SA	Mouth	entire drainage
1964	Salmon	6	MF Salmon River	2,274			1,668	SA	Mouth	confluence Marsh and Bear Valley creeks
1964	Salmon	7	Lemhi River	422			403	SA	Mouth	entire drainage
1964	Salmon	8	EF Salmon River	354			173	SA	Mouth	entire drainage
1964	Snake	1	Snake River	67			86	SA	Clearwater River	Oxbow Dam?
	1965 -	no open	season							
1966	Clearwater	1	Clearwater River	147					Mouth	entire drainage
1966	Salmon	1	Salmon River	4,837					Mouth	Headwaters
1966	Salmon	2	MF Salmon River	2,384					Mouth	mainstem headwaters
1966	Salmon	6	Unknown	560					Unknown-in Salmon drainage	Unknown-in Salmon drainage
1966	Snake	1	Snake River	587					Clearwater River	Oxbow Dam?
1966	statewide	99	statewide ^a				3,743	SA	all waters open	all waters open
1967	Salmon	2	Salmon River	3,819					Mouth	mainstem headwaters
1967	Salmon	3	Little Salmon River	192					Mouth	mainstem headwaters
1967	Salmon	4	SF Salmon River	8					Mouth	EF SF Salmon River (includes Secesh to Loon Creek and EF SF to Johnson Creek)
1967	Salmon	5	MF Salmon River	1,879					Mouth	confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1967	Salmon	6	Big Creek	115					Mouth	Smith Creek
1967	Salmon	7	NF Salmon River	38					Mouth	entire drainage

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1967	Salmon	8	Lemhi River	790					Mouth	entire drainage
1967	Salmon	9	EF Salmon River	475					Mouth	Herd Creek
1967	Snake	1	Snake River	65					Clearwater River	Hells Canyon Dam
1967	statewide	100	statewidea				3,125	SA	all waters open	all waters open
1967	Unknown	10	Unknown	286					Unknown	Unknown
1968	Clearwater	1	Clearwater River	26		<u></u>			Mouth	confluence SF and MF Clearwater rivers (unsure if it also includes MF)
1968	Salmon	2	Salmon River	5,809					Mouth	mainstem headwaters
1968	Salmon	3	Little Salmon River	384					Mouth	mainstem headwaters
1968	Salmon	4	SF Salmon River	341					Mouth	EF SF Salmon River (includes Secesh to Loon Creek and EF SF to Johnson Creek) confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1968		6		26					Mouth	Smith Creek
1968	Salmon Salmon	7	Big Creek NF Salmon River	60					Mouth	entire drainage
1968	Salmon	8	Lemhi River	657					Mouth	entire drainage entire drainage
1968	Salmon	9	EF Salmon River	657					Mouth	Herd Creek
1968	Snake	_ 9	Snake River	162					Clearwater River	Hells Canyon Dam
1968	statewide	100	statewide ^a				4,990	SA		,
1968	Unknown	100	Unknown	264			4,990		all waters open Unknown	all waters open Unknown
1969	Clearwater	10	Clearwater River	28					Mouth	NF Clearwater River
1969	Clearwater	2	Clearwater River	19		<u></u>			NF Clearwater River	confluence SF and MF Clearwater rivers
1969	Clearwater	3	MF Clearwater River	9					Mouth	confluence Lochsa and Selway rivers
1969	Salmon	1	Salmon River	116					Mouth	Whitebird Creek
1969	Salmon	2	Salmon River	245					Whitebird Creek	Little Salmon River
1969	Salmon	3	Salmon River	187					Little Salmon River	SF Salmon River
1969	Salmon	4	Salmon River	93					SF Salmon River	MF Salmon River
1969	Salmon	5	Salmon River	479					MF Salmon River	Lemhi River
1969	Salmon	6	Salmon River	105					Lemhi River	Pahsimeroi River
1969	Salmon	7	Salmon River	1,602					Pahsimeroi River	EF Salmon River
1969	Salmon	8	Salmon River	3,824					EF Salmon River	mainstem headwaters

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1969	Salmon	9	Little Salmon River	690					Mouth	mainstem headwaters
1969	Salmon	10	MF Salmon River	1,906					Mouth	confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1969	Salmon	11	Big Creek	226					Mouth	Smith Creek
1969	Salmon	12	Camas Creek	557					Yellowjacket Creek	Headwaters
1969	Salmon	13	Loon Creek	377					Mouth	Headwaters (including Mayfield Creek)
1969	Salmon	14	Marsh Creek	226					Mouth	Bridge downstream of Capehorn Creek
1969	Salmon	15	Bear Valley Creek	104					Mouth	Fir Creek Pack Bridge
1969	Salmon	16	NF Salmon River	38					Mouth	entire drainage
1969	Salmon	17	Lemhi River	764					Mouth	entire drainage
1969	Salmon	18	Pahsimeroi River	94					Mouth	entire drainage
1969	Salmon	19	EF Salmon River	651					Mouth	Bridge downstream of Herd Creek
1969	Salmon	20	Valley Creek	38					Mouth	Stanley Lake Creek
1969	Salmon	41	SF Salmon River	9					Unknown	Unknown
1969	Snake	1	Snake River	12					Clearwater River	Salmon River
1969	Snake	2	Snake River	309					Salmon River	Hells Canyon Dam
1969	statewide	100	statewide ^a				5,386	SA	all waters open	all waters open
1969	Unknown	21	Unknown	434					Unknown	Unknown
1970	Salmon	1	Salmon River	20					Mouth	Whitebird Creek
1970	Salmon	2	Salmon River	59					Whitebird Creek	Little Salmon River
1970	Salmon	3	Salmon River	39					Little Salmon River	SF Salmon River
1970	Salmon	4	Salmon River	45					SF Salmon River	MF Salmon River
1970	Salmon	5	Salmon River	79					MF Salmon River	Lemhi River
1970	Salmon	6	Salmon River	39					Lemhi River	Pahsimeroi River
1970	Salmon	7	Salmon River	559					Pahsimeroi River	EF Salmon River
1970	Salmon	8	Salmon River	1,963					EF Salmon River	Hell Roaring Creek
1970	Salmon	9	Little Salmon River	474					Mouth	mainstem headwaters
1970	Salmon	10	MF Salmon River	791					Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1970	Salmon	11	Big Creek	25					Mouth	Smith Creek
1970	Salmon	12	Camas Creek	320					Yellowjacket Creek	Silver Creek
1010	Jannon	14	Ournas Orock	020					Tollowjacket Oreek	City Ci Ciccit

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1970	Salmon	13	Loon Creek	255					Mouth	Mayfield Creek
1970	Salmon	14	Marsh Creek	158					Mouth	Bridge downstream of Capehorn Creek
1970	Salmon	15	Bear Valley Creek	22					Mouth	Fir Creek Pack Bridge
1970	Salmon	16	NF Salmon River	11					Mouth	entire drainage
1970	Salmon	17	Lemhi River	410					Mouth	entire drainage
1970	Salmon	19	EF Salmon River	180					Mouth	Bridge downstream of Herd Creek
1970	Salmon	20	Valley Creek	101					Mouth	Stanley Lake Creek
1970	Snake	1	Snake River	0					Clearwater River	Salmon River
1970	Snake	2	Snake River	7					Salmon River	Hells Canyon Dam
1970	statewide	22	statewide ^b		3,366		2,552	SA	all waters open	all waters open
1970	Unknown	21	Unknown	151					Unknown	Unknown
1971	Clearwater	1	Clearwater River	2					Mouth	NF Clearwater River
1971	Salmon	1	Salmon River	21					Mouth	Whitebird Creek
1971	Salmon	2	Salmon River	54					Whitebird Creek	Little Salmon River
1971	Salmon	3	Salmon River	31					Little Salmon River	SF Salmon River
1971	Salmon	4	Salmon River	2					SF Salmon River	MF Salmon River
1971	Salmon	5	Salmon River	19					MF Salmon River	Lemhi River
1971	Salmon	6	Salmon River	5					Lemhi River	Pahsimeroi River
1971	Salmon	7	Salmon River	312					Pahsimeroi River	EF Salmon River
1971	Salmon	8	Salmon River	1,011					EF Salmon River	Hell Roaring Creek
1971	Salmon	9	Little Salmon River	568					Mouth	mainstem headwaters
1971	Salmon	10	MF Salmon River	687					Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1971	Salmon	11	Big Creek	65					Mouth	Smith Creek
1971	Salmon	12	Camas Creek	35					Yellowjacket Creek	Silver Creek
1971	Salmon	13	Loon Creek	308					Mouth	Mayfield Creek
1971	Salmon	14	Marsh Creek	19					Mouth	Bridge downstream of Capehorn Creek
1971	Salmon	16	Lemhi River	182					Mouth	entire drainage
1971	Salmon	17	EF Salmon River	163					Mouth	Bridge downstream of Herd Creek
1971	Salmon	18	Valley Creek	50					Mouth	Stanley Lake Creek

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1971	Salmon	19	SF Salmon River	8					Unknown	Unknown
1971	Snake	1	Snake River	2					Clearwater River	Salmon River
1971	Snake	2	Snake River	8					Salmon River	Hells Canyon Dam
1971	statewide	21	statewide ^b		3,647		1,529	SA	all waters open	all waters open
1971	Unknown	20	Unknown	3					Unknown	Unknown
1972	Salmon	1	Salmon River	0					Mouth	Whitebird Creek
1972	Salmon	2	Salmon River	87					Whitebird Creek	Little Salmon River
1972	Salmon	3	Salmon River	45					Little Salmon River	SF Salmon River
1972	Salmon	4	Salmon River	17					SF Salmon River	MF Salmon River
1972	Salmon	5	Salmon River	21					MF Salmon River	Lemhi River
1972	Salmon	6	Salmon River	34					Lemhi River	Pahsimeroi River
1972	Salmon	7	Salmon River	453					Pahsimeroi River	EF Salmon River
1972	Salmon	8	Salmon River	1,169					EF Salmon River	Hell Roaring Creek
1972	Salmon	9	Little Salmon River	2,987					Mouth	mainstem headwaters
1972	Salmon	10	MF Salmon River	937			-		Mouth	confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1972	Salmon	11	Big Creek	33					Mouth	Smith Creek
1972	Salmon	12	Camas Creek	167					Yellowjacket Creek	Silver Creek
1972	Salmon	13	Loon Creek	213					Mouth	Mayfield Creek
1972	Salmon	14	Marsh Creek	30					Mouth	Bridge downstream of Capehorn Creek
1972	Salmon	15	Bear Valley Creek	40					Mouth	Fir Creek Pack Bridge
1972	Salmon	17	Lemhi River	219					Mouth	entire drainage
1972	Salmon	19	EF Salmon River	161					Mouth	Bridge downstream of Herd Creek
1972	Salmon	20	Valley Creek	43					Mouth	Stanley Lake Creek
1972	Snake	1	Snake River	3					Clearwater River	Salmon River
1972	Snake	2	Snake River	0					Salmon River	Hells Canyon Dam
1972	statewide	22	statewide ^b		2,376		11,880	NP	all waters open	all waters open
1972	Unknown	21	Unknown	3					Unknown	Unknown
1973	Clearwater	1	Clearwater River	5					Mouth	NF Clearwater River
1973	Clearwater	3	MF Clearwater River	15					Mouth	confluence of Lochsa and Selway rivers
1973	Salmon	1	Salmon River	0					Mouth	Whitebird Creek

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1973	Salmon	2	Salmon River	352					Whitebird Creek	Little Salmon River
1973	Salmon	3	Salmon River	148					Little Salmon River	SF Salmon River
1973	Salmon	4	Salmon River	5					SF Salmon River	MF Salmon River
1973	Salmon	5	Salmon River	31					MF Salmon River	Lemhi River
1973	Salmon	6	Salmon River	46					Lemhi River	Pahsimeroi River
1973	Salmon	7	Salmon River	746					Pahsimeroi River	EF Salmon River
1973	Salmon	8	Salmon River	2,263					EF Salmon River	Hell Roaring Creek
1973	Salmon	9	Little Salmon River	2,896					Mouth	mainstem headwaters
1973	Salmon	10	MF Salmon River	1,216					Mouth	confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1973	Salmon	11	Big Creek	87					Mouth	Smith Creek
1973	Salmon	12	Camas Creek	450					Yellowjacket Creek	Silver Creek
1973	Salmon	13	Loon Creek	204					Mouth	Mayfield Creek
1973	Salmon	14	Marsh Creek	153					Mouth	Bridge downstream of Capehorn Creek
1973	Salmon	15	Bear Valley Creek	230					Mouth	Unknown
1973	Salmon	16	Lemhi River	174					Mouth	entire drainage
1973	Salmon	17	EF Salmon River	465					Mouth	Bridge downstream of Herd Creek
1973	Salmon	18	Valley Creek	36					Mouth	Stanley Lake Creek
1973	Salmon	19	SF Salmon River	5					Unknown	Unknown
1973	Salmon	33	Salmon River	112					Mouth	mainstem headwaters
1973	Snake	1	Snake River	0					Clearwater River	Salmon River
1973	Snake	2	Snake River	0					Salmon River	Hells Canyon Dam
1973	statewide	21	statewide ^b		1,514		18,925	NP	all waters open	all waters open
1973	Unknown	20	Unknown	62					Unknown	Unknown
1974	Salmon	1	Salmon River	0					Mouth	Whitebird Creek
1974	Salmon	2	Salmon River	24					Whitebird Creek	Little Salmon River
1974	Salmon	3	Salmon River	24					Little Salmon River	SF Salmon River
1974	Salmon	4	Salmon River	16					SF Salmon River	MF Salmon River
1974	Salmon	5	Salmon River	12					MF Salmon River	Lemhi River
1974	Salmon	6	Salmon River	0					Lemhi River	Pahsimeroi River
1974	Salmon	7	Salmon River	133					Pahsimeroi River	EF Salmon River

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1974	Salmon	8	Salmon River	432					EF Salmon River	Hell Roaring Creek
1974	Salmon	9	Little Salmon River	322					Mouth	mainstem headwaters
1974	Salmon	10	MF Salmon River	351					Mouth	Confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1974	Salmon	11	Big Creek	8					Mouth	Smith Creek
1974	Salmon	12	Camas Creek	12					Yellowjacket Creek	Silver Creek
1974	Salmon	13	Loon Creek	55					Mouth	Mayfield Creek
1974	Salmon	14	Marsh Creek	24					Mouth	Bridge downstream of Capehorn Creek
1974	Salmon	16	Lemhi River	35					Mouth	entire drainage
1974	Salmon	18	EF Salmon River	90					Mouth	Bridge downstream of Herd Creek
1974	Salmon	20	SF Salmon River	4					Unknown	Unknown
1974	statewide	100	statewide ^a				6,221	NP	all waters open	all waters open
	1975 and 19	976 - no d	ppen season							
1977	Clearwater	1	Clearwater River	153					Mouth	NF Clearwater River
1977	Clearwater	2	Clearwater River	7					NF Clearwater River	SF Clearwater River
1977	Clearwater	3	SF Clearwater River	4					Mouth	Mount Idaho Bridge
1977	Clearwater	4	MF Clearwater River	348					Mouth	confluence of Lochsa and Selway rivers
1977	Clearwater	101	Clearwater drainage				7,894	DAY	all waters open	all waters open
1977	Salmon	1	Salmon River	14					Mouth	Whitebird Creek
1977	Salmon	2	Salmon River	265					Whitebird Creek	Little Salmon River
1977	Salmon	3	Salmon River	75					Little Salmon River	SF Salmon River
1977	Salmon	4	Salmon River	31					SF Salmon River	MF Salmon River
1977	Salmon	5	Salmon River	61					MF Salmon River	Lemhi River
1977	Salmon	6	Salmon River	7					Lemhi River	Pahsimeroi River
1977	Salmon	7	Salmon River	338					Pahsimeroi River	EF Salmon River
1977	Salmon	8	Salmon River	540					EF Salmon River	Valley Creek
1977	Salmon	9	Little Salmon River	1,432					Mouth	mainstem headwaters
1977	Salmon	10	MF Salmon River	404					Mouth	confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1977	Salmon	102	Salmon drainage				42,632	DAY	all waters open	all waters open
										·

Table 4 (continued)

				-	Harvest		_	Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1977	Snake	1	Snake River	0					Clearwater River	Salmon River
1977	Snake	2	Snake River	3					Salmon River	Hells Canyon Dam
1977	Snake	100	Snake drainage				1,007	DAY	all waters open	all waters open
1977	statewide	103	statewide		474				all waters open	all waters open
1978	Clearwater	1	Clearwater River	27					Mouth	NF Clearwater River
1978	Clearwater	2	Clearwater River	378					NF Clearwater River	SF Clearwater River
1978	Clearwater	3	NF Clearwater River	5					Mouth	Dworshak Dam
1978	Clearwater	4	MF Clearwater River	219					Mouth	confluence of Lochsa and Selway rivers
1978	Clearwater	98	Clearwater drainage				8,929	DAY	all waters open	all waters open
1978	Salmon	1	Salmon River	37					Mouth	Whitebird Creek
1978	Salmon	2	Salmon River	210					Whitebird Creek	Little Salmon River
1978	Salmon	3	Salmon River	288					Little Salmon River	SF Salmon River
1978	Salmon	4	Salmon River	11					SF Salmon River	MF Salmon River
1978	Salmon	5	Salmon River	48					MF Salmon River	Lemhi River
1978	Salmon	6	Salmon River	85					Lemhi River	Pahsimeroi River
1978	Salmon	7	Salmon River	674					Pahsimeroi River	EF Salmon River
1978	Salmon	8	Salmon River	1,799					EF Salmon River	Redfish Lake Creek
1978	Salmon	9	Little Salmon River	1,309					Mouth	mainstem headwaters
1978	Salmon	10	MF Salmon River	1,724					Mouth	confluence Marsh and Bear Valley creeks (with Dagger Falls closure)
1978	Salmon	11	Lemhi River	107					Mouth	Hayden Creek
1978	Salmon	97	Salmon drainage				63,905	DAY	all waters open	all waters open
1978	Snake	1	Snake River	0					Clearwater River	Salmon River
1978	Snake	2	Snake River	0					Salmon River	Hells Canyon Dam
1978	Snake	96	Snake drainage				771	DAY	all waters open	all waters open
	1979 to 19	84 - no o _l	pen season							
1985	Salmon	1	Little Salmon River			2,313	7,081	DAY	Posted boundary 100 yards upstream of mouth	Posted boundary 100 yards upstream of Rapid River
1985	Snake	2	Snake River			15	112	DAY	Wild Sheep Rapids	Hells Canyon Dam
1986	Salmon	1	Little Salmon River			1,430	18,756	HRS	Riggins City water pipeline about 200 yards upstream of mouth	Rapid River
	Salmon	3	Panther Creek			834	3,551	DAY	Clear Creek	Moyer Creek

Table 4 (continued)

					Harvest			Effort		
Year	Drainage	Zone	County/River	Adult	Jack	NL	Effort	unit	Downstream Boundary	Upstream Boundary
1986	Snake	2	Snake River			26	132	DAY	Wild Sheep Rapids	Hells Canyon Dam
1987	Salmon	1	Little Salmon River			422	16,997	HRS	Riggins City water pipeline about 200 yards upstream of mouth	Rapid River
1988	Salmon	1	Little Salmon River			692	19,044	HRS	Riggins City water pipeline about 200 yards upstream of mouth	Rapid River
1988	Snake	2	Snake River	Open 5/6	to 5/16 bu	ut no data	was found		Lower Pittsburg Landing	Hells Canyon Dam
	1989 -	no open	season							
1990	Salmon	1	Little Salmon River			565	13,676	HRS	Riggins City water pipeline about 200 yards upstream of mouth	Smokey Boulder Road Bridge
1990	Clearwater	6	Clearwater River including NF			369	c		Big Canyon Creek	Ahsahka Boat Ramp and NF Clearwater to Dworshak Dam
	1991 -	no open	season							
1992	Salmon	1	Little Salmon River			499	9,691	HRS	Main Salmon River Road Bridge	Rapid River
1993	Salmon	1	Little Salmon River			423	7,073	HRS	Main Salmon River Road Bridge	Rapid River
	1994 to 19	96 - no o _l	oen season	<u>-</u>	·	·		·	·	

^a Effort was estimated statewide this year.

^b Effort and jack harvest were estimated statewide this year.

 $^{^{\}circ}$ 743 anglers were interviewed at the check stations.

Table 5. The monthly river section adult Chinook Salmon harvest estimates for 1970.

Drainage/River section	May	June	July	August	Total
Statewide total	94	569	4,990	55	5,708
Salmon drainage	90	569	4,843	48	5,550
Bear Valley Creek			22		22
Big Creek			25		25
Camas Creek		12	308		320
EF Salmon River		12	168		180
Lemhi River		92	318		410
Little Salmon River	39	162	269	4	474
Loon Creek		4	251		255
Marsh Creek		20	134	4	158
MF Salmon River	4	14	773		791
NF Salmon River			11		11
Salmon River-1	4		8	8	20
Salmon River-2	31	20	8		59
Salmon River-3	4	19	16		39
Salmon River-4		4	37	4	45
Salmon River-5		8	71		79
Salmon River-6			39		39
Salmon River-7		24	523	12	559
Salmon River-8	8	178	1,761	16	1,963
Valley Creek			101		101
Snake drainage				7	7
Snake River				7	7
Unknown drainage	4		147		151
Unknown	4		147		151

Table 6. The monthly river section adult Chinook Salmon harvest estimates for 1971.

Drainage/River section	May	June	July	August	Total
Statewide total	2	150	3,377	26	3,555
Clearwater drainage		2			2
Clearwater River-1		2			2
Salmon drainage	2	140	3,372	26	3,540
Big Creek			65		65
Camas Creek			35		35
EF Salmon River		2	161		163
Lemhi River			182		182
Little Salmon River		77	489	2	568
Loon Creek		3	305		308
Marsh Creek			16	3	19
MF Salmon River		8	676	3	687
Salmon River-1		2	19		21
Salmon River-2	2	19	30	3	54
Salmon River-3		5	24	2	31
Salmon River-4			2		2
Salmon River-5			19		19
Salmon River-6			5		5
Salmon River-7		2	299	11	312
Salmon River-8		22	987	2	1,011
SF Salmon River			8		8
Valley Creek			50		50
Snake drainage		8	2		10
Snake River		8	2		10
Unknown drainage			3		3
Unknown			3		3

Table 7. The monthly river section adult Chinook Salmon harvest estimates for 1972.

Drainage/River section	May	June	July	August	Total
Statewide total	94	852	5,689	27	6,662
Salmon drainage	94	852	5,686	24	6,656
Bear Valley Creek			40		40
Big Creek			33		33
Camas Creek		9	158		167
EF Salmon River		3	158		161
Lemhi River		70	149		219
Little Salmon River	85	633	2,263	6	2,987
Loon Creek		6	198	9	213
Marsh Creek			30		30
MF Salmon River		55	879	3	937
Salmon River-2	6	44	34	3	87
Salmon River-3	3	4	38		45
Salmon River-4			17		17
Salmon River-5			21		21
Salmon River-6			34		34
Salmon River-7			450	3	453
Salmon River-8		25	1,144		1,169
Valley Creek		3	40		43
Snake drainage				3	3
Snake River				3	3
Unknown drainage			3		3
Unknown			3		3

Table 8. The monthly river section adult Chinook Salmon harvest estimates for 1973.

Drainage/River section	May	June	July	Total
Statewide total	656	5,413	3,632	9,701
Clearwater River	5	15		20
Clearwater River-1	5			5
MF Clearwater River		15		15
Salmon River	651	5,352	3,616	9,619
Bear Valley Creek		133	97	230
Big Creek			87	87
Camas Creek	5	280	165	450
EF Salmon River		333	132	465
Lemhi River	15	103	56	174
Little Salmon River	459	1,636	801	2,896
Loon Creek		77	127	204
Marsh Creek		66	87	153
MF Salmon River		818	398	1,216
Salmon River-2	102	210	40	352
Salmon River-3	20	118	10	148
Salmon River-33	15	66	31	112
Salmon River-4			5	5
Salmon River-5		21	10	31
Salmon River-6		17	29	46
Salmon River-7	15	362	369	746
Salmon River-8	20	1,092	1,151	2,263
SF Salmon River		5		5
Valley Creek		15	21	36
Unknown drainage		46	16	62
Unknown		46	16	62

Table 9. The monthly river section adult Chinook Salmon harvest estimates for 1974.

Drainage/River section	Мау	June	July	Total
Statewide total	8	69	1,465	1,542
Salmon drainage	8	69	1,465	1,542
Big Creek			8	8
Camas Creek			12	12
EF Salmon River		8	82	90
Lemhi River		4	31	35
Little Salmon River	4	29	289	322
Loon Creek			55	55
Marsh Creek			24	24
MF Salmon River		8	343	351
Salmon River-2			24	24
Salmon River-3	4		20	24
Salmon River-4		4	12	16
Salmon River-5			12	12
Salmon River-7		4	129	133
Salmon River-8		12	420	432
SF Salmon River			4	4

Table 10. The monthly river section adult Chinook Salmon harvest estimates for 1977.

Drainage/River section	May	June	July	Total
Statewide total	2,262	1,201	219	3,682
Clearwater drainage	364	148		512
Clearwater River-1	99	54		153
Clearwater River-2	3	4		7
MF Clearwater River	258	90		348
SF Clearwater River	4			4
Salmon drainage	1,898	1,050	219	3,167
Little Salmon River	1,130	291	11	1,432
MF Salmon River	76	274	54	404
Salmon River-1	14			14
Salmon River-2	230	22	13	265
Salmon River-3	64	8	3	75
Salmon River-4	7	17	7	31
Salmon River-5	29	32		61
Salmon River-6		7		7
Salmon River-7	234	68	36	338
Salmon River-8	114	331	95	540
Snake drainage		3		3
Snake River		3		3

Table 11. The monthly river section adult Chinook Salmon harvest estimates for 1978.

Drainage/River section	June	July	Total
Statewide total	2,465	4,456	6,921
Clearwater drainage	535	94	629
Clearwater River-1	27		27
Clearwater River-2	297	81	378
MF Clearwater River	206	13	219
NF Clearwater River	5		5
Salmon drainage	1,930	4,362	6,292
Lemhi River	45	62	107
Little Salmon River	1,033	276	1,309
MF Salmon River	182	1,542	1,724
Salmon River-1		37	37
Salmon River-2	137	73	210
Salmon River-3	205	83	288
Salmon River-4		11	11
Salmon River-5	11	37	48
Salmon River-6		85	85
Salmon River-7	23	651	674
Salmon River-8	294	1,505	1,799

Appendix A. Adjustments made to Hauck's 1954 to 1958 Chinook Salmon harvest estimates using his statewide total estimate and the percentage of harvest from each county. Cells shaded in grey were adjusted for rounding error so the sum of all sections equals the statewide harvest total. The statewide total harvest estimates for 1954 to 1958 were in Table 5 and the percent of harvest by county in Table 6 in Hauck's reports. The harvest for river sections in 1959 is from Table 4 and percent of harvest by river section in 1959 was calculated using the harvest estimates by river section. All of Hauck's original harvest estimates were then reduced for survey bias in this report. downst = downstream; upst = upstream.

Year	County/River	Percent of harvest	Hauck original harvest	Bias adjusted harvest
1954	Statewide total		29,550	14,775
1954	Blaine County	7.0%	2,069	1,035
1954	Custer County	53.2%	15,721	7,861
1954	Idaho County	4.6%	1,359	680
1954	Lemhi County	11.1%	3,280	1,640
1954	Valley County	22.8%	6,737	3,369
1954	Other counties	1.3%	384	190
1955	Statewide total		38,877	19,439
1955	Custer County	31.8%	12,363	6,182
1955	Idaho County	11.5%	4,471	2,236
1955	Lemhi County	19.7%	7,659	3,830
1955	Valley County	32.6%	12,674	6,337
1955	Washington County	3.7%	1,438	719
1955	Other counties	0.7%	272	135
1956	Statewide total		42,687	21,344
1956	Custer County	34.2%	14,599	7,300
1956	Idaho County	8.0%	3,415	1,708
1956	Lemhi County	19.2%	8,196	4,098
1956	Valley County	31.6%	13,489	6,745
1956	Washington County	5.2%	2,220	1,110
1956	Other counties	1.8%	768	383
1957	Statewide total		78,195	39,098
1957	Custer County	32.2%	25,179	12,590
1957	Idaho County	5.5%	4,301	2,151
1957	Lemhi County	22.4%	17,516	8,758
1957	Nez Perce County	0.7%	547	274
1957	Valley County	35.1%	27,446	13,723
1957	Other counties	4.1%	3,206	1,602

Year	County/River	Percent of harvest	Hauck original harvest	Bias adjusted harvest
1958	Statewide total		49,411	24,706
1958	Blaine County	2.7%	1,334	667
1958	Custer County	40.2%	19,863	9,932
1958	Idaho County	5.9%	2,915	1,458
1958	Lemhi County	17.3%	8,548	4,274
1958	Valley County	32.6%	16,108	8,054
1958	Other counties	1.3%	643	321
1959	Statewide total		39,978	19,989
1959	Clearwater drainage	0.4%	140	70
1959	Weiser River	1.0%	390	195
1959	EF Salmon River	9.1%	3,647	1,824
1959	Lemhi River	5.8%	2,311	1,156
1959	MF Salmon River	15.6%	6,236	3,118
1959	Pahsimeroi River	0.5%	195	98
1959	Salmon River - downst MF Salmon	4.2%	1,670	835
1959	Salmon River - upst MF Salmon	37.5%	14,978	7,489
1959	SF Salmon River	21.6%	8,630	4,315
1959	Snake River - downst Oxbow	1.6%	640	320
1959	Snake River - upst Brownlee	2.5%	1,002	501
1959	Unknown	0.3%	139	68

Appendix B. Bjornn's 1960 Chinook Salmon harvest and effort estimates from Table 4 that were re-scaled so the sum of all zones equals the statewide estimate (harvest = 43,323 fish and effort = 26,901 anglers). The scaled harvest estimates were then adjusted for bias, rounded, and adjusted if necessary so the sum of the bias adjusted estimates equals the statewide bias adjusted total harvest of 21,662 fish. Cells shaded in grey were adjusted for rounding error. downst = downstream; upst = upstream.

			Table 4	Percent	Scaled	Bias	Table 4	Percent	Scaled
Drainage	Zone	River	harvest	of harvest	harvest	Adjusted	effort	of effort	effort
Clearwater	1	Clearwater River	30	0.07%	31	16	91	0.27%	74
Salmon	1	Salmon River-downst MF	3,141	7.58%	3,282	1,641	2,169	6.54%	1,759
Salmon	2	Salmon River upst MF	15,866	38.27%	16,578	8,287	9,776	29.47%	7,927
Salmon	3	SF Salmon River	6,802	16.40%	7,107	3,554	5,764	17.37%	4,674
Salmon	4	EF SF Salmon River	1,456	3.51%	1,521	761	2,233	6.73%	1,811
Salmon	5	Secesh River	1,910	4.61%	1,996	998	1,230	3.71%	997
Salmon	6	MF Salmon River	5,955	14.36%	6,222	3,111	5,017	15.12%	4,068
Salmon	7	Lemhi River	2,850	6.87%	2,978	1,489	2,656	8.01%	2,154
Salmon	8	EF Salmon River	2,256	5.44%	2,357	1,179	2,234	6.73%	1,811
Snake	1	Snake River downst Oxbow	227	0.55%	237	119	648	1.95%	525
Snake	2	Snake River upst Brownlee	777	1.87%	812	406	971	2.93%	787
Snake	3	Weiser River	193	0.47%	202	101	387	1.17%	314
		Total:	41,463		43,323	21,662	33,176		26,901

Appendix C. Bjornn's 1961 Chinook Salmon harvest and effort estimates from Table 4 that were re-scaled so the sum of all zones equals the statewide estimate (harvest = 25,786 fish and effort = 22,921 anglers). The scaled harvest estimates were then adjusted for bias, rounded, and adjusted if necessary so the sum of the bias adjusted estimates equals the statewide bias adjusted total harvest of 12,893 fish. Cells shaded in grey were adjusted for rounding error. downst = downstream; upst = upstream.

			Table 4	Percent	Scaled	Bias	Table 4	Percent	Scaled
Drainage	Zone	River	harvest	of harvest	harvest	Adjusted	effort	of effort	effort
Clearwater	1	Clearwater River downst Lewiston Dam	32	0.12%	32	16	252	0.93%	214
Clearwater	2	Clearwater River upst Lewiston Dam	126	0.49%	127	64	568	2.11%	483
Salmon	1	Salmon River downst MF	1,008	3.93%	1,013	507	2,017	7.48%	1,715
Salmon	2	Salmon River upst MF	10,404	40.54%	10,453	5,225	8,765	32.51%	7,452
Salmon	3	SF Salmon River	2,143	8.35%	2,153	1,077	4,130	15.32%	3,512
Salmon	4	EF SF Salmon River	756	2.95%	760	380	1,324	4.91%	1,126
Salmon	5	Secesh River	220	0.86%	221	111	410	1.52%	349
Salmon	6	MF Salmon River	6,656	25.94%	6,688	3,343	5,077	18.83%	4,317
Salmon	7	Lemhi River	3,026	11.79%	3,040	1,520	2,301	8.54%	1,956
Salmon	8	EF Salmon River	1,041	4.06%	1,046	523	1,072	3.98%	912
Snake	1	Snake River downst Oxbow	189	0.74%	190	95	569	2.11%	484
Snake	2	Snake River upst Oxbow	63	0.25%	63	32	472	1.75%	401
		Total:	25,664		25,786	12,893	26,957		22,921

Appendix D. Bjornn's 1962 Chinook Salmon harvest and effort estimates from Table 3 that were re-scaled so the sum of all zones equals the statewide estimate (harvest = 24,100 fish and effort = 22,523 anglers). The scaled harvest estimates were then adjusted for bias, rounded, and adjusted if necessary so the sum of the bias adjusted estimates equals the statewide bias adjusted total harvest of 12,050 fish. Cells shaded in grey were adjusted for rounding error. downst = downstream; upst = upstream.

			Table 3	Percent	Scaled	Bias	Table 3	Percent	Scaled
Drainage	Zone	River	harvest	of harvest	harvest	Adjusted	effort	of effort	effort
Salmon	1	Salmon River downst MF	1,675	6.95%	1,676	838	2,256	8.27%	1,863
Salmon	2	Salmon River upst MF	7,688	31.91%	7,691	3,845	8,201	30.07%	6,774
Salmon	3	SF Salmon River	4,068	16.89%	4,069	2,034	5,025	18.43%	4,150
Salmon	4	EF SF Salmon River	923	3.83%	923	462	1,401	5.14%	1,157
Salmon	5	Secesh River	580	2.41%	580	290	682	2.50%	563
Salmon	6	MF Salmon River	5,707	23.69%	5,709	2,854	5,092	18.67%	4,205
Salmon	7	Lemhi River	2,495	10.36%	2,496	1,248	3,043	11.16%	2,513
Salmon	8	EF Salmon River	751	3.12%	751	376	1,058	3.88%	874
Snake	1	Snake River	205	0.85%	205	103	513	1.88%	424
		Total	24,092		24,100	12,050	27,271		22,523

Appendix E. Bjornn's 1963 Chinook Salmon harvest and effort estimates from Table 3 that were re-scaled so the sum of all zones equals the statewide estimate (harvest = 24,351 fish and effort = 21,455 anglers). The scaled harvest estimates were then adjusted for bias, rounded, and adjusted if necessary so the sum of the bias adjusted estimates equals the statewide bias adjusted total harvest of 12,176 fish. Cells shaded in grey were adjusted for rounding error.

			Table 3	Percent	Scaled	Bias	Table 3	Percent	Scaled
Drainage	Zone	River	harvest	of harvest	harvest	Adjusted	effort	of effort	effort
Clearwater	1	Clearwater River	99	0.41%	99	50	592	2.20%	473
Salmon	1	Salmon River	822	3.38%	824	412	1,845	6.87%	1,473
Salmon	2	Salmon River	8,769	36.11%	8,794	4,396	7,514	27.97%	5,999
Salmon	3	SF Salmon River	5,107	21.03%	5,120	2,560	4,825	17.96%	3,853
Salmon	4	EF SF Salmon River	758	3.12%	760	380	1,351	5.03%	1,079
Salmon	5	Secesh River	132	0.54%	132	66	493	1.83%	394
Salmon	6	MF Salmon River	5,832	24.01%	5,847	2,924	5,701	21.22%	4,552
Salmon	7	Lemhi River	1,055	4.34%	1,058	529	2,274	8.46%	1,816
Salmon	8	EF Salmon River	1,548	6.37%	1,552	776	1,285	4.78%	1,026
Snake	1	Snake River	165	0.68%	165	83	989	3.68%	790
		Total	24,287		24,351	12,176	26,869	1	21,455

Appendix F. Bjornn's 1964 Chinook Salmon harvest and effort estimates from the Questionnaire Results Table 4 that were re-scaled so the sum of all zones equals the statewide estimate (harvest = 17,246 fish and effort = 6,269 successful anglers). The scaled harvest estimates were then adjusted for bias, rounded, and adjusted if necessary so the sum of the bias adjusted estimates equals the statewide bias adjusted total harvest of 8,623 fish. Cells shaded in grey were adjusted for rounding error. downst = downstream; upst = upstream.

			Table 4	Percent	Scaled	Bias	Table 4	Percent	Scaled
Drainage	Zone	River	harvest	of harvest	harvest	Adjusted	effort	of effort	effort
Clearwater	1	Clearwater River	33	0.20%	34	17	33	0.47%	29
Salmon	1	Salmon River downst MF	455	2.74%	472	236	260	3.67%	230
Salmon	2	Salmon Rive upst MF	5,719	34.38%	5,929	2,963	2,177	30.74%	1,927
Salmon	3	SF Salmon River	3,247	19.52%	3,367	1,684	1,364	19.26%	1,207
Salmon	4	EF SF Salmon River	617	3.71%	640	320	260	3.67%	230
Salmon	5	Secesh River	552	3.32%	572	286	357	5.04%	316
Salmon	6	MF Salmon River	4,386	26.37%	4,548	2,274	1,884	26.60%	1,668
Salmon	7	Lemhi River	813	4.89%	843	422	455	6.42%	403
Salmon	8	EF Salmon River	682	4.10%	707	354	195	2.75%	173
Snake	1	Snake River	129	0.78%	134	67	97	1.37%	86
		Total	16,633		17,246	8,623	7,082	1	6,269

Appendix G. Ortmann's 1973 monthly Chinook Salmon harvest estimates from Table 5 by river section after parsing the Unknown month harvest to May, June, and July. Twenty fish reported caught in Jan-Apr were omitted as they were likely steelhead. Cells shaded in grey were adjusted for rounding error so the sum of all sections equals the statewide total harvest estimate.

Drainage	Zone	River	May	June	July	Total
Clearwater	1	Clearwater River	5	0	0	5
Clearwater	3	MF Clearwater River	0	15	0	15
Salmon	2	Salmon River - 1	102	210	40	352
Salmon	3	Salmon River - 2	20	118	10	148
Salmon	4	Salmon River - 4	0	0	5	5
Salmon	5	Salmon River - 5	0	21	10	31
Salmon	6	Salmon River - 6	0	17	29	46
Salmon	7	Salmon River - 7	15	362	369	746
Salmon	8	Salmon River - 8	20	1,092	1,151	2,263
Salmon	33	Salmon River - Unknown	15	66	31	112
Salmon	10	MF Salmon River	0	818	398	1,216
Salmon	17	EF Salmon River	0	333	132	465
Salmon	19	SF Salmon River	0	5	0	5
Salmon	9	Little Salmon River	459	1,636	801	2,896
Salmon	15	Bear Valley Creek	0	133	97	230
Salmon	13	Loon Creek	0	77	127	204
Salmon	16	Lemhi River	15	103	56	174
Salmon	14	Marsh Creek	0	66	87	153
Salmon	11	Big Creek	0	0	87	87
Salmon	18	Valley Creek	0	15	21	36
Salmon	12	Camas Creek	5	280	165	450
Unknown	20	Unknown stream	0	46	16	62
Statewide to	otal harve	est				9,701

Appendix H. Ortmann's 1977 monthly Chinook Salmon harvest estimates from Table 2 by river section after parsing the Unknown month and Salmon – Unknown section harvest (All unknown parsed column) to May, June, and July. Cells shaded in grey were adjusted for rounding error so the sum of all sections equals the statewide total harvest estimate.

			Harvest				All
Drainage	Zone	River	May	June	July	Total	parsed
Clearwater	1	Upper Clearwater River	99	54	0	153	7
Clearwater	2	Lower Clearwater River	3	4	0	7	0
Clearwater	3	SF Clearwater River	4	0	0	4	0
Clearwater	4	MF Clearwater River	258	90	0	348	10
Salmon	1	Salmon River - 1	14	0	0	14	4.37
Salmon	2	Salmon River - 2	230	22	13	265	44.76
Salmon	3	Salmon River - 3	64	8	3	75	8.91
Salmon	4	Salmon River - 4	7	17	7	31	0.81
Salmon	5	Salmon River - 5	29	32	0	61	1.55
Salmon	6	Salmon River - 6	0	7	0	7	0.18
Salmon	7	Salmon River - 7	234	68	36	338	11.65
Salmon	8	Salmon River - 8	114	331	95	540	27.76
Salmon		Salmon River - Unknown	parsed th	ne 34 fish	to Salmo	n Zones 1	- 8
Salmon	9	Little Salmon River	1,130	291	11	1,432	31
Salmon	10	MF Salmon River	76	274	54	404	18
Snake	2	Upper Snake River	0	3	0	3	0
		Statewide total				3,682	166.00

Appendix I. Ortmann's 1978 monthly Chinook Salmon harvest estimates from Table 2 by river section after parsing the Unknown month and Salmon – Unknown section harvest (All unknown parsed column) to May, June, and July. Cells shaded in grey were adjusted for rounding error so the sum of all sections equals the statewide total harvest estimate.

			Harvest			All
Drainage	Zone	River	June	July	Total	unknown parsed
Clearwater	1	Upper Clearwater River	27	0	27	21.90
Clearwater	2	Lower Clearwater River	297	73	370	44.35
Clearwater	3	NF Clearwater River	5	0	5	0.17
Clearwater	4	MF Clearwater River	213	13	226	39.58
		Clearwater unknown	parsed the 21 fish to Clearwater Zones 1 - 4			
Salmon	1	Salmon River - 1	0	37	37	0.38
Salmon	2	Salmon River - 2	144	63	207	23.10
Salmon	3	Salmon River - 3	210	75	285	23.89
Salmon	4	Salmon River - 4	6	5	11	11.11
Salmon	5	Salmon River - 5	12	36	48	5.49
Salmon	6	Salmon River - 6	0	86	86	5.87
Salmon	7	Salmon River - 7	22	655	677	33.87
Salmon	8	Salmon River - 8	244	1,557	1,801	194.28
Salmon		Salmon River - Unknown	parsed the 32 fish to Salmon Zones 1 - 8			
Salmon	9	Little Salmon River	1,033	276	1,309	176.00
Salmon	10	MF Salmon River	182	1,543	1,725	160.00
Salmon	11	Lemhi River	45	62	107	5.00
		Statewide total			6,921	745.00

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