

**Salmon age and sex composition and mean lengths for  
the Yukon River area, 2003**

by

**Larry DuBois**

**Disclaimer**

Data within this report includes age, sex and length data for Chinook, chum and coho salmon from selected projects on the Yukon River in 2003. The information presented is preliminary and may contain errors.

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Division of Commercial Fisheries



**SALMON AGE AND SEX COMPOSITION  
AND MEAN LENGTHS FOR  
THE YUKON RIVER AREA, 2003**



By

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### **Disclaimer**

This notebook contains age, sex and length data for chinook, summer chum, fall chum, and coho salmon from selected projects on the Yukon River. The information presented is preliminary and requires further review by staff. The following text, tables, and appendices may contain errors. Staff is encouraged to forward any error found using or reviewing this notebook to Larry DuBois. The information in this notebook should not be used for public distribution.

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## CHINOOK SALMON

A total of 11,192 chinook salmon were sampled for age, sex, and length (ASL) from the Yukon River in 2003 (Table 1). Chinook salmon ASL summary tables for commercial, subsistence, test, and escapement sampling projects are presented in Tables 1 through 7 and Appendices A.1 through A.30.

### *Chinook Salmon Commercial Harvest*

Commercial harvest samples were collected from 3,207 fish in Districts 1, 2, 4, 5, and 6 by Alaska Department of Fish and Game (ADF&G) personnel (Table 1). Age composition of the Yukon River chinook salmon harvest in 2003 was estimated to be approximately 65.4% age-1.4, 26.1% age-1.3, 7.9% age-1.5, and 0.5% age-1.2 fish, with several other age classes present in smaller proportions (Table 2). Age and sex composition for 92.2% of the total drainage chinook harvest was estimated. Females accounted for 53.3% of the total harvest. The 2003 age class distribution was most similar to the age class distribution observed in 2000 (Table 3). In the 2003 commercial harvest, age-1.2 and age-1.5 fish were present in lower percentages and age-1.4 fish in slightly higher percentages, compared with 2002.

Lower river harvests, Districts 1 and 2 combined, comprised 91.5% of the total Yukon River commercial harvest (Table 2). All commercial periods in Districts 1 and 2 were restricted to 8-inch and larger mesh size gillnets. All five commercial periods were sampled in District 1, and two of four periods were sampled in District 2. Age composition estimates from similar commercial harvest dates in District 1 were used to estimate the unsampled periods in District 2. The percentage of females was similar for both districts, 53.3% and 55.1% (Appendices A.1 and A.2). The percentage of the dominant age group, age-1.4 fish, ranged from 59.0% to 77.3% among periods. Comparing the District 1 age composition in 2003, with the 10-year average from unrestricted gear and 8-inch and larger gear, the percentages of age-5 and age-7 fish were near average, age-6 fish was slightly above average, and age-4 fish was the lowest on record (Table 3). Comparing numbers of fish harvested in District 1, from similar gear types, the 2003 chinook salmon harvest of 23,327 chinook salmon was 55.0% of the 10-year average harvest of 42,401 fish (Table 4). Comparing harvest by age group, the number of age-1.3, age-1.4, and age-1.5 fish harvested ranged from 55.7% to 58.1% of the 10-year average, similar to the harvest overall, however, age-1.2 fish numbered only 8.7%. The low percentage of age-1.2 fish in 2003 suggests a below average percentage of age-1.3 fish returning in 2004.

In District 4, where harvest samples were collected from fishwheels, age-1.3 fish dominated the harvest followed by age-1.2 fish (Table 2, Appendix A.3). Sampling occurred during all three periods and 34.0% of the harvest was sampled. Fishwheels select for smaller size chinook salmon than large-mesh gillnets, and this selection bias favors younger fish and males. District 4

In Districts 5 and 6 harvest samples were collected from mixed gear, including gillnets and fishwheels (Table 2, Appendices A.4 and A.5). In Districts 5 and 6, 32.4% and 25.6%, respectively, of the harvests were sampled. The commercial harvest in District 5 was dominated by age-1.4 fish (52.5%). In District 6, age-1.3 fish comprised 41.2% and age-1.4 fish 39.8% of the harvest.

With the exception of District 4, several trends in the commercial harvest are apparent when moving upriver and comparing age groups from Districts 1, 2, 5 and 6. The percentages of age-1.2 and age-1.3 chinook salmon are increasing, and age-1.4 and age-1.5 fish are decreasing (Table 2). For example, age-1.2 fish increase from 0.5% (District 1) to 11.4% (District 6), age-1.3 fish increase from 26.1% (District 1) to 41.2% (District 6), age-1.4 fish decrease from 65.4% (District 1) to 39.8% (District 6), and age-1.5 fish decrease from 7.9% (District 1) to 6.0% (District 6). Part of these trends can be attributed to gear selectivity; fishwheels are used in Districts 5 and 6 and select for younger fish. The Districts 5 and 6 harvests were sampled at the processing plant, where all fish from a given period, both gillnet and fishwheel harvested were mixed.

The age composition of chinook salmon samples collected from the **District 1 8.0" and larger mesh size gillnet** commercial harvest was 0.5% age-4, 26.1% age-5, 65.4% age-6, and 7.9% age-7 fish (Appendix A.1). Sex composition was 53.3% females.

The age composition of chinook salmon samples collected from the **District 2 8.0" and larger mesh size gillnet** commercial harvest was 0.9% age-4, 30.9% age-5, 60.3% age-6, and 7.6% age-7 fish (Appendix A.2). Sex composition was 55.1% females.

The age composition of chinook salmon samples collected from the **District 4C fishwheel** commercial harvest was 2.6% age-3, 23.7% age-4, 54.9% age-5, 15.5% age-6, and 3.4% age-7 fish (Appendix A.3). Sex composition was 15.3% females.

The age composition of chinook salmon samples collected from the **District 5BC mixed mesh size gillnet and fishwheel** commercial harvest was 5.0% age-4, 34.7% age-5, 52.7% age-6, and 7.6% age-7 fish (Appendix A.4). Sex composition was 37.6% females.

The age composition of chinook salmon samples collected from the **District 6 mixed mesh size gillnet and fishwheel** commercial harvest was 1.0% age-3, 11.4% age-4, 41.2% age-5, 40.0% age-6, and 6.3% age-7 fish (Appendix A.5). Sex composition was 41.0% females.

### *Chinook Salmon Subsistence Harvest*

A total of 643 subsistence harvest samples were collected from Districts 1, 3, and 4, however some of these samples lack sex information (Table 1, Appendices A.6 through A.12). ADF&G, United States Fish and Wildlife Service and Emmonak Tribal Council collected samples from 5.5-inch, 8.5-inch, and unknown mesh sizes in District 1. Youths employed by Tanana Chiefs

Conference collected samples from 8.5-inch mesh gillnets in District 3 near Holy Cross. In District 4, the City of Kaltag collected samples from 8.5-inch mesh gillnets and ADF&G collected samples from fishwheels near Ruby. Age-6 fish dominated the samples collected from 8.5 inch gillnets, and age-5 fish dominated the 5.5-inch gillnet and fishwheel samples (Table 1).

The age composition of chinook salmon samples collected from the **District 1 5.5" mesh size gillnet** subsistence harvest was 11.1% age-4, 47.8% age-5, 38.9% age-6, and 2.2% age-7 fish (Appendix A.6). Sex composition was 42.2% females.

The age composition of chinook salmon samples collected from the **District 1 8.5" mesh size gillnet** subsistence harvest was 0.6% age-4, 30.8% age-5, 62.2% age-6, and 6.4% age-7 fish (Appendix A.7). Sex composition was 42.9% females.

The age composition of chinook salmon samples collected from the **District 1 mixed mesh size gillnet** subsistence harvest was 2.4% age-4, 42.9% age-5, 46.4% age-6, and 8.3% age-7 fish (Appendix A.8). Age data includes fish that were not sexed.

The sex composition of chinook salmon samples collected from the **District 1 mixed mesh size gillnet** subsistence harvest was 50.0% females (Appendix A.9). Sex data were recorded for 16 of 84 aged fish.

The age composition of chinook salmon samples collected from the **District 3 (Holy Cross) 8.5" mesh size gillnet** subsistence harvest was 3.4% age-4, 15.3% age-5, 74.6% age-6, and 6.8% age-7 fish (Appendix A.10). Sex composition was 57.6% females.

The age composition of chinook salmon samples collected from the **District 4 (Kaltag) 8.5" mesh size gillnet** subsistence harvest was 1.0% age-4, 18.2% age-5, 67.9% age-6, and 13.0% age-7 fish (Appendix A.11). Sex composition was 49.3% females.

The age composition of chinook salmon samples collected from the **District 4 (Ruby) fishwheel** subsistence harvest was 13.3% age-4, 68.9% age-5, 13.3% age-6, and 4.4% age-7 fish (Appendix A.12). Sex composition was 8.9% females.

### *Chinook Salmon Test Fish Projects*

A total of 4,642 chinook salmon were sampled from test fishing projects in the mainstem of the Yukon River (Table 1, Appendices A.13 through A.23). Test fisheries operating drift gillnets were Big Eddy and Middle Mouth (8.25-inch mesh) near Emmonak, the radio telemetry project (8.5-inch mesh) at Russian Mission and Dogfish, and Pilot Station Sonar using 2.75-, 4.0-, 5.25-, 5.75-, 6.5-, 7.5-, and 8.5-inch mesh. Set gillnets were fished at Big Eddy and Middle Mouth (7.5- and 8.5-inch mesh). Fishwheels were operated by the Canadian Department of Fisheries and Oceans just upstream of the US/Canada border as part of a mark-recapture project.

Age composition from test fishing projects using large-mesh gear (8.25- and 8.5-inch) were similar; age-6 fish dominated the catch samples followed by age-5, age-7 and age-4 fish. For example, the average age composition from the 8.25-inch gear was: 62.7% age-6, 29.4% age-5, 7.5% age-7 and 0.3% age-4 (n=306, Appendices A.14 and A.16). The average age composition from the five test fishing projects using 8.5-inch gear was: 68.0% age-6, 24.1% age-5, 7.2% age-7 and 0.6% age-4 (n=2,568, Appendices A.15, A.17, A.18, A.20, and A.22). The percentage of females from all test fishing projects using large-mesh gear, excluding the Pilot Station Sonar 8.5-inch mesh, had a relatively small range from 50.7% to 54.4%. The Pilot Station Sonar 8.5-inch mesh catches had the lowest percentage of females (45.6%) and age-6 fish (59.1%) among the large-mesh gear test fishing projects (Appendix A.22). The fishwheels in Canada captured fewer females and older fish than other test fishing projects using gillnets (Appendix A.23).

Age and sex composition of chinook salmon typically changes during the season with increasing numbers of females and older-aged fish as the season progresses. These trends were observed in mixed-stock samples from projects with adequate numbers of samples collected throughout the season. The Big Eddy and Middle Mouth 8.5-inch set gillnet samples are stratified by quartiles and have adequate samples from each quartile to observe these trends. Typically, the percentages of age-6 fish and females increase, and age-5 fish decrease, through the season. For example, the Big Eddy percentages from first to fourth quartile were: 61.7% and 80.4% for age-6 fish, 37.3% and 66.0% for females, and 34.7% and 15.3% for age-5 fish (Appendix A.15). The Middle Mouth percentages from first to fourth quartile were: 65.1% and 75.3% for age-6 fish, 44.8% and 63.2% for females, and 27.2% and 17.4% for age-5 fish (Appendix A.17).

The Big Eddy and Middle Mouth combined 8.5-inch set gillnet test fisheries have operated from 1985 to present, and usually sample fish from the end of May through July 15. A historical summary of the percent by age and females from these fisheries is presented in Table 5. The 2003 age and sex are analogous to the average from years with comparable data. The years included in the average only include years when the test fisheries operated throughout the season.

The age composition of chinook salmon samples collected from the **Big Eddy** test fishing project using **7.5" mesh size set gillnet** was 75.0% age-5 and 25.0% age-6 fish (Appendix A.13). Sex composition was 18.7% females.

The age composition of chinook salmon samples collected from the **Big Eddy** test fishing project using **8.25" mesh size drift gillnet** was 0.5% age-4, 30.5% age-5, 62.1% age-6, and 6.9% age-7 fish (Appendix A.14). Sex composition was 52.2% females.

The age composition of chinook salmon samples collected from the **Big Eddy** test fishing project using **8.5" mesh size set gillnet** was 0.5% age-4, 26.2% age-5, 68.3% age-6, and 4.8% age-7 fish (Appendix A.15). Sex composition was 50.7% females.

The age composition of chinook salmon samples collected from the **Middle Mouth test** fishing project using **8.25" mesh size drift gillnet** was 27.2% age-5, 64.1% age-6, and 8.7% age-7 fish (Appendix A.16). Sex composition was 54.4% females.

The age composition of chinook salmon samples collected from the **Middle Mouth** test fishing project using **8.5" mesh size set gillnet** was 0.8% age-4, 22.3% age-5, 67.9% age-6, and 8.9% age-7 fish (Appendix A.17). Sex composition was 54.4% females.

The age composition of chinook salmon samples collected from the **Russian Mission** radio tagging project using **8.5" mesh size drift gillnet** was 0.7% age-4, 18.7% age-5, 74.3% age-6, and 6.3% age-7 fish (Appendix A.18). Age data includes fish that were not sexed.

The sex composition of chinook salmon samples collected from the **Russian Mission** radio tagging project using **8.5" mesh size drift gillnet** was 52.8% females (Appendix A.19). Sex data were recorded for 233 of 268 aged fish.

The age composition of chinook salmon samples collected from the **Russian Mission (Dogfish)** radio tagging project using **8.5" mesh size drift gillnet** was 0.3% age-4, 23.3% age-5, 67.5% age-6, 8.8% age-7, and 0.1% age-8 fish (Appendix A.20). Age data includes fish that were not sexed.

The sex composition of chinook salmon samples collected from the **Russian Mission (Dogfish)** radio tagging project using **8.5" mesh size drift gillnet** was 51.7% females (Appendix A.21). Sex data were recorded for 656 of 729 aged fish.

#### ***Pilot Station Sonar Project***

The Pilot Station Sonar sample is not weighted by catch therefore the sample does not reflect the total run passage of salmon by Pilot Station. (Appendix A.22).

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 2.75" mesh size drift gillnet** test fishing project was 57.1% age-5 and 42.9% age-6 fish. Sex composition was 71.4% females.

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 4.0" mesh size drift gillnet** test fishing project was 6.5% age-3, 10.9% age-4, 56.5% age-5, and 26.1% age-6 fish. Sex composition was 30.4% females.

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 5.25" mesh size drift gillnet** test fishing project was 20.3% age-4, 40.5% age-5, 36.5% age-6, and 2.7% age-7 fish. Sex composition was 41.2% females.

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 5.75" mesh size drift gillnet** test fishing project was 25.0% age-4, 25.0% age-5, and 50.0% age-6 fish. Sex composition was 25.0% females.

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 6.5" mesh size drift gillnet** test fishing project was 1.7% age-4, 60.8% age-5, 36.6% age-6, and 0.9% age-7 fish. Sex composition was 48.3% females.

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 7.5" mesh size drift gillnet** test fishing project was 2.3% age-4, 51.1% age-5, 44.7% age-6, and 1.8% age-7 fish. Sex composition was 50.7% females.

The age composition of chinook salmon samples collected from **Yukon River Pilot Station Sonar 8.5" mesh size drift gillnet** test fishing project was 1.8% age-4, 36.8% age-5, 59.1% age-6 and 2.3% age-7 fish. Sex composition was 45.6% females.

#### ***Canadian Fishwheel Project***

The age composition of chinook salmon samples collected from the **Sheep Rock and White Rock Fish Wheel** test fishing projects was 11.2% age-4, 48.1% age-5, 36.8% age-6, and 3.8% age-7 fish (Appendix A.23). Sex composition was 27.6% females.

### ***Chinook Salmon Escapement Projects***

Seven escapement projects sampled 2,759 chinook salmon from tributaries in the Yukon River drainage in 2003 (Table 1, Appendices A.24 through A.30). Fish were sampled from weir traps at the East Fork Andreafsky, Gisasa, and Tozitna Rivers and Henshaw Creek. The samples from these five weir escapement-monitoring projects were stratified by date, and the escapement passage numbers, also stratified by date, were applied to the sample percentages. Carcass sampling projects were conducted at the Anvik, Chena and Salcha Rivers and escapement numbers were not applied to these sample percentages. Age composition from escapement projects were similar; age-5 fish dominated followed by age-6, age-4, and age-7 fish. The average from all escapement projects combined was 51.6% age-5, 32.2% age-6, 12.7% age-4, and 3.0% age-7 fish (Table 1). The overall percent females was 37.6%. Tributaries with relatively high percent by age were: age-6 fish in the Chena and Salcha Rivers (41.6% and 42.4%, respectively), age-5 fish in the Gisasa River (67.8%), and age-4 fish in the Tozitna River (26.9%). Tozitna River also had the lowest percentage of females (18.6%).

Historical percent by age and females, from long-standing escapement projects, is presented in Table 6. At the Anvik and Salcha Rivers, carcass sampling was the primary means of collection. At the Chena River samples were primarily from carcasses, however, some years include a mixture of samples from carcasses and electro-shocked fish. The East Fork Andreafsky samples were from a weir trap. The percentages of females from these projects in 2003 were similar to the averages. Comparing percent by age from 2003 with the 10-year average, age-5 fish were above average and age-6 and age-4 fish were below average for all four projects (Table 6). For example, age-5 fish were 10.2%, 13.1%, 12.9%, and 7.9% above the 10-year average and age-4 fish were 6.8%, 4.5%, 9.3%, and 7.5% below the 10-year average (East Fork Andreafsky, Anvik, Chena, and Salcha Rivers, respectively, Table 6). These age differences from escapement projects, 2003 percent by age compared to a project average, are more pronounced than age differences observed in the commercial or test fisheries.

The age composition of chinook salmon samples collected from **East Fork Andreafsky River Weir** was 0.5% age-3, 16.0% age-4, 51.9% age-5, 30.7% age-6, and 0.8% age-7 fish (Appendix A.24). Sex composition was 46.2% females. Sample percentages were applied to escapement numbers.

The age composition of **carcass** samples collected from **Anvik River** chinook salmon was 0.2% age-3, 8.9% age-4, 54.7% age-5, 33.2% age-6, and 3.0% age-7 fish (Appendix A.25). Sex composition was 37.6% females.

The age composition of **carcass** samples collected from **Chena River** chinook salmon was 5.1% age-4, 46.5% age-5, 41.6% age-6, and 6.8% age-7 fish (Appendix A.26). Sex composition was 44.9% females.

The age composition of chinook salmon samples collected from **Gisasa River Weir** was 0.4% age-3, 5.5% age-4, 67.8% age-5, 25.4% age-6, and 1.0% age-7 fish (Appendix A.27). Sex composition was 35.3% females. Sample percentages were applied to escapement numbers.

The age composition of chinook salmon samples collected from **Henshaw Creek Weir** was 1.4% age-3, 19.4% age-4, 45.7% age-5, 31.8% age-6, and 1.7% age-7 fish (Appendix A.28). Sex composition was 38.4% females. Sample percentages were applied to escapement numbers.

The age composition of **carcass** samples collected from **Salcha River** chinook salmon was 0.7% age-3, 7.3% age-4, 42.4% age-5, 42.4% age-6, and 7.3% age-7 fish (Appendix A.29). Sex composition was 42.4% females.

The age composition of chinook salmon samples collected from **Tozitna River Weir** was 0.4% age-3, 26.9% age-4, 51.9% age-5, 20.4% age-6, and 0.4% age-7 fish (Appendix A.30). Sex composition was 18.6% females. Sample percentages were applied to escapement numbers.

### *Chinook Salmon Mean Lengths*

Mean lengths by sex from individual projects in Appendices A.1 through A.30 are summarized in Table 7. Some projects with small sample sizes were not included. Mean length has a positive correlation with ocean age. The average mean lengths for the most common age groups were: 545mm for age-1.2 males, 565mm for age-1.2 females, 733mm for age 1.3-males, 768mm for age 1.3-females, 848mm for age-1.4 males, 866 for age-1.4 females, 933mm for age-1.5 males, and 907mm for age-1.5 females. Females had a larger mean length than males for ages-1.2, -1.3, and -1.4, whereas age-1.5 males were larger than the females. The mean lengths from fish sampled in the District 4 commercial and subsistence fishwheels were in the lower range of mean lengths from all projects.

## SUMMER CHUM SALMON

A total of 6,730 summer chum salmon were sampled for ASL data from the Yukon River in 2003 (Table 8). Summer chum salmon ASL summary tables for commercial, subsistence, test, and escapement sampling projects are presented in Tables 8 through 12 and Appendices B.1 through B.16. References to chum salmon refer to summer chum salmon, whereas fall chum salmon will be identified per se. The percentage of age-4 chum salmon was above average for most projects.

### *Summer Chum Salmon Commercial Catch*

In 2003, chum salmon were sampled from commercial harvests in Districts 1, 2, and 6 by ADF&G staff (Table 8, Appendices B.1 through B.3). Districts 1 and 2 commercial harvest periods were restricted to 8.0-inch and larger mesh size openings. District 6 commercial harvest samples were from fishwheels. Age-4 fish dominated the harvest in all districts (range 59.3% to 70.2%) and comprised 65.6% of the combined harvest in numbers of fish (Table 9). The percentage of age-5 fish, by harvest district, ranged from 26.5% to 32.2% and averaged 31.1%. The percentage of females in the upper river District 6 harvest (56.7%) was greater than in the lower river harvests (39.6% and 34.2%, Districts 1 and 2, respectively). The percentage of females from the combined harvest was 45.5% (Table 9).

Comparing the District 1 commercial harvests from 2003 and 2002, the age-4 percentage was greater in 2003 (64.5% and 55.1%, 2003 and 2002, respectively). An increase in age-4 fish was also observed in District 6 (70.2% and 54.6%, 2003 and 2002, respectively). Historical percent by age for summer chum salmon sampled in the commercial and subsistence fisheries from 1982 through 2003 is presented in Table 10. While many different gear types are included and each gear type will have a bias on the age composition, the 61.0% age-4 fish from 2003 is in the historical upper range and well above the 10-year average of 44.2% (Table 10). This above average percentage of age-4 fish suggests an above average percentage of age-5 fish in 2004.

The age composition of chum salmon samples collected from **District 1 8.0" and larger mesh size gillnet** commercial harvest was 0.2% age-3, 64.5% age-4, 32.0% age-5, and 3.3% age-6 fish (Appendix B.1). Sex composition was 39.6% females.

The age composition of chum salmon samples collected from **District 2 8.0" and larger mesh size gillnet** commercial harvest was 0.2% age-3, 59.3% age-4, 37.6% age-5, and 2.9% age-6 fish (Appendix B.2). Sex composition was 34.2% females.

The age composition of chum salmon samples collected from **District 6 fishwheel** commercial harvest was 70.2% age-4, 26.5% age-5 and 3.3 % age-6 fish (Appendix B.3). Sex composition was 56.7% females.

### *Summer Chum Salmon Subsistence Harvest*

A total of 289 chum salmon were sampled from the subsistence harvests in Districts 1 and 4 (Table 8, Appendices B.4 through B.7). Samples were from mixed-, 5.5-inch, and 8.5-inch mesh gillnets in District 1, and 6.5-inch mesh gillnets in District 4. Sex was not recorded for all fish sampled.

The age composition of chum salmon samples collected from **District 1 5.5" mesh size gillnet** subsistence harvest was 0.4% age-3, 48.8% age-4, 44.7% age-5, and 6.1% age-6 fish (Appendix B.4). Age data includes fish that were not sexed.

The sex composition of chum salmon samples collected from **District 1 5.5" mesh size gillnet** subsistence harvest was 32.6% females (Appendix B.5). Sex data were recorded for 218 of 246 aged fish.

The age composition of chum salmon samples collected from **District 1 8.5" mesh size gillnet** subsistence harvest was 83.3% age-4 and 16.7% age-5 fish (Appendix B.5). Sex composition was 33.3% females.

The age composition of chum salmon samples collected from **District 4C (Ruby) 6.5" mesh size gillnet** subsistence harvest was 66.7% age-4, 30.3% age-5, and 3.0% age-6 fish (Appendix B.7). Sex composition was 0% females, however, this may be incorrect because samplers received inadequate training.

### *Summer Chum Salmon Test Fish Harvest*

A total of 822 chum salmon were sampled from the 5.5-inch drift gillnet test fisheries at Big Eddy and Middle Mouth (Table 8, Appendices B.8 and B.9). Similar to the commercial samples, the percentage of age-4 fish in the 2003 test fish harvest was well above the historical average. In 2003, the age-4 fish comprised 78.7% of the samples in the test fisheries, almost twice the 42.6% average and the highest percentage on record (Table 11). Conversely, age-5 harvest samples comprised 18.7% and were the lowest on record. The 54.4% females observed in the test fishery samples was slightly below the 59.9% average and within the historical range. The years included in the average only include years when the test fisheries operated throughout the season.

The age composition of chum salmon samples collected from the **Big Eddy** test fishing project using **5.5" mesh size drift gillnet** was 0.2% age-3, 76.7% age-4, 21.2% age-5, and 1.9% age-6 fish (Appendix B.8). Sex composition was 53.7% females.

The age composition of chum salmon samples collected from the **Middle Mouth** test fishing project using **5.5" mesh size drift gillnet** was 0.8% age-3, 83.2% age-4, 13.3% age-5, and 2.7% age-6 fish (Appendix B.9). Sex composition was 55.9% females.

### *Summer Chum Salmon Escapement Projects*

Seven escapement projects sampled 4,721 chum salmon from tributaries in the Yukon River drainage in 2003 (Table 8, Appendices B.10 through B.16). Fish were sampled from weir traps at the East Fork Andreafsky, Gisasa, Nulato and Tozitna Rivers, and Clear and Henshaw Creeks. Anvik River chum salmon were captured with a beach seine. The samples from these seven escapement-monitoring projects were stratified by date, and the escapement passage numbers, also stratified by date, were applied to the sample percentages. Sample dates were dependent on weir operational periods, and usually began near the end of June and continued through the end of July. Several projects encountered high water events during late June and early July when weir operations were temporarily suspended.

The percentage of age-4 chum salmon ranged from 70.1% at Gisasa River to 88.7% at Clear Creek with an average of 79.7% (Table 8). The percentage of age-5 fish ranged from 8.5% at Henshaw Creek to 27.9% at Gisasa River with an average of 17.6%. Comparing age-4 chum salmon from 2002 and 2003, an increased age-4 percentage was observed at most escapement projects in 2003 (Richard Price, Yukon Stock Identification Biologist, ADF&G, *personal communication*). Clear and Henshaw Creeks and Tozitna River had large increases in the age-4 percentage from 2002 to 2003 (+65.4%, +70.2%, and +67.7%, respectively). Comparing the 10-year average age-4 percentage from the East Fork Andreafsky, Anvik, and Nulato Rivers with 2003, all of these sampling locations were above average in 2003 (range +19.0% to +28.0%, DuBois, *personal observation*).

The percentage of females in 2003 ranged from 32.9% at Tozitna River to 55.3% at Anvik River with an overall average of 44.7%. Comparing the percentage of females from these escapement projects in 2002, every project had slightly lower percentages in 2003, except for the Nulato River (Richard Price, Yukon Stock Identification Biologist, ADF&G, *personal communication*). The average percentage of females decreased 3.6% from 2002.

The age composition of chum salmon samples collected from **East Fork Andreafsky River Weir** was 0.4% age-3, 73.3% age-4, 25.7% age-5, and 0.5% age-6 fish (Appendix B.10). Sex composition was 44.8% females. Sample percentages were applied to escapement numbers.

The age composition of chum salmon samples collected from **Anvik River Sonar beach seine** project was 1.4% age-3, 72.9% age-4, 24.5% age-5, and 1.3% age-6 fish (Appendix B.11). Sex composition was 55.3% females. Sample percentages were applied to sonar passage estimates.

The age composition of chum salmon samples collected from **Clear Creek Weir** was 0.3% age-3, 88.7% age-4, 8.9% age-5, and 2.2% age-6 fish (Appendix B.12). Sex composition was 40.5% females. Sample percentages were applied to escapement numbers.

The age composition of chum salmon samples collected from **Gisasa River Weir** was 0.6% age-3, 69.3% age-4, 28.4% age-5, and 1.7% age-6 fish (Appendix B.13). Sex composition was 45.9% females. Sample percentages were applied to escapement numbers.

The age composition of chum salmon samples collected from **Henshaw Creek Weir** was 1.8% age-3, 85.9% age-4, 7.6% age-5, and 4.7% age-6 fish (Appendix B.14). Sex composition was 52.5% females. Sample percentages were applied to escapement numbers.

The age composition of chum salmon samples collected from **Nulato River Weir** was 1.7% age-3, 79.5% age-4, 17.6% age-5, and 1.2% age-6 fish (Appendix B.15). Sex composition was 41.8% females. Sample percentages were applied to escapement numbers.

The age composition of chum salmon samples collected from **Tozitna River Weir** was 1.1 age-3, 87.0% age-4, 10.5% age-5, and 1.3% age-6 fish (Appendix B.16). Sex composition was 32.9% females. Sample percentages were applied to escapement numbers.

### *Summer Chum Salmon Mean Lengths*

Mean lengths by sex from individual projects in Appendices B.1 through B.16 are summarized in Table 12. Three projects with small sample sizes were not included. The average mean lengths by sex and age group were: 549mm for age-0.2 males, 527mm for age-0.2 females, 575mm for age 0.3-males, 551mm for age-0.3 females, 608mm for age-0.4 males, 578mm for age-0.4 females, 628mm for age-0.5 males, and 589mm for age-0.5 females (Table 12). Males were larger at age than females for all age groups.

## **FALL CHUM SALMON SEASON**

A total of 2,697 fall chum salmon were sampled for ASL data from the Yukon River in 2003 (Table 8). Fall chum salmon ASL summary tables for commercial, subsistence, test, and escapement sampling projects are presented in Tables 8, 9, and 12 and Appendices C.1 through C.10. Similar to summer chum salmon, the age-4 component of fall chum salmon was above average for most projects.

### *Fall Chum Salmon Commercial Harvest*

In 2003, fall chum salmon were sampled from commercial harvests in Districts 1 and 4 by ADF&G staff (Table 8, Appendices C.1 and C.2). District 1 commercial harvest periods were restricted to 6.0-inch and larger mesh size openings. District 4 commercial harvest samples were from fishwheels. Age-4 fish dominated the harvest in both districts and comprised 90.3% of the combined harvest in numbers of fish (Table 9). The percentage of age-4 fish and females in the

District 1 harvest were greater than in the District 4 harvests. The percentage of females from the combined harvest was 54.1% (Table 9).

The age composition of fall chum salmon samples collected from **District 1 6.0" and larger mesh size gillnet** commercial harvest was 0.6% age-3, 93.5% age-4, 5.5% age-5, and 0.4% age-6 fish (Appendix C.1). Sex composition was 53.2% females.

The age composition of chum salmon samples collected from **District 4C (Ruby) fishwheel** commercial harvest was 76.7% age-4, 22.9% age-5, and 0.4 % age-6 fish (Appendix C.2). Sex composition was 43.7% females.

### *Fall Chum Salmon Subsistence Harvest*

The age composition of fall chum salmon samples collected from the **District 5B (Tanana and Rapids) fishwheel** subsistence harvest was 77.5% age-4, 21.4% age-5, and 1.1% age-6 fish (Appendix C.3). Sex composition was 43.3% females.

### *Fall Chum Salmon Test Fishing Catch*

A total of 1,325 fall chum salmon were sampled from four test fishing projects in the lower and middle Yukon River from mid-July through mid-September (Table 8, Appendices C.4 through C.7). In the lower Yukon River, ADF&G crews fished 6.0-inch mesh drift gillnets at Big Eddy and Middle Mouth. The Asacarsarmiut Traditional Council conducted test fishing with 5 7/8-inch mesh drift gillnets near Mountain Village. The City of Kaltag also used 5 7/8-inch drift gillnets in the middle river test fishery. Similar to the commercial samples, the percentage of age-4 fish in the 2003 test fish harvest was above the historical average. In 2003, the age-4 fish comprised 85.9% of the samples in the test fisheries. The overall percentage of females was 53.3% (Table 8).

The age composition of fall chum salmon samples collected from **Big Eddy** test fishing project using **6.0" mesh size drift gillnet** was 1.0% age-3, 91.8% age-4, 6.5% age-5, and 0.7% age-6 fish (Appendix C.4). Sex composition was 60.2% females.

The age composition of fall chum salmon samples collected from **Middle Mouth** test fishing project using **6.0" mesh size drift gillnet** was 0.5% age-3, 88.7% age-4, 10.5% age-5, and 0.3% age-6 fish (Appendix C.5). Sex composition was 55.5% females.

The age composition of fall chum salmon samples collected from **Mountain Village** test fishing project using **5 7/8" mesh size drift gillnet** was 0.4% age-3, 89.6% age-4, and 10.0% age-5 fish (Appendix C.6). Sex composition was 51.3% females.

The age composition of fall chum salmon samples collected from **Kaltag** test fishing project using **5 7/8" mesh size drift gillnet** was 73.3% age-4, 25.6% age-5, and 1.1% age-6 fish (Appendix C.7). Sex composition was 46.1% females.

### *Fall Chum Salmon Escapement Projects*

Escapement sampling projects for fall chum salmon collected vertebrae samples from beach seined fish in the Sheenjok River, and from carcasses in the Delta and Toklat Rivers. A total of 416 fish were sampled from these rivers in 2003 (Table 8, Appendices C.8 through C.10). The age-4 average percentage from these samples was 84.1%, similar to the fall chum test fish average (Table 8). The overall percentage of females was 52.8%.

The age composition of fall chum salmon samples collected from **Delta River** was 2.3% age-3, 87.2% age-4, 9.9% age-5, and 0.6% age-6 fish (Appendix C.8). Sex composition was 55.2% females.

The age composition of fall chum salmon samples collected from **Sheenjok River** was 1.2% age-3, 82.1% age-4 and 15.5% age-5, and 1.2% age-6 fish (Appendix C.9). Sex composition was 45.2% females.

The age composition of fall chum salmon samples collected from **Toklat River** was 5.0% age-3, 83.1% age-4, 11.3% age-5, and 0.6% age-6 fish (Appendix C.10). Sex composition was 58.1% females.

### *Fall Chum Salmon Mean Lengths*

Mean lengths by sex from individual projects in Appendices C.1 through C.10 are summarized in Table 12. The average mean lengths by sex and age group were: 580mm for age-0.2 males, 559mm for age-0.2 females, 609mm for age 0.3-males, 591mm for age-0.3 females, 619mm for age-0.4 males, 608mm for age-0.4 females, 641mm for age-0.5 males, and 617mm for age-0.5 females (Table 12). Males were larger at age than females for all age groups. Fall chum salmon mean lengths, by age and sex, were larger than mean lengths from summer chum salmon by an average of 27mm (Table 12).

## COHO SALMON

A total of 1,777 coho chum salmon were sampled for ASL data from the Yukon River in 2003 (Table 13). Coho salmon ASL summary tables for commercial, test, and escapement sampling projects are presented in Tables 13 and 14, and Appendices D.1 through D.7.

### *Coho Salmon Commercial Harvest*

In 2003, coho salmon were sampled from commercial harvests in Districts 1 and 4, by ADF&G staff (Table 13, Appendices D.1 and D.2). District 1 commercial harvest periods were restricted to 6.0-inch and larger mesh size openings and District 4 commercial harvest samples were from fishwheels. Age-4 fish dominated the harvest in both districts, however age-3 fish were in an atypically high percentage in the fishwheel samples.

The age composition of coho salmon samples collected from **District 1 6.0" and larger mesh size gillnet** commercial harvest was 24.2% age-3, 71.1% age-4, and 4.8% age-5 fish (Appendix D.1). Sex composition was 46.5% females.

The age composition of coho salmon samples collected from **District 4C (Ruby) fishwheel** commercial harvest was 43.9% age-3, 51.2% age-4, and 4.9 % age-5 fish (Appendix D.2). Sex composition was 29.3% females.

### *Coho Salmon Test Fishing Catch*

A total of 717 coho salmon were sampled from four test fishery projects in the lower and middle Yukon River (Table 13, Appendices D.3 through D.6). These projects were the same projects test fishing for fall chum salmon: Big Eddy, Middle Mouth, Mountain Village, and Kaltag. The average age composition from three of these projects (Kaltag was excluded because of small sample size) was 24.8% age-3, 66.6% age-4, and 8.6% age-5 fish; a similar age composition as the District 1 commercial harvest (Table 13). The average percentage of females from these three projects was also similar to the District 1 commercial harvest.

The age composition of coho salmon samples collected from **Big Eddy** test fishing project using **6.0" mesh size drift gillnet** was 26.0% age-3, 64.3% age-4, and 9.7% age-5 fish (Appendix D.3). Sex composition was 45.9% females.

The age composition of coho salmon samples collected from **Middle Mouth** test fishing project using **6.0" mesh size drift gillnet** was 21.0% age-3, 70.2% age-4, and 8.8% age-5 fish (Appendix D.4). Sex composition was 55.1% females.

The age composition of coho salmon samples collected from **Mountain Village** test fishing project using **5 7/8" mesh size drift gillnet 6.0 inch mesh drift gillnet** was 27.4% age-3, 65.2% age-4, and 7.4% age-5 fish (Appendix D.5). Sex composition was 48.3% females.

The age composition of coho salmon samples collected from **Kaltag** test fishing project using **5 7/8" mesh size drift gillnet** was 20.0% age-3, 70.0% age-4, and 10.0% age-5 fish (Appendix D.6). Sex composition was 35.0% females.

### *Coho Salmon Escapement Project*

Age composition of coho salmon samples collected from **Andreafsky River Weir** project was 14.6% age-3, 78.4% age-4, and 7.0% age-5 fish (Appendix D.7). Sex composition was 50.6% females.

### *Coho Salmon Mean Lengths*

Mean lengths by sex from individual projects in Appendices D.1 through D.7 are summarized in Table 14. The average mean lengths by sex and age group were: 581mm for age-1.1 males and females, 579mm for age-2.1 males, 585mm for age-2.1 females, 584mm for age-3.1 males, and 583mm for age-3.1 females (Table 14). Coho salmon do not appear to be consistently larger with increased age. Some projects show increased size at age, whereas others do not. Neither does length by sex show a consistent relationship among projects. Confounding the length by sex comparison is the difficulty in determining sex from fish without developed secondary sexual characteristics. Sexual dimorphism is most obvious in salmon as they near their spawning grounds. Therefore, sex determination from the District 1 commercial harvest and the lower river test fisheries is not as reliable as sex determination from an escapement project. Comparing mean lengths among projects, the average lengths from the East Fork Andreafsky weir samples were less than lengths from other projects. This finding may be affected by selectivity of 5 7/8-inch and larger gillnets selecting for larger fish in the commercial and test fisheries.

# TABLES

Table 1. Yukon River chinook salmon, percent by age and females, from commercial, subsistence, test, and escapement projects, 2003.

Project Type and Location	Sample Size	Age						Females
		3	4	5	6	7	8	
<b>Commercial</b>								
District 1 (8.0" ≥ mesh)	1,405	0.0	0.5	26.1	65.4	7.9	0.1	53.3
District 2 (8.0" ≥ mesh)	779	0.0	0.9	30.9	60.3	7.6	0.0	55.1
District 4C (fishwheel)	191	2.6	23.7	54.9	15.5	3.4	0.0	15.3
District 5BC (gillnet and fishwheel)	368	0.0	5.0	34.7	52.7	7.6	0.0	37.6
District 6 (gillnet and fishwheel)	464	1.0	11.4	41.2	40.0	6.3	0.0	41.0
<b>Subsistence</b>								
District 1 (5.5" mesh)	90	0.0	11.1	47.8	38.9	2.2	0.0	42.2
District 1 (8.5" mesh)	156	0.0	0.6	30.8	62.2	6.4	0.0	42.9
District 1 (mixed mesh)	84	0.0	2.4	42.9	46.4	8.3	0.0	50.0 <sup>a</sup>
District 3, Holy Cross (8.5" mesh)	59	0.0	3.4	15.3	74.6	6.8	0.0	57.6
District 4, Kaltag (8.5" mesh)	209	0.0	1.0	18.2	67.9	13.0	0.0	43.9
District 4, Ruby (fishwheel)	45	0.0	13.3	68.9	13.3	4.4	0.0	8.9
<b>Test<sup>b</sup></b>								
Big Eddy (7.5" set gillnet)	16	0.0	0.0	75.0	25.0	0.0	0.0	18.7
Big Eddy (8.25" drift gillnet)	203	0.0	0.5	30.5	62.1	6.9	0.0	52.2
Big Eddy (8.5" set gillnet)	602	0.0	0.5	26.2	68.3	5.0	0.0	50.7
Middle Mouth (8.25" drift gillnet)	103	0.0	0.0	27.2	64.1	8.7	0.0	54.4
Middle Mouth (8.5" set gillnet)	798	0.0	0.8	22.3	67.9	8.9	0.1	54.4
Pilot Station (2.75-8.5" mesh combined)	827	0.4	5.8	49.2	42.9	1.7	0.0	46.2
Russian Mission (8.5" mesh)	268	0.0	0.7	18.7	74.3	6.3	0.0	52.8 <sup>c</sup>
Dogfish (8.5" mesh)	729	0.0	0.3	23.3	67.5	8.8	0.1	51.7 <sup>d</sup>
Canada (fishwheel)	1,096	0.0	11.2	48.1	36.9	3.8	0.0	27.6
<b>Escapement</b>								
Andreafsky River, East Fork <sup>e</sup>	533	0.5	16.0	51.9	30.7	0.8	0.0	46.2
Anvik River <sup>f</sup>	428	0.2	8.9	54.7	33.2	3.0	0.0	37.6
Chena River <sup>f</sup>	370	0.0	5.1	46.5	41.6	6.8	0.0	44.9
Gisasa River <sup>g</sup>	472	0.4	5.5	67.8	25.4	1.0	0.0	35.3
Henshaw Creek <sup>g</sup>	304	1.4	19.4	45.7	31.8	1.7	0.0	38.4
Salcha River <sup>f</sup>	151	0.7	7.3	42.4	42.4	7.3	0.0	42.4
Tozitna River <sup>e</sup>	501	0.4	26.9	51.9	20.4	0.4	0.0	18.6
Average Escapement <sup>g</sup>		0.5	12.7	51.6	32.2	3.0	0.0	37.6
Total All Projects <sup>h</sup>	11,251							

<sup>a</sup> Sex data refers to 16 of 84 aged fish.

<sup>b</sup> Includes radio tagging projects at Russian Mission and Dogfish and Canadian fishwheels.

<sup>c</sup> Sex data refers to 233 of 268 aged fish.

<sup>d</sup> Sex data refers to 656 of 729 aged fish.

<sup>e</sup> Samples were collected from a weir trap. Total age and sex composition were weighted by escapement estimates in each sampling period.

<sup>f</sup> Samples were collected from carcasses.

<sup>g</sup> Sampling biases between weir and carcass collection methods is considered minimal.

<sup>h</sup> Sampling biases among the different gear types used influence age and sex composition, therefore only averages from similar gear types are presented.

Table 2. Yukon River Districts 1 through 6 chinook salmon commercial harvest, by number and percent, age and sex composition, 2003.

Location	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
District 1 <sup>a</sup>	1,405	Males	7	0.0	86	0.4	3,989	17.1	0	0.0	6,155	26.4	0	0.0	665	2.8	0	0.0	0	0.0	0	0.0	10,901	46.7
		Females	0	0.0	20	0.1	2,106	9.0	0	0.0	9,093	39.0	0	0.0	1,179	5.1	0	0.0	29	0.1	0	0.0	12,426	53.3
		Total	7	0.0	106	0.5	6,095	26.1	0	0.0	15,249	65.4	0	0.0	1,844	7.9	0	0.0	29	0.1	0	0.0	23,327	100.0
District 2 <sup>a</sup>	779	Males	0	0.0	124	0.9	2,652	18.6	0	0.0	3,186	22.3	0	0.0	388	2.7	0	0.0	0	0.0	0	0.0	6,349	44.5
		Females	0	0.0	0	0.0	1,761	12.3	0	0.0	5,420	38.0	0	0.0	691	4.8	0	0.0	0	0.0	0	0.0	7,871	55.1
		Total	0	0.0	124	0.9	4,413	30.9	0	0.0	8,605	60.3	0	0.0	1,079	7.6	0	0.0	0	0.0	0	0.0	14,281	100.0
District 4 <sup>b</sup>	191	Males	15	2.6	127	22.6	287	51.0	0	0.0	35	6.3	0	0.0	13	2.3	0	0.0	0	0.0	0	0.0	476	84.7
		Females	0	0.0	6	1.1	22	3.9	0	0.0	52	9.2	0	0.0	6	1.1	0	0.0	0	0.0	0	0.0	86	15.3
		Total	15	2.6	133	23.7	309	54.9	0	0.0	87	15.5	0	0.0	19	3.4	0	0.0	0	0.0	0	0.0	562	100.0
District 5 <sup>c</sup>	368	Males	0	0.0	49	4.3	310	27.4	0	0.0	317	28.0	0	0.0	24	2.2	6	0.6	0	0.0	0	0.0	708	62.4
		Females	0	0.0	7	0.7	83	7.3	0	0.0	279	24.5	3	0.2	53	4.6	3	0.2	0	0.0	0	0.0	426	37.6
		Total	0	0.0	56	5.0	393	34.7	0	0.0	596	52.5	3	0.2	77	6.8	9	0.8	0	0.0	0	0.0	1,134	100.0
District 6 <sup>c</sup>	464	Males	18	1.0	207	11.4	641	35.3	0	0.0	178	9.8	4	0.2	20	1.1	0	0.0	0	0.0	0	0.0	1,069	59.0
		Females	0	0.0	0	0.0	107	5.9	0	0.0	544	30.0	0	0.0	88	4.9	5	0.3	0	0.0	0	0.0	744	41.0
		Total	18	1.0	207	11.4	748	41.2	0	0.0	722	39.8	4	0.2	108	6.0	5	0.3	0	0.0	0	0.0	1,813	100.0
Total <sup>d</sup> All Districts	3,207	Males	40	0.0	593	0.4	7,879	17.1	0	0.0	9,871	26.4	4	0.0	1,110	2.8	6	0.0	0	0.0	0	0.0	19,503	46.7
		Females	0	0.0	33	0.1	4,079	9.0	0	0.0	15,388	39.0	3	0.0	2,017	5.1	8	0.0	29	0.1	0	0.0	21,553	53.3
		Total	40	0.0	626	0.5	11,957	26.1	0	0.0	25,259	65.4	7	0.0	3,127	7.9	14	0.0	29	0.1	0	0.0	41,117	100.0

<sup>a</sup> Fishery was restricted to 8.0" and larger mesh size gillnets.

<sup>b</sup> Samples were collected from fishwheels.

<sup>c</sup> Samples were collected from mixed gear including gillnets and fishwheels.

<sup>d</sup> Includes fish sold from test fish.

Table 3. Yukon River District 1 chinook salmon, percent by age and females, from unrestricted mesh size commercial harvests, 1985-2003. <sup>a</sup>

Year	Sample Size	Age						Females
		3	4	5	6	7	8	
1985	576	0.0	1.4	6.6	80.3	11.4	0.4	57.8
1986	1,279	0.0	1.1	26.5	45.8	26.5	0.2	47.9
1987	1,436	0.0	1.2	5.6	79.9	12.8	0.6	55.3
1988	1,022	0.0	3.2	18.6	41.5	35.2	1.5	46.2
1989	982	0.0	0.8	27.0	59.1	11.8	1.3	48.6
1990	1,537	0.0	7.2	21.5	62.8	8.4	0.1	50.3
1991	1,532	0.0	1.3	39.4	50.1	9.0	0.3	47.0
1992	1,354	0.0	2.3	12.0	81.5	4.3	0.0	55.5
1993	1,673	0.0	4.5	21.2	64.9	9.4	0.0	49.2
1994	1,392	0.0	1.7	44.3	49.2	4.8	0.0	52.4
1995	1,884	0.0	3.0	11.3	81.4	4.3	0.1	50.1
1996	2,093	0.1	1.1	36.4	38.2	24.1	0.2	52.3
1997	1,881	0.0	4.0	10.9	83.3	1.7	0.0	47.2
1998	1,311	0.0	3.6	53.9	34.9	7.6	0.0	41.8
1999	1,857	0.0	2.1	14.8	81.4	1.6	0.0	43.6
2000	721	0.0	1.2	27.9	63.7	7.3	0.0	57.6
2001 <sup>b</sup>	0	-	-	-	-	-	-	-
2002 <sup>c</sup>	1,133	0.0	3.8	20.2	63.1	13.0	0.0	54.9
2003 <sup>c</sup>	1,405	0.0	0.5	26.1	65.4	7.9	0.1	53.3
10-Year Average (1993-2002)		0.0	2.8	26.8	62.2	8.2	0.0	49.9

<sup>a</sup> Unrestricted mesh size gillnet commercial harvest periods had no mesh size restrictions.

Restricted mesh size gillnet commercial harvest periods prior to 2000 were restricted to a smaller mesh size.

<sup>b</sup> No commercial fishing occurred in 2001.

<sup>c</sup> Restricted to gillnets with 8.0" and larger mesh size.

Table 4. Yukon River District 1 chinook salmon commercial harvest, by brood year and age group, from unrestricted mesh size gillnets, 1985-2003. <sup>a</sup>

Year	Brood Year and (Age Group)										Total
	2000	1999	1998		1997		1996		1995		
	(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	
1985	0	700	3,341	0	62,171	152	7,984	1,515	0	244	76,106
1986	0	429	11,374	0	18,843	258	11,074	858	0	86	42,922
1987	0	725	3,431	32	49,282	348	5,506	2,470	0	353	62,147
1988	0	1,049	6,038	65	13,551	36	11,015	545	32	461	32,792
1989	0	257	8,689	0	18,986	0	3,154	644	97	354	32,180
1990	0	3,049	8,878	162	26,289	130	2,480	1,049	0	56	42,092
1991	0	667	20,533	0	25,802	273	4,202	465	59	74	52,074
1992	0	1,251	6,523	0	44,359	95	2,116	225	0	0	54,569
1993	0	2,118	9,961	0	30,350	198	3,948	501	0	8	47,084
1994	0	986	26,317	0	31,123	62	2,897	185	0	0	61,633
1995	0	2,245	8,904	0	60,460	75	2,918	150	75	0	74,827
1996	0	680	20,956	0	21,181	113	13,589	2	113	1	56,637
1997	0	2,775	6,874	0	52,341	0	1,009	63	0	0	63,062
1998	0	916	13,886	0	8,513	21	1,934	39	0	20	25,327
1999	0	787	5,513	0	32,206	29	472	139	0	0	37,145
2000	0	54	1,320	0	3,014	0	324	22	0	0	4,735
2001 <sup>b</sup>	-	-	-	-	-	-	-	-	-	-	-
2002 <sup>c</sup>	0	420	2,244	0	7,040	0	1,456	0	0	0	11,159
2003 <sup>c</sup>	7	106	6,095	0	15,249	0	1,844	0	29	0	23,327
10-yr Average (1993-2002)	0	1,220	10,664	0	27,359	55	3,172	122	21	3	42,401

<sup>a</sup> Unrestricted mesh size gillnet commercial harvest periods had no mesh size restrictions.

Restricted mesh size gillnet commercial harvest periods prior to 2000 were restricted to a smaller mesh size.

<sup>b</sup> No commercial fishing occurred in 2001.

<sup>c</sup> Restricted to gillnets with 8.0" and larger mesh size.

Table 5. Yukon River chinook salmon, percent by age and females, from the combined Big Eddy and Middle Mouth 8.5-inch set gillnet test fish catches, 1985-2003.

Year	Sample Size	Number of Days <sup>a</sup>	Age					Females
			4	5	6	7	8	
1985	309	na	3.9	8.4	79.3	8.1	0.3	53.7
1986	533	na	0.9	22.7	52.9	23.1	0.2	46.3
1987	465	na	0.9	3.0	78.5	17.0	0.4	62.8
1988	262	30	2.3	15.3	43.9	37.8	0.8	56.1
1989	381	29	0.8	17.8	67.2	13.9	0.5	53.0
1990	227	23	3.5	11.0	76.7	8.8	0.0	56.4
1991	356	27	1.4	42.1	48.9	7.0	0.6	49.2
1992	359	19	1.1	10.6	82.7	5.0	0.6	56.5
1993	472	25	0.8	25.8	63.8	9.3	0.2	50.8
1994	653	41	1.4	41.3	51.8	5.5	0.0	47.3
1995	445	19	0.9	11.2	81.6	6.3	0.0	50.8
1996	355	13	1.1	61.4	21.4	16.3	0.0	53.0
1997	302	12	1.7	9.6	86.4	2.6	0.0	51.3
1998	928	39	1.3	43.4	45.3	9.9	0.1	50.2
1999	942	35	0.7	9.1	87.0	3.1	0.0	61.4
2000	923	42	0.7	19.2	71.1	9.1	0.0	53.4
2001	1,018	37	0.5	11.0	80.6	8.0	0.0	56.9
2002	1,053	43	2.5	20.5	64.9	12.1	0.0	52.2
2003	1,371	47	0.6	24.1	68.0	7.3	0.1	52.5
Average <sup>b</sup> (1994, 1998-2002)	920	40	1.2	24.1	66.8	7.9	0.0	53.6

<sup>a</sup> The Big Eddy and Middle Mouth 8.5 " set gillnet test fisheries were conducted from the end of May through July 15. Before 1998 these test fisheries may have been discontinuous within the season or may not have been conducted throughout the season. For example, in 1997 these fisheries were operated from 5/29-6/9 (12 days) and 71% if the samples were collected on the last two days. Different start dates were likely influenced by river breakup dates. For example, in 1985 the test fisheries began on 6/16 and in 2003 began on 5/27. Because age and sex composition of chinook salmon are known to change through any given season, inter-annual comparisons among years without similar sampling dates may lead to erroneous conclusions.

<sup>b</sup> The years used for the average only include years when the samples were collected throughout the season and include samples from a minimum of 35 days each season. These years were 1994, and 1998-2002. The years excluded from the average may represent misleading age and sex composition because test fishing sampling dates are not similar.

Table 6. Yukon River chinook salmon, percent by age and females, from selected escapement projects, 1984-2003.

Project	Year	Age						Females
		3	4	5	6	7	8	
East Fork Andreafsky River	1984	0.2	12.6	49.8	35.7	1.7	0.0	26.7
	1985	0.0	39.6	12.8	43.6	4.0	0.0	33.2
	1986	0.0	2.2	69.8	21.8	6.2	0.0	23.3
	1987	0.3	4.7	8.9	83.7	2.4	0.0	56.1
	1988	0.2	27.8	29.5	26.6	15.6	0.0	38.7
	1989	0.0	5.3	71.8	21.2	1.7	0.0	13.6
	1990	0.6	31.8	28.7	37.9	0.9	0.0	41.6
	1991	0.0	10.3	56.9	30.5	2.3	0.0	33.9
	1992	0.0	23.1	46.1	25.0	3.8	0.0	21.2
	1993	0.4	16.9	38.7	41.8	2.3	0.0	29.9
	1994	0.0	8.0	53.0	34.5	4.3	0.2	35.5
	1995	0.0	35.0	15.7	47.5	1.7	0.0	43.7
	1996	1.2	6.6	74.1	13.9	4.2	0.0	41.9
	1997	0.0	52.7	15.6	31.7	0.0	0.0	36.8
1998	0.0	16.8	71.4	11.1	0.8	0.0	29.0	
1999	0.3	34.5	32.2	32.5	0.6	0.0	28.6	
2000	0.0	12.6	49.1	38.3	0.0	0.0	54.3	
2001	0.0	14.5	18.5	64.5	2.4	0.0	63.7	
2002	0.0	30.5	48.2	20.0	1.4	0.0	21.1	
2003	0.5	16.0	51.9	30.7	0.8	0.0	46.2	
10-Year Average (1993-2002)		0.2	22.8	41.7	33.6	1.8	0.0	38.5
Anvik River	1984	0.0	11.9	50.0	35.9	2.2	0.0	41.3
	1985	0.0	30.3	39.4	30.3	0.0	0.0	24.2
	1986	0.0	0.7	50.0	38.0	11.3	0.0	67.2
	1987	0.0	9.5	13.1	73.9	3.7	0.0	58.7
	1988	0.0	30.5	38.2	27.2	4.1	0.0	29.7
	1989	0.3	4.2	49.1	43.5	2.9	0.0	40.7
	1990	0.3	26.3	26.0	43.8	3.8	0.0	37.0
	1991	0.0	10.3	55.0	31.7	2.9	0.0	41.0
	1992	0.0	9.5	38.1	50.8	1.6	0.0	41.3
	1993	0.0	13.8	38.5	45.6	2.1	0.0	42.1
	1994	0.0	3.0	51.9	39.8	5.4	0.0	42.0
	1995	0.0	9.5	38.1	50.8	1.6	0.0	41.3
	1996	0.0	9.9	55.4	24.4	9.9	0.4	35.1
	1997	0.0	25.0	30.6	44.1	0.3	0.0	36.8
1998	0.3	14.7	59.9	23.9	1.2	0.0	32.7	
1999	0.0	9.3	42.5	48.1	0.0	0.0	37.9	
2000	0.0	4.9	41.9	52.7	0.5	0.0	40.9	
2001	0.0	11.1	30.1	53.0	5.7	0.0	38.3	
2002	0.0	19.5	43.1	34.2	3.2	0.0	28.8	
2003	0.2	8.9	54.7	33.2	3.0	0.0	37.6	
10-Year Average (1993-2002)		0.0	13.4	41.6	41.7	3.3	0.0	39.8
Chena River	1984	0.0	11.6	47.7	30.8	9.8	0.0	41.9
	1985	0.0	12.1	21.7	59.2	7.0	0.0	52.5
	1986	0.1	9.3	51.2	29.9	9.3	0.1	25.4
	1987	0.0	2.9	13.1	75.6	8.4	0.0	58.0
	1988	0.6	10.5	17.5	46.4	24.6	0.4	60.9
	1989	0.3	4.2	30.2	54.9	10.4	0.0	64.9
	1990	0.0	23.8	25.7	46.7	3.8	0.0	46.2
	1991	0.0	8.3	55.8	28.5	7.4	0.0	31.5
	1992	1.9	40.7	16.4	40.5	0.4	0.0	37.7
	1993	0.5	29.4	41.2	27.8	1.1	0.0	16.6
	1994	0.0	2.9	43.6	51.2	2.3	0.0	45.1
	1995	0.0	4.4	20.9	70.9	3.8	0.0	66.0
	1996	2.1	6.2	44.2	23.5	23.9	0.0	44.0
	1997	0.3	37.2	13.4	48.0	1.1	0.0	39.6
1998	0.0	4.0	72.4	18.4	4.8	0.0	41.2	
1999	0.9	7.9	25.2	65.4	0.6	0.0	58.8	
2000	0.0	20.1	35.6	35.6	8.7	0.0	34.9	
2001	0.6	9.6	33.6	51.2	5.0	0.0	44.0	
2002	0.1	29.0	29.8	38.5	2.7	0.0	31.7	
2003	0.0	5.1	46.5	41.6	6.8	0.0	44.9	
10-Year Average (1993-2002)		0.4	14.4	33.6	44.4	7.1	0.0	44.3
Salcha River	1984	0.0	8.9	38.6	40.8	11.4	0.2	42.1
	1985	0.0	12.3	17.6	64.8	5.3	0.0	48.5
	1986	0.2	11.8	43.7	29.5	14.8	0.0	35.8
	1987	0.2	6.0	12.6	73.5	7.8	0.0	62.8
	1988	0.4	20.3	22.5	42.1	14.7	0.0	39.6
	1989	0.5	4.1	28.9	57.8	8.8	0.0	62.2
	1990	0.2	17.6	24.9	48.9	8.3	0.0	48.9
	1991	0.2	8.2	44.3	41.4	5.8	0.2	47.2
	1992	1.2	30.8	28.6	38.2	1.1	0.0	34.4
	1993	0.9	28.0	39.1	31.1	0.9	0.0	27.6
	1994	0.6	2.7	39.1	52.9	4.8	0.0	44.5
	1995	0.0	13.6	20.6	62.8	3.1	0.0	56.0
	1996	2.7	6.2	38.4	28.6	24.1	0.0	50.8
	1997	0.0	14.4	14.4	69.4	1.7	0.0	50.0
1998	2.4	4.9	72.4	17.9	2.4	0.0	30.0	
1999	0.0	9.1	24.1	66.4	0.3	0.0	54.7	
2000	0.0	22.0	48.8	24.4	4.9	0.0	43.9	
2001	0.5	10.4	33.9	52.1	3.1	0.0	37.5	
2002	0.0	36.2	13.8	38.7	11.3	0.0	34.8	
2003	0.7	7.3	42.4	42.4	7.3	0.0	42.4	
10-Year Average (1993-2002)		0.7	14.8	34.5	44.4	5.7	0.0	43.0

Table 7. Yukon River chinook salmon mean lengths (mm) by sex, project, brood year, and age group, 2003.

Sex	Project Location	Project Type <sup>a</sup>	Brood Year and (Age Group)									
			2000 (1.1)	1999 (1.2)	1998 (1.3)	(2.2)	1997 (1.4)	(2.3)	1996 (1.5)	(2.4)	1995 (1.6)	(2.5)
<b>Male</b>												
	District 1	Com 8+	400	527	765		871		939			
	District 2	Com 8+		579	753		869		925			
	District 4	Com FW	397	518	682		837		1,048			
	District 5	Com FW GN		562	727		859		939	918		
	District 6	Com FW GN	383	525	719		850	650	965			
	District 1	Sub 5.5		544	715		840		890			
	District 1	Sub 8.5		606	762		856		949			
	District 1	Sub mix			642		929		953			
	District 3	Sub		565	721		847					
	District 4	Sub GN		605	750		893		940	875		
	District 4	Sub FW		489	711		780		890			
	Big Eddy	TF 7.5			741		800					
	Big Eddy	TF 8.25		595	755		822		883			
	Big Eddy	TF 8.5		565	774		855		945	925		
	Middle Mouth	TF 8.25			772		841		948			
	Middle Mouth	TF 8.5		501	777		866		928			
	Russian Mission	TF 8.5		535	752		880		946			
	Dogfish	TF 8.5		560	735		881		942		995	
	Pilot Station	TF	398	530	719		834		940			
	Canada	TF FW		572	763		912	780	1,018			
	E.F. Andraefsky	Esc	383	533	710		824					
	Anvik	Esc	375	535	721		833		875			
	Chena	Esc		555	748		865		927			
	Gisasa	Esc	305	521	723		804					
	Henshaw	Esc	376	508	688		826					
	Salcha	Esc	450	538	752		841		925			
	Tozitna	Esc	373	518	704		791		805			
Male	All Projects	Average	384	545	733		848	715	933	906	995	
<b>Female</b>												
	District 1	Com 8+		620	785		877		935		1,035	
	District 2	Com 8+			769		864		926			
	District 4	Com FW		580	669		756		780			
	District 5	Com FW GN		598	742		885	755	934	915		
	District 6	Com FW GN			799		874		922	910		
	District 1	Sub 5.5		529	731		878		995			
	District 1	Sub 8.5			767		863		853			
	District 1	Sub mix			764		895					
	District 3	Sub			793		879		918			
	District 4	Sub GN		565	774		867		932	915		
	District 4	Sub FW			735		848					
	Big Eddy	TF 7.5					883					
	Big Eddy	TF 8.25			791		871		889			
	Big Eddy	TF 8.5			826		879		934			
	Middle Mouth	TF 8.25			789		865		874			
	Middle Mouth	TF 8.5			793		878		919			
	Russian Mission	TF 8.5			770		876		904		945	
	Dogfish	TF 8.5			765		864		928			
	Pilot Station	TF			751		860		910			
	Canada	TF FW		561	801		923		975	885		
	E.F. Andraefsky	Esc		514	731		841		860			
	Anvik	Esc		620	745		831		856			
	Chena	Esc		500	803		872		933			
	Gisasa	Esc			744		867		946			
	Henshaw	Esc			761		851		892			
	Salcha	Esc			790		882		886			
	Tozitna	Esc			779		860		865			
Female	All Projects	Average		565	768		866	755	907	906	1,035	945

<sup>a</sup> Project types are: Com is commercial, Sub is subsistence, TF is test fish, Esc is escapement, GN is gillnet, FW is fishwheel; and number refers to mesh size.

Table 8. Yukon River chum salmon, percent by age and females, from commercial, subsistence, test, and escapement projects, 2003.

Project Type and Location	Sample Size	Age					Females
		3	4	5	6	7	
<b>Commercial - Summer Chum</b>							
District 1 (8.0" ≥ mesh)	289	0.2	64.5	32.0	3.3	0.0	39.6
District 2 (8.0" ≥ mesh)	313	0.2	59.4	37.5	2.9	0.0	34.2
District 6 (fishwheel)	296	0.0	70.2	26.5	3.3	0.0	56.7
<b>Commercial - Fall Chum</b>							
District 1 (6.0" ≥ mesh)	513	0.6	93.5	5.5	0.4	0.0	53.2
District 4C (fishwheel)	256	0.0	76.7	22.9	0.4	0.0	43.7
<b>Subsistence - Summer Chum</b>							
District 1 (5.5" mesh)	246	0.4	48.8	44.7	6.1	0.0	32.6 <sup>a</sup>
District 1 (8.5" mesh)	6	0.0	0.0	83.3	16.7	0.0	33.3 <sup>b</sup>
District 1 (mixed mesh)	4	0.0	50.0	50.0	0.0	0.0	<sup>b</sup>
District 4C (6.5" mesh)	33	0.0	66.7	30.3	3.0	0.0	<sup>c</sup>
<b>Subsistence - Fall Chum</b>							
District 5B (fishwheel)	187	0.0	77.5	21.4	1.1	0.0	43.3
<b>Test - Summer Chum</b>							
Big Eddy (5.5" drift gillnet)	566	0.2	76.7	21.2	1.9	0.0	53.7
Middle Mouth (5.5" drift gillnet)	256	0.8	83.2	13.3	2.7	0.0	55.9
<b>Test - Fall Chum</b>							
Big Eddy (6.0" drift gillnet)	294	1.0	91.8	6.5	0.7	0.0	60.2
Middle Mouth (6.0" drift gillnet)	391	0.5	88.7	10.5	0.3	0.0	55.5
Mountain Village (5 7/8" drift gillnet)	269	0.4	89.6	10.0	0.0	0.0	51.3
Kaltag (5 7/8" drift gillnet)	371	0.0	73.3	25.6	1.1	0.0	46.1
Average Test Fall Chum		0.5	85.9	13.2	0.5	0.0	53.3
<b>Escapement - Summer Chum</b>							
Andreafsky River, East Fork <sup>d,e</sup>	1,127	0.4	73.4	25.7	0.5	0.0	44.8
Anvik River <sup>f</sup>	584	1.4	72.9	24.5	1.3	0.0	55.3
Clear Creek <sup>d</sup>	679	0.3	88.7	8.9	2.2	0.0	40.5
Gisasa River <sup>d</sup>	703	0.6	70.1	27.9	1.4	0.0	45.1
Henshaw Creek <sup>d</sup>	696	1.1	85.9	8.5	4.5	0.0	51.9
Nulato River <sup>d</sup>	377	1.6	79.8	17.5	1.1	0.0	42.2
Tozitna River <sup>d</sup>	555	1.1	87.0	10.5	1.3	0.0	32.9
Average Escapement Summer Chum		0.9	79.7	17.6	1.3	0.0	44.7
<b>Escapement - Fall Chum</b>							
Delta River <sup>d</sup>	172	2.3	87.2	9.9	0.6	0.0	55.2
Sheenjok River <sup>h</sup>	84	1.2	82.1	15.5	1.2	0.0	45.2
Toklat River <sup>d</sup>	160	5.0	83.1	11.3	0.6	0.0	58.1
Average Escapement Fall Chum		2.8	84.1	12.2	0.8	0.0	52.8
Total Summer Chum	6,730						
Total Fall Chum	2,697						

<sup>a</sup> Sex data refers to 218 of 246 aged fish.

<sup>b</sup> Sex data not available.

<sup>c</sup> Sampling was conducted by youth in a pilot subsistence sampling program. Incorrect sexing is suspected.

<sup>d</sup> Samples were collected from a weir trap. Total age and sex composition were weighted by escapement estimates in each sampling period.

<sup>e</sup> East Fork Andreafsky River weir operational period was 6/21 through 9/15. Fall chum salmon are included.

<sup>f</sup> Samples were collected with a beach seine. Total age and sex composition were weighted by sonar escapement estimates in each sampling period.

<sup>g</sup> Samples were collected from carcasses, age from vertebrae.

<sup>h</sup> Samples were collected with a beach seine, age from vertebrae.

Table 9. Yukon River chum salmon commercial harvest, by number and percent, age and sex composition, 2003.

Sample Location	Sample Size		Age										Total	
			3		4		5		6		7		No.	Per.
<b>Summer Chum Salmon</b>														
District 1 <sup>a</sup>	289	Males	0	0.0	1,259	34.8	858	23.7	68	1.9	0	0.0	2,183	60.4
		Females	9	0.2	1,073	29.7	299	8.3	51	1.4	0	0.0	1,433	39.6
		Total	9	0.2	2,332	64.5	1,157	32.0	119	3.3	0	0.0	3,616	100.0
District 2 <sup>a</sup>	313	Males	5	0.2	976	36.6	778	29.2	56	2.1	0	0.0	1,754	65.8
		Females	0	0.0	604	22.7	224	8.4	23	0.9	0	0.0	911	34.2
		Total	5	0.2	1,580	59.3	1,002	37.6	78	2.9	0	0.0	2,665	100.0
District 6 <sup>b</sup>	296	Males	0	0.0	1,292	29.0	571	12.8	69	1.6	0	0.0	1,932	43.3
		Females	0	0.0	1,840	41.2	609	13.7	79	1.8	0	0.0	2,529	56.7
		Total	0	0.0	3,132	70.2	1,180	26.5	148	3.3	0	0.0	4,461	100.0
Summer Chum Salmon All Districts		Males	5	0.0	3,527	32.8	2,206	20.5	193	1.8	0	0.0	5,869	54.6
		Females	9	0.1	3,517	32.7	1,132	10.5	153	1.4	0	0.0	4,873	45.4
		Total	14	0.1	7,045	65.6	3,339	31.1	346	3.2	0	0.0	10,742	100.0
<b>Fall Chum Salmon</b>														
District 1 <sup>c</sup>	513	Males	17	0.3	2,277	40.3	162	2.9	0	0.0	0	0.0	2,455	46.8
		Females	18	0.3	3,008	53.2	148	2.6	20	0.4	0	0.0	3,198	53.2
		Total	35	0.6	5,286	93.5	310	5.5	20	0.4	0	0.0	5,653	100.0
District 4 <sup>b</sup>	256	Males	0	0.0	567	43.1	170	12.9	3	0.2	0	0.0	740	56.3
		Females	0	0.0	441	33.6	131	10.0	3	0.2	0	0.0	575	43.7
		Total	0	0.0	1,008	76.7	301	22.9	6	0.4	0	0.0	1,315	100.0
Fall Chum Salmon All Districts		Males	17	0.2	2,844	40.8	332	4.8	3	0.0	0	0.0	3,195	45.9
		Females	18	0.3	3,449	49.5	279	4.0	23	0.3	0	0.0	3,773	54.1
		Total	35	0.5	6,294	90.3	611	8.8	26	0.4	0	0.0	6,968	100.0

<sup>a</sup> Restricted commercial openings to gillnet with 8.0" and larger mesh size.

<sup>b</sup> Commercial harvest was from fishwheels.

<sup>c</sup> Restricted commercial openings to gillnet with 6.0" and larger mesh size.

Table 10. Yukon River summer chum salmon, percent by age, from combined commercial and subsistence samples, 1982-2003.<sup>a</sup>

Year	Sample Size	Age				
		3	4	5	6	7
1982	3,419	5.3	0.0	88.6	6.1	0.0
1983	4,110	1.0	53.8	44.4	0.8	0.0
1984	2,722	2.0	73.7	23.9	0.5	0.0
1985	2,472	1.4	68.6	29.2	0.8	0.0
1986	3,473	0.1	29.1	69.8	1.0	0.0
1987	2,184	0.4	60.8	31.8	6.9	0.0
1988	5,112	0.0	70.1	29.1	0.8	0.0
1989	3,778	0.4	38.7	60.5	0.4	0.0
1990	3,155	0.4	38.3	58.9	2.4	0.0
1991	5,015	1.3	48.0	49.8	0.9	0.0
1992	4,303	0.2	31.0	65.0	3.8	0.0
1993	2,011	0.4	47.5	47.7	4.5	0.0
1994	3,820	0.1	51.3	46.6	2.0	0.0
1995	4,740	0.6	51.9	45.3	2.1	0.0
1996	3,863	0.4	46.2	48.8	4.5	0.1
1997	3,195	0.2	29.0	67.2	3.6	0.0
1998	1,147	0.3	62.8	34.2	2.7	0.0
1999	1,627	0.2	40.7	58.2	0.9	0.0
2000	442	0.0	44.2	53.4	2.4	0.0
2001 <sup>b</sup>	586	0.0	15.4	81.9	2.7	0.0
2002	1,103	0.1	52.9	44.4	2.6	0.0
2003	1,187	0.2	61.0	35.0	3.8	0.0
10-Year Average (1993-2002)	2,253	0.2	44.2	52.8	2.8	0.0

<sup>a</sup> Age composition estimates are from samples collected from each gear type, by district and fishery, or from adjacent fisheries and/or test fisheries of the same gear type. Fisheries for which no appropriate samples were available were not apportioned to age.

<sup>b</sup> No commercial harvest occurred in 2001.

Table 11. Yukon River summer chum salmon, percent by age and females, from the 5.5-inch mesh gillnet harvest, Big Eddy and Middle Mouth test fisheries, 1985-2003.

Year	Sample Size	Number of Days <sup>a</sup>	Age				Females
			3	4	5	6	
1985	954	15	0.0	62.4	37.1	0.5	51.6
1986	1,125	25	0.1	26.2	73.2	0.4	55.1
1987	0	-	-	-	-	-	-
1988	804	30	0.1	50.5	48.4	1.0	59.5
1989	1,074	29	0.0	39.9	59.5	0.6	62.2
1990	1,328	42	0.8	46.1	50.1	3.1	66.0
1991	1,495	41	0.0	45.4	53.6	0.9	55.2
1992	1,089	32	0.0	22.0	71.8	6.2	61.4
1993	1,757	46	0.1	38.2	57.4	4.4	50.4
1994	2,385	49	0.0	35.6	61.9	2.6	62.5
1995	1,839	38	0.5	40.2	53.2	6.1	56.2
1996	1,936	47	0.1	42.3	52.4	5.2	63.7
1997	1,947	46	0.0	24.1	71.5	4.4	61.0
1998	1,649	47	0.0	62.5	33.5	4.0	52.5
1999	1,227	33	1.1	48.1	47.4	3.4	50.0
2000	950	42	0.2	52.5	45.8	1.5	63.8
2001	724	37	0.0	25.0	73.8	1.2	64.6
2002	792	47	0.5	57.3	40.4	1.8	63.3
2003	822	49	0.4	78.7	18.7	2.2	54.4
Average <sup>b</sup>	1,527	44	0.2	42.6	54.0	3.2	59.9

<sup>a</sup> The Big Eddy and Middle Mouth 5.5 " drift gillnet test fisheries were conducted from the end of May through July 15. Some years these test fisheries may have been discontinuous within the season or may not have been conducted throughout the season. Different start dates were likely influenced by river breakup dates. For example, in 1992 the test fisheries began on 6/14 and in 2003 began on 5/28. Because age and sex composition of chum salmon are known to change through any given season, inter-annual comparisons among years without similar sampling dates may lead to erroneous conclusions.

<sup>b</sup> The years used for the average only include years when the samples were collected throughout the season and include samples from a minimum of 37 days each season. Eleven years are included in the average. These years were 1990-1991, 1993-1998, and 2000-2002. The years excluded from the average may represent misleading age and sex composition because test fishing sampling dates are not similar.

Table 12. Yukon River chum salmon mean lengths (mm) by sex, project, and age, 2003.

Sex	Project Location	Project Type <sup>a</sup>	Age			
			3	4	5	6
<b>Male Summer Chum</b>						
	District 1	Com 8+		592	620	629
	District 2	Com 8+	570	591	622	652
	District 6	Com FW	570	591	622	652
	District 1	Sub 5.5	580	591	616	612
	Big Eddy	TF 5.5	560	569	591	624
	Middle Mouth	TF 5.5		573	604	637
	E.F. Andreafsky	Esc	504	559	596	583
	Anvik	Esc	525	567	606	627
	Clear	Esc		554	595	605
	Gisasa	Esc	511	579	610	621
	Henshaw	Esc	563	563	593	637
	Nulato	Esc		568	608	648
	Tozitna	Esc	562	575	617	643
	Male Summer Chum Average		549	575	608	628
<b>Female Summer Chum</b>						
	District 1	Com 8+	570	565	581	595
	District 2	Com 8+		561	586	640
	District 6	Com FW		569	591	613
	District 1	Sub 5.5		584	592	596
	Big Eddy	TF 5.5		558	576	594
	Middle Mouth	TF 5.5	553	562	581	583
	E.F. Andreafsky	Esc	482	522	550	555
	Anvik	Esc	522	535	564	602
	Clear	Esc	498	532	577	580
	Gisasa	Esc	533	550	582	576
	Henshaw	Esc	523	540	577	582
	Nulato	Esc	521	539	570	550
	Tozitna	Esc	543	547	593	595
	Female Summer Chum Average		527	551	578	589
<b>Male Fall Chum</b>						
	District 1	Com 6+	590	593	605	
	District 4	Com FW		605	612	595
	District 5	Sub FW		611	647	675
	Big Eddy	TF 6.0	598	607	632	
	Middle Mouth	TF 6.0	560	609	618	640
	Mt. Village	TF 5 7/8		614	611	
	Kaltag	TF 5 7/8		617	624	660
	Delta	Esc		612	607	620
	Sheenjek	Esc		623	643	710
	Toklat	Esc	570	595	589	585
	Male Fall Chum Average		580	609	619	641
<b>Female Fall Chum</b>						
	District 1	Com 6+	545	588	605	658
	District 4	Com FW		579	607	615
	District 5	Sub FW		588	618	
	Big Eddy	TF 6.0	555	595	615	630
	Middle Mouth	TF 6.0	565	597	605	
	Mt. Village	TF 5 7/8		614	611	
	Kaltag	TF 5 7/8		605	606	565
	Delta	Esc	556	581	591	
	Sheenjek	Esc	580	600	638	
	Toklat	Esc	552	563	581	
	Female Fall Chum Average		559	591	608	617

<sup>a</sup> Project types are: Com is commercial, Sub is subsistence, TF is test fish, Esc is escapement, GN is gillnet, FW is fishwheel; and number refers to mesh size.

Table 13. Yukon River coho salmon, percent by age and females, from commercial, test, and escapement projects, 2003.

Project Type and Location	Sample Size	Age			Females
		3	4	5	
<b>Commercial</b>					
District 1 ( 6.0" ≥ mesh )	416	24.2	71.1	4.8	50.6
District 4C (fishwheel)	41	43.9	51.2	4.9	29.3
<b>Test</b>					
Big Eddy ( 6.0" drift gillnet )	196	26.0	64.3	9.7	45.9
Middle Mouth ( 6.0" drift gillnet )	205	21.0	70.2	8.8	55.1
Mountain Village (5 7/8" drift gillnet)	296	27.4	65.2	7.4	48.3
Kaltag (5 7/8" drift gillnet)	20	20.0	70.0	10.0	35.0
Average Test <sup>a</sup>		24.8	66.6	8.6	49.8
<b>Escapement</b>					
Andreafsky River, East Fork	603	12.8	78.4	8.8	49.1
<b>Total All Projects</b>		<b>1,777</b>			

<sup>a</sup> Test fishery average includes three projects with adequate sample numbers throughout the season; Kaltag is not included.

Table 14. Yukon River coho salmon mean lengths (mm) by sex, project, and age, 2003.

Sex	Project Location	Project Type <sup>a</sup>	Age		
			3	4	5
<b>Male</b>					
	District 1	Com 6+	583	593	601
	District 4	FW	565	554	550
	Big Eddy	TF 6	585	590	582
	Middle Mouth	TF 6	592	580	603
	Mt. Village	TF 5 7/8	594	593	587
	Kaltag	TF 5 7/8	583	616	630
	E.F. Andreafsky	Esc	564	565	582
	Male Average <sup>b</sup>		581	579	584
<b>Female</b>					
	District 1	Com 6+	574	581	591
	District 4	FW	591	604	
	Big Eddy	TF 6	593	590	612
	Middle Mouth	TF 6	590	592	585
	Mt. Village	TF 5 7/8	589	588	587
	Kaltag	TF 5 7/8	550	566	600
	E.F. Andreafsky	Esc	547	553	539
	Female Average <sup>b</sup>		581	585	583

<sup>a</sup> Project types are: Com is commercial, TF is test fish, Esc is escapement, FW is fishwheel; and number refers to mesh size.

<sup>b</sup> Kaltag test fishery mean lengths are excluded from average because of small sample size.

**Appendix A**

**Chinook Salmon**

Appendix A.1. Yukon River District 1 chinook salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/16 Period 1	387	Males	0	0.0	0	0.0	2,160	20.1	0	0.0	3,406	31.8	0	0.0	305	2.8	0	0.0	0	0.0	0	0.0	5,871	54.8
		Females	0	0.0	0	0.0	692	6.5	0	0.0	3,517	32.8	0	0.0	609	5.7	0	0.0	28	0.3	0	0.0	4,846	45.2
		Subtotal	0	0.0	0	0.0	2,852	26.6	0	0.0	6,923	64.6	0	0.0	914	8.5	0	0.0	28	0.3	0	0.0	10,717	100.0
6/21 Period 2	392	Males	0	0.0	37	0.5	1,099	15.0	0	0.0	1,546	21.2	0	0.0	168	2.3	0	0.0	0	0.0	0	0.0	2,850	39.0
		Females	0	0.0	19	0.3	875	12.0	0	0.0	3,222	44.1	0	0.0	335	4.6	0	0.0	0	0.0	0	0.0	4,451	61.0
		Subtotal	0	0.0	56	0.8	1,974	27.0	0	0.0	4,768	65.3	0	0.0	503	6.9	0	0.0	0	0.0	0	0.0	7,301	100.0
6/26 Period 3	394	Males	7	0.3	47	1.8	361	13.7	0	0.0	507	19.3	0	0.0	53	2.0	0	0.0	0	0.0	0	0.0	974	37.1
		Females	0	0.0	0	0.0	320	12.2	0	0.0	1,248	47.5	0	0.0	87	3.3	0	0.0	0	0.0	0	0.0	1,655	62.9
		Subtotal	7	0.3	47	1.8	681	25.9	0	0.0	1,755	66.8	0	0.0	140	5.3	0	0.0	0	0.0	0	0.0	2,629	100.0
7/2 Period 4	144	Males	0	0.0	0	0.0	214	13.2	0	0.0	383	23.6	0	0.0	102	6.3	0	0.0	0	0.0	0	0.0	699	43.1
		Females	0	0.0	0	0.0	147	9.0	0	0.0	677	41.7	0	0.0	101	6.2	0	0.0	0	0.0	0	0.0	925	56.9
		Subtotal	0	0.0	0	0.0	361	22.2	0	0.0	1,060	65.3	0	0.0	203	12.5	0	0.0	0	0.0	0	0.0	1,624	100.0
7/7 Period 5	88	Males	0	0.0	0	0.0	50	11.4	0	0.0	149	34.1	0	0.0	20	4.6	0	0.0	0	0.0	0	0.0	219	50.0
		Females	0	0.0	0	0.0	15	3.4	0	0.0	189	43.2	0	0.0	15	3.4	0	0.0	0	0.0	0	0.0	218	50.0
		Subtotal	0	0.0	0	0.0	65	14.8	0	0.0	338	77.3	0	0.0	35	8.0	0	0.0	0	0.0	0	0.0	437	100.0
Other <sup>b</sup>	0 <sup>c</sup>	Males	0	0.0	2	0.4	106	17.1	0	0.0	164	26.4	0	0.0	18	2.8	0	0.0	0	0.0	0	0.0	290	46.7
		Females	0	0.0	1	0.1	56	9.0	0	0.0	242	39.0	0	0.0	32	5.1	0	0.0	0	0.0	0	0.0	330	53.3
		Subtotal	0	0.0	3	0.5	162	26.1	0	0.0	405	65.4	0	0.0	49	7.9	0	0.0	0	0.0	0	0.0	619	100.0
Total All Periods	1,405	Males	7	0.0	86	0.4	3,990	17.1	0	0.0	6,155	26.4	0	0.0	666	2.8	0	0.0	0	0.0	0	0.0	10,903	46.7
		Females	0	0.0	20	0.1	2,105	9.0	0	0.0	9,095	39.0	0	0.0	1,179	5.1	0	0.0	28	0.1	0	0.0	12,425	53.3
		Total	7	0.0	106	0.5	6,095	26.1	0	0.0	15,249	65.4	0	0.0	1,844	7.9	0	0.0	28	0.1	0	0.0	23,327	100.0
Mean Length Std. Error	Males	400		527		765				871				939										
Mean Length Std. Error	Females			620		785				877				935										

<sup>a</sup> Restricted commercial openings to gillnet with 8.0" and larger mesh size.

<sup>b</sup> Other represents 619 fish from test fish sold at times other than during the commercial openings.

<sup>c</sup> No samples were taken from the test fish.

Appendix A.2. Yukon River District 2 chinook salmon commercial harvest age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/18 Period 1	391	Males	0	0.0	58	0.8	1,672	22.2	0	0.0	1,863	24.8	0	0.0	211	2.8	0	0.0	0	0.0	0	0.0	3,804	50.6
		Females	0	0.0	0	0.0	749	10.0	0	0.0	2,594	34.5	0	0.0	365	4.9	0	0.0	0	0.0	0	0.0	3,708	49.4
		Subtotal	0	0.0	58	0.8	2,421	32.2	0	0.0	4,457	59.3	0	0.0	576	7.7	0	0.0	0	0.0	0	0.0	7,512	100.0
6/25 Period 2	388	Males	0	0.0	66	1.3	784	15.2	0	0.0	877	17.0	0	0.0	93	1.8	0	0.0	0	0.0	0	0.0	1,820	35.3
		Females	0	0.0	0	0.0	917	17.8	0	0.0	2,166	42.0	0	0.0	252	4.9	0	0.0	0	0.0	0	0.0	3,335	64.7
		Subtotal	0	0.0	66	1.3	1,701	33.0	0	0.0	3,043	59.0	0	0.0	345	6.7	0	0.0	0	0.0	0	0.0	5,155	100.0
7/2 Period 3	0 <sup>b</sup>	Males	0	0.0	0	0.0	104	13.9	0	0.0	172	22.9	0	0.0	47	6.3	0	0.0	0	0.0	0	0.0	323	43.1
		Females	0	0.0	0	0.0	67	9.0	0	0.0	312	41.7	0	0.0	46	6.2	0	0.0	0	0.0	0	0.0	426	56.9
		Subtotal	0	0.0	0	0.0	172	22.9	0	0.0	484	64.6	0	0.0	94	12.5	0	0.0	0	0.0	0	0.0	749	100.0
7/7 Period 4	0 <sup>b</sup>	Males	0	0.0	0	0.0	92	11.4	0	0.0	274	34.1	0	0.0	37	4.6	0	0.0	0	0.0	0	0.0	402	50.0
		Females	0	0.0	0	0.0	27	3.4	0	0.0	347	43.2	0	0.0	27	3.4	0	0.0	0	0.0	0	0.0	402	50.0
		Subtotal	0	0.0	0	0.0	119	14.8	0	0.0	621	77.3	0	0.0	64	8.0	0	0.0	0	0.0	0	0.0	804	100.0
Other <sup>c</sup>	0 <sup>d</sup>	Males	0	0.0	1	0.9	11	18.6	0	0.0	14	22.3	0	0.0	2	2.7	0	0.0	0	0.0	0	0.0	27	44.5
		Females	0	0.0	0	0.0	8	12.3	0	0.0	23	38.0	0	0.0	3	4.8	0	0.0	0	0.0	0	0.0	34	55.1
		Subtotal	0	0.0	1	0.9	19	30.9	0	0.0	37	60.3	0	0.0	5	7.6	0	0.0	0	0.0	0	0.0	61	100.0
Total All Periods	779	Males	0	0.0	124	0.9	2,652	18.6	0	0.0	3,186	22.3	0	0.0	388	2.7	0	0.0	0	0.0	0	0.0	6,349	44.5
		Females	0	0.0	0	0.0	1,761	12.3	0	0.0	5,420	38.0	0	0.0	691	4.8	0	0.0	0	0.0	0	0.0	7,871	55.1
		Total	0	0.0	124	0.9	4,413	30.9	0	0.0	8,605	60.3	0	0.0	1,079	7.6	0	0.0	0	0.0	0	0.0	14,281	100.0
Mean Length Std. Error	Males			579			753			869			925											
				11			4			5			13											
Mean Length Std. Error	Females					769			864			926												
						4			3			7												

<sup>a</sup> Restricted commercial openings to gillnet with 8.0" and larger mesh size.

<sup>b</sup> No sampling occurred during periods 3 and 4, therefore number and percent in each age group are based on the District 1 commercial samples for these dates.

<sup>c</sup> Other represents 61 fish from the test fish project that were sold at times other than during the commercial openings.

<sup>d</sup> No samples were taken from the test fish.

Appendix A.3. Yukon River District 4C chinook salmon commercial harvest age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/27 <sup>b</sup> Period 1	85	Males	0	0.0	24	17.6	87	63.5	0	0.0	16	11.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	127	92.9
		Females	0	0.0	0	0.0	3	2.4	0	0.0	7	4.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	7.1
		Subtotal	0	0.0	24	17.6	90	65.9	0	0.0	23	16.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	137	100.0
6/30 - 7/1 Period 2	62	Males	12	3.2	82	22.6	171	46.8	0	0.0	18	4.8	0	0.0	12	3.2	0	0.0	0	0.0	0	0.0	294	80.6
		Females	0	0.0	6	1.6	17	4.8	0	0.0	41	11.3	0	0.0	6	1.6	0	0.0	0	0.0	0	0.0	71	19.4
		Subtotal	12	3.2	88	24.2	188	51.6	0	0.0	59	16.1	0	0.0	18	4.8	0	0.0	0	0.0	0	0.0	365	100.0
7/3 Period 3	44	Males	3	4.5	20	34.1	29	47.7	0	0.0	1	2.3	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	55	90.9
		Females	0	0.0	0	0.0	1	2.3	0	0.0	4	6.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	9.1
		Subtotal	3	4.5	20	34.1	30	50.0	0	0.0	5	9.1	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	60	100.0
Total All Periods	191	Males	15	2.6	127	22.6	287	51.0	0	0.0	35	6.3	0	0.0	13	2.3	0	0.0	0	0.0	0	0.0	476	84.7
		Females	0	0.0	6	1.1	22	3.9	0	0.0	52	9.2	0	0.0	6	1.1	0	0.0	0	0.0	0	0.0	86	15.3
		Total	15	2.6	133	23.7	309	54.9	0	0.0	87	15.5	0	0.0	19	3.4	0	0.0	0	0.0	0	0.0	562	100.0
Mean Length Std. Error	Males	397 6		518 8		682 5				837 19				1,048 13										
Mean Length Std. Error	Females			580		669 12				756 9				780										

<sup>a</sup> Commercial harvest from fishwheels.

<sup>b</sup> Sampling on 6/27 occurred after tails were removed, therefore no lengths were recorded for these fish.

Appendix A.4. Yukon River District 5BC chinook salmon commercial harvest age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
7/5 Period 1	94	Males	0	0.0	6	2.1	94	33.0	0	0.0	106	37.2	0	0.0	12	4.2	0	0.0	0	0.0	0	0.0	218	76.6
		Females	0	0.0	0	0.0	6	2.1	0	0.0	52	18.1	0	0.0	9	3.2	0	0.0	0	0.0	0	0.0	67	23.4
		Subtotal	0	0.0	6	2.1	100	35.1	0	0.0	158	55.3	0	0.0	21	7.4	0	0.0	0	0.0	0	0.0	285	100.0
7/9 Period 2	133	Males	0	0.0	33	6.8	113	23.3	0	0.0	131	27.1	0	0.0	7	1.5	4	0.8	0	0.0	0	0.0	287	59.4
		Females	0	0.0	7	1.5	69	14.3	0	0.0	94	19.5	0	0.0	26	5.3	0	0.0	0	0.0	0	0.0	196	40.6
		Subtotal	0	0.0	40	8.3	182	37.6	0	0.0	225	46.6	0	0.0	33	6.8	4	0.8	0	0.0	0	0.0	483	100.0
7/11 Periods 3, 4	141	Males	0	0.0	10	2.8	104	28.4	0	0.0	81	22.0	0	0.0	5	1.4	3	0.7	0	0.0	0	0.0	202	55.3
		Females	0	0.0	0	0.0	8	2.1	0	0.0	132	36.2	3	0.7	18	5.0	2	0.7	0	0.0	0	0.0	164	44.7
		Subtotal	0	0.0	10	2.8	112	30.5	0	0.0	213	58.2	3	0.7	23	6.4	5	1.4	0	0.0	0	0.0	366	100.0
Total All Periods	368	Males	0	0.0	49	4.3	310	27.4	0	0.0	317	28.0	0	0.0	24	2.2	6	0.6	0	0.0	0	0.0	708	62.4
		Females	0	0.0	7	0.7	83	7.3	0	0.0	279	24.5	3	0.2	53	4.6	3	0.2	0	0.0	0	0.0	426	37.6
		Total	0	0.0	56	5.0	393	34.7	0	0.0	596	52.5	3	0.2	77	6.8	9	0.8	0	0.0	0	0.0	1,134	100.0
Mean Length Std. Error		Males		562 12	727 6					859 7				939 29	918									
Mean Length Std. Error		Females		598 3	742 14					885 5	755			934 19	915									

<sup>a</sup> Samples were collected from mixed gear including gillnets and fishwheels.

Appendix A.5. Yukon River District 6 chinook salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
		No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.			
7/12 Period 1	137	Males	0	0.0	17	3.6	239	51.1	0	0.0	58	12.4	0	0.0	7	1.4	0	0.0	0	0.0	0	0.0	320	68.6
		Females	0	0.0	0	0.0	27	5.8	0	0.0	109	23.4	0	0.0	10	2.2	0	0.0	0	0.0	0	0.0	147	31.4
		Subtotal	0	0.0	17	3.6	266	56.9	0	0.0	167	35.8	0	0.0	17	3.6	0	0.0	0	0.0	0	0.0	467	100.0
7/15 Period 2	153	Males	9	1.3	103	15.0	264	38.6	0	0.0	67	9.8	4	0.7	9	1.3	0	0.0	0	0.0	0	0.0	456	66.7
		Females	0	0.0	0	0.0	18	2.6	0	0.0	174	25.5	0	0.0	36	5.2	0	0.0	0	0.0	0	0.0	228	33.3
		Subtotal	9	1.3	103	15.0	282	41.2	0	0.0	241	35.3	4	0.7	45	6.5	0	0.0	0	0.0	0	0.0	684	100.0
7/19 Period 3	78	Males	9	2.6	66	17.9	61	16.7	0	0.0	37	10.3	0	0.0	5	1.3	0	0.0	0	0.0	0	0.0	179	48.7
		Females	0	0.0	0	0.0	28	7.7	0	0.0	132	35.9	0	0.0	23	6.4	5	1.3	0	0.0	0	0.0	188	51.3
		Subtotal	9	2.6	66	17.9	89	24.4	0	0.0	169	46.2	0	0.0	28	7.7	5	1.3	0	0.0	0	0.0	367	100.0
7/22- 23 Periods 4, 5	96	Males	0	0.0	22	7.3	77	26.0	0	0.0	15	5.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	114	38.5
		Females	0	0.0	0	0.0	34	11.5	0	0.0	129	43.8	0	0.0	18	6.3	0	0.0	0	0.0	0	0.0	181	61.5
		Subtotal	0	0.0	22	7.3	111	37.5	0	0.0	144	49.0	0	0.0	18	6.3	0	0.0	0	0.0	0	0.0	295	100.0
Total All Periods	464	Males	18	1.0	207	11.4	641	35.3	0	0.0	178	9.8	4	0.2	20	1.1	0	0.0	0	0.0	0	0.0	1069	59.0
		Females	0	0.0	0	0.0	107	5.9	0	0.0	544	30.0	0	0.0	88	4.9	5	0.3	0	0.0	0	0.0	744	41.0
		Total	18	1.0	207	11.4	748	41.2	0	0.0	722	39.8	4	0.2	108	6.0	5	0.3	0	0.0	0	0.0	1,813	100.0
Mean Length Std. Error		Males	383	525	719				850	650	965													
			12	7	4				9		44													
Mean Length Std. Error		Females			799				874		922		910											
					9				5		9													

<sup>a</sup> Samples were collected from mixed gear including gillnets and fishwheels.

Appendix A.6. Yukon River District 1 chinook salmon subsistence harvest, from 5.5 " gillnets, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/6	54	Males	0	0.0	0	0.0	18	33.3	0	0.0	12	22.2	0	0.0	1	1.9	0	0.0	0	0.0	0	0.0	31	57.4
		Females	0	0.0	0	0.0	6	11.1	0	0.0	16	29.7	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0	23	42.6
		Subtotal	0	0.0	0	0.0	24	44.4	0	0.0	28	51.9	0	0.0	2	3.7	0	0.0	0	0.0	0	0.0	54	100.0
6/10	1	Males	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Females	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
		Subtotal	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
6/13	35	Males	0	0.0	8	22.9	10	28.6	0	0.0	3	8.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	21	60.0
		Females	0	0.0	2	5.7	9	25.7	0	0.0	3	8.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	40.0
		Subtotal	0	0.0	10	28.6	19	54.3	0	0.0	6	17.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	35	100.0
Total	90	Males	0	0.0	8	8.9	28	31.1	0	0.0	15	16.7	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	52	57.8
		Females	0	0.0	2	2.2	15	16.7	0	0.0	20	22.2	0	0.0	1	1.1	0	0.0	0	0.0	0	0.0	38	42.2
		Total	0	0.0	10	11.1	43	47.8	0	0.0	35	38.9	0	0.0	2	2.2	0	0.0	0	0.0	0	0.0	90	100.0
Mean Length	Males			544		715				840					890									
Std. Error					18		11			21														
Mean Length	Females			529		731				878					995									
Std. Error				49		17				13														

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<sup>a</sup> Subsistence harvests from 5.5" gillnets were sampled three times in District 1.

Appendix A.10. Yukon River District 3 (Holy Cross) chinook salmon subsistence harvest, from 8.5 " gillnets, age and sex composition and mean length (mm), 2003.

		Brood Year and (Age Group)																						
Sample Dates	Sample Size		2000		1999		1998		1997		1996		1995		Total									
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.										
6/16, 27	59	Males	0	0.0	2	3.4	7	11.9	0	0.0	16	27.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	25	42.4
		Females	0	0.0	0	0.0	2	3.4	0	0.0	28	47.5	0	0.0	4	6.8	0	0.0	0	0.0	0	0.0	34	57.6
		Total	0	0.0	2	3.4	9	15.3	0	0.0	44	74.6	0	0.0	4	6.8	0	0.0	0	0.0	0	0.0	59	100.0
Mean Length		Males			565		721				847													
Std. Error					5		28				20													
Mean Length		Females					793				879				918									
Std. Error							38				8				14									

Appendix A.11. Yukon River District 4 (Kaltag) chinook salmon subsistence harvest, from 8.5 " gillnets, age and sex composition and mean length (mm), 2003.

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/15 - 7/26	209	Males	0	0.0	1	0.5	26	12.4	0	0.0	66	31.6	0	0.0	12	5.8	1	0.5	0	0.0	0	0.0	106	50.7
		Females	0	0.0	1	0.5	12	5.8	0	0.0	76	36.3	0	0.0	13	6.2	1	0.5	0	0.0	0	0.0	103	49.3
		Total	0	0.0	2	1.0	38	18.2	0	0.0	142	67.9	0	0.0	25	12.0	2	1.0	0	0.0	0	0.0	209	100.0
Mean Length		Males			605		750			893				940		875								
Std. Error							10			7				15										
Mean Length		Females			565		774			867				932		915								
Std. Error							17			5				10										

Appendix A.12. Yukon River District 4 (Ruby) chinook salmon subsistence harvest, from fishwheels, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/23, 26	45	Males	0	0.0	6	13.3	30	66.7	0	0.0	3	6.7	0	0.0	2	4.4	0	0.0	0	0.0	0	0.0	41	91.1
		Females	0	0.0	0	0.0	1	2.2	0	0.0	3	6.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	8.9
		Total	0	0.0	6	13.3	31	68.9	0	0.0	6	13.3	0	0.0	2	4.4	0	0.0	0	0.0	0	0.0	45	100.0
Mean Length		Males			489		711			780				890										
Std. Error					12		7			33				100										
Mean Length		Females					735			848														
Std. Error										16														

<sup>a</sup> Subsistence harvests from fishwheels were sampled twice in District 4 (Ruby) and combined because of small sample size.

Appendix A.19. Russian Mission chinook salmon 8.5" drift gillnet catch age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates <sup>b</sup>	Sample Size <sup>c</sup>		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/4- 14 1st quartile	46	Males	0	0.0	1	2.2	6	13.0	0	0.0	12	26.1	0	0.0	3	6.5	0	0.0	0	0.0	0	0.0	22	47.8
		Females	0	0.0	0	0.0	2	4.3	0	0.0	21	45.7	0	0.0	1	2.2	0	0.0	0	0.0	0	0.0	24	52.2
		Subtotal	0	0.0	1	2.2	8	17.4	0	0.0	33	71.7	0	0.0	4	8.7	0	0.0	0	0.0	0	0.0	46	100.0
6/15- 17 2nd quartile	72	Males	0	0.0	0	0.0	4	5.6	0	0.0	37	51.4	0	0.0	2	2.8	0	0.0	0	0.0	0	0.0	43	59.7
		Females	0	0.0	0	0.0	1	1.4	0	0.0	27	37.5	0	0.0	1	1.4	0	0.0	0	0.0	0	0.0	29	40.3
		Subtotal	0	0.0	0	0.0	5	6.9	0	0.0	64	88.9	0	0.0	3	4.2	0	0.0	0	0.0	0	0.0	72	100.0
6/18- 25 3rd quartile	73	Males	0	0.0	1	1.4	10	13.7	0	0.0	21	28.8	0	0.0	1	1.4	0	0.0	0	0.0	0	0.0	33	45.2
		Females	0	0.0	0	0.0	4	5.5	0	0.0	32	43.8	0	0.0	4	5.5	0	0.0	0	0.0	0	0.0	40	54.8
		Subtotal	0	0.0	1	1.4	14	19.2	0	0.0	53	72.6	0	0.0	5	6.8	0	0.0	0	0.0	0	0.0	73	100.0
6/26 - 7/11 4th quartile	42	Males	0	0.0	0	0.0	3	7.1	0	0.0	8	19.0	0	0.0	1	2.4	0	0.0	0	0.0	0	0.0	12	28.6
		Females	0	0.0	0	0.0	5	11.9	0	0.0	23	54.8	0	0.0	2	4.8	0	0.0	0	0.0	0	0.0	30	71.4
		Subtotal	0	0.0	0	0.0	8	19.0	0	0.0	31	73.8	0	0.0	3	7.1	0	0.0	0	0.0	0	0.0	42	100.0
Total	233	Males	0	0.0	2	0.9	23	9.9	0	0.0	78	33.5	0	0.0	7	3.0	0	0.0	0	0.0	0	0.0	110	47.2
		Females	0	0.0	0	0.0	12	5.2	0	0.0	103	44.2	0	0.0	8	3.4	0	0.0	0	0.0	0	0.0	123	52.8
		Total	0	0.0	2	0.9	35	15.0	0	0.0	181	77.7	0	0.0	15	6.4	0	0.0	0	0.0	0	0.0	233	100.0
Mean Length	Males			535		752				880				946										
Std. Error				3		13				8				20										
Mean Length	Females					770				876				904										
Std. Error						12				4				15										

<sup>a</sup> The numbers of fish sampled are not weighted by catch and, therefore, do not reflect the total run passage by Russian Mission.

<sup>b</sup> Sample dates are stratified by quartiles based on Pilot Station Sonar chinook salmon daily counts.

<sup>c</sup> Chinook salmon sampled of unknown sex are not included.

Appendix A.7. Yukon River District 1 chinook salmon subsistence harvest, from 8.5" gillnets, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total			
			2000		1999		1998		1997		1996		1995													
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.												
6/3	57	Males	0	0.0	0	0.0	14	24.6	0	0.0	21	36.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	35	61.4		
		Females	0	0.0	0	0.0	4	7.0	0	0.0	16	28.1	0	0.0	2	3.5	0	0.0	0	0.0	0	0.0	22	38.6		
		Subtotal	0	0.0	0	0.0	18	31.6	0	0.0	37	64.9	0	0.0	2	3.5	0	0.0	0	0.0	0	0.0	57	100.0		
6/6	43	Males	0	0.0	1	2.3	9	21.0	0	0.0	12	27.9	0	0.0	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0	23	53.5
		Females	0	0.0	0	0.0	5	11.6	0	0.0	14	32.6	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	20	46.5
		Subtotal	0	0.0	1	2.3	14	32.6	0	0.0	26	60.5	0	0.0	2	4.7	0	0.0	0	0.0	0	0.0	0	0.0	43	100.0
6/10	12	Males	0	0.0	0	0.0	2	16.7	0	0.0	5	41.6	0	0.0	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0	8	66.7
		Females	0	0.0	0	0.0	0	0.0	0	0.0	2	16.7	0	0.0	2	16.7	0	0.0	0	0.0	0	0.0	0	0.0	4	33.3
		Subtotal	0	0.0	0	0.0	2	16.7	0	0.0	7	58.3	0	0.0	3	25.0	0	0.0	0	0.0	0	0.0	0	0.0	12	100.0
6/13	44	Males	0	0.0	0	0.0	11	25.0	0	0.0	10	22.7	0	0.0	2	4.5	0	0.0	0	0.0	0	0.0	0	0.0	23	52.3
		Females	0	0.0	0	0.0	3	6.8	0	0.0	17	38.7	0	0.0	1	2.3	0	0.0	0	0.0	0	0.0	0	0.0	21	47.7
		Subtotal	0	0.0	0	0.0	14	31.8	0	0.0	27	61.4	0	0.0	3	6.8	0	0.0	0	0.0	0	0.0	0	0.0	44	100.0
Total	156	Males	0	0.0	1	0.6	36	23.1	0	0.0	48	30.8	0	0.0	4	2.6	0	0.0	0	0.0	0	0.0	0	0.0	89	57.1
		Females	0	0.0	0	0.0	12	7.7	0	0.0	49	31.4	0	0.0	6	3.8	0	0.0	0	0.0	0	0.0	0	0.0	67	42.9
		Total	0	0.0	1	0.6	48	30.8	0	0.0	97	62.2	0	0.0	10	6.4	0	0.0	0	0.0	0	0.0	0	0.0	156	100.0
Mean Length	Males			606		762				856				949												
Std. Error						7				10				16												
Mean Length	Females					767				863				853												
Std. Error						14				8				28												

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<sup>a</sup> Subsistence harvests from 8.5" gillnets were sampled four times in District 1.

Appendix A.8. Yukon River District 1 chinook salmon subsistence harvest, from gillnets of unknown mesh size, age composition, 2003. <sup>a</sup>

Sample Dates	Sample Size	Brood Year and (Age Group)																				Total	
		2000		1999		1998		1997		1996		1995											
		(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.								
6/6	26	0	0.0	0	0.0	9	34.6	0	0.0	13	50.0	0	0.0	4	15.4	0	0.0	0	0.0	0	0.0	26	100.0
6/10	19	0	0.0	1	5.3	8	42.1	0	0.0	8	42.1	0	0.0	2	10.5	0	0.0	0	0.0	0	0.0	19	100.0
6/13	39	0	0.0	1	2.6	19	48.7	0	0.0	18	46.2	0	0.0	1	2.6	0	0.0	0	0.0	0	0.0	39	100.0
Total	84	0	0.0	2	2.4	36	42.9	0	0.0	39	46.4	0	0.0	7	8.3	0	0.0	0	0.0	0	0.0	84	100.0

<sup>a</sup> Subsistence harvests from gillnets of unknown mesh size were sampled three times in District 1, however sex and length data were not recorded for all fish.

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Appendix A.9. Yukon River District 1 chinook salmon subsistence harvest, from gillnets of unknown mesh size, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.						
6/6	16	Males	0	0.0	0	0.0	1	6.3	0	0.0	4	25.0	0	0.0	3	18.8	0	0.0	0	0.0	0	0.0	8	50.0
		Females	0	0.0	0	0.0	3	18.7	0	0.0	5	31.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	50.0
		Total	0	0.0	0	0.0	4	25.0	0	0.0	9	56.3	0	0.0	3	18.8	0	0.0	0	0.0	0	0.0	16	100.0
Mean Length		Males					642				929				953									
Std. Error											14				24									
Mean Length		Females					764				895													
Std. Error							25				31													

<sup>a</sup> Subsistence harvests from gillnets of unknown mesh size were sampled three times in District 1, however sex and length data were only recorded on 6/6.

Appendix A.20. Russian Mission (Dogfish) chinook salmon 8.5" drift gillnet catch age composition, 2003.<sup>a</sup>

Sample Dates <sup>b</sup>	Sample Size <sup>c</sup>	Brood Year and (Age Group)																				Total	
		2000		1999		1998		1997		1996		1995											
		(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/3- 14 1st quartile	180	0	0.0	0	0.0	35	19.4	0	0.0	125	69.4	0	0.0	20	11.1	0	0.0	0	0.0	0	0.0	180	100.0
6/15- 17 2nd quartile	102	0	0.0	0	0.0	15	14.7	0	0.0	80	78.4	0	0.0	7	6.9	0	0.0	0	0.0	0	0.0	102	100.0
6/18- 26 3rd quartile	246	0	0.0	2	0.8	68	27.6	0	0.0	148	60.2	0	0.0	27	11.0	0	0.0	1	0.4	0	0.0	246	100.0
6/27 - 7/13 4th quartile	201	0	0.0	0	0.0	52	25.9	0	0.0	139	69.2	0	0.0	10	5.0	0	0.0	0	0.0	0	0.0	201	100.0
Total	729	0	0.0	2	0.3	170	23.3	0	0.0	492	67.5	0	0.0	64	8.8	0	0.0	1	0.1	0	0.0	729	100.0

<sup>a</sup> The numbers of fish sampled are not weighted by catch and, therefore, do not reflect the total run passage by Russian Mission (Dogfish).

<sup>b</sup> Sample dates are stratified by quartiles based on Pilot Station Sonar chinook salmon daily counts.

<sup>c</sup> Chinook salmon sampled of unknown sex are included.

Appendix A.21. Russian Mission (Dogfish) chinook salmon 8.5" drift gillnet catch age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates <sup>b</sup>	Sample Size <sup>c</sup>		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
6/3- 14 1st quartile	156	Males	0	0.0	0	0.0	23	14.7	0	0.0	49	31.4	0	0.0	6	3.8	0	0.0	0	0.0	0	0.0	78	50.0
		Females	0	0.0	0	0.0	9	5.8	0	0.0	57	36.5	0	0.0	12	7.7	0	0.0	0	0.0	0	0.0	78	50.0
		Subtotal	0	0.0	0	0.0	32	20.5	0	0.0	106	67.9	0	0.0	18	11.5	0	0.0	0	0.0	0	0.0	156	100.0
6/15- 17 2nd quartile	84	Males	0	0.0	0	0.0	6	7.1	0	0.0	42	50.0	0	0.0	3	3.6	0	0.0	0	0.0	0	0.0	51	60.7
		Females	0	0.0	0	0.0	4	4.8	0	0.0	26	31.0	0	0.0	3	3.6	0	0.0	0	0.0	0	0.0	33	39.3
		Subtotal	0	0.0	0	0.0	10	11.9	0	0.0	68	81.0	0	0.0	6	7.1	0	0.0	0	0.0	0	0.0	84	100.0
6/18- 26 3rd quartile	235	Males	0	0.0	2	0.9	42	17.9	0	0.0	51	21.7	0	0.0	11	4.7	0	0.0	1	0.4	0	0.0	107	45.5
		Females	0	0.0	0	0.0	24	10.2	0	0.0	89	37.9	0	0.0	15	6.4	0	0.0	0	0.0	0	0.0	128	54.5
		Subtotal	0	0.0	2	0.9	66	28.1	0	0.0	140	59.6	0	0.0	26	11.1	0	0.0	1	0.4	0	0.0	235	100.0
6/27 - 7/13 4th quartile	181	Males	0	0.0	0	0.0	43	23.8	0	0.0	37	20.4	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	81	44.8
		Females	0	0.0	0	0.0	6	3.3	0	0.0	85	47.0	0	0.0	9	5.0	0	0.0	0	0.0	0	0.0	100	55.2
		Subtotal	0	0.0	0	0.0	49	27.1	0	0.0	122	67.4	0	0.0	10	5.5	0	0.0	0	0.0	0	0.0	181	100.0
Total	656	Males	0	0.0	2	0.3	114	17.4	0	0.0	179	27.3	0	0.0	21	3.2	0	0.0	1	0.2	0	0.0	317	48.3
		Females	0	0.0	0	0.0	43	6.6	0	0.0	257	39.2	0	0.0	39	5.9	0	0.0	0	0.0	0	0.0	339	51.7
		Total	0	0.0	2	0.3	157	23.9	0	0.0	436	66.5	0	0.0	60	9.1	0	0.0	1	0.2	0	0.0	656	100.0
Mean Length Std. Error	Males			560 21			735 5			881 5			942 13			995								
Mean Length Std. Error	Females					765 9			864 3			928 9												

<sup>a</sup> The numbers of fish sampled are not weighted by catch and, therefore, do not reflect the total run passage by Russian Mission (Dogfish).

<sup>b</sup> Sample dates are stratified by quartiles based on Pilot Station Sonar chinook salmon daily counts.

<sup>c</sup> Chinook salmon sampled of unknown sex are not included.

Appendix A.22. Pilot Station Sonar chinook salmon test fish catch age and sex composition by mesh size and mean length, 2003.<sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																Total							
			2000				1999				1998				1997						1996				1995	
			(1.1)		(1.2)		(1.3)		(2.2)		(1.4)		(2.3)		(1.5)		(2.4)		(1.6)		(2.5)		No.	Per.		
6/5 - 8/6 Mesh Size 2.75"	7	Males	0	0.0	0	0.0	1	14.3	0	0.0	1	14.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	28.6		
		Females	0	0.0	0	0.0	3	42.9	0	0.0	2	28.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	71.4		
		Subtotal	0	0.0	0	0.0	4	57.1	0	0.0	3	42.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	100.0		
Mean Length		Males				785				870																
Std. Error		Females				690				878																
Mean Length						26				32																
Std. Error																										
6/5 - 8/6 Mesh Size 4.0"	46	Males	3	6.5	5	10.9	21	45.7	0	0.0	3	6.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	32	69.6		
		Females	0	0.0	0	0.0	5	10.9	0	0.0	9	19.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	30.4		
		Subtotal	3	6.5	5	10.9	26	56.5	0	0.0	12	26.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	46	100.0		
Mean Length		Males				398				490				707				822								
Std. Error		Females				14				46				63				67								
Mean Length						773				838																
Std. Error						20				15																
6/5 - 8/6 Mesh Size 5.25"	148	Males	0	0.0	30	20.3	38	25.7	0	0.0	19	12.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	87	58.8		
		Females	0	0.0	0	0.0	22	14.9	0	0.0	35	23.8	0	0.0	4	2.7	0	0.0	0	0.0	0	0.0	61	41.2		
		Subtotal	0	0.0	30	20.3	60	40.5	0	0.0	54	36.5	0	0.0	4	2.7	0	0.0	0	0.0	0	0.0	148	100.0		
Mean Length		Males				520				714				848												
Std. Error		Females				12				10				15												
Mean Length						750				873				956												
Std. Error						10				8				23												
6/5 - 8/6 Mesh Size 5.75"	4	Males	0	0.0	1	25.0	1	25.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	75.0		
		Females	0	0.0	0	0.0	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	25.0		
		Subtotal	0	0.0	1	25.0	1	25.0	0	0.0	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	100.0		
Mean Length		Males				620				750				820												
Std. Error		Females								970																
Mean Length																										
Std. Error																										
6/5 - 8/6 Mesh Size 6.50"	232	Males	0	0.0	4	1.7	79	34.1	0	0.0	36	15.5	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	120	51.7		
		Females	0	0.0	0	0.0	62	26.7	0	0.0	49	21.1	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	112	48.3		
		Subtotal	0	0.0	4	1.7	141	60.8	0	0.0	85	36.6	0	0.0	2	0.9	0	0.0	0	0.0	0	0.0	232	100.0		
Mean Length		Males				591				667				825				990								
Std. Error		Females				32				7				11												
Mean Length						747				855				890												
Std. Error						6				7																
6/5 - 8/6 Mesh Size 7.50"	219	Males	0	0.0	5	2.3	72	32.9	0	0.0	31	14.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	108	49.3		
		Females	0	0.0	0	0.0	40	18.3	0	0.0	67	30.6	0	0.0	4	1.8	0	0.0	0	0.0	0	0.0	111	50.7		
		Subtotal	0	0.0	5	2.3	112	51.1	0	0.0	98	44.7	0	0.0	4	1.8	0	0.0	0	0.0	0	0.0	219	100.0		
Mean Length		Males				522				726				822												
Std. Error		Females				28				7				11												
Mean Length						750				861				868												
Std. Error						7				6				23												
6/5 - 8/6 Mesh Size 8.50"	171	Males	0	0.0	3	1.8	43	25.1	0	0.0	44	25.7	0	0.0	3	1.8	0	0.0	0	0.0	0	0.0	93	54.4		
		Females	0	0.0	0	0.0	20	11.7	0	0.0	57	33.3	0	0.0	1	0.6	0	0.0	0	0.0	0	0.0	78	45.6		
		Subtotal	0	0.0	3	1.8	63	36.8	0	0.0	101	59.1	0	0.0	4	2.3	0	0.0	0	0.0	0	0.0	171	100.0		
Mean Length		Males				595				740				843				923								
Std. Error		Females				37				10				10				37								
Mean Length						772				867				910												
Std. Error						10				6																
Total Combined Mesh	827	Males	3	0.4	48	5.8	255	30.8	0	0.0	135	16.3	0	0.0	4	0.5	0	0.0	0	0.0	0	0.0	445	53.8		
		Females	0	0.0	0	0.0	152	18.4	0	0.0	220	26.6	0	0.0	10	1.2	0	0.0	0	0.0	0	0.0	382	46.2		
		Total	3	0.4	48	5.8	407	49.2	0	0.0	355	42.9	0	0.0	14	1.7	0	0.0	0	0.0	0	0.0	827	100.0		
Mean Length		Males				398				530				719				834				940				
Std. Error		Females				8				8				4				5				15				
Mean Length						751				880				910												
Std. Error						5				4				19												

<sup>a</sup> The numbers of fish represented in this table are not weighted by catch size, instead, numbers of fish sampled are divided by mesh size and, therefore, do not reflect the total run passage by Pilot Station.

Appendix A.23. Sheep Rock and White Rock (Canada) chinook salmon fishwheel catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)																		Total			
			2000 (1.1)		1999 (1.2)		1998 (1.3)		(2.2)		1997 (1.4)		(2.3)		1996 (1.5)		(2.4)		1995 (1.6)				(2.5)	
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/26 - 7/9	290	Males	0	0.0	5	1.7	172	59.3	0	0.0	57	19.7	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	235	81.0
		Females	0	0.0	0	0.0	13	4.5	0	0.0	38	13.1	0	0.0	3	1.0	1	0.3	0	0.0	0	0.0	55	19.0
		Subtotal	0	0.0	5	1.7	185	63.8	0	0.0	95	32.8	0	0.0	4	1.4	1	0.3	0	0.0	0	0.0	290	100.0
7/10- 15	266	Males	0	0.0	9	3.4	113	42.5	0	0.0	55	20.7	1	0.4	3	1.1	0	0.0	0	0.0	0	0.0	181	68.0
		Females	0	0.0	2	0.8	13	4.9	0	0.0	64	24.1	0	0.0	5	1.9	1	0.4	0	0.0	0	0.0	85	32.0
		Subtotal	0	0.0	11	4.1	126	47.4	0	0.0	119	44.7	1	0.4	8	3.0	1	0.4	0	0.0	0	0.0	266	100.0
7/16- 25	288	Males	0	0.0	51	17.7	109	37.8	0	0.0	45	15.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	205	71.2
		Females	0	0.0	4	1.4	16	5.6	0	0.0	53	18.4	0	0.0	10	3.5	0	0.0	0	0.0	0	0.0	83	28.8
		Subtotal	0	0.0	55	19.1	125	43.4	0	0.0	98	34.0	0	0.0	10	3.5	0	0.0	0	0.0	0	0.0	288	100.0
7/26 - 9/3	252	Males	0	0.0	50	19.8	83	32.9	0	0.0	36	14.3	0	0.0	4	1.6	0	0.0	0	0.0	0	0.0	173	68.7
		Females	0	0.0	2	0.8	8	3.2	0	0.0	55	21.8	0	0.0	14	5.6	0	0.0	0	0.0	0	0.0	79	31.3
		Subtotal	0	0.0	52	20.6	91	36.1	0	0.0	91	36.1	0	0.0	18	7.1	0	0.0	0	0.0	0	0.0	252	100.0
Total	1,096	Males	0	0.0	115	10.5	477	43.5	0	0.0	193	17.6	1	0.1	8	0.7	0	0.0	0	0.0	0	0.0	794	72.4
		Females	0	0.0	8	0.7	50	4.6	0	0.0	210	19.2	0	0.0	32	2.9	2	0.2	0	0.0	0	0.0	302	27.6
		Total	0	0.0	123	11.2	527	48.1	0	0.0	403	36.8	1	0.1	40	3.6	2	0.2	0	0.0	0	0.0	1,096	100.0
Mean Length		Males		572		763				912		780		1,018										
Std. Error				5		3				6				22										
Mean Length		Females		561		801				923				975		885								
Std. Error				20		7				4				9										

<sup>a</sup> Passage data is unavailable, therefore sample dates are stratified by quartiles based on sample size.

Appendix A.24. East Fork Andreafsky River weir chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995		(1.6)		(2.5)							
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.		
6/23 - 7/5 (6/23 - 7/5)	119	Males	5	0.8	96	15.1	266	42.0	0	0.0	22	3.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	388	61.3
		Females	0	0.0	48	7.6	170	26.9	0	0.0	21	3.3	0	0.0	5	0.8	0	0.0	0	0.0	0	0.0	245	38.7
		Subtotal	5	0.8	144	22.7	436	68.9	0	0.0	42	6.7	0	0.0	5	0.8	0	0.0	0	0.0	0	0.0	633	100.0
7/6 - 9 (7/6 - 11)	120	Males	15	0.8	248	13.3	607	32.5	0	0.0	140	7.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,012	54.2
		Females	0	0.0	47	2.5	373	20.0	0	0.0	435	23.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	855	45.8
		Subtotal	15	0.8	295	15.8	980	52.5	0	0.0	575	30.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,867	100.0
7/13- 18 (7/12- 18)	128	Males	0	0.0	169	12.5	485	35.9	0	0.0	74	5.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	729	53.9
		Females	0	0.0	31	2.3	180	13.3	0	0.0	391	28.9	0	0.0	22	1.6	0	0.0	0	0.0	0	0.0	623	46.1
		Subtotal	0	0.0	200	14.8	665	49.2	0	0.0	465	34.4	0	0.0	22	1.6	0	0.0	0	0.0	0	0.0	1,352	100.0
7/20 - 9/15 <sup>b</sup> (7/19 - 9/15)	166	Males	0	0.0	57	10.8	134	25.3	0	0.0	38	7.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	230	43.4
		Females	0	0.0	6	1.2	61	11.4	0	0.0	224	42.2	0	0.0	10	1.8	0	0.0	0	0.0	0	0.0	301	56.6
		Subtotal	0	0.0	64	12.0	195	36.7	0	0.0	262	49.4	0	0.0	10	1.8	0	0.0	0	0.0	0	0.0	531	100.0
Total	533	Males	20	0.5	570	13.0	1,492	34.0	0	0.0	274	6.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2,359	53.8
		Females	0	0.0	132	3.0	784	17.9	0	0.0	1,071	24.4	0	0.0	36	0.8	0	0.0	0	0.0	0	0.0	2,024	46.2
		Total	20	0.5	702	16.0	2,276	51.9	0	0.0	1,345	30.7	0	0.0	36	0.8	0	0.0	0	0.0	0	0.0	4,383	100.0
Mean Length Std. Error		Males	383		533		710				824													
Mean Length Std. Error		Females			514		731				841		860		20									

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> East Fork Andreafsky River weir was not operational from 8/15 to 8/17 due to high water levels, therefore escapement estimates are not included for that period.

Appendix A.25 Anvik River chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>ab</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995		Total									
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
7/30 - 8/8	428	Males	1	0.2	37	8.7	177	41.4	0	0.0	50	11.7	0	0.0	2	0.4	0	0.0	0	0.0	0	0.0	267	62.4
		Females	0	0.0	1	0.2	57	13.3	0	0.0	92	21.5	0	0.0	11	2.6	0	0.0	0	0.0	0	0.0	161	37.6
		Total	1	0.2	38	8.9	234	54.7	0	0.0	142	33.2	0	0.0	13	3.0	0	0.0	0	0.0	0	0.0	428	100.0
Mean Length		Males	375		535		721				833				875									
Std. Error					5		4				9				55									
Mean Length		Females			620		745				831				856									
Std. Error							7				5				23									

<sup>a</sup> Samples were collected from carcasses.

<sup>b</sup> Sample percentages are not applied to escapement passage estimates.

Appendix A.26 Chena River chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>ab</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.										
8/6 - 14 Total	370	Males	0	0.0	18	4.8	127	34.3	0	0.0	49	13.2	0	0.0	10	2.7	0	0.0	0	0.0	0	0.0	204	55.1
		Females	0	0.0	1	0.3	45	12.2	0	0.0	105	28.4	0	0.0	15	4.1	0	0.0	0	0.0	0	0.0	166	44.9
		Total	0	0.0	19	5.1	172	46.5	0	0.0	154	41.6	0	0.0	25	6.8	0	0.0	0	0.0	0	0.0	370	100.0
Mean Length		Males			555	748			865		927													
Std. Error					12	6			10		33													
Mean Length		Females			500	803			872		933													
Std. Error						8			5		7													

<sup>a</sup> Samples were collected from carcasses.

<sup>b</sup> Sample percentages are not applied to escapement passage estimates.

Appendix A.27. Gisasa River weir chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/28 - 7/7 <sup>b</sup> (6/28 - 7/7)	116	Males	0	0.0	8	6.0	67	48.3	0	0.0	4	2.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	79	56.9
		Females	0	0.0	0	0.0	45	32.7	0	0.0	13	9.5	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	60	43.1
		Subtotal	0	0.0	8	6.0	113	81.0	0	0.0	17	12.1	0	0.0	1	0.9	0	0.0	0	0.0	0	0.0	139	100.0
7/8 - 10 (7/8 - 11)	147	Males	0	0.0	36	6.1	305	51.7	0	0.0	32	5.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	373	63.3
		Females	0	0.0	0	0.0	100	17.0	0	0.0	109	18.4	0	0.0	8	1.4	0	0.0	0	0.0	0	0.0	217	36.7
		Subtotal	0	0.0	36	6.1	405	68.7	0	0.0	140	23.8	0	0.0	8	1.4	0	0.0	0	0.0	0	0.0	590	100.0
7/14 - 18 (7/12 - 18)	99	Males	7	1.0	41	6.1	416	62.6	0	0.0	41	6.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	504	75.8
		Females	0	0.0	0	0.0	67	10.1	0	0.0	94	14.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	161	24.2
		Subtotal	7	1.0	41	6.1	483	72.7	0	0.0	134	20.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	665	100.0
7/19 - 8/3 (7/19 - 8/3)	110	Males	0	0.0	16	3.6	200	43.7	0	0.0	25	5.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	241	52.7
		Females	0	0.0	0	0.0	54	11.8	0	0.0	154	33.6	0	0.0	8	1.8	0	0.0	0	0.0	0	0.0	217	47.3
		Subtotal	0	0.0	16	3.6	254	55.5	0	0.0	179	39.1	0	0.0	8	1.8	0	0.0	0	0.0	0	0.0	458	100.0
Total	472	Males	7	0.4	101	5.5	989	53.4	0	0.0	101	5.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,198	64.7
		Females	0	0.0	0	0.0	267	14.4	0	0.0	369	19.9	0	0.0	18	1.0	0	0.0	0	0.0	0	0.0	654	35.3
		Total	7	0.4	101	5.5	1,256	67.8	0	0.0	471	25.4	0	0.0	18	1.0	0	0.0	0	0.0	0	0.0	1,852	100.0
Mean Length Std. Error		Males	305		521		723		804															
Mean Length Std. Error		Females			744		867		946															

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Gisasa River weir was not operational on July 3 and 4 due to high water, therefore escapement estimates are not included for those days.

Appendix A.28 Henshaw Creek weir chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995		No.	Per.								
			(1.1) No.	(1.1) Per.	(1.2) No.	(1.2) Per.	(1.3) No.	(1.3) Per.	(2.2) No.	(2.2) Per.	(1.4) No.	(1.4) Per.	(2.3) No.	(2.3) Per.			(1.5) No.	(1.5) Per.	(2.4) No.	(2.4) Per.	(1.6) No.	(1.6) Per.	(2.5) No.	(2.5) Per.
6/28 - 7/2 (6/26 - 7/2) <sup>b</sup>	9	Males	0	0.0	0	0.0	7	66.7	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	77.8
		Females	0	0.0	0	0.0	1	11.1	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	22.2
		Subtotal	0	0.0	0	0.0	8	77.8	0	0.0	2	22.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	100.0
7/10- 14 (7/9- 14)	89	Males	0	0.0	37	18.0	101	49.5	0	0.0	4	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	143	69.7
		Females	0	0.0	0	0.0	23	11.2	0	0.0	37	18.0	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0	62	30.3
		Subtotal	0	0.0	37	18.0	124	60.7	0	0.0	41	20.2	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0	205	100.0
7/15- 18 (7/15- 19)	125	Males	0	0.0	51	20.8	91	36.8	0	0.0	10	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	152	61.6
		Females	0	0.0	0	0.0	24	9.6	0	0.0	65	26.4	0	0.0	6	2.4	0	0.0	0	0.0	0	0.0	95	38.4
		Subtotal	0	0.0	51	20.8	115	46.4	0	0.0	75	30.4	0	0.0	6	2.4	0	0.0	0	0.0	0	0.0	247	100.0
7/21- 26 (7/20- 26) <sup>b</sup>	74	Males	8	6.8	23	18.9	16	13.5	0	0.0	8	6.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	56	45.9
		Females	0	0.0	0	0.0	5	4.1	0	0.0	59	48.6	0	0.0	2	1.4	0	0.0	0	0.0	0	0.0	65	54.1
		Subtotal	8	6.8	23	18.9	21	17.6	0	0.0	67	55.4	0	0.0	2	1.4	0	0.0	0	0.0	0	0.0	121	100.0
7/31 - 8/5 (7/31 - 8/5)	7	Males	0	0.0	3	42.9	2	28.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	71.4
		Females	0	0.0	0	0.0	0	0.0	0	0.0	2	28.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	28.6
		Subtotal	0	0.0	3	42.9	2	28.6	0	0.0	2	28.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	100.0
Total	304	Males	8	1.4	115	19.4	217	36.8	0	0.0	24	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	364	61.6
		Females	0	0.0	0	0.0	53	8.9	0	0.0	164	27.8	0	0.0	10	1.7	0	0.0	0	0.0	0	0.0	227	38.4
		Total	8	1.4	115	19.4	270	45.7	0	0.0	188	31.8	0	0.0	10	1.7	0	0.0	0	0.0	0	0.0	591	100.0
Mean Length Std. Error		Males	376 5		508 7		688 5			826 23														
Mean Length Std. Error		Females					761 9			851 6				892 10										

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Henshaw Creek weir was not operational from 7/3 through 7/8 and 7/27 through 7/30, therefore escapement estimates are not included for those days.

Appendix A.29 Salcha River chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>ab</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)																				Total	
			2000		1999		1998		1997		1996		1995											
			(1.1)	(1.2)	(1.3)	(2.2)	(1.4)	(2.3)	(1.5)	(2.4)	(1.6)	(2.5)	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
8/9 - 14	151	Males	1	0.7	11	7.3	52	34.4	0	0.0	21	13.9	0	0.0	2	1.3	0	0.0	0	0.0	0	0.0	87	57.6
Total		Females	0	0.0	0	0.0	12	8.0	0	0.0	43	28.5	0	0.0	9	6.0	0	0.0	0	0.0	0	0.0	64	42.4
		Total	1	0.7	11	7.3	64	42.4	0	0.0	64	42.4	0	0.0	11	7.3	0	0.0	0	0.0	0	0.0	151	100.0
Mean Length		Males	450		538		752				841				925									
Std. Error					24		9				18				55									
Mean Length		Females					790				882				886									
Std. Error							18				9				25									

<sup>a</sup> Samples were collected from carcasses.

<sup>b</sup> Sample percentages are not applied to escapement passage estimates.

Appendix A.30. Tozitna River weir chinook salmon escapement age and sex composition and mean length (mm), 2003.<sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)																		Total			
			2000		1999		1998		1997		1996		1995											
			(1.1) No.	(1.1) Per.	(1.2) No.	(1.2) Per.	(1.3) No.	(1.3) Per.	(2.2) No.	(2.2) Per.	(1.4) No.	(1.4) Per.	(2.3) No.	(2.3) Per.	(1.5) No.	(1.5) Per.	(2.4) No.	(2.4) Per.	(1.6) No.	(1.6) Per.	(2.5) No.	(2.5) Per.	No.	Per.
6/26 - 7/9 <sup>b</sup> (6/26 - 7/9)	103	Males	0	0.0	91	19.4	274	58.2	0	0.0	50	10.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	416	88.3
		Females	0	0.0	0	0.0	23	4.9	0	0.0	32	6.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	55	11.7
		Subtotal	0	0.0	91	19.4	297	63.1	0	0.0	82	17.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	471	100.0
7/10- 13 (7/10- 13)	135	Males	3	0.7	144	33.3	218	50.4	0	0.0	26	5.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	391	90.4
		Females	0	0.0	0	0.0	26	5.9	0	0.0	16	3.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	42	9.6
		Subtotal	3	0.7	144	33.3	244	56.3	0	0.0	42	9.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	433	100.0
7/14- 18 (7/14- 18)	137	Males	0	0.0	158	36.5	199	46.0	0	0.0	28	6.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	386	89.1
		Females	0	0.0	0	0.0	16	3.6	0	0.0	32	7.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	47	10.9
		Subtotal	0	0.0	158	36.5	215	49.6	0	0.0	60	13.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	433	100.0
7/19- 26 (7/19- 26)	126	Males	4	0.8	96	19.8	149	31.0	0	0.0	34	7.1	0	0.0	4	0.8	0	0.0	0	0.0	0	0.0	287	59.5
		Females	0	0.0	0	0.0	38	7.9	0	0.0	153	31.8	0	0.0	4	0.8	0	0.0	0	0.0	0	0.0	195	40.5
		Subtotal	4	0.8	96	19.8	187	38.9	0	0.0	187	38.9	0	0.0	8	1.6	0	0.0	0	0.0	0	0.0	482	100.0
Total	501	Males	7	0.4	489	26.9	841	46.2	0	0.0	139	7.6	0	0.0	4	0.2	0	0.0	0	0.0	0	0.0	1,480	81.4
		Females	0	0.0	0	0.0	102	5.7	0	0.0	233	12.8	0	0.0	4	0.2	0	0.0	0	0.0	0	0.0	339	18.6
		Total	7	0.4	489	26.9	943	51.9	0	0.0	372	20.4	0	0.0	8	0.4	0	0.0	0	0.0	0	0.0	1,819	100.0
Mean Length Std. Error		Males	373		518		704			791				805										
Mean Length Std. Error		Females					779			860				865										

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Tozitna River weir was not operational from July 3 through 5 due to high water levels, therefore escapement estimates are not included for that period.

# **Appendix B**

## **Summer Chum Salmon**

Appendix B.1. Yukon River District 1 chum salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/16 Period 1	112	Males	0	0.0	353	40.2	243	27.7	23	2.7	0	0.0	619	70.5
		Females	0	0.0	180	20.5	71	8.0	8	0.9	0	0.0	259	29.5
		Subtotal	0	0.0	533	60.7	314	35.7	31	3.6	0	0.0	878	100.0
6/21 Period 2	132	Males	0	0.0	338	29.5	294	25.7	44	3.8	0	0.0	675	59.1
		Females	9	0.8	329	28.8	87	7.6	43	3.8	0	0.0	468	40.9
		Subtotal	9	0.8	667	58.3	381	33.3	87	7.6	0	0.0	1,143	100.0
6/26 Period 3	45	Males	0	0.0	126	35.6	71	20.0	0	0.0	0	0.0	197	55.6
		Females	0	0.0	126	35.5	31	8.9	0	0.0	0	0.0	157	44.4
		Subtotal	0	0.0	252	71.1	102	28.9	0	0.0	0	0.0	354	100.0
7/2 <sup>bc</sup> Period 4	0	Males	0	0.0	334	35.6	188	20.0	0	0.0	0	0.0	522	55.6
		Females	0	0.0	333	35.5	83	8.9	0	0.0	0	0.0	416	44.4
		Subtotal	0	0.0	667	71.1	271	28.9	0	0.0	0	0.0	938	100.0
7/7 <sup>b</sup> Period 5	0	Males	0	0.0	95	35.6	53	20.0	0	0.0	0	0.0	148	55.6
		Females	0	0.0	94	35.5	24	8.9	0	0.0	0	0.0	118	44.4
		Subtotal	0	0.0	189	71.1	77	28.9	0	0.0	0	0.0	266	100.0
Other <sup>d</sup>	0	Males	0	0.0	13	34.8	9	23.7	1	1.9	0	0.0	22	60.4
		Females	0	0.2	11	29.7	3	8.3	0	1.4	0	0.0	15	39.6
		Subtotal	0	0.2	24	64.5	12	32.0	1	3.3	0	0.0	37	100.0
Total	289	Males	0	0.0	1,259	34.8	858	23.7	68	1.9	0	0.0	2,183	60.4
		Females	9	0.2	1,073	29.7	299	8.3	51	1.4	0	0.0	1,433	39.6
		Total	9	0.2	2,332	64.5	1,157	32.0	119	3.3	0	0.0	3,616	100.0
Mean Length Std. Error	Males			592 3		620 4		629 9						
Mean Length Std. Error	Females	570		565 3		581 7		595 14						

<sup>a</sup> Restricted commercial openings to gillnet with 8.0" and larger mesh size.

<sup>b</sup> No sampling occurred during periods 4 and 5; percentages of these fish are based on period 3 samples.

<sup>c</sup> Only the lower half of District 1 was open to fishing during period 4.

<sup>d</sup> Other represents 37 fish from test fish sold at times other than during the commercial openings.

Appendix B.2. Yukon River District 2 chum salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/18 Period 1	157	M	5	0.6	253	33.7	272	36.3	19	2.5	0	0.0	548	73.2
		F	0	0.0	138	18.5	52	7	10	1.3	0	0.0	200	26.8
		Subtotal	5	0.6	391	52.2	324	43.3	29	3.8	0	0.0	748	100.0
6/25 Period 2	156	M	0	0.0	476	37.8	331	26.3	24	1.9	0	0.0	832	66.0
		F	0	0.0	307	24.4	113	9	8	0.7	0	0.0	428	34.0
		Subtotal	0	0.0	783	62.2	444	35.3	32	2.6	0	0.0	1,260	100.0
7/2 <sup>b</sup> Period 3	0	Males	0	0.0	56	37.8	39	26.3	3	1.9	0	0.0	82	55.6
		Females	0	0.0	36	24.4	13	9.0	1	0.7	0	0.0	65	44.4
		Subtotal	0	0.0	91	62.2	52	35.3	4	2.6	0	0.0	147	100.0
7/7 <sup>b</sup> Period 4	0	Males	0	0.0	162	37.8	113	26.3	8	1.9	0	0.0	238	55.6
		Females	0	0.0	104	24.4	39	9.0	3	0.7	0	0.0	190	44.4
		Subtotal	0	0.0	266	62.2	151	35.3	11	2.6	0	0.0	428	100.0
Other <sup>c</sup>	0	Males	0	0.2	30	36.6	24	29.2	2	2.1	0	0.0	54	65.8
		Females	0	0.0	19	22.7	7	8.4	1	0.9	0	0.0	28	34.2
		Subtotal	0	0.2	49	59.3	31	37.6	2	2.9	0	0.0	82	100.0
Total	313	Males	5	0.2	976	36.6	778	29.2	56	2.1	0	0.0	1,754	65.8
		Females	0	0.0	604	22.7	224	8.4	23	0.9	0	0.0	911	34.2
		Total	5	0.2	1,580	59.3	1,002	37.6	78	2.9	0	0.0	2,665	100.0
Mean Length		Males	570		591		622		652					
Std. Error					2		4		9					
Mean Length		Females			561		586		640					
Std. Error					3		8		23					

<sup>a</sup> Restricted commercial openings to gillnet with 8.0" and larger mesh size.

<sup>b</sup> No sampling occurred during periods 3 and 4; percentages of these fish are based on period 2 samples.

<sup>c</sup> Other represents 82 fish from test fish sold at times other than during the commercial openings.

Appendix B.3. Yukon River District 6 chum salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000		1999		1998		1997		1996			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	No.	Per.	No.	Per.	No.	Per.	No.
7/11- 13 <sup>b</sup> Period 1	0	Males	0	0.0	60	29.0	27	12.8	3	1.6	0	0.0	90	43.3
		Females	0	0.0	86	41.2	28	13.7	4	1.8	0	0.0	118	56.7
		Subtotal	0	0.0	146	70.2	55	26.5	7	3.3	0	0.0	208	100.0
7/14- 16 <sup>b</sup> Period 2	0	Males	0	0.0	162	29.0	71	12.8	9	1.6	0	0.0	242	43.3
		Females	0	0.0	230	41.2	76	13.7	10	1.8	0	0.0	316	56.7
		Subtotal	0	0.0	392	70.2	148	26.5	19	3.3	0	0.0	558	100.0
7/18- 20 <sup>b</sup> Period 3	0	Males	0	0.0	174	29.0	77	12.8	9	1.6	0	0.0	259	43.3
		Females	0	0.0	247	41.2	82	13.7	11	1.8	0	0.0	340	56.7
		Subtotal	0	0.0	421	70.2	158	26.5	20	3.3	0	0.0	599	100.0
7/21- 23 Period 4	146	Males	0	0.0	451	26.0	178	10.3	12	0.7	0	0.0	641	37.0
		Females	0	0.0	759	43.9	332	19.2	0	0.0	0	0.0	1,091	63.0
		Subtotal	0	0.0	1,210	69.9	510	29.5	12	0.7	0	0.0	1,732	100.0
7/28- 29 Period 5	150	Males	0	0.0	446	32.7	218	16.0	36	2.7	0	0.0	700	51.3
		Females	0	0.0	518	38.0	91	6.7	55	4.0	0	0.0	664	48.7
		Subtotal	0	0.0	964	70.7	309	22.7	91	6.7	0	0.0	1,364	100.0
Total	296	Males	0	0.0	1,292	29.0	571	12.8	69	1.6	0	0.0	1,932	43.3
		Females	0	0.0	1,840	41.2	609	13.7	79	1.8	0	0.0	2,529	56.7
		Total	0	0.0	3,132	70.2	1,180	26.5	148	3.3	0	0.0	4,461	100.0
Mean Length		Males	570		591		622		652					
Std. Error					3		5		24					
Mean Length		Females			569		591		613					
Std. Error					3		4		5					

<sup>a</sup> Commercial harvest from fishwheels.

<sup>b</sup> No sampling occurred during periods 1, 2, and 3; percentages of these fish are based on periods 4 and 5.

Appendix B.4. Yukon River District 1 chum salmon subsistence harvest, from 5.5" gillnets, age composition, 2003. <sup>a</sup>

Sample Dates	Sample Size	Brood Year and (Age Group)										Total	
		2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
		No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/6	65	0	0.0	26	40.0	34	52.3	5	7.7	0	0.0	65	100.0
6/10	18	1	5.6	9	50.0	6	33.3	2	11.1	0	0.0	18	100.0
6/12- 13	76	0	0.0	85	52.1	70	42.9	8	4.9	0	0.0	163	100.0
Total	246	1	0.4	120	48.8	110	44.7	15	6.1	0	0.0	246	100.0

<sup>a</sup> Subsistence chum salmon harvests from 5.5" gillnets were sampled three times in District 1, however sex and length data were not recorded for all fish.

Appendix B.5. Yukon River District 1 chum salmon subsistence harvest, from 5.5" gillnets, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/6	51	Males	0	0.0	10	19.6	17	33.4	3	5.9	0	0.0	30	58.8
		Females	0	0.0	8	15.7	12	23.5	1	1.9	0	0.0	21	41.2
		Subtotal	0	0.0	18	35.3	29	56.9	4	7.8	0	0.0	51	100.0
6/10	4	Males	1	25.0	2	50.0	1	25.0	0	0.0	0	0.0	4	100.0
		Females	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Subtotal	1	25.0	2	50.0	1	25.0	0	0.0	0	0.0	4	100.0
6/12- 13	163	Males	0	0.0	63	38.6	45	27.6	5	3.1	0	0.0	113	69.3
		Females	0	0.0	22	13.5	25	15.3	3	1.8	0	0.0	50	30.7
		Subtotal	0	0.0	85	52.1	70	42.9	8	4.9	0	0.0	163	100.0
Total	218	Males	1	0.5	75	34.4	63	28.9	8	3.7	0	0.0	147	67.4
		Females	0	0.0	30	13.8	37	17.0	4	1.8	0	0.0	71	32.6
		Total	1	0.5	105	48.2	100	45.9	12	5.5	0	0.0	218	100.0
Mean Length Std. Error	Males	580		591		616		612						
				3		4		11						
Mean Length Std. Error	Females			584		592		596						
				4		5		36						

<sup>a</sup> Subsistence chum salmon harvests from 5.5" gillnets were sampled three times in District 1, however sex and length data were not recorded for all fish.

Appendix B.6. Yukon River District 1 chum salmon subsistence harvest, from 8.5" gillnets, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)		No.	Per.
6/3	6	Males	0	0.0	0	0.0	3	50.0	1	16.7	0	0.0	4	66.7
Total		Females	0	0.0	0	0.0	2	33.3	0	0.0	0	0.0	2	33.3
		Subtotal	0	0.0	0	0.0	5	83.3	1	16.7	0	0.0	6	100.0
Mean Length		Males					617		600					
Std. Error							8							
Mean Length		Females					629							
Std. Error							11							

<sup>a</sup> Subsistence chum salmon harvests from 8.5" gillnets were sampled once in District 1.

Appendix B.7. Yukon River District 4C (Ruby) chum salmon subsistence harvest, from 6.5" gillnets, age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/3 Total	33	Males	0	0.0	22	66.7	10	30.3	1	3.0	0	0.0	33	100.0
		Females	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Total	0	0.0	22	66.7	10	30.3	1	3.0	0	0.0	33	100.0
Mean Length Std. Error		Males			635 6			638 9			680			
Mean Length Std. Error		Females												

<sup>a</sup> These fish were sampled by youth employed in a pilot ASL subsistence sampling program conducted by Tanana Chiefs Conference. Limited training was available for these youth and the sex composition is likely incorrect.

Appendix B.8. Big Eddy chum salmon 5.5" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
5/27 - 6/9 1st quartile	144	Males	0	0.0	46	31.9	21	14.6	1	0.7	0	0.0	68	47.2
		Females	0	0.0	37	25.7	36	25.0	3	2.1	0	0.0	76	52.8
		Subtotal	0	0.0	83	57.6	57	39.6	4	2.8	0	0.0	144	100.0
6/10- 14 2nd quartile	120	Males	0	0.0	43	35.9	13	10.8	0	0.0	0	0.0	56	46.7
		Females	0	0.0	49	40.8	14	11.7	1	0.8	0	0.0	64	53.3
		Subtotal	0	0.0	92	76.7	27	22.5	1	0.8	0	0.0	120	100.0
6/15- 24 3rd quartile	53	Males	0	0.0	15	28.3	4	7.6	1	1.9	0	0.0	20	37.7
		Females	0	0.0	28	52.8	5	9.4	0	0.0	0	0.0	33	62.3
		Subtotal	0	0.0	43	81.1	9	17.0	1	1.9	0	0.0	53	100.0
6/25 - 7/15 4th quartile	249	Males	1	0.4	100	40.1	15	6.0	2	0.8	0	0.0	118	47.4
		Females	0	0.0	116	46.6	12	4.8	3	1.2	0	0.0	131	52.6
		Subtotal	1	0.4	216	86.7	27	10.8	5	2.0	0	0.0	249	100.0
Total	566	Males	1	0.2	204	36.1	53	9.4	4	0.7	0	0.0	262	46.3
		Females	0	0.0	230	40.6	67	11.8	7	1.2	0	0.0	304	53.7
		Total	1	0.2	434	76.7	120	21.2	11	1.9	0	0.0	566	100.0
Mean Length Std. Error		Males	560		569		591		624					
						2		4		8				
Mean Length Std. Error		Females			558		576		594					
						2		3		9				

<sup>a</sup> Sample dates are stratified by quartiles based on combined Big Eddy and Middle Mouth 5.5" drift gillnet catch totals.

Appendix B.9. Middle Mouth chum salmon 5.5" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
5/27 - 6/9 1st quartile	31	Males	0	0.0	8	25.8	5	16.1	3	9.7	0	0.0	16	51.6
		Females	0	0.0	7	22.6	4	12.9	4	12.9	0	0.0	15	48.4
		Subtotal	0	0.0	15	48.4	9	29.0	7	22.6	0	0.0	31	100.0
6/10- 14 2nd quartile	5	Males	0	0.0	3	60.0	0	0.0	0	0.0	0	0.0	3	60.0
		Females	0	0.0	2	40.0	0	0.0	0	0.0	0	0.0	2	40.0
		Subtotal	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	5	100.0
6/15- 24 3rd quartile	33	Males	0	0.0	11	33.3	3	9.1	0	0.0	0	0.0	14	42.4
		Females	0	0.0	15	45.5	4	12.1	0	0.0	0	0.0	19	57.6
		Subtotal	0	0.0	26	78.8	7	21.2	0	0.0	0	0.0	33	100.0
6/25 - 7/15 4th quartile	187	Males	0	0.0	72	38.5	8	4.3	0	0.0	0	0.0	80	42.8
		Females	2	1.1	95	50.8	10	5.3	0	0.0	0	0.0	107	57.2
		Subtotal	2	1.1	167	89.3	18	9.6	0	0.0	0	0.0	187	100.0
Total	256	Males	0	0.0	94	36.7	16	6.3	3	1.2	0	0.0	113	44.1
		Females	2	0.8	119	46.5	18	7.0	4	1.5	0	0.0	143	55.9
		Total	2	0.8	213	83.2	34	13.3	7	2.7	0	0.0	256	100.0
Mean Length Std. Error	Males			573 3		604 7		637 14						
Mean Length Std. Error	Females	553 13		562 2		581 7		583 13						

<sup>a</sup> Sample dates are stratified by quartiles based on combined Big Eddy and Middle Mouth 5.5" drift gillnet catch totals.

Appendix B.10. East Fork Andraefsky River weir chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/21- 25 (6/18- 27)	129	Males	0	0.0	412	21.7	794	41.9	29	1.6	0	0.0	1,236	65.1
		Females	0	0.0	383	20.2	280	14.7	0	0.0	0	0.0	662	34.9
		Subtotal	0	0.0	795	41.9	1,074	56.6	29	1.6	0	0.0	1,898	100.0
6/29 - 7/1 (6/28 - 7/3)	128	Males	0	0.0	944	32.0	806	27.3	0	0.0	0	0.0	1,749	59.4
		Females	23	0.8	644	21.9	506	17.2	23	0.8	0	0.0	1,197	40.6
		Subtotal	23	0.8	1,588	53.9	1,312	44.5	23	0.8	0	0.0	2,946	100.0
7/6- 7 (7/4- 10)	146	Males	0	0.0	3,618	44.5	1,559	19.2	0	0.0	0	0.0	5,177	63.7
		Females	0	0.0	2,060	25.4	891	10.9	0	0.0	0	0.0	2,951	36.3
		Subtotal	0	0.0	5,678	69.9	2,450	30.1	0	0.0	0	0.0	8,128	100.0
7/13- 14 (7/11- 17)	143	Males	26	0.7	1,567	43.3	228	6.3	51	1.4	0	0.0	1,871	51.7
		Females	25	0.7	1,492	41.3	227	6.3	0	0.0	0	0.0	1,744	48.3
		Subtotal	51	1.4	3,059	84.6	455	12.6	51	1.4	0	0.0	3,615	100.0
7/20 (7/18- 23)	119	Males	0	0.0	1,205	38.6	78	2.5	0	0.0	0	0.0	1,284	41.2
		Females	0	0.0	1,730	55.5	105	3.4	0	0.0	0	0.0	1,834	58.8
		Subtotal	0	0.0	2,935	94.1	183	5.9	0	0.0	0	0.0	3,118	100.0
7/27- 31 (7/24 - 8/1)	144	Males	0	0.0	634	34.0	91	4.9	0	0.0	0	0.0	725	38.9
		Females	0	0.0	1,048	56.3	90	4.8	0	0.0	0	0.0	1,138	61.1
		Subtotal	0	0.0	1,682	90.3	181	9.7	0	0.0	0	0.0	1,863	100.0
8/3- 6 (8/2- 8)	144	Males	4	0.7	198	32.6	38	6.3	0	0.0	0	0.0	240	39.6
		Females	13	2.1	299	49.3	46	7.6	8	1.4	0	0.0	367	60.4
		Subtotal	17	2.8	497	81.9	84	13.9	8	1.4	0	0.0	607	100.0
8/10- 14 (8/9-14) <sup>b</sup>	93	Males	0	0.0	57	31.2	19	10.7	4	2.2	0	0.0	80	44.1
		Females	0	0.0	84	46.2	18	9.7	0	0.0	0	0.0	102	55.9
		Subtotal	0	0.0	141	77.4	37	20.4	4	2.2	0	0.0	182	100.0
8/20- 25 (8/18- 29)	66	Males	0	0.0	74	37.9	23	12.1	0	0.0	0	0.0	97	50.0
		Females	0	0.0	94	48.5	3	1.5	0	0.0	0	0.0	97	50.0
		Subtotal	0	0.0	168	86.4	26	13.6	0	0.0	0	0.0	194	100.0
9/2- 15 (8/30 - 9/15)	15	Males	0	0.0	24	46.7	0	0.0	0	0.0	0	0.0	24	46.7
		Females	0	0.0	28	53.3	0	0.0	0	0.0	0	0.0	28	53.3
		Subtotal	0	0.0	52	100.0	0	0.0	0	0.0	0	0.0	52	100.0
Total	1,127	Males	29	0.1	8,733	38.6	3,637	16.1	84	0.4	0	0.0	12,483	55.2
		Females	61	0.3	7,861	34.8	2,166	9.6	31	0.1	0	0.0	10,120	44.8
		Total	90	0.4	16,594	73.4	5,803	25.7	115	0.5	0	0.0	22,603	100.0
Mean Length Std. Error		Males	504		559		596		583					
					2		4		23					
Mean Length Std. Error		Females	482		522		550		555					
			16		2		4		15					

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> East Fork Andraefsky River weir was not operational from 8/15 to 8/17 due to high water levels, therefore escapement estimates are not included for that period.

Appendix B.11. Anvik River chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>ab</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/28 - 7/1 (6/20 - 7/3)	144	Males	368	0.7	15,814	29.8	11,769	22.2	1,104	2.1	0	0.0	29,054	54.9
		Females	0	0.0	15,447	29.2	7,355	13.9	1,103	2.1	0	0.0	23,906	45.1
		Subtotal	368	0.7	31,261	59.0	19,124	36.1	2,207	4.2	0	0.0	52,960	100.0
7/6- 9 (7/4- 11)	148	Males	0	0.0	31,038	32.4	9,053	9.4	647	0.7	0	0.0	40,737	42.6
		Females	647	0.7	40,737	42.6	13,579	14.2	0	0.0	0	0.0	54,963	57.4
		Subtotal	647	0.7	71,775	75.0	22,632	23.6	647	0.7	0	0.0	95,700	100.0
7/14- 15 (7/12- 16)	141	Males	0	0.0	16,527	32.6	6,467	12.8	0	0.0	0	0.0	22,994	45.4
		Females	359	0.7	21,197	41.9	5,748	11.3	359	0.7	0	0.0	27,664	54.6
		Subtotal	359	0.7	37,724	74.5	12,215	24.1	359	0.7	0	0.0	50,658	100.0
7/18- 20 (7/17- 27)	151	Males	345	0.7	14,130	27.2	5,170	9.9	0	0.0	0	0.0	19,644	37.7
		Females	1,723	3.3	28,260	54.3	2,412	4.7	0	0.0	0	0.0	32,396	62.3
		Subtotal	2,068	4.0	42,390	81.5	7,582	14.6	0	0.0	0	0.0	52,040	100.0
Total	584	Males	712	0.3	77,509	30.9	32,458	12.9	1,750	0.7	0	0.0	112,430	44.7
		Females	2,729	1.1	105,641	42.0	29,096	11.6	1,463	0.6	0	0.0	138,928	55.3
		Total	3,441	1.4	183,150	72.9	61,554	24.5	3,213	1.3	0	0.0	251,358	100.0
Mean Length		Males	525		567		606		627					
Std. Error					2		4		19					
Mean Length		Females	522		535		564		602					
Std. Error			15		2		4		12					

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Samples were collected with a beach seine.

Appendix B.12. Clear Creek weir chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/23 - 7/7 (6/22 - 7/7) <sup>b</sup>	124	Males	0	0.0	827	57.2	163	11.3	70	4.8	0	0.0	1,060	73.4
		Females	0	0.0	338	23.4	47	3.2	0	0.0	0	0.0	385	26.6
		Subtotal	0	0.0	1,165	80.6	210	14.5	70	4.8	0	0.0	1,445	100.0
7/8- 13 (7/8- 13)	118	Males	0	0.0	675	52.6	54	4.2	33	2.5	0	0.0	762	59.3
		Females	0	0.0	468	36.4	44	3.4	11	0.9	0	0.0	522	40.7
		Subtotal	0	0.0	1,143	89.0	98	7.6	44	3.4	0	0.0	1,284	100.0
7/14- 19 (7/14- 19)	148	Males	0	0.0	579	45.2	43	3.4	0	0.0	0	0.0	622	48.6
		Females	9	0.7	614	48.0	35	2.7	0	0.0	0	0.0	657	51.4
		Subtotal	9	0.7	1,193	93.2	78	6.1	0	0.0	0	0.0	1,279	100.0
7/20- 25 (7/20- 25)	134	Males	0	0.0	323	47.0	41	6.0	0	0.0	0	0.0	364	53.0
		Females	0	0.0	302	44.0	21	3.0	0	0.0	0	0.0	323	47.0
		Subtotal	0	0.0	625	91.0	62	9.0	0	0.0	0	0.0	687	100.0
7/26 - 8/2 (7/26 - 8/2)	155	Males	0	0.0	290	54.2	14	2.6	0	0.0	0	0.0	304	56.8
		Females	7	1.3	221	41.3	3	0.6	0	0.0	0	0.0	231	43.2
		Subtotal	7	1.3	511	95.5	17	3.2	0	0.0	0	0.0	535	100.0
Total	679	Males	0	0.0	2,694	51.5	315	6.0	102	2.0	0	0.0	3,112	59.5
		Females	16	0.3	1,943	37.2	149	2.9	11	0.2	0	0.0	2,118	40.5
		Total	16	0.3	4,637	88.7	464	8.9	113	2.2	0	0.0	5,230	100.0
Mean Length Std. Error	Males			554 1		595 5		605 8						
Mean Length Std. Error	Females	498 13		532 2		577 6		580						

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Clear Creek weir was not operational 6/26, 7/2, and 7/3 due to high water levels, therefore escapement estimates are not included for those periods.

Appendix B.13. Gisasa River weir chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/28 - 7/2 (6/28 - 7/2) <sup>b</sup>	106	Males	0	0.0	829	32.1	536	20.7	24	0.9	0	0.0	1,390	53.8
		Females	0	0.0	585	22.6	610	23.6	0	0.0	0	0.0	1,194	46.2
		Subtotal	0	0.0	1,414	54.7	1,146	44.3	24	0.9	0	0.0	2,584	100.0
7/5- 7 (7/5- 8)	100	Males	0	0.0	1,132	35.0	776	24.0	0	0.0	0	0.0	1,908	59.0
		Females	65	2.0	647	20.0	518	16.0	97	3.0	0	0.0	1,326	41.0
		Subtotal	65	2.0	1,779	55.0	1,294	40.0	97	3.0	0	0.0	3,234	100.0
7/9- 11 (7/9- 12)	69	Males	72	1.4	1,950	39.1	578	11.6	0	0.0	0	0.0	2,600	52.2
		Females	0	0.0	1,806	36.3	578	11.6	0	0.0	0	0.0	2,384	47.8
		Subtotal	72	1.4	3,756	75.4	1,156	23.2	0	0.0	0	0.0	4,984	100.0
7/13- 16 (7/13- 17)	101	Males	0	0.0	1,767	32.7	1,285	23.8	54	1.0	0	0.0	3,105	57.4
		Females	0	0.0	1,713	31.7	535	9.9	53	1.0	0	0.0	2,302	42.6
		Subtotal	0	0.0	3,480	64.4	1,820	33.7	107	2.0	0	0.0	5,407	100.0
7/18- 21 (7/18- 22)	97	Males	0	0.0	1,946	37.1	541	10.3	54	1.0	0	0.0	2,541	48.5
		Females	0	0.0	2,163	41.3	432	8.3	108	2.1	0	0.0	2,703	51.5
		Subtotal	0	0.0	4,109	78.4	973	18.6	162	3.1	0	0.0	5,244	100.0
7/23- 25 (7/23- 26)	100	Males	0	0.0	520	49.0	74	7.0	0	0.0	0	0.0	595	56.0
		Females	0	0.0	425	40.0	43	4.0	0	0.0	0	0.0	467	44.0
		Subtotal	0	0.0	945	89.0	117	11.0	0	0.0	0	0.0	1,062	100.0
7/28- 31 (7/27 - 8/3)	130	Males	14	0.8	717	38.5	301	16.2	14	0.8	0	0.0	1,047	56.2
		Females	0	0.0	688	36.9	129	6.9	0	0.0	0	0.0	817	43.8
		Subtotal	14	0.8	1,405	75.4	430	23.1	14	0.8	0	0.0	1,864	100.0
Total	703	Males	86	0.3	8,861	36.4	4,091	16.8	146	0.6	0	0.0	13,185	54.1
		Females	65	0.3	8,026	32.9	2,844	11.6	259	1.1	0	0.0	11,194	45.9
		Total	151	0.6	16,887	69.3	6,935	28.4	405	1.7	0	0.0	24,379	100.0
Mean Length Std. Error	Males	511		579		610		621						
				2		4								
Mean Length Std. Error	Females	533		550		582		576						
				13		4		7						

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Gisasa River weir was not operational from 7/3 to 7/4 due to high water levels, therefore escapement estimates are not included for that period.

Appendix B.14. Henshaw Creek weir chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)		No.	Per.
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.		
6/28 - 7/2 (6/26 - 7/2) <sup>b</sup>	31	Males	0	0.0	12	29.0	8	19.4	5	12.9	0	0.0	25	61.3
		Females	0	0.0	9	22.6	5	12.9	1	3.2	0	0.0	15	38.7
		Subtotal	0	0.0	21	51.6	13	32.3	6	16.1	0	0.0	40	100.0
7/10- 14 (7/9- 15)	176	Males	0	0.0	1,907	48.3	381	9.7	179	4.5	0	0.0	2,468	62.5
		Females	45	1.1	1,212	30.7	135	3.4	90	2.3	0	0.0	1,481	37.5
		Subtotal	45	1.1	3,119	79.0	516	13.1	269	6.8	0	0.0	3,949	100.0
7/16- 20 (7/16- 20)	106	Males	0	0.0	2,002	43.4	174	3.8	131	2.8	0	0.0	2,307	50.0
		Females	44	0.9	2,132	46.2	87	1.9	43	1.0	0	0.0	2,306	50.0
		Subtotal	44	0.9	4,134	89.6	261	5.7	174	3.8	0	0.0	4,613	100.0
7/21- 25 (7/21- 26) <sup>b</sup>	111	Males	71	0.9	2,840	36.0	213	2.7	0	0.0	0	0.0	3,124	39.6
		Females	142	1.8	3,975	50.5	284	3.6	355	4.5	0	0.0	4,756	60.4
		Subtotal	213	2.7	6,815	86.5	497	6.3	355	4.5	0	0.0	7,880	100.0
7/31 - 8/6 (7/31 - 8/6)	272	Males	4	0.4	426	37.1	21	1.8	8	0.7	0	0.0	460	40.1
		Females	4	0.3	638	55.5	34	3.0	13	1.1	0	0.0	688	59.9
		Subtotal	8	0.7	1,064	92.6	55	4.8	21	1.8	0	0.0	1,148	100.0
Total	696	Males	75	0.4	7,186	40.7	797	4.5	324	1.8	0	0.0	8,383	47.5
		Females	235	1.4	7,966	45.2	545	3.1	502	2.9	0	0.0	9,247	52.5
		Total	310	1.8	15,152	85.9	1,342	7.6	826	4.7	0	0.0	17,630	100.0
Mean Length		Males	563		563		593		637					
Std. Error						2		12		8				
Mean Length		Females	523		540		577		582					
Std. Error			13		2		6		6					

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Henshaw Creek weir was not operational from 7/3 to 7/8 and from 7/27 to 7/30 due to high water levels, therefore escapement estimates are not included for those periods.

Appendix B.15. Nulato River weir chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
7/8- 9 (7/5- 10)	120	Males	0	0.0	3,305	43.3	1,334	17.5	127	1.7	0	0.0	4,766	62.5
		Females	127	1.7	2,478	32.5	191	2.5	64	0.8	0	0.0	2,860	37.5
		Subtotal	127	1.7	5,783	75.8	1,525	20.0	191	2.5	0	0.0	7,626	100.0
7/11, 14 (7/11-16)	129	Males	0	0.0	2,533	45.7	687	12.4	43	0.8	0	0.0	3,263	58.9
		Females	0	0.0	1,889	34.1	386	7.0	0	0.0	0	0.0	2,275	41.1
		Subtotal	0	0.0	4,422	79.8	1,073	19.4	43	0.8	0	0.0	5,538	100.0
7/18 (7/17- 22)	128	Males	0	0.0	2,962	46.1	401	6.3	0	0.0	0	0.0	3,364	52.3
		Females	201	3.1	2,410	37.5	452	7.0	0	0.0	0	0.0	3,062	47.7
		Subtotal	201	3.1	5,372	83.6	853	13.3	0	0.0	0	0.0	6,426	100.0
Total	377	Males	0	0.0	8,800	44.9	2,423	12.4	170	0.9	0	0.0	11,393	58.2
		Females	328	1.7	6,777	34.6	1,029	5.2	64	0.3	0	0.0	8,197	41.8
		Total	328	1.7	15,577	79.5	3,452	17.6	234	1.2	0	0.0	19,590	100.0
Mean Length Std. Error	Males			568		608		648						
				2		5		13						
Mean Length Std. Error	Females		521		539		570		550					
			3		2		5							

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

Appendix B.16. Tozitna River weir chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
6/27 - 7/11 (6/24 - 7/11) <sup>b</sup>	95	Males	0	0.0	187	50.5	55	14.7	4	1.1	0	0.0	246	66.3
		Females	0	0.0	98	26.3	19	5.3	8	2.1	0	0.0	125	33.7
		Subtotal	0	0.0	285	76.8	74	20.0	12	3.2	0	0.0	371	100.0
7/12- 16 (7/12- 16)	151	Males	4	0.7	300	48.4	45	7.3	25	4.0	0	0.0	374	60.3
		Females	4	0.6	206	33.1	33	5.3	4	0.6	0	0.0	247	39.7
		Subtotal	8	1.3	506	81.5	78	12.6	29	4.6	0	0.0	621	100.0
7/17- 21 (7/17-21)	160	Males	15	0.6	1,294	54.4	238	10.0	45	1.9	0	0.0	1,592	66.9
		Females	0	0.0	670	28.1	104	4.4	15	0.6	0	0.0	788	33.1
		Subtotal	15	0.6	1,964	82.5	342	14.4	60	2.5	0	0.0	2,380	100.0
7/22- 26 (7/22- 26)	149	Males	55	0.7	4,793	59.1	599	7.4	54	0.7	0	0.0	5,501	67.8
		Females	54	0.6	2,451	30.2	109	1.3	0	0.0	0	0.0	2,614	32.2
		Subtotal	109	1.3	7,244	89.3	708	8.7	54	0.7	0	0.0	8,115	100.0
Total	555	Males	73	0.6	6,575	57.2	937	8.2	127	1.1	0	0.0	7,713	67.1
		Females	59	0.5	3,423	29.8	265	2.3	27	0.2	0	0.0	3,774	32.9
		Total	132	1.1	9,998	87.0	1,202	10.5	154	1.3	0	0.0	11,487	100.0
Mean Length Std. Error	Males	562		575		617		643						
				2		7		11						
Mean Length Std. Error	Females	543		547		593		595						
				3		6		10						

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> Tozitna River weir was not operational from 7/3 to 7/5 due to high water levels, therefore escapement estimates are not included for that period.

# **Appendix C**

## **Fall Chum Salmon**

Appendix C.1. Yukon River District 1 fall chum salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
8/25 Period 1	149	Males	17	0.7	1,230	49.0	51	2.0	0	0.0	0	0.0	1,297	51.7
		Females	0	0.0	1,196	47.6	0	0.0	17	0.7	0	0.0	1,213	48.3
		Subtotal	17	0.7	2,426	96.6	51	2.0	17	0.7	0	0.0	2,510	100.0
8/27 Period 2	129	Males	0	0.0	142	34.9	12	3.1	0	0.0	0	0.0	155	38.0
		Females	0	0.0	233	57.3	16	3.9	3	0.8	0	0.0	252	62.0
		Subtotal	0	0.0	375	92.2	28	7.0	3	0.8	0	0.0	407	100.0
8/29 Period 3	96	Males	0	0.0	39	32.3	5	4.2	0	0.0	0	0.0	43	36.5
		Females	0	0.0	74	62.5	1	1.0	0	0.0	0	0.0	76	63.5
		Subtotal	0	0.0	113	94.8	6	5.2	0	0.0	0	0.0	119	100.0
9/1 Period 4	139	Males	0	0.0	249	33.1	27	3.6	0	0.0	0	0.0	276	36.7
		Females	5	0.7	433	57.5	38	5.0	0	0.0	0	0.0	476	63.3
		Subtotal	5	0.7	682	90.6	65	8.6	0	0.0	0	0.0	752	100.0
9/3 Period 5	0 <sup>b</sup>	Males	0	0.0	346	33.1	38	3.6	0	0.0	0	0.0	384	36.7
		Females	7	0.7	601	57.5	52	5.0	0	0.0	0	0.0	662	63.3
		Subtotal	7	0.7	948	90.6	90	8.6	0	0.0	0	0.0	1,046	100.0
9/5 Period 6	0 <sup>b</sup>	Males	0	0.0	176	33.1	19	3.6	0	0.0	0	0.0	195	36.7
		Females	4	0.7	306	57.5	27	5.0	0	0.0	0	0.0	337	63.3
		Subtotal	4	0.7	482	90.6	46	8.6	0	0.0	0	0.0	532	100.0
9/9 Period 7	0 <sup>b</sup>	Males	0	0.0	26	33.1	3	3.6	0	0.0	0	0.0	29	36.7
		Females	1	0.7	46	57.5	4	5.0	0	0.0	0	0.0	51	63.3
		Subtotal	1	0.7	72	90.6	7	8.6	0	0.0	0	0.0	80	100.0
9/11 Period 8	0 <sup>b</sup>	Males	0	0.0	69	33.1	7	3.6	0	0.0	0	0.0	76	36.7
		Females	1	0.7	119	57.5	10	5.0	0	0.0	0	0.0	131	63.3
		Subtotal	1	0.7	188	90.6	18	8.6	0	0.0	0	0.0	207	100.0
Total	513	Males	17	0.3	2,277	40.3	162	2.9	0	0.0	0	0.0	2,455	46.8
		Females	18	0.3	3,008	53.2	148	2.6	20	0.4	0	0.0	3,198	53.2
		Total	35	0.6	5,286	93.5	310	5.5	20	0.4	0	0.0	5,653	100
Mean Length Std. Error	Males	590		593		605								
				2		9								
Mean Length Std. Error	Females	545		588		605		658						
				2		5								

<sup>a</sup> Restricted commercial openings to gillnet with 6.0" and larger mesh size.

<sup>b</sup> No sampling occurred during periods 5, 6, 7 or 8, therefore, percentages of these fish were based on the samples from period 4.

Appendix C.2. Yukon River District 4C (Ruby) fall chum salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000		1999		1998		1997		1996			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	No.	Per.	No.	Per.	No.	Per.	No.
8/31 Period 2 <sup>b</sup>	144	Males	0	0.0	175	43.8	47	11.8	3	0.7	0	0.0	225	56.3
		Females	0	0.0	139	34.7	34	8.3	3	0.7	0	0.0	175	43.7
		Subtotal	0	0.0	314	78.5	81	20.1	6	1.4	0	0.0	400	100.0
9/3 Period 3	112	Males	0	0.0	392	42.9	123	13.4	0	0.0	0	0.0	515	56.3
		Females	0	0.0	302	33.0	98	10.7	0	0.0	0	0.0	400	43.7
		Subtotal	0	0.0	694	75.9	221	24.1	0	0.0	0	0.0	915	100.0
Total	256	Males	0	0.0	567	43.1	170	12.9	3	0.2	0	0.0	740	56.3
		Females	0	0.0	441	33.6	131	10.0	3	0.2	0	0.0	575	43.7
		Total	0	0.0	1,008	76.7	301	22.9	6	0.4	0	0.0	1,315	100.0
Mean Length Std. Error		Males			605 3		612 5		595					
Mean Length Std. Error		Females			579 4		607 5		615					

<sup>a</sup> Commercial harvest from fishwheels.

<sup>b</sup> The first fall chum commercial period in District 4C occurred on 8/27, however there was no harvest.

Appendix C.3. Yukon River District 5B fall chum salmon subsistence harvest age and sex composition and mean length (mm), 2003.

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
8/13 <sup>a</sup>	70	Males	0.0	0.0	31.0	44.3	15.0	21.4	2.0	2.9	0.0	0.0	48.0	68.6
		Females	0.0	0.0	18.0	25.7	4.0	5.7	0.0	0.0	0.0	0.0	22.0	31.4
		Subtotal	0.0	0.0	49.0	70.0	19.0	27.1	2.0	2.9	0.0	0.0	70.0	100.0
9/11 <sup>a</sup>	78	Males	0	0.0	24	30.8	9	11.5	0	0.0	0	0.0	33	42.3
		Females	0	0.0	38	48.7	7	9.0	0	0.0	0	0.0	45	57.7
		Subtotal	0	0.0	62	79.5	16	20.5	0	0.0	0	0.0	78	100.0
9/11 <sup>b</sup>	39	Males	0	0.0	20	51.3	5	12.8	0	0.0	0	0.0	25	64.1
		Females	0	0.0	14	35.9	0	0.0	0	0.0	0	0.0	14	35.9
		Subtotal	0	0.0	34	87.2	5	12.8	0	0.0	0	0.0	39	100.0
Total	187	Males	0	0.0	75	40.1	29	15.5	2	1.1	0	0.0	106	56.7
		Females	0	0.0	70	37.4	11	5.9	0	0.0	0	0.0	81	43.3
		Total	0	0.0	145	77.5	40	21.4	2	1.1	0	0.0	187	100.0
Mean Length		Males		611		647		675						
Std. Error				4		5		30						
Mean Length		Females		588		618								
Std. Error				4		8								

<sup>a</sup> Samples were from fish harvested by fishwheels near Tanana.

<sup>b</sup> Samples were from fish harvested by fishwheels near Rapids.

Appendix C.4. Big Eddy fall chum salmon 6.0" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)										Total	
			2000		1999		1998		1997		1996			
			(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	No.	Per.	No.	Per.	No.	Per.	No.
7/16- 31 1st quartile	70	Males	0	0.0	27	38.6	1	1.4	0	0.0	0	0.0	28	40.0
		Females	0	0.0	37	52.8	5	7.2	0	0.0	0	0.0	42	60.0
		Subtotal	0	0.0	64	91.4	6	8.6	0	0.0	0	0.0	70	100.0
8/1- 9 2nd quartile	59	Males	2	3.4	19	32.2	1	1.7	0	0.0	0	0.0	22	37.3
		Females	0	0.0	33	55.9	3	5.1	1	1.7	0	0.0	37	62.7
		Subtotal	2	3.4	52	88.1	4	6.8	1	1.7	0	0.0	59	100.0
8/10- 14 3rd quartile	82	Males	0	0.0	26	31.7	4	4.9	0	0.0	0	0.0	30	36.6
		Females	0	0.0	51	62.2	1	1.2	0	0.0	0	0.0	52	63.4
		Subtotal	0	0.0	77	93.9	5	6.1	0	0.0	0	0.0	82	100.0
8/15- 24 4th quartile	83	Males	0	0.0	34	41.0	3	3.6	0	0.0	0	0.0	37	44.6
		Females	1	1.2	43	51.8	1	1.2	1	1.2	0	0.0	46	55.4
		Subtotal	1	1.2	77	92.8	4	4.8	1	1.2	0	0.0	83	100.0
Total	294	Males	2	0.7	106	36.0	9	3.1	0	0.0	0	0.0	117	39.8
		Females	1	0.3	164	55.8	10	3.4	2	0.7	0	0.0	177	60.2
		Total	3	1.0	270	91.8	19	6.5	2	0.7	0	0.0	294	100.0
Mean Length		Males	598	607	632									
Std. Error			33	3	13									
Mean Length		Females	555	595	615	630								
Std. Error				2	11									

<sup>a</sup> Sample dates are stratified by quartiles based on Big Eddy 6.0" drift gillnet catch total.

Appendix C.5. Middle Mouth fall chum salmon 6.0" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
7/16- 26 1st quartile	122	M	0	0.0	45	36.9	5	4.1	1	0.8	0	0.0	51	41.8
		F	0	0.0	58	47.5	13	10.7	0	0.0	0	0.0	71	58.2
		Subtotal	0	0.0	103	84.4	18	14.8	1	0.8	0	0.0	122	100.0
7/27 - 8/4 2nd quartile	96	M	1	1.0	48	50.0	5	5.2	0	0.0	0	0.0	54	56.3
		F	0	0.0	41	42.7	1	1.1	0	0.0	0	0.0	42	43.7
		Subtotal	1	1.0	89	92.7	6	6.3	0	0.0	0	0.0	96	100.0
8/5- 15 3rd quartile	113	M	0	0.0	47	41.6	4	3.6	0	0.0	0	0.0	51	45.1
		F	0	0.0	58	51.3	4	3.5	0	0.0	0	0.0	62	54.9
		Subtotal	0	0.0	105	92.9	8	7.1	0	0.0	0	0.0	113	100.0
8/16- 26 4th quartile	60	M	0	0.0	15	25.0	3	5.0	0	0.0	0	0.0	18	30.0
		F	1	1.7	35	58.3	6	10.0	0	0.0	0	0.0	42	70.0
		Subtotal	1	1.7	50	83.3	9	15.0	0	0.0	0	0.0	60	100.0
Total	391	M	1	0.3	155	39.6	17	4.4	1	0.3	0	0.0	174	44.5
		F	1	0.2	192	49.1	24	6.1	0	0.0	0	0.0	217	55.5
		Total	2	0.5	347	88.7	41	10.5	1	0.3	0	0.0	391	100.0
Mean Length		Males	560	609	618	640								
Std. Error				3	8									
Mean Length		Females	565	597	605									
Std. Error				2	6									

<sup>a</sup> Sample dates are stratified by quartiles based on Middle Mouth 6.0" drift gillnet catch total.

Appendix C.6. Mountain Village fall chum salmon 5 7/8" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
7/17- 28 1st quartile	84	Males	0	0.0	47	55.9	10	11.9	0	0.0	0	0.0	57	67.9
		Females	1	1.2	24	28.6	2	2.4	0	0.0	0	0.0	27	32.1
		Subtotal	1	1.2	71	84.5	12	14.3	0	0.0	0	0.0	84	100.0
7/29 - 8/6 2nd quartile	68	Males	0	0.0	23	33.8	2	3.0	0	0.0	0	0.0	25	36.8
		Females	0	0.0	41	60.3	2	2.9	0	0.0	0	0.0	43	63.2
		Subtotal	0	0.0	64	94.1	4	5.9	0	0.0	0	0.0	68	100.0
8/7- 16 3rd quartile	60	Males	0	0.0	23	38.3	3	5.0	0	0.0	0	0.0	26	43.3
		Females	0	0.0	33	55.0	1	1.7	0	0.0	0	0.0	34	56.7
		Subtotal	0	0.0	56	93.3	4	6.7	0	0.0	0	0.0	60	100.0
8/17 - 9/5 4th quartile	57	Males	0	0.0	20	35.1	3	5.3	0	0.0	0	0.0	23	40.4
		Females	0	0.0	30	52.6	4	7.0	0	0.0	0	0.0	34	59.6
		Subtotal	0	0.0	50	87.7	7	12.3	0	0.0	0	0.0	57	100.0
Seasonal	269	Males	0	0.0	113	42.0	18	6.7	0	0.0	0	0.0	131	48.7
		Females	1	0.4	128	47.6	9	3.3	0	0.0	0	0.0	138	51.3
		Total	1	0.4	241	89.6	27	10.0	0	0.0	0	0.0	269	100.0
Mean Length		Males		614		611								
Std. Error				3		11								
Mean Length		Males		614		611								
Std. Error				2		9								

<sup>a</sup> Sample dates are stratified by quartiles based on Mountain Village test fish CPUE (catch per unit effort).

Appendix C.7. Kaltag fall chum salmon 5 7/8" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
7/25 - 8/8 1st quartile	90	Males	0	0.0	41	45.5	12	13.4	0	0.0	0	0.0	53	58.9
		Females	0	0.0	24	26.7	12	13.3	1	1.1	0	0.0	37	41.1
		Subtotal	0	0.0	65	72.2	24	26.7	1	1.1	0	0.0	90	100.0
8/9- 14 2nd quartile	99	Males	0	0.0	48	48.5	13	13.1	0	0.0	0	0.0	61	61.6
		Females	0	0.0	29	29.3	8	8.1	1	1.0	0	0.0	38	38.4
		Subtotal	0	0.0	77	77.8	21	21.2	1	1.0	0	0.0	99	100.0
8/15- 27 3rd quartile	109	Males	0	0.0	41	37.6	14	12.9	2	1.8	0	0.0	57	52.3
		Females	0	0.0	38	34.9	14	12.8	0	0.0	0	0.0	52	47.7
		Subtotal	0	0.0	79	72.5	28	25.7	2	1.8	0	0.0	109	100.0
8/28 - 9/17 4th quartile	73	Males	0	0.0	23	31.5	6	8.2	0	0.0	0	0.0	29	39.7
		Females	0	0.0	28	38.4	16	21.9	0	0.0	0	0.0	44	60.3
		Subtotal	0	0.0	51	69.9	22	30.1	0	0.0	0	0.0	73	100.0
Total	371	Males	0	0.0	153	41.2	45	12.1	2	0.6	0	0.0	200	53.9
		Females	0	0.0	119	32.1	50	13.5	2	0.5	0	0.0	171	46.1
		Total	0	0.0	272	73.3	95	25.6	4	1.1	0	0.0	371	100.0
Mean Length		Males		617		624		660						
Std. Error				2		5								
Mean Length		Females		605		606		565						
Std. Error				2		4								

<sup>a</sup> Sample dates are stratified by quartiles based on Kaltag test fish CPUE (catch per unit effort).

Appendix C.8. Delta River fall chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
11/25, 28 Total	172	Males	0	0.0	68	39.5	8	4.7	1	0.6	0	0.0	77	44.8
		Females	4	2.3	82	47.7	9	5.2	0	0.0	0	0.0	95	55.2
		Total	4	2.3	150	87.2	17	9.9	1	0.6	0	0.0	172	100.0
Mean Length		Males			612		607		620					
Std. Error					3		7							
Mean Length		Females	556		581		591							
Std. Error			10		3		9							

<sup>a</sup> Escapement samples were collected from carcasses; vertebrae were used for age determination.

Appendix C.9. Sheenjek River fall chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
9/4-23	84	Males	0	0.0	35	41.6	10	11.9	1	1.2	0	0.0	46	54.8
Total		Females	1	1.2	34	40.5	3	3.6	0	0.0	0	0.0	38	45.2
		Total	1	1.2	69	82.1	13	15.5	1	1.2	0	0.0	84	100.0
Mean Length		Males			623		643		710					
Std. Error					6		15							
Mean Length		Females	580		600		638							
Std. Error					4		17							

<sup>a</sup> Escapement samples were collected with a beach seine; vertebrae were used for age determination.

Appendix C.10. Toklat River fall chum salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)										Total	
			2000 (0.2)		1999 (0.3)		1998 (0.4)		1997 (0.5)		1996 (0.6)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.	No.	Per.
10/24	160	Males	1	0.6	58	36.2	7	4.4	1	0.6	0	0.0	67	41.9
Total		Females	7	4.4	75	46.9	11	6.9	0	0.0	0	0.0	93	58.1
		Total	8	5.0	133	83.1	18	11.3	1	0.6	0	0.0	160	100.0
Mean Length		Males	570		595		589		585					
Std. Error					4		14							
Mean Length		Females	552		563		581							
Std. Error			16		3		11							

<sup>a</sup> Escapement samples were collected from carcasses; vertebrae were used for age determination.

# **Appendix D**

## **Coho Salmon**

Appendix D.1. Yukon River District 1 coho salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.
8/25 Period 1	110	Males	696	17.3	1,501	37.3	110	2.7	2,307	57.3
		Females	549	13.6	1,099	27.2	73	1.8	1,721	42.7
		Subtotal	1,245	30.9	2,600	64.5	183	4.5	4,028	100.0
8/27 Period 2	102	Males	100	9.8	372	36.3	0	0.0	472	46.1
		Females	171	16.7	352	34.3	30	2.9	553	53.9
		Subtotal	271	26.5	724	70.6	30	2.9	1,025	100.0
8/29 Period 3	100	Males	80	11.0	292	40.0	7	1.0	380	52.0
		Females	66	9.0	270	37.0	15	2.0	350	48.0
		Subtotal	146	20.0	562	77.0	22	3.0	730	100.0
9/1 Period 4	104	Males	71	5.8	530	43.3	36	2.9	636	51.9
		Females	141	11.5	412	33.6	35	2.9	588	48.1
		Subtotal	212	17.3	942	76.9	71	5.8	1,224	100.0
9/3 Period 5	0 <sup>b</sup>	Males	75	5.8	560	43.3	37	2.9	671	51.9
		Females	149	11.5	434	33.6	37	2.9	622	48.1
		Subtotal	224	17.3	994	76.9	75	5.8	1,293	100.0
9/5 Period 6	0 <sup>b</sup>	Males	43	5.8	334	43.3	22	2.9	400	51.9
		Females	89	11.5	259	33.6	22	2.9	371	48.1
		Subtotal	133	17.3	593	76.9	45	5.8	771	100.0
9/9 Period 7	0 <sup>b</sup>	Males	11	5.8	82	43.3	6	2.9	99	51.9
		Females	22	11.5	64	33.6	6	2.9	91	48.1
		Subtotal	33	17.3	146	76.9	11	5.8	190	100.0
9/11 Period 8	0 <sup>b</sup>	Males	21	5.8	163	43.3	11	2.9	196	51.9
		Females	43	11.5	127	33.6	11	2.9	181	48.1
		Subtotal	65	17.3	290	76.9	22	5.8	377	100.0
Total	416	Males	1,096	11.4	3,834	39.8	229	2.4	5,160	53.5
		Females	1,230	12.8	3,017	31.3	229	2.4	4,478	46.5
		Total	2,329	24.2	6,851	71.1	459	4.8	9,638	100.0
Mean Length Std. Error		Males	583 6		593 3		601 26			
Mean Length Std. Error		Females	574 5		581 3		591 10			

<sup>a</sup> Restricted commercial openings to gillnet with 6.0" and larger mesh size.

<sup>b</sup> No sampling occurred during periods 5, 6, 7 or 8, therefore, percentages of these fish were based on the samples from period 4.

Appendix D.2. Yukon River District 4C (Ruby) coho salmon commercial harvest age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)		No.	Per.
			No.	Per.	No.	Per.	No.	Per.		
9/5	41	Males	98	26.8	143	39.0	18	4.9	260	70.7
Period 3 <sup>b</sup>		Females	63	17.1	45	12.2	0	0.0	107	29.3
Total		Total	161	43.9	188	51.2	18	4.9	367	100.0
Mean Length		Males	565		554		550			
Std. Error			15		15		20			
Mean Length		Females	591		604					
Std. Error			6		6					

<sup>a</sup> Commercial harvest from fishwheels.

<sup>b</sup> There was no harvest from the first and second coho salmon commercial periods in District 4C.

Appendix D.3. Big Eddy coho salmon 6.0" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)		No.	Per.
			No.	Per.	No.	Per.	No.	Per.		
7/22 - 8/3 1st quartile	44	Males	3	6.8	16	36.4	3	6.8	22	50
		Females	8	18.2	11	25	3	6.8	22	50
		Subtotal	11	25	27	61.4	6	13.6	44	100
8/4- 10 2nd quartile	48	Males	9	18.7	12	25	2	4.2	23	47.9
		Females	8	16.7	15	31.3	2	4.1	25	52.1
		Subtotal	17	35.4	27	56.3	4	8.3	48	100
8/11- 15 3rd quartile	58	Males	11	19	22	37.9	2	3.5	35	60.3
		Females	6	10.3	15	25.9	2	3.4	23	39.7
		Subtotal	17	29.3	37	63.8	4	6.9	58	100
8/16- 28 4th quartile	46	Males	4	8.7	19	41.3	3	6.5	26	56.5
		Females	2	4.3	16	34.8	2	4.4	20	43.5
		Subtotal	6	13	35	76.1	5	10.9	46	100
Total	196	Males	27	13.8	69	35.2	10	5.1	106	54.1
		Females	24	12.2	57	29.1	9	4.6	90	45.9
		Total	51	26.0	126	64.3	19	9.7	196	100.0
Mean Length		Males	585		590		582			
Std. Error			7		4		11			
Mean Length		Females	593		590		612			
Std. Error			4		3		3			

<sup>a</sup> Sample dates are stratified by quartiles based on Big Eddy 6.0" drift gillnet catch total.

Appendix D.4. Middle Mouth coho salmon 6.0" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)		No.	Per.
			No.	Per.	No.	Per.	No.	Per.		
7/28 - 8/7 1st quartile	66	Males	12	18.2	18	27.3	3	4.6	33	50
		Females	4	6	28	42.4	1	1.5	33	50
		Subtotal	16	24.2	46	69.7	4	6.1	66	100
8/11- 14 2nd quartile	44	Males	6	13.6	9	20.5	1	2.3	16	36.4
		Females	5	11.4	21	47.7	2	4.5	28	63.6
		Subtotal	11	25	30	68.2	3	6.8	44	100
8/15- 17 3rd quartile	51	Males	2	3.9	16	31.4	4	7.8	22	43.1
		Females	7	13.7	19	37.2	3	5.9	29	56.9
		Subtotal	9	17.6	35	68.6	7	13.7	51	100
8/18- 25 4th quartile	44	Males	1	2.3	17	38.6	3	6.8	21	47.7
		Females	6	13.6	16	36.4	1	2.3	23	52.3
		Subtotal	7	15.9	33	75	4	9.1	44	100
Total	205	Males	21	10.3	60	29.2	11	5.4	92	44.9
		Females	22	10.7	84	41.0	7	3.4	113	55.1
		Total	43	21.0	144	70.2	18	8.8	205	100.0
Mean Length		Males	592		580		603			
Std. Error			9		5		11			
Mean Length		Females	590		592		585			
Std. Error			5		3		12			

<sup>a</sup> Sample dates are stratified by quartiles based on Middle Mouth 6.0" drift gillnet catch total.

Appendix D.5. Mountain Village coho salmon 5 7/8" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates <sup>a</sup>	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)		No.	Per.
			No.	Per.	No.	Per.	No.	Per.		
7/24 - 8/15 1st quartile	77	Males	8	10.4	31	40.2	2	2.6	41	53.2
		Females	11	14.3	22	28.6	3	3.9	36	46.8
		Subtotal	19	24.7	53	68.8	5	6.5	77	100.0
8/15- 18 2nd quartile	71	Males	11	15.5	24	33.8	5	7.1	40	56.3
		Females	15	21.1	15	21.1	1	1.4	31	43.7
		Subtotal	26	36.6	39	54.9	6	8.5	71	100.0
8/19- 23 3rd quartile	76	Males	7	9.2	27	35.5	2	2.6	36	47.4
		Females	12	15.8	23	30.3	5	6.6	40	52.6
		Subtotal	19	25	50	65.8	7	9.2	76	100.0
8/24- 9/9 4th quartile	72	Males	7	9.7	26	36.1	3	4.2	36	50.0
		Females	10	13.9	25	34.7	1	1.4	36	50.0
		Subtotal	17	23.6	51	70.8	4	5.6	72	100.0
Total	296	Males	33	11.2	108	36.5	12	4.0	153	51.7
		Females	48	16.2	85	28.7	10	3.4	143	48.3
		Total	81	27.4	193	65.2	22	7.4	296	100.0
Mean Length		Males	594		593		587			
Std. Error			6		3		11			
Mean Length		Females	589		588		587			
Std. Error			3		3		11			

<sup>a</sup> Sample dates are stratified by quartiles based on Mountain Village test fish CPUE (catch per unit effort).

Appendix D.6. Kaltag coho salmon 5 7/8" drift gillnet catch age and sex composition and mean length (mm), 2003.

Sample Dates	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)		No.	Per.
			No.	Per.	No.	Per.	No.	Per.	No.	Per.
8/13 - 9/18 Total	20	Males	2	10.0	10	50.0	1	5.0	13	65.0
		Females	2	10.0	4	20.0	1	5.0	7	35.0
		Total	4	20.0	14	70.0	2	10.0	20	100.0
Mean Length		Males	583		616		630			
Std. Error					10					
Mean Length		Females	550		566		600			
Std. Error					17					

Appendix D.7. East Fork Andraefsky River weir coho salmon escapement age and sex composition and mean length (mm), 2003. <sup>a</sup>

Sample Dates (Strata Dates)	Sample Size		Brood Year and (Age Group)						Total	
			2000 (1.1)		1999 (2.1)		1998 (3.1)			
			No.	Per.	No.	Per.	No.	Per.	No.	Per.
7/31 - 8/11 (7/15 - 8/11)	86	Males	4	3.5	53	47.7	6	5.8	63	57.0
		Females	2	2.3	33	30.2	12	10.5	47	43.0
		Subtotal	6	5.8	86	77.9	18	16.3	110	100.0
8/12- 23 (8/12- 23) <sup>b</sup>	148	Males	13	4.0	125	39.2	15	4.7	153	48.0
		Females	19	6.1	129	40.5	17	5.4	166	52.0
		Subtotal	32	10.1	254	79.7	32	10.1	319	100.0
8/24- 25 (8/24- 27)	123	Males	167	5.7	1,075	36.6	96	3.3	1,338	45.5
		Females	215	7.3	1,195	40.6	191	6.5	1,601	54.5
		Subtotal	382	13.0	2,270	77.2	287	9.8	2,939	100.0
8/31 - 9/4 (8/28 - 9/5)	126	Males	163	5.6	1,144	38.9	93	3.2	1,400	47.6
		Females	257	8.7	1,237	42.1	47	1.6	1,541	52.4
		Subtotal	420	14.3	2,381	81.0	140	4.8	2,941	100.0
9/7- 15 (9/6- 15)	120	Males	236	14.2	680	40.8	69	4.2	985	59.2
		Females	83	5.0	582	35.0	14	0.8	679	40.8
		Subtotal	319	19.2	1,262	75.8	83	5.0	1,664	100.0
Total	603	Males	583	7.3	3,076	38.6	280	3.5	3,939	49.4
		Females	577	7.3	3,177	39.8	280	3.5	4,034	50.6
		Total	1,160	14.6	6,253	78.4	560	7.0	7,973	100.0
Mean Length Std. Error	Males	564 8		565 4		582 9				
Mean Length Std. Error	Females	547 9		553 4		539 14				

<sup>a</sup> The number of fish in each stratum age and sex category are derived from the sample percentages; discrepancies in sums are attributed to rounding errors.

<sup>b</sup> East Fork Andraefsky River weir was not operational from 8/15 to 8/17 due to high water levels, therefore escapements estimates are not included for that period.