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1993 Wannock River Chinook Salmon Mark-Recapture Experiment

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1993 Wannock River Chinook Salmon

Mark-Recapture Experiment

by

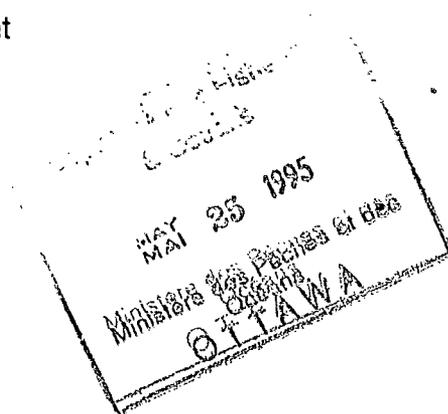
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ABSTRACT

Winther, I. 1995. 1993 Wannock River chinook salmon mark-recapture experiment. Can. Manuscr. Rep. Fish. Aquat. Sci. 2280: 52 p.

A mark-recapture experiment was implemented in 1993 as part of the continued assessment of chinook salmon (*Onchorynchus tshawytscha*) escapements to the Wannock River. The escapement of female chinook salmon to the Wannock River in 1993 was estimated at 9300 to 9500 using Bayesian techniques. Length, age and fin clip information are presented.

RESUME

Winther, I. 1995. 1993 Wannock River chinook salmon mark-recapture experiment. Can. Manuscr. Rep. Fish. Aquat. Sci. 2280: 52 p.

Une expérience de capture-recapture a été effectuée en 1993, dans le cadre du programme d'évaluation des échappées de saumon quinnat (*Onchorynchus tshawytscha*) dans la rivière Wannock. En 1993, on a estimé que le nombre d'échappées de quinnats femelles dans la rivière Wannock se situait entre 9 300 et 9 500 (méthodes bayésiennes). L'étude donne de l'information sur la taille, l'âge et le rognage des nageoires.

TABLE OF CONTENTS

Abstract/Resume	iii
Introduction	1
Methods	1
Results	4
Discussion	8
References	9

List of Tables:

Table 1. Seine catch	10
Table 2. Sexual composition of chinook samples.	11
Table 3. Chinook length frequency summary.	12
Table 4. Chinook recoveries by treatment before release.	11
Table 5. Chinook recoveries by number of seine recaptures.	11
Table 6. Chinook recoveries by dead pitch area.	13
Table 7. Chinook recoveries by week of mark application.	13
Table 8. Chinook recoveries by week of dead pitch.	14
Table 9. Recovery matrix, week of mark application verses week of dead pitch. ...	14
Table 10. Length at age data for chinook samples.	15
Table 11. Age data from coded wire tag recoveries.	16
Table 12. Incidence of chinook fin clips.	17
Table 13. Egg retention in female dead pitch recoveries.	17

List of Figures:

Figure 1. Wannock River, Rivers Inlet, British Columbia.	18
Figure 2. Population posterior probability distributions.	19
Figure 3. Comparison of female chinook POH length frequency distributions from seine caught and dead pitched samples.	20
Figure 4. Comparison of male chinook POH length frequency distributions from seine caught and dead pitched samples	21
Figure 5. Wannock River water levels and secchi disk depth.	22

List of Appendices:

Appendix 1. Chinook marking data.	23
Appendix 2. Chinook dead pitch data.	36
Appendix 3. Data for chinook mark recoveries.	46
Appendix 4. Weather and water conditions.	48

INTRODUCTION

The Canadian Department of Fisheries and Oceans committed to halting the decline of chinook salmon stocks in 1985 as part of the Pacific Salmon Treaty. The Pacific Salmon Commission Joint Chinook Technical Committee described Rivers Inlet as an "escapement indicator stock" for evaluation of the Pacific Salmon Treaty Chinook Rebuilding Program (Anon. 1991). The Wannock River is the largest contributor to the Rivers Inlet chinook stock complex with significant impact on stock trends in the area (Winther 1992).

Rivers Inlet chinook are important locally as the target of a large sport fishery. They also contribute to Native and commercial fisheries. The Oweekeno Band has been involved in enhancement of chinook salmon since 1983 through the Community Economic Development Program of the Department of Fisheries & Oceans. Chinook enhancement takes place at the Owikeno Salmonid Enhancement Program facility on the Wannock River, at the Snootli Hatchery in Bella Coola and in net pens in Rivers Inlet.

This report details the third year of live marking and carcass recovery to determine the size of the Wannock River chinook stock. Winther (1992, 1993) reported mark-recapture experiments to determine chinook escapements in 1991 and 1992. The objective of this series of mark-recapture experiments is to ultimately determine stock trends and provide a measure of the enhanced component of the stock.

METHODS

Mark Application

Chinook were captured from the Spring Pool of the Wannock River with a beach seine 84 m long and 10 m deep. Seining took place on 19 days between September 30 and October 25, 1993. Winther (1993) describes the beach seining procedure.

Date, weather, river level and secchi disk depth data were recorded each sample day. Time, set and catch data were recorded on waterproof forms.

Chinook marking and sampling procedures were similar to those carried out in 1992 (Winther 1993). All chinook were measured for post orbital to hypural plate (POH) length, sexed by external morphology, and checked for fin clips. Comments were recorded on the presence of hooks, fungal growth or seal scars. All chinook released received an individually numbered Kurl Lock tag and a 7 mm hole to the left operculum. Condition on release was noted as good, required resuscitation, bleeding, or spawned out. Set number, tag number, POH length, sex, condition, and fin clip data were recorded for each new fish encountered. Only set number and tag number were recorded for recaptured fish. New tags were applied to fish recaptured with an opercular punch but missing the original tag.

Adipose clipped chinook less than 65 cm POH length were kept for coded wire tag (CWT) sampling. CWT sampling consisted of measuring POH length, collecting scales and collecting the head. Scales were forwarded to the Fish Morphology Laboratory in Vancouver for ageing and heads were forwarded to the Snootli Hatchery in Bella Coola for dissection and CWT identification.

Chinook were collected to provide broodstock to hatchery programs. Broodstock chinook were sampled for POH length, fin clips, scales, and incised to determine sex. Broodstock carcasses were cut in half before being returned to the river. Tags were removed from previously marked fish.

Carcass Recovery

Carcasses were collected daily from the banks of the Wannock River from October 28 to November 26, 1993. Data were recorded on waterproof forms. Date, weather and area surveyed were recorded daily. Each fish was sampled, cut in half and returned to the river or bank. The river was divided into four zones and separated by the north and south bank for eight possible areas of carcass recovery (Figure 1). The area of recovery was noted for each chinook carcass. Carcasses were measured for POH length, incised to determine sex, and checked for tags, opercular punches and fin clips. The percentage of eggs retained in females was estimated. Scale samples were collected under the guide of the first 50 chinook encountered each week. Actual scale collections were more sporadic. Heads were collected from all adipose fin clipped chinook carcasses for CWT sampling.

Population Estimation

Female population size was estimated using a sequential Bayes algorithm as described by Gazey & Staley (1986). Calculations of the Bayesian estimation of posterior probability were based on 161 (K=161) discrete population levels in increments of 100 between 1000 and 17000 female chinook ($N_1=1000, N_2=1100, \dots, N_{161}=17000$) for a single time period ($T=1$). The probability of observing all R_t 's given the population size N_i over T sampling intervals given:

M_t = total marked fish at the start of sampling interval t;

C_t = total number of fish sampled during interval t; and

R_t = number of recaptures in the sample C_t was:

$$P(N_t | R_1, R_2, \dots, R_T) = \frac{\prod_{t=1}^T \left(\frac{1}{N_t} \right)^{R_t} \left(1 - \frac{M_t}{N_t} \right)^{C_t - R_t}}{\sum_{i=1}^K \prod_{t=1}^T \left(\frac{1}{N_T} \right)^{R_t} \left(1 - \frac{M_t}{N_t} \right)^{C_t - R_t}}$$

The 95% standardized probability region was calculated as the interval between bounds a and b such that $P(N < a) = 0.025$ and $P(N > b) = 0.025$. The highest probability density was calculated as the narrowest interval between a and b (ie. $b - a$ was minimal) with $P(a < N < b) = 0.95$.

The Chapman modification of Petersen mark recapture analysis (Ricker 1975) was presented for comparison. The formula used for the population estimate was:

$$N = \frac{(M+1)(C+1)}{(R+1)}$$

where: N = the population estimate;
 M = total fish marked;
 C = total fish caught in the recovery sample;
 R = the number of marked fish recaptured in sample C .

The 95% confidence limits about the Petersen population estimate was calculated by inserting values for R from tables of confidence limits for variables distributed in a Poisson frequency distribution (Ricker 1975, p. 343).

The Schaefer method of stratified tagging and recovery (Ricker 1975) was performed as a check of variability of conditions during the mark-recovery procedures using the formula:

$$N = \sum \left(R_{ij} \frac{M_i C_j}{R_i C_j} \right)$$

The notation was the same as for the Petersen estimate with subscripts i and j referring to the weeks of application and recovery respectively.

Identification of Bias

Tests were performed to identify potential sources of bias to the population estimation procedure to assess generally whether the samples met the assumption of equal probability of selection. Sample statistics of sex, time and size were compared with the expectation that random samples of the same population would have the same characteristics. Similarly, the characteristics of marked and unmarked components of the recovery sample were expected to be the same, as were the recovered and not recovered components of the application sample.

Kolmogorov-Smirnov two sample tests (Sokal & Rohlf 1981) were used to compare length frequency distributions of the application and recovery samples, of marked and

unmarked components of the recovery sample, and of recovered and not recovered components of the application samples. Chi-square contingency tables (Zar 1985) were used to determine sexual, temporal and spatial bias in the application and recovery samples. All tests were made to the 5% level of probability ($p < .05$).

RESULTS

Data collection

Field staff captured and marked chinook for 19 days from September 30 to October 25. Mark and recapture histories for every chinook appear in Appendix 1. Seine catch per set appears in Table 1. Chinook dead pitch data are tabled in Appendix 2. Data for dead pitch recoveries of marked chinook appear in Appendix 3.

A total of 563 female and 576 male chinook were caught by beach seining. Dead pitch recoveries included 821 female and 384 male chinook. 66 marked fish were recovered in the dead pitch. Assuming no marks were missed, 2278 unique chinook were encountered in the study.

Population Estimation

The most probable population estimate provided by the posterior distribution presented in Figure 2 is 9300 to 9500 female chinook. The interval between each probability evaluation was 100 fish, thus the mode of the probability distribution was within one interval of the population evaluation with the highest probability, 9400. This was based on 480 marked female releases and 821 females dead pitched for 42 mark recoveries. The 95% quantiles (2.5% on each end of the distribution) were 7200 and 13,300. The 95% highest probability density was between 7000 and 12,800 female chinook.

Estimates of the male chinook population were confounded by selectivity in the samples, given further consideration in the discussion. The most probable population estimate from Figure 2 is 7900 to 8100 male chinook, based on 499 marked male releases and 384 males dead pitched for 24 mark recoveries. The 95% quantiles were 5800 and 12,900. The 95% highest probability density was between 5600 and 12,500 male chinook.

The female chinook population estimate provided by the Chapman modification of the Petersen formula (Ricker 1975) was 9195 with 95% confidence limits of 6550 and 11840. The male estimate was 7700 with 95% confidence limits of 4838 and 10,562.

Sexual Bias

Sexual composition of the seine sample was different from the dead pitch sample (Table 2). The male:female ratio of the seine sample was approximately 1:1 whereas the

dead pitch sample was 0.47:1. The removal of CWT and broodstock samples did not change the sex ratio of the marked releases from that of the original seine sample. The sex ratio of marked releases was 1:1 (chi-square $p > .05$).

Sexual bias was not evident in the marked releases as the ratio of marked to unmarked chinook in the dead pitch sample was essentially the same for males and females. The probability of recovering a marked fish in the dead pitch was independent of sex (chi-square $p > .05$).

The dead pitch sample was biased toward females: In the comparison of recovered to not recovered mark releases, females were recovered at a rate almost twice that of males. (chi-square $p < .05$).

No correction factor was required for sex identified from external morphology. A total of 50 males and 91 females were sexed from external morphology and dissection. A single 835 mm male (POH length) was misidentified as female. Two females, 825 mm and 820 mm POH length, were misidentified as males. Sex identification errors were small (approximately 2%) and in opposite directions, cancelling out any correction.

Length Frequency

Chinook POH length frequency data are presented in Table 3. Seine caught chinook are separated by sex and incidence of recovery. Dead pitched chinook are separated by sex and tag incidence. The table also provides an account of chinook of unknown length. Lengths were not recorded for some broodstock collected from set 38 and for some dead pitch recoveries too decomposed to measure.

There was no measurable size bias between or among samples of female chinook in the study. Continuous POH length frequencies (LF) were compared using Kolmogorov-Smirnov 2 tailed tests to the .05 probability level. The LF of seine caught female chinook did not differ from that of dead pitched female chinook. The LF of female chinook recovered in the dead pitch did not differ from that of female chinook not recovered. The LF comparison among females collected in the dead pitch showed no difference between marked and unmarked chinook. Female chinook continuous POH length frequencies are compared in Figure 3.

Broodstock and CWT sample removals did not change the LF of the seine catch from that of the marked releases for either sex. The LF of the seine catch did not differ from the LF of the marked releases and the LF of the marked releases did not differ from the LF of the removals for males and females respectively.

Size bias was evident between samples of male chinook in the study. The LF of males caught in the seine (and of marked releases) was different from the LF of males dead pitched. Male chinook less than 600 mm POH length were not represented in the

dead pitch sample. There were only 24 male mark recoveries so the Kolmogorov-Smirnov tests made within samples were only approximations. The LF of marked male dead pitch recoveries was not different from the LF of unmarked male dead pitch recoveries suggesting no size bias in the marked releases. The LF of male mark recoveries was different from the LF of marked males not recovered suggesting size bias in the dead pitch. Figure 4 compares continuous POH length frequencies for males.

Treatment before release

Chinook mark releases and recoveries for all treatment types were used in the population estimation as the treatment did not bias the potential for recovery. None of the chinook mark releases were bleeding and only 1 female required resuscitation. No spawned out salmon were marked. Some chinook mark releases were collected and held in net pens as part of the broodstock sample. Recoveries by treatment are presented for males and females in Table 4. Treatment was independent of recovery for both sexes (chi-square $p > .05$).

Chinook salmon were handled up to 5 times in the seine but this did not affect their potential for recovery in the dead pitch sample. Male and female recoveries by number of seine recaptures are presented in Table 5. Recovery was independent of the number of seine recaptures (chi-square $p > .05$).

Area of recovery

Dead pitch recoveries by area are noted in Table 6. Most chinook carcasses and mark recoveries were made in areas N2 and S2 (Figure 1). Female chinook mark recoveries were independent of area (chi-square $p > .05$). Male mark recoveries were biased by area, appearing to be over represented in area N4 and under represented in area N2 (chi-square $p < .05$).

Temporal bias

Male and female mark recoveries were compared by week of mark application and by week of dead pitch to determine temporal bias. Recoveries by week of mark application are presented in Table 8. Recoveries by week of dead pitch appear in Table 9. Temporal bias was not evident in the samples of male chinook. Recovery proved independent of the week of mark application and independent of the week of dead pitch (chi-square $p > .05$). The relative frequency of mark recovery in the dead pitch was not different through the 5 weeks of carcass sampling. The relative frequency of mark recovery was not different through the 4 weeks of seining and mark application for males. The incidence of females recoveries from the fourth week of marking was higher than expected (chi-square $p < .05$). This suggests temporal bias in the dead pitch / mark recovery procedure, selecting for females marked in week 4 of the seine sample.

Table 9 depicts matrices of week of mark application versus week of mark recovery for females and males. Schaefer estimates provided a measure of the effect of temporal biases on the population estimation. The Schaefer estimate of female chinook was 9476 on the basis of 41 recoveries. (The tag number was unknown for one female mark recovery.) The schaefer estimate for males was 5453.

Tag loss

The incidence of tag loss in the seine sample was minimal. Only two seine recaptures required retagging (observed as chinook recaptured in the seine without tags but with opercular punches). Both retagged chinook were male, 500 mm and 845 mm POH length respectively.

There was no evidence of tag loss from the carcass sample. All of the marked chinook recovered included both a tag and an opercular punch.

Age Data

Length at age data are presented in Table 10. There was no significant difference between the age composition of female chinook samples collected from the seine catch or from the dead pitch. Only two age classes, 4₁ and 5₁, were present in the samples of female chinook and were predominantly age 5₁. Age 4₁ chinook made up 10% of female samples combined; 5% and 13% for seine and dead pitch samples respectively.

Differences in the seine and dead pitch samples make the age composition of male chinook unclear. Samples contained components of age 2₁, 3₁, 4₁, 5₁, and 6₁ male chinook. Age 5₁ chinook appear to make up the largest component of the male population at approximately twice the age 4₁ component. Other components are smaller but their relative abundances are confounded by the size selectivity of the samples. Age 6₁ chinook made up a small fraction of each sample. Age 2₁ chinook were only present in the seine sample.

Scale ages were verified with CWT data in 12 cases (Table 11). One chinook aged from scales as 4₁ was actually 5 years old from the CWT information. All CWT age verifications came from 5 year old chinook. An 870 mm POH length male aged as 3₁ was probably an error.

Enhancement Contribution

The paucity of hatchery fin clips recovered in the program precluded any meaningful analysis of the contribution to the population from hatcheries. The incidence of chinook fin clips are presented in Table 12.

Egg retention

Egg retention in female carcasses was measured to estimate prespawn mortality and assess whether seining and marking induced prespawn mortality. Egg retention data are presented in Table 13. There was no difference in egg retention between marked and unmarked carcasses sampled from the dead pitch (chi-square $p > .05$). Less than 4% of females sampled retained over 50 percent eggs.

Environmental Conditions

Low and clear water conditions prevailed through the study. A single weather event in the beginning of November caused river levels to rise to 4 m from an average of 2.5 m. The river dropped below 3 m within 4 days and water clarity was not affected. Secchi disc depth averaged 1 m for the duration of the study. River level and secchi disk depth are presented in Figure 5 (Appendix 4).

DISCUSSION

Initial comparisons of the 1993 escapement to those in 1991 and 1992 appear encouraging but should be viewed with caution due to the great deal of overlap in the posterior population distributions and the method used. All of the estimates produced in the series of mark recaptures suffer from insufficient numbers of marked releases. Hilborn and Walters (1992) do not suggest using tagging studies to estimate abundance unless 25% or more of the population can be marked. The level of marking was approximately 5% in these studies. It is unlikely that mark levels of 25% could be attained using the capture techniques described above. (Levels of 10% might be reached given good conditions and increased effort.)

Population estimates using marked to unmarked ratios rely on marked and unmarked animals behaving alike. Comparisons of mark incidence by area and of spawning success in females showed no evidence of behavioral differences.

Temporal bias experienced in the female carcass sample did not appear to affect the population estimate. The Schaefer estimate for female chinook was almost the same as the Petersen and Bayesian estimates. The Schaefer estimate for male chinook was much less than the Bayesian or Petersen estimates.

Providing an unbiased estimate of the male component of the Wannock River chinook escapement has been impossible due to sampling bias experienced in the dead pitch (Winther 1992, 1993). It is evident that male chinook less than 650 mm POH length are under represented in the dead pitch sample. Dead pitch sampling essentially excluded the 2₁ and 3₁ age classes. The male chinook population estimate is only valid if seine samples accurately represent the population (Junge 1963).

The installation of small fences to catch carcasses accounted for only 23 chinook. It was hoped that the fences might provide an unbiased sample by catching all sizes of carcasses. Smaller carcasses are usually washed out of the river. The size of chinook from the fences were not different from the rest of the dead pitch sample.

Water clarity in 1993 averaged around 1 m, considerably more than the average secchi depths of 0.6 m experienced in 1992. Low water and dropping water levels appeared to benefit carcass recovery. Increased water clarity allowed for the collection of sunken carcasses that would otherwise not be observed.

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Table 1. 1993 Wannock River seine catch by set.

Set	Date	CHINOOK						Total Chinook	sockeye	coho	pink	chum	sh	dv	trout	
		Female			Male											Total
		New	RC	Total	New	RC	Total									
1	30-Sep	12	0	12	21	0	21	33		6					1	
2	1-Oct	10	0	10	9	0	9	19		6					8	
3	1-Oct	1	0	1	2	0	2	3		2					6	
4	1-Oct	2	0	2	3	0	3	5			3				5	
5	2-Oct	10	0	10	18	1	19	29		9		1			5	
6	2-Oct	3	1	4	5	3	8	12		1			1		7	
7	4-Oct	12	0	12	15	1	16	28		5					3	1
8	4-Oct	1	0	1	2	2	4	5			1				6	
9	4-Oct	1	1	2	2	3	5	7	1	1					7	3
10	5-Oct	14	1	15	14	1	15	30		5					7	
11	5-Oct	2	0	2	7	0	7	9		9					7	
12	5-Oct	4	0	4	2	3	5	9	1	1		1		10	1	
13	6-Oct	17	1	18	12	0	12	30		2					4	
14	6-Oct	7	0	7	8	0	8	15		1					6	1
15	6-Oct	2	2	4	9	2	11	15		1		1		3		
16	7-Oct	14	2	16	11	1	12	28	1	5		1		1		
17	7-Oct	3	0	3	8	2	10	13	9	4		2		8		
18	8-Oct	3	2	5	8	3	11	16	6		1	1		13		
19	8-Oct	0	2	2	2	2	4	6	1					15		
20	12-Oct	27	0	27	50	2	52	79				10		4		
21	13-Oct	18	6	24	14	4	18	42		13				9		
22	13-Oct	20	9	29	15	4	19	48		2				3		
23	14-Oct	14	4	18	12	2	14	32	1	2		3		1		
24	14-Oct	7	1	8	7	1	8	16		2		2				
25	14-Oct	9	5	14	4	4	8	22	1	3		4		1		
26	15-Oct	6	3	9	21	1	22	31		3		3		1		
27	15-Oct	9	1	10	9	2	11	21				3		1		
28	15-Oct	8	3	11	11	3	14	25		1	1	1		3		
29	19-Oct	49	2	51	48	2	50	101		11		11		2		
30	20-Oct	45	3	48	38	5	43	91		11		11		7		
31	20-Oct	18	2	20	13	6	19	39	1	5		2		3	1	
32	21-Oct	13	3	16	29	0	29	45	1	9		8		6		
33	21-Oct	19	2	21	18	4	22	43	1	1		10		15		
34	22-Oct	44	7	51	42	7	49	100	44	12		17		19	4	
35	22-Oct	26	4	30	16	6	22	52	35	6		8		12		
36	23-Oct	55	2	57	31	9	40	97	14	10		10		11		
37	24-Oct	44	3	47	13	2	15	62	26	11		15		8		
38	25-Oct	14	1	15	27	7	34	49	12	13		25		11		
Total catch		563	73	636	576	95	671	1307	155	173	6	150	1	239	11	

RC = recaptured, sh = steelhead, dv = dolly varden
trout are rainbow and cutthroat combined

Table 2. Sexual composition of 1994 Wannock River chinook samples.

	Males	Females
Seine Sample	576	563
Marked releases	499	480
Carcass Sample	384	821
Mark recoveries	24	42

Table 3 on next page.

Table 4. Chinook mark recoveries by treatment prior to release.

Sex	Condition	Recovered	Not Recovered
Females	Good	40	412
	Recuscitated	0	1
	Held before release	2	26
Males	Good	23	460
	Held before release	1	15

Table 5. Recoveries of chinook marked releases compared by the number of times the chinook was recaptured in the seine.

Seine recaptures	Females recovered	Females not recovered	Males recovered	Males not recovered
0	41	392	23	412
1	1	30	1	51
2	0	12	0	9
3	0	2	0	2
4	0	2	0	0
5	0	0	0	1

Table 3. 1993 Wannock River chinook POH length frequency summary.

POH length	Females			Females			Males			Males			Sexes combined	
	Female catch	Seine sample removals	marked releases	Females pitched	Carcass Sample marked	unmarked	Male catch	Seine Sample removals	marked releases	Males pitched	Carcass Sample marked	unmarked	Total seined	Total pitched
280	0	0	0	0	0	0	9	0	9	0	0	0	9	0
300	0	0	0	0	0	0	11	0	11	0	0	0	11	0
320	0	0	0	0	0	0	14	1	13	0	0	0	14	0
340	0	0	0	0	0	0	8	2	6	0	0	0	8	0
360	0	0	0	0	0	0	4	1	3	0	0	0	4	0
380	0	0	0	0	0	0	2	0	2	1	0	1	2	1
400	0	0	0	0	0	0	2	1	1	0	0	0	2	0
420	0	0	0	0	0	0	4	0	4	0	0	0	4	0
440	0	0	0	0	0	0	2	0	2	0	0	0	2	0
460	0	0	0	1	0	1	5	2	3	0	0	0	5	1
480	0	0	0	0	0	0	6	1	5	1	0	1	6	1
500	0	0	0	0	0	0	10	0	10	1	0	1	10	1
520	0	0	0	0	0	0	10	2	8	0	0	0	10	0
540	0	0	0	0	0	0	7	2	5	0	0	0	7	0
560	0	0	0	1	0	1	4	0	4	1	0	1	4	2
580	0	0	0	0	0	0	4	1	3	1	0	1	4	1
600	0	0	0	0	0	0	8	0	8	3	0	3	8	3
620	0	0	0	1	0	1	9	1	8	0	0	0	9	1
640	0	0	0	0	0	0	5	2	3	2	0	2	5	2
660	2	0	2	0	0	0	10	2	8	3	0	3	12	3
680	0	0	0	5	0	5	11	1	10	4	0	4	11	9
700	2	0	2	8	1	7	12	2	10	10	0	10	14	18
720	10	0	10	15	0	15	17	5	12	7	1	6	27	22
740	14	2	12	25	0	25	19	4	15	15	1	14	33	40
760	21	3	18	39	3	36	20	3	17	22	0	22	41	61
780	57	5	52	70	4	66	35	5	30	33	2	31	92	103
800	82	14	68	86	7	79	47	4	43	26	3	23	129	112
820	89	13	76	125	10	115	40	3	37	29	2	27	129	154
840	107	12	95	141	4	137	57	5	52	41	4	37	164	182
860	75	12	63	97	7	90	52	4	48	48	2	46	127	145
880	47	10	37	73	1	72	36	5	31	35	3	32	83	108
900	26	3	23	66	1	65	40	4	36	34	1	33	66	100
920	23	6	17	21	3	18	25	2	23	17	2	15	48	38
940	6	1	5	7	1	6	16	3	13	15	2	13	22	22
960	1	0	1	7	0	7	2	1	1	6	0	6	3	13
980	0	0	0	0	0	0	5	1	4	3	1	2	5	3
1000	0	0	0	0	0	0	1	0	1	2	0	2	1	2
Total	562	81	481	788	42	746	569	70	499	360	24	336	1131	1148
UK	1	1		33		33	7			24		24	8	57
Grand Total	563	82		821		779	576			384		360	1139	1205

Table 6. Incidence of chinook carcass recoveries compared by the areas sampled. Areas are noted on Figure 1.

Area	Males marked	Males not marked	Females marked	Females not marked
N1	0	9	0	20
S1	0	7	0	28
N2	1	73	13	164
S2	5	117	15	314
N3	7	64	5	76
S3	2	32	2	58
N4	8	42	7	103
S4	0	13	0	13
Inlet	0	4	0	1
TOTAL	23	361	42	777

Table 7. Incidence of chinook mark recoveries compared by week of mark application. The tag on one female mark recovery could not be read, so the week of marking was unknown. The total marked female carcass recoveries was 42.

Week	Males recovered	Males not recovered	Females recovered	Females not recovered
Sep 30- Oct 6	5	122	5	92
Oct 7-13	4	102	3	81
Oct 14-20	7	144	9	124
Oct 21-27	8	107	24	142
Total	24	475	41	439

Table 8. Incidence of chinook mark recoveries compared by week of carcass sampling.

Week	Males marked	Males not marked	Females marked	Females not marked
Oct 28- Nov 3	3	20	0	20
Nov 4-10	12	106	19	260
Nov 11-17	9	199	20	404
Nov 18-24	0	33	3	90
Nov 25-26	0	2	0	5
Total	24	360	42	779

Table 9. Chinook mark recovery matrix for week of mark application and week of carcass sample, separated by sex. Female recoveries totalled 42, but one tag could not be read.

Week of recovery FEMALES	Week of mark application				Total
	Sep 30-Oct 7	Oct 8-14	Oct 15-21	Oct 22-24	
Oct 28 - Nov 4	0	0	0	0	0
Nov 5-11	0	1	6	12	19
Nov 12-18	4	2	3	10	19
Nov 19-25	1	0	0	2	3
Nov 25-26	0	0	0	0	0
Total	5	3	9	24	41
MALES					
Oct 28 - Nov 4	0	1	0	2	3
Nov 5-11	3	1	5	3	12
Nov 12-18	2	2	2	3	9
Nov 19-25	0	0	0	0	0
Nov 25-26	0	0	0	0	0
Total	5	4	7	8	24

Table 10. Length frequency at age data for 1993 Wannock River chinook samples. All chinook aged had only one freshwater year.

Sample>	SEINE SAMPLE							DEAD PITCH SAMPLE					
	MALE					FEMALE		MALE			FEMALE		
Age>	2	3	4	5	6	4	5	3	4	5	6	4	5
POH (mm)													
340	2												
360	1												
380													
400	1												
420													
440													
460													
480		1						1					
500													
520		1											
540		2											
560													
580													
600													
620													
640			2										
660													
680			1									1	
700			1						3			1	1
720			2						1			1	
740			3				1	1				3	3
760			1	2				2	1			1	4
780			3	2				3	3			4	6
800			1	2			2	6		2			20
820			1	1				11	2	5		1	13
840				4	1			6		3		1	28
860				1				9	1	1	3		16
880				4				9	1	4			6
900				4				3	1	4			7
920				2				5		5		1	5
940				3				1		4			2
960				1						3			1
980					1					1			
1000											1		
TOTAL	4	4	15	26	2	3	56	2	13	34	1	14	112

Table 11. Coded wire tag age data associated with adipose clip recoveries from seine and dead pitch samples. October samples were collected from seine catches and November samples were collected from the dead pitch.

Date	POH (mm)	Sex	Scale Age	CWT Age
1-Oct	460	M		3
13-Oct	610	M		3
19-Oct	510	M		3
21-Oct	785	F		5
25-Oct	765	M	5	5
6-Nov	856	F	5	5
6-Nov	728	F	4	no pin
8-Nov	772	F		no pin
8-Nov	830	F	5	5
8-Nov	777	F	4	5
8-Nov	832	F	5	5
10-Nov	746	F		5
10-Nov	792	M	5	5
11-Nov	950	M	5	5
11-Nov	855	F	5	5
11-Nov	806	F		5
12-Nov	822	F		no pin
14-Nov	852	F	5	5
14-Nov	790	F	5	5
14-Nov	737	F		4
15-Nov	800	F	5	5
16-Nov	825	F	5	no pin
18-Nov	918	M		5
18-Nov	814	M	5	5

Table 12. Incidence of hatchery applied marks recovered in the seine and dead pitch samples.

SEINE SAMPLE	Females	Males	Total
Adipose	15	17	32
Left Ventral	3	0	3
Regenerate Ad.	0	1	1
Total checked	563	576	1139
DEAD PITCH SAMPLE			
Adipose	15	4	19
Left Ventral	0	1	1
Right Ventral	1	1	2
Unknown	35	20	55
Total checked	821	384	1205

Table 13. Egg retention in female carcasses.

% Eggs	None 0%	Few 1-5%	Quarter 6-30%	Half 31-70%	Full 71-100%	Unknown
Marked	34	2	2	0	1	3
Unmarked	651	54	18	3	20	33

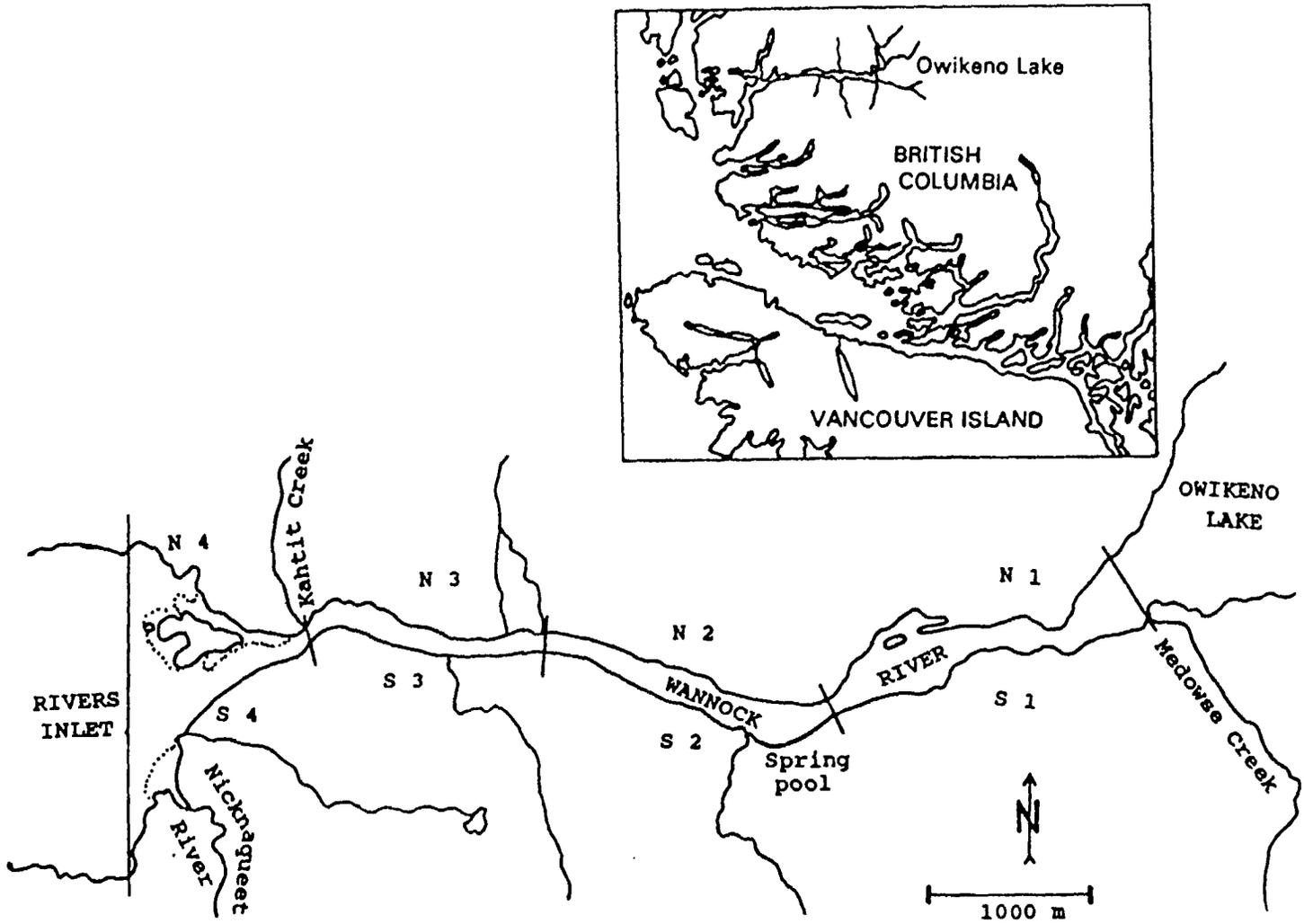


Figure 1. Wannock River, Rivers Inlet, British Columbia, Canada.

Posterior Probability Distribution

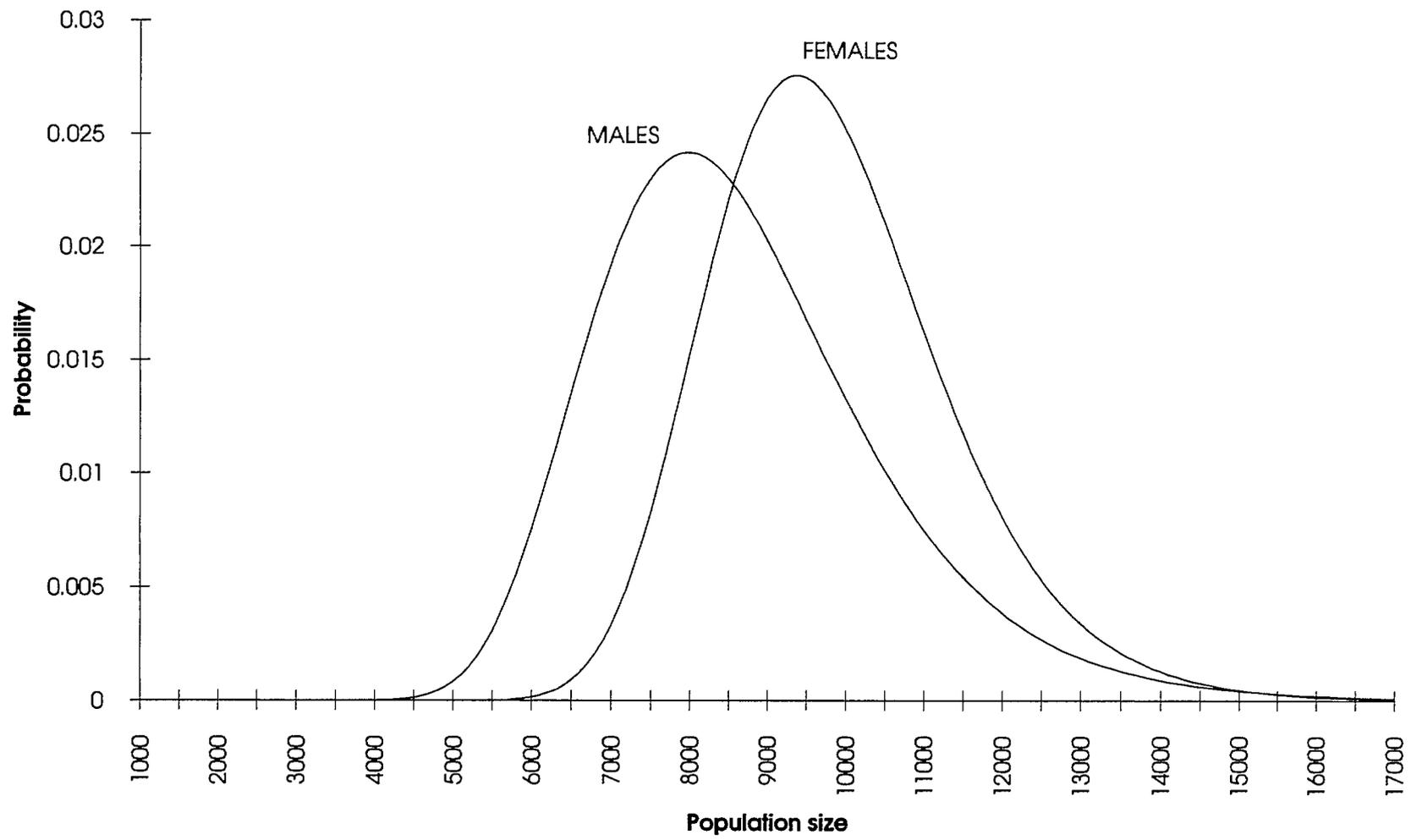
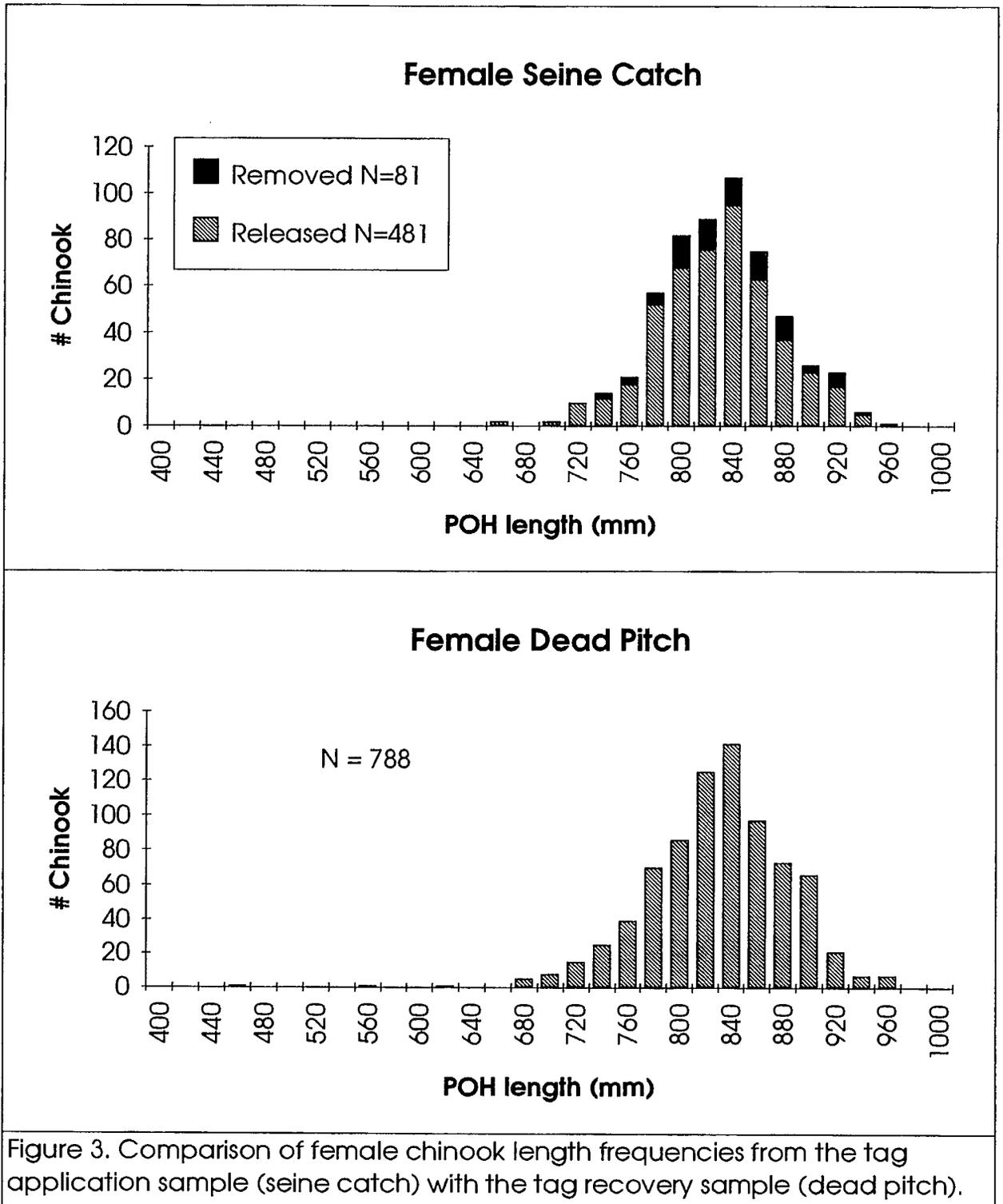


Figure 2. Population posterior probability distributions for Wannock River Chinook, 1993.



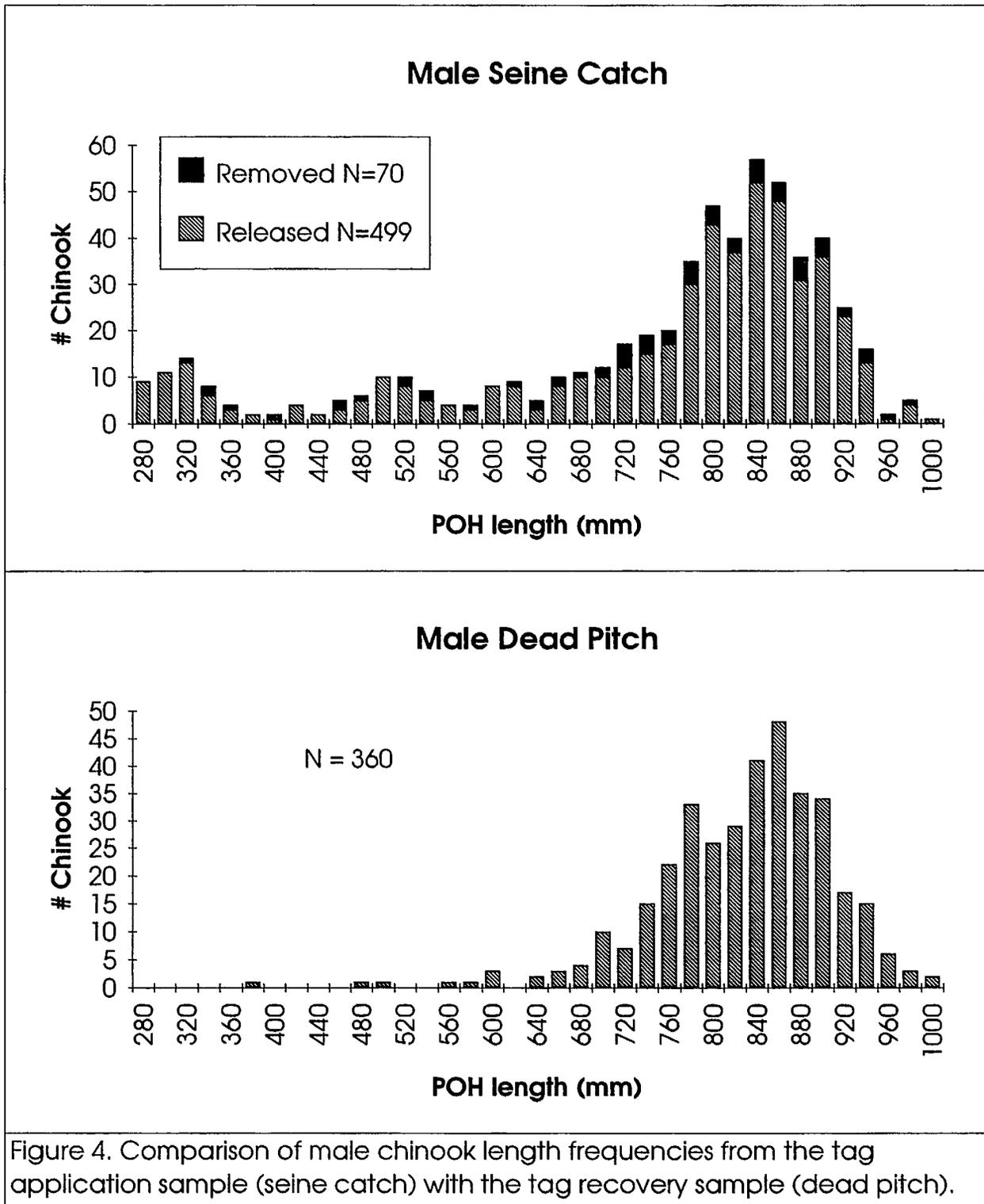


Figure 4. Comparison of male chinook length frequencies from the tag application sample (seine catch) with the tag recovery sample (dead pitch).

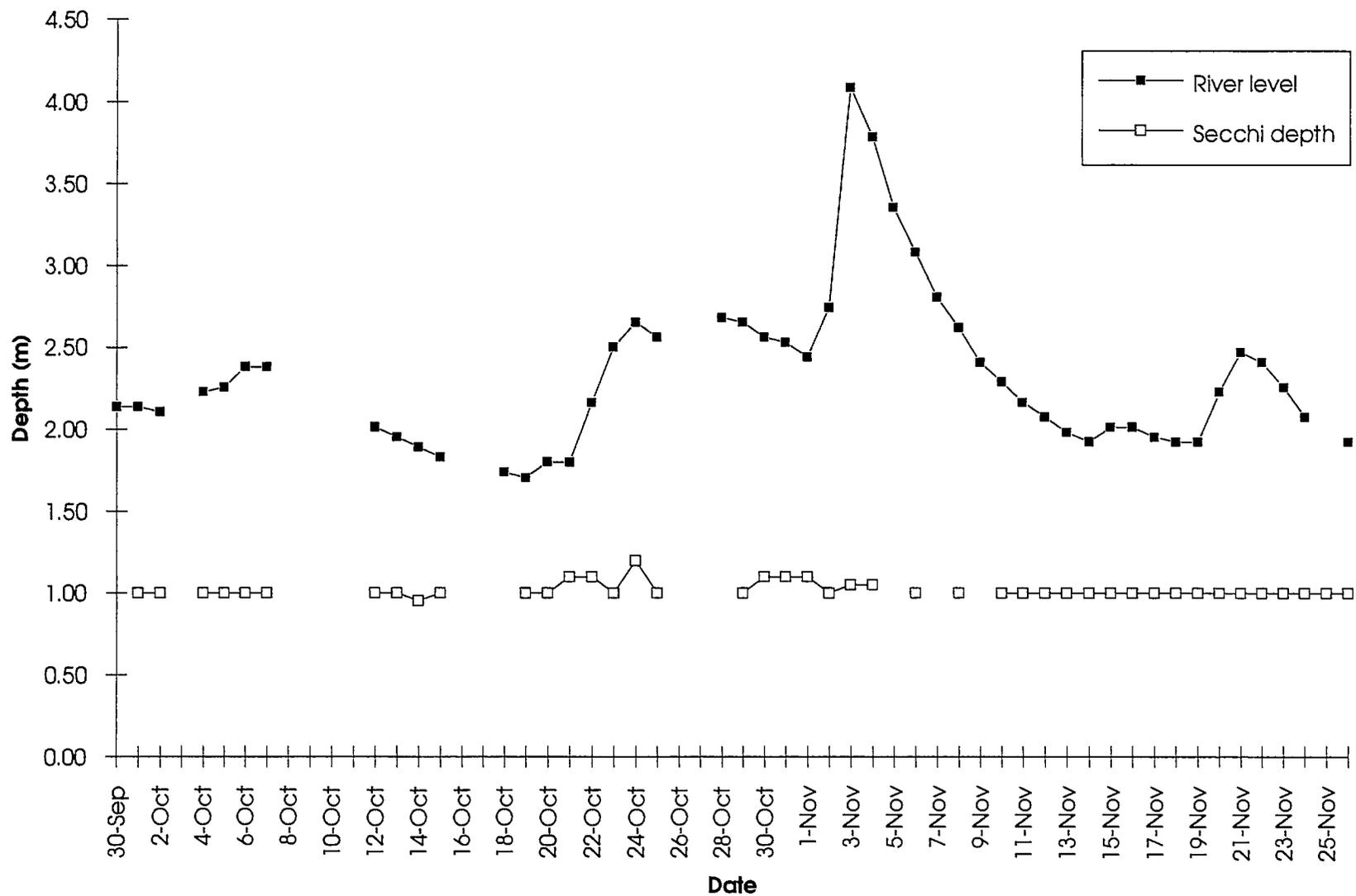


Figure 5. Wannock River water levels and secchi disk depths during the 1993 chinook mark-recapture program.

Appendix 1. 1993 Wannock River chinook tagging data. Codes: M= male, F= female, POH= post orbital to hypural plate length in mm, CD= condition, FC= fin clips, Sc= scale, BS= broodstock, DP= dead pitch, AD= adipose, LV= left ventral, RG= regenerate. Condition codes: 1= swam away, 2= resuscitated, 3= bleeding, 4=dead, 5= kelt.

Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
1	30-Sep	1	28002	810	M	1			715	19-Oct	29	28788	805	F	1				
2	30-Sep	1	28003	795	F	1	AD		716	19-Oct	29	28789	835	F	1				
3	30-Sep	1	28004	850	M	1			717	19-Oct	29	28790	675	M	1				
4	30-Sep	1	28005	795	M	1			718	19-Oct	29	28791	700	M	1				
5	30-Sep	1	28006	845	F	1			719	19-Oct	29	28792	780	M	1				
6	30-Sep	1	28007	850	M	1			720	19-Oct	29	28793	825	F	1				
7	30-Sep	1	28008	905	M	1			721	19-Oct	29	28794	755	M	1				
8	30-Sep	1	28009	805	F	1			722	19-Oct	29	28795	815	F	1				
9	30-Sep	1	28010	770	F	1			723	19-Oct	29	28796	695	M	1				
10	30-Sep	1	28011	820	F	1			724	19-Oct	29	28797	805	F	1				
11	30-Sep	1	28012	840	M	1			725	19-Oct	29	28798	675	M	1				
12	30-Sep	1	28013	805	F	1			726	19-Oct	29	28799	785	M	1				
13	30-Sep	1	28014	820	M	1			727	19-Oct	29	28800	775	F	1				
14	30-Sep	1	28016	780	F	1			728	19-Oct	29	28801	785	M	1				
15	30-Sep	1	28017	900	F	1			729	19-Oct	29	39259	295	M	1				
16	30-Sep	1	28018	815	F	1			730	19-Oct	29	39260	315	M	1				
17	30-Sep	1	28019	700	M	1			731	19-Oct	29	39261	525	M	1				
18	30-Sep	1	28020	790	F	1			732	19-Oct	29	39262	315	M	1				
19	30-Sep	1	28021	820	F	1			733	20-Oct	30	28802	800	M	1				
20	30-Sep	1	28022	820	M	1			734	20-Oct	30	28803	915	F	1				
21	30-Sep	1	28023	785	M	1			735	20-Oct	30	28804	920	M	1				
22	30-Sep	1	28024	815	F	1			736	20-Oct	30	28805	895	F	1				
23	30-Sep	1	28025	755	M	1			737	20-Oct	30	28806	905	F	1				
24	30-Sep	1	28026	700	M	1			738	20-Oct	30	28807	900	F	1		HOLD		
25	30-Sep	1	28027	750	M	1			739	20-Oct	30	28808	945	F	1				
26	30-Sep	1	39101	575	M	1			740	20-Oct	30	28810	910	F	1				
27	30-Sep	1	28028	750	M	1			741	20-Oct	30	28811	890	F	1				
28	30-Sep	1	39102	580	M	1			742	20-Oct	30	28812	815	F	1				
29	30-Sep	1	39103	640	M	1			743	20-Oct	30	28813	910	F	1		HOLD		
30	30-Sep	1	28029	855	M	1			744	20-Oct	30	28814	865	F	1		HOLD		
31	30-Sep	1	39104	355	M	1			745	20-Oct	30	28816	875	F	1				
32	30-Sep	1	39105	610	M	1			746	20-Oct	30	28817	680	M	1				
33	30-Sep	1	39106	330	M	1			747	20-Oct	30	28818	935	M	1				
34	1-Oct	2	28031	850	M	1			748	20-Oct	30	28819	910	F	1		HOLD		
35	1-Oct	2	28032	900	F	1			749	20-Oct	30	28820	885	F	1				
36	1-Oct	2	28033	815	F	1			750	20-Oct	30	28821	845	F	1		HOLD		
37	1-Oct	2	28034	835	M	1			751	20-Oct	30	28822	885	F	1		HOLD		
38	1-Oct	2	28035	840	F	1			752	20-Oct	30	28444			1				
39	1-Oct	2	28036	740	F	1			753	20-Oct	30	28823	915	F	1				
40	1-Oct	2	28038	740	F	1			754	20-Oct	30	28824	750	F	1				
41	1-Oct	2	28039	650	M	1			755	20-Oct	30	28825	905	M	1				
42	1-Oct	2	28040	825	F	1			756	20-Oct	30	28826	915	M	1				
43	1-Oct	2	28041	770	F	1			757	20-Oct	30	28827	950	M	1				
44	1-Oct	2	28042	915	F	1			758	20-Oct	30	28828	750	F	1				
45	1-Oct	2	28043	835	M	1			759	20-Oct	30	28829	855	M	1				
46	1-Oct	2	28044	865	M	1			760	20-Oct	30	28830	800	M	1				
47	1-Oct	2	28045	720	F	1			761	20-Oct	30	28716			1				
48	1-Oct	2	28046	840	M	1			762	20-Oct	30	28831	875	F	1				
49	1-Oct	2	39201	555	M	1			763	20-Oct	30	28832	890	F	1		HOLD		
50	1-Oct	2	39202	460	M	4	AD	370351E	764	20-Oct	30	28833	875	F	1		HOLD		
51	1-Oct	2	28047	850	M	1			765	20-Oct	30	28834	915	F	1		HOLD		
52	1-Oct	2	28048	800	F	1			766	20-Oct	30	28835	840	M	1				
53	1-Oct	3	28049	715	M	1			767	20-Oct	30	28836	820	F	1		HOLD		
54	1-Oct	3	28050	750	F	1			768	20-Oct	30	28837	920	M	1				
55	1-Oct	3	39203	310	M	1			769	20-Oct	30	28838	895	M	1				

Appendix 1. 1993 Wannock River chinook tagging data. Codes: M= male, F= female, POH= post orbital to hypural plate length in mm, CD= condition, FC= fin clips, Sc= scale, BS= broodstock, DP= dead pitch, AD= adipose, LV= left ventral, RG= regenerate. Condition codes: 1= swam away, 2= resuscitated, 3= bleeding, 4=dead, 5= kelt.

Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
56	1-Oct	4	28051	895	M	1			770	20-Oct	30	28839	815	M	1				
57	1-Oct	4	28052	845	M	1			771	20-Oct	30	28840	875	F	1		HOLD		
58	1-Oct	4	28053	780	F	1			772	20-Oct	30	28841	930	F	1				
59	1-Oct	4	28054	735	M	1			773	20-Oct	30	28842	845	F	1		HOLD		
60	1-Oct	4	28055	695	F	1			774	20-Oct	30	39263	605	M	1				
61	2-Oct	5	28056	840	F	1			775	20-Oct	30	28843	830	F	1	LV			
62	2-Oct	5	28058	840	F	1			776	20-Oct	30	28844	845	F	1		HOLD		
63	2-Oct	5	28059	820	M	1			777	20-Oct	30	28845	810	F	1				
64	2-Oct	5	28060	760	M	1		jaw broken	778	20-Oct	30	28848	865	F	1				
65	2-Oct	5	28061	780	F	1			779	20-Oct	30	28849	800	F	1				
66	2-Oct	5	39204	630	M	1			780	20-Oct	30	28847	795	F	1				
67	2-Oct	5	28062	840	F	1			781	20-Oct	30	28850	740	F	1				
68	2-Oct	5	28063	880	M	1			782	20-Oct	30	28791			1				
69	2-Oct	5	28064	840	F	1			783	20-Oct	30	28720			1				
70	2-Oct	5	28065	840	F	1			784	20-Oct	30	28851	835	F	1				
71	2-Oct	5	28002			1			785	20-Oct	30	28852	910	F	1				
72	2-Oct	5	28066	770	M	1			786	20-Oct	30	28853	880	M	1				
73	2-Oct	5	28067	665	M	1			787	20-Oct	30	39264	495	M	1				
74	2-Oct	5	28068	800	F	1			788	20-Oct	30	28854	915	M	1				
75	2-Oct	5	28069	770	F	1			789	20-Oct	30	28855	930	F	1				
76	2-Oct	5	28070	755	M	1			790	20-Oct	30	28856	775	F	1		HOLD		
77	2-Oct	5	28071	850	M	1			791	20-Oct	30	28714			1				
78	2-Oct	5	28072	765	F	1			792	20-Oct	30	28857	810	M	1				
79	2-Oct	5	28073	845	F	1			793	20-Oct	30	28858	870	F	1				
80	2-Oct	5	28074	835	M	1			794	20-Oct	30	28116			1				
81	2-Oct	5	28075	830	M	1			795	20-Oct	30	28860	840	F	1		HOLD		
82	2-Oct	5	28101	770	M	1			796	20-Oct	30	28861	730	M	1				
83	2-Oct	5	28102	840	M	1			797	20-Oct	30	28862	870	M	1				
84	2-Oct	5	28103	805	M	1			798	20-Oct	30	28863	760	M	1				
85	2-Oct	5	28104	830	M	1			799	20-Oct	30	28864	815	F	1		HOLD		
86	2-Oct	5	39205	405	M	1			800	20-Oct	30	28865	875	F	1		HOLD		
87	2-Oct	5	39206	345	M	1			801	20-Oct	30	39265	380	M	1				
88	2-Oct	5	39207	505	M	1			802	20-Oct	30	28866	730	M	1		HOLD		
89	2-Oct	5	39208	485	M	1			803	20-Oct	30	28867	835	M	1		HOLD		
90	2-Oct	6	28105	860	F	1			804	20-Oct	30	28868	790	F	1				
91	2-Oct	6	28073			1			805	20-Oct	30	28869	790	M	1				
92	2-Oct	6	28106	875	F	1			806	20-Oct	30	28783			1				
93	2-Oct	6	28107	875	M	1			807	20-Oct	30	28871	730	F	1				
94	2-Oct	6	28108	865	M	1			808	20-Oct	30	28872	790	M	1				
95	2-Oct	6	28002			1			809	20-Oct	30	28873	815	F	1		HOLD		
96	2-Oct	6	28109	910	M	1			810	20-Oct	30	39266	500	M	1				
97	2-Oct	6	28110	755	M	1			811	20-Oct	30	39267	535	M	1		HOLD		
98	2-Oct	6	39205			1			812	20-Oct	30	28870	865	M	1				
99	2-Oct	6	28067			1			813	20-Oct	30	28875	675	M	1				
100	2-Oct	6	28111	770	F	1			814	20-Oct	30	39268	590	M	1		HOLD		
101	2-Oct	6	39209	330	M	1			815	20-Oct	30	28876	850	F	1		HOLD		
102	4-Oct	7	28112	845	M	1			816	20-Oct	30	28877	870	M	1				
103	4-Oct	7	28113	830	F	1			817	20-Oct	30	39269	605	M	1				
104	4-Oct	7	28114	950	F	1			818	20-Oct	30	39260			1				
105	4-Oct	7	28115	770	M	1			819	20-Oct	30	28878	835	M	1				
106	4-Oct	7	28116	750	M	1			820	20-Oct	30	39275	330	M	1				
107	4-Oct	7	28117	870	F	1			821	20-Oct	30	39270	325	M	1				
108	4-Oct	7	28118	845	F	1			822	20-Oct	30	39271	530	M	1				
109	4-Oct	7	28119	785	M	1	AD		823	20-Oct	30	39272	305	M	1				
110	4-Oct	7	28120	800	F	1			824	20-Oct	31	28879	805	F	1				

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
111	4-Oct	7	28121	865	M	1	RG		825	20-Oct	31	28880	870	F	1				
112	4-Oct	7	28122	840	F	1	AD		826	20-Oct	31	28881	845	F	1				
113	4-Oct	7	39210	615	M	1			827	20-Oct	31	28882	885	F	1				
114	4-Oct	7	28123	845	M	1			828	20-Oct	31	28883	780	F	1		HOLD		
115	4-Oct	7	28124	860	F	1			829	20-Oct	31	28884	870	F	1		HOLD		
116	4-Oct	7	28125	900	F	1			830	20-Oct	31	28885	815	F	1		HOLD		
117	4-Oct	7	28126	840	F	1			831	20-Oct	31	28818			1		HOLD		
118	4-Oct	7	28127	855	M	1			832	20-Oct	31	28886	745	F	1				
119	4-Oct	7	28128	840	F	1			833	20-Oct	31	28887	835	F	1		HOLD		
120	4-Oct	7	28129	815	M	1			834	20-Oct	31	28444							
121	4-Oct	7	28130	820	M	1			835	20-Oct	31	28888	685	M	1		HOLD		
122	4-Oct	7	28131	840	M	1			836	20-Oct	31	28889	830	F	1		HOLD		
123	4-Oct	7	28132	925	F	1			837	20-Oct	31	28890	835	F	1				
124	4-Oct	7	28133	810	M	1	AD		838	20-Oct	31	28891	915	F	1				
125	4-Oct	7	28134	840	M	1			839	20-Oct	31	28892	845	F	1				
126	4-Oct	7	28135	850	M	1			840	20-Oct	31	28893	845	F	1				
127	4-Oct	7	28136	825	F	1			841	20-Oct	31	28894	775	F	1				
128	4-Oct	7	39105			1			842	20-Oct	31	28895	780	F	1				
129	4-Oct	7	39211	310	M	1			843	20-Oct	31	28896	855	M	1		HOLD		
130	4-Oct	8	28137	855	F	1			844	20-Oct	31	28755							
131	4-Oct	8	28138	840	M	1			845	20-Oct	31	28862							
132	4-Oct	8	28139	865	M	1			846	20-Oct	31	28897	830	M	1				
133	4-Oct	8	39105			1			847	20-Oct	31	28898	835	M	1		HOLD		
134	4-Oct	8	28022			1			848	20-Oct	31	28899	810	M	1		HOLD		
135	4-Oct	9	28125			1			849	20-Oct	31	28116					HOLD		
136	4-Oct	9	28140	785	M	1			850	20-Oct	31	28900	745	M	1		HOLD		
137	4-Oct	9	28141	780	F	1			851	20-Oct	31	28901	900	M	1		HOLD		
138	4-Oct	9	28007			1			852	20-Oct	31	28902	855	M	1				
139	4-Oct	9	39105			1			853	20-Oct	31	28714					HOLD		
140	4-Oct	9	39212	350	M	1			854	20-Oct	31	28903	845	M	1		HOLD		
141	4-Oct	9	39203			1			855	20-Oct	31	28904	880	M	1		HOLD		
142	5-Oct	10	28142	835	M	1			856	20-Oct	31	39274	620	M	1				
143	5-Oct	10	28143	870	F	1			857	20-Oct	31	28826					HOLD		
144	5-Oct	10	28128			1			858	20-Oct	31	39273	280	M	1				
145	5-Oct	10	28144	810	F	1			859	20-Oct	31	28905	780	F	1				
146	5-Oct	10	28145	840	F	1	AD		860	20-Oct	31	28906	820	F	1				
147	5-Oct	10	28146	780	M	1			861	20-Oct	31	28845							
148	5-Oct	10	28147	840	F	1			862	20-Oct	31	39276	615	M	1				
149	5-Oct	10	28148	790	M	1			863	21-Oct	32	28907	725	M	1		HOLD		
150	5-Oct	10	28149	845	F	1			864	21-Oct	32	28908	790	M	1				
151	5-Oct	10	28150	840	F	1			865	21-Oct	32	28909	835	F	1				
152	5-Oct	10	28151	845	F	1	RETAG		866	21-Oct	32	28910	895	M	1		HOLD		
153	5-Oct	10	28152	845	F	1			867	21-Oct	32	28911	800	M	1				
154	5-Oct	10	28153	905	M	1			868	21-Oct	32	28596							
155	5-Oct	10	28154	995	M	1			869	21-Oct	32	28912	870	M	1				
156	5-Oct	10	28155	860	F	1			870	21-Oct	32	28913	900	F	1				
157	5-Oct	10	28156	850	F	1			871	21-Oct	32	28914	890	M	1				
158	5-Oct	10	28157	850	M	1			872	21-Oct	32	28915	800	M	1				
159	5-Oct	10	28158	730	M	1			873	21-Oct	32	28916	810	F	1		HOLD		
160	5-Oct	10	28159	810	F	1			874	21-Oct	32	28917	785	F	1				
161	5-Oct	10	28160	845	F	1			875	21-Oct	32	28918	775	F	1				
162	5-Oct	10	28161	830	M	1			876	21-Oct	32	28919	865	M	1		HOLD		
163	5-Oct	10	28162	730	M	1			877	21-Oct	32	28920	855	F	1		HOLD		
164	5-Oct	10	28163	830	F	1			878	21-Oct	32	39277	480	M	1				
165	5-Oct	10	28164	710	M	1			879	21-Oct	32	28921	850	M	1		HOLD		

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
166	5-Oct	10	28165	710	F	1			880	21-Oct	32	28459				1			
167	5-Oct	10	28166	665	M	1			881	21-Oct	32	28810				1			
168	5-Oct	10	28167	815	F	1			882	21-Oct	32	28922	885	M	1				
169	5-Oct	10	39213	430	M	1			883	21-Oct	32	28923	790	M	1				
170	5-Oct	10	39105			1			884	21-Oct	32	28924	850	M	1				
171	5-Oct	10	39214	330	M	1			885	21-Oct	32	28925	800	F	1				
172	5-Oct	10	39215	315	M	1			886	21-Oct	32	28926	815	F	1		HOLD		
173	5-Oct	11	28168	845	F	1			887	21-Oct	32	28927	740	M	1		HOLD		
174	5-Oct	11	28169	890	F	1			888	21-Oct	32	28928	845	F	1				
175	5-Oct	11	28170	915	M	1	AD		889	21-Oct	32	28929	685	M	1				
176	5-Oct	11	28171	915	M	1			890	21-Oct	32	39278	510	M	1				
177	5-Oct	11	28172	855	M	1			891	21-Oct	32	28930	970	M	1		HOLD		
178	5-Oct	11	28173	825	M	1			892	21-Oct	32	39279	410	M	1				
179	5-Oct	11	28174	790	M	1			893	21-Oct	32	28931	740	M	1		HOLD		
180	5-Oct	11	39216	505	M	1			894	21-Oct	32	28932	720	F	1				
181	5-Oct	11	39217	480	M	1			895	21-Oct	32	28933	860	F	1		HOLD		
182	5-Oct	12	28175	910	M	1			896	21-Oct	32	28934	770	F	1				
183	5-Oct	12	39218	450	M	1			897	21-Oct	32	28935	690	M	1	AD			
184	5-Oct	12	28176	815	F	1			898	21-Oct	32	28936	850	M	1				
185	5-Oct	12	28177	860	F	1			899	21-Oct	32	39280	310	M	1		HOLD		
186	5-Oct	12	28164			1			900	21-Oct	32	28937	740	F	1		HOLD		
187	5-Oct	12	28178	825	F	1			901	21-Oct	32	28938	700	M	1				
188	5-Oct	12	28179	790	F	1			902	21-Oct	32	28939	790	M	1				
189	5-Oct	12	39105			1			903	21-Oct	32	39281	640	M	1		HOLD		
190	5-Oct	12	39215			1			904	21-Oct	32	39282	595	M	1				
191	6-Oct	13	28200	950	M	1			905	21-Oct	32	39283	550	M	1				
192	6-Oct	13	28180	845	M	1			906	21-Oct	32	39284	330	M	1		HOLD		
193	6-Oct	13	28181	940	M	1			907	21-Oct	32	28940	705	M	1		HOLD		
194	6-Oct	13	28182	720	F	1			908	21-Oct	33	28941	800	F	1				
195	6-Oct	13	28183	880	F	1			909	21-Oct	33	28690			1				
196	6-Oct	13	28184	795	M	1			910	21-Oct	33	28942	800	M	1				
197	6-Oct	13	28185	930	M	1			911	21-Oct	33	28943	850	F	1				
198	6-Oct	13	28186	840	F	1			912	21-Oct	33	28944	875	M	1				
199	6-Oct	13	28187	880	F	1			913	21-Oct	33	28586			1				
200	6-Oct	13	28178			1			914	21-Oct	33	28945	880	M	1		HOLD		
201	6-Oct	13	28188	825	F	1			915	21-Oct	33	28946	850	F	1				
202	6-Oct	13	28189	905	M	1			916	21-Oct	33	28947	865	M	1				
203	6-Oct	13	28190	855	F	1			917	21-Oct	33	28761			1	AD			
204	6-Oct	13	28191	800	M	1			918	21-Oct	33	28948	820	F	1	AD			
205	6-Oct	13	28192	835	F	1			919	21-Oct	33	28949	780	M	1				
206	6-Oct	13	28193	835	M	1			920	21-Oct	33	28950	910	M	1				
207	6-Oct	13	28194	845	F	1			921	21-Oct	33	28951	805	F	1				
208	6-Oct	13	28195	850	M	1			922	21-Oct	33	28952	930	M	1				
209	6-Oct	13	28196	795	F	1			923	21-Oct	33	28953	860	M	1				
210	6-Oct	13	28197	880	F	1			924	21-Oct	33	28954	900	M	1		HOLD		
211	6-Oct	13	28198	780	F	1			925	21-Oct	33	28955	840	F	1				
212	6-Oct	13	28199	845	M	1			926	21-Oct	33	28956	860	F	1				
213	6-Oct	13	28401	845	F	1			927	21-Oct	33	28957	795	F	1				
214	6-Oct	13	28402	845	F	1			928	21-Oct	33	28958	795	F	1				
215	6-Oct	13	28403	810	F	1			929	21-Oct	33	28959	850	F	1				
216	6-Oct	13	28404	770	F	1			930	21-Oct	33	28960	830	F	1		HOLD		
217	6-Oct	13	28405	845	F	1			931	21-Oct	33	28912			1				
218	6-Oct	13	28406	835	F	1			932	21-Oct	33	28961	905	M	1		HOLD		
219	6-Oct	13	28407	675	M	1			933	21-Oct	33	28962	770	M	1		HOLD		
220	6-Oct	13	39219	545	M	1			934	21-Oct	33	28963	850	F	1		HOLD		

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
221	6-Oct	14	28408	915	M	1			935	21-Oct	33	28964	860	F	1				
222	6-Oct	14	28409	885	M	1			936	21-Oct	33	39285	445	M	1				
223	6-Oct	14	28410	905	F	1			937	21-Oct	33	28965	905	F	1				
224	6-Oct	14	28411	880	F	1			938	21-Oct	33	28966	665	M	1	AD	HOLD		
225	6-Oct	14	28412	925	F	1			939	21-Oct	33	28967	870	F	1				
226	6-Oct	14	28413	785	M	1			940	21-Oct	33	28968	770	M	1				
227	6-Oct	14	28414	830	F	1			941	21-Oct	33	28902							
228	6-Oct	14	28415	890	F	1			942	21-Oct	33	28969	715	M	1				
229	6-Oct	14	28416	780	M	1	AD		943	21-Oct	33	39286	270	M	1				
230	6-Oct	14	28417	920	M	1			944	21-Oct	33	28970	870	F	1				
231	6-Oct	14	28418	800	M	1			945	21-Oct	33	28971	860	F	1		HOLD		
232	6-Oct	14	28419	825	F	1			946	21-Oct	33	28639							
233	6-Oct	14	28420	825	F	1			947	21-Oct	33	28972	835	F	1		HOLD		
234	6-Oct	14	28421	795	M	1			948	21-Oct	33	28973	785	F	1	AD	HOLD		
235	6-Oct	14	39220	495	M	1			949	21-Oct	33	39287	510	M	1				
236	6-Oct	15	28422	790	M	1			950	21-Oct	33	39288	290	M	1				
237	6-Oct	15	28423	800	M	1			951	21-Oct	BS	28836				3	RELEASED		
238	6-Oct	15	28424	840	M	1			952	22-Oct	34	28974	840	F	1				
239	6-Oct	15	28425	830	F	1			953	22-Oct	34	28975	815	M	1				
240	6-Oct	15	39221	625	M	1			954	22-Oct	34	28976	840	M	1				
241	6-Oct	15	39215			1			955	22-Oct	34	28977	765	F	1		HOLD		
242	6-Oct	15	28406			1			956	22-Oct	34	28978	790	F	1		HOLD		
243	6-Oct	15	28426	835	F	1			957	22-Oct	34	28979	870	M	1		HOLD		
244	6-Oct	15	28427	980	M	1			958	22-Oct	34	28980	895	M	1				
245	6-Oct	15	28181			1			959	22-Oct	34	28981	840	F	1				
246	6-Oct	15	28428	835	M	1			960	22-Oct	34	28982	690	M	1		HOLD		
247	6-Oct	15	28429	935	M	1			961	22-Oct	34	28983	851	F	1		HOLD		
248	6-Oct	15	28430	860	M	1			962	22-Oct	34	28984	785	M	1				
249	6-Oct	15	28410			1			963	22-Oct	34	28985	850	M	1				
250	6-Oct	15	39222	315	M	1			964	22-Oct	34	28986	755	F	1				
251	7-Oct	16	28431	925	F	1			965	22-Oct	34	28987	810	F	1		HOLD		
252	7-Oct	16	28432	935	F	1			966	22-Oct	34	28740							
253	7-Oct	16	28433	855	F	1			967	22-Oct	34	28988	775	F	1		HOLD		
254	7-Oct	16	28434	870	F	1			968	22-Oct	34	28989	820	M	1				
255	7-Oct	16	28435	805	F	1			969	22-Oct	34	28990	840	F	1				
256	7-Oct	16	28436	845	M	1			970	22-Oct	34	28991	840	F	1				
257	7-Oct	16	28437	695	F	1			971	22-Oct	34	28992	810	F	1				
258	7-Oct	16	28438	915	M	1			972	22-Oct	34	28993	915	M	1				
259	7-Oct	16	39223	550	M	1			973	22-Oct	34	28994	885	M	1				
260	7-Oct	16	28439	800	F	1			974	22-Oct	34	28995	850	F	1		HOLD		
261	7-Oct	16	28440	915	F	1			975	22-Oct	34	28912					HOLD		
262	7-Oct	16	28441	865	F	1	AD		976	22-Oct	34	28996	830	F	1				
263	7-Oct	16	28442	820	F	1			977	22-Oct	34	28997	850	F	1				
264	7-Oct	16	28443	780	F	1			978	22-Oct	34	28998	825	F	1		HOLD		
265	7-Oct	16	28444	880	F	1			979	22-Oct	34	28999	945	M	1		HOLD		
266	7-Oct	16	28445	945	M	1			980	22-Oct	34	29000	790	F	1				
267	7-Oct	16	28446	885	M	1			981	22-Oct	34	29001	855	F	1				
268	7-Oct	16	28447	970	M	1			982	22-Oct	34	29002	835	F	1				
269	7-Oct	16	39224	600	M	1			983	22-Oct	34	29003	790	M	1				
270	7-Oct	16	28448	870	F	1			984	22-Oct	34	29004	805	M	1				
271	7-Oct	16	28449	935	M	1			985	22-Oct	34	29005	750	M	1		HOLD		
272	7-Oct	16	28450	835	M	1			986	22-Oct	34	29006	800	F	1				
273	7-Oct	16	28451	710	M	1			987	22-Oct	34	28742							
274	7-Oct	16	28452	720	M	1			988	22-Oct	34	29007	830	F	1				
275	7-Oct	16	28190			1			989	22-Oct	34	29008	775	F	1				

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
276	7-Oct	16	28453	850	F	1			990	22-Oct	34	29009	800	F	1				
277	7-Oct	16	28410			1			991	22-Oct	34	28944			1				
278	7-Oct	16	28184			1			992	22-Oct	34	28720			1				
279	7-Oct	17	28454	855	M	1			993	22-Oct	34	39289	620	M	1				
280	7-Oct	17	28446			1			994	22-Oct	34	29010	850	F	1				
281	7-Oct	17	28455	970	M	1			995	22-Oct	34	29011	790	F	1				
282	7-Oct	17	28456	830	M	1			996	22-Oct	34	29012	720	M	1		HOLD		
283	7-Oct	17	28457	845	F	1			997	22-Oct	34	29013	840	M	1		HOLD		
284	7-Oct	17	28142			1			998	22-Oct	34	29014	860	F	1		HOLD		
285	7-Oct	17	28458	880	M	1			999	22-Oct	34	29015	830	F	1				
286	7-Oct	17	28459	835	F	1			1000	22-Oct	34	28025							
287	7-Oct	17	28460	775	F	1			1001	22-Oct	34	29016	785	M	1		AD		
288	7-Oct	17	28461	810	M	1			1002	22-Oct	34	28911			1				
289	7-Oct	17	28462	805	M	1			1003	22-Oct	34	29017	810	F	1		HOLD		
290	7-Oct	17	28463	840	M	1			1004	22-Oct	34	29018	790	M	1				
291	7-Oct	17	39225	515	M	1			1005	22-Oct	34	29019	805	M	1		HOLD		
292	8-Oct	18	28464	900	M	1			1006	22-Oct	34	28905			1		HOLD		
293	8-Oct	18	28465	890	M	1			1007	22-Oct	34	28609			1				
294	8-Oct	18	28466	855	F	1			1008	22-Oct	34	29020	790	F	1				
295	8-Oct	18	28461			1			1009	22-Oct	34	29021	760	M	1				
296	8-Oct	18	28467	780	F	1			1010	22-Oct	34	28955			1		HOLD		
297	8-Oct	18	28468	810	M	1			1011	22-Oct	34	28942			1				
298	8-Oct	18	28436			1			1012	22-Oct	34	29022	770	F	1				
299	8-Oct	18	28459			1			1013	22-Oct	34	29023	850	F	1				
300	8-Oct	18	28469	865	F	1			1014	22-Oct	34	29024	770	F	1				
301	8-Oct	18	39225			1			1015	22-Oct	34	29025	835	F	1				
302	8-Oct	18	28460			1			1016	22-Oct	34	29026	860	F	1		HOLD		
303	8-Oct	18	28470	745	M	1			1017	22-Oct	34	29027	810	F	1				
304	8-Oct	18	28471	825	M	1			1018	22-Oct	34	29028	920	M	1				
305	8-Oct	18	28472	760	M	1			1019	22-Oct	34	29029	770	F	1				
306	8-Oct	18	28473	860	M	1		AD	1020	22-Oct	34	29030	860	M	1		HOLD		
307	8-Oct	18	39226	285	M	1			1021	22-Oct	34	29031	660	F	1		HOLD		
308	8-Oct	19	28128			1			1022	22-Oct	34	29032	905	M	1				
309	8-Oct	19	39225			1			1023	22-Oct	34	29033	785	M	1		HOLD		
310	8-Oct	19	39221			1			1024	22-Oct	34	29034	830	F	1				
311	8-Oct	19	28190			1			1025	22-Oct	34	39290	650	M	1				
312	8-Oct	19	28474	775	M	1			1026	22-Oct	34	29035	805	F	1				
313	8-Oct	19	39227	285	M	1			1027	22-Oct	34	39291	460	M	1		HOLD		
314	12-Oct	20	28475	835	F	1			1028	22-Oct	34	29036	790	F	1		HOLD		
315	12-Oct	20	28476	880	M	1			1029	22-Oct	34	29037	830	F	1				
316	12-Oct	20	28477	910	M	1			1030	22-Oct	34	39292	555	M	1				
317	12-Oct	20	28478	890	M	1			1031	22-Oct	34	29038	840	F	1		HOLD		
318	12-Oct	20	28479	925	M	1			1032	22-Oct	34	29039	740	M	1				
319	12-Oct	20	28480	865	F	1			1033	22-Oct	34	29040	765	F	1				
320	12-Oct	20	28481	805	M	1			1034	22-Oct	34	29041	825	F	1				
321	12-Oct	20	39231	290	M	1			1035	22-Oct	34	28851			1				
322	12-Oct	20	39228	500	M	1		RETAG	1036	22-Oct	34	29042	720	M	1				
323	12-Oct	20	39229	500	M	1			1037	22-Oct	34	28958			1				
324	12-Oct	20	28482	935	M	1			1038	22-Oct	34	39293	490	M	1				
325	12-Oct	20	28483	810	M	1		AD	1039	22-Oct	34	39294	420	M	1				
326	12-Oct	20	28484	900	F	1			1040	22-Oct	34	39295	520	M	1				
327	12-Oct	20	28485	800	F	1		AD	1041	22-Oct	34	39296	470	M	1				
328	12-Oct	20	28486	880	M	1			1042	22-Oct	34	39297	540	M	1				
329	12-Oct	20	28487	830	F	1		LV	1043	22-Oct	34	39275			1				
330	12-Oct	20	28488	835	F	1			1044	22-Oct	34	39298	290	M	1				

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
331	12-Oct	20	39230	320	M	1			1045	22-Oct	34	39299	270	M	1				
332	12-Oct	20	28489	931	M	1			1046	22-Oct	34	29043	725	F	1				
333	12-Oct	20	28490	875	F	1			1047	22-Oct	34	39300	300	M	1				
334	12-Oct	20	28449			1			1048	22-Oct	34	39301	315	M	1				
335	12-Oct	20	28491	870	M	1			1049	22-Oct	34	39302	280	M	1				
336	12-Oct	20	28492	795	F	1			1050	22-Oct	34	39303	595	M	1				
337	12-Oct	20	28493	810	F	1			1051	22-Oct	35	29044	840	M	1				
338	12-Oct	20	28494	805	M	1			1052	22-Oct	35	29045	780	F	1				
339	12-Oct	20	28495	840	M	1			1053	22-Oct	35	28555			1				
340	12-Oct	20	28496	925	M	1			1054	22-Oct	35	29046	855	M	1				
341	12-Oct	20	28497	835	M	1			1055	22-Oct	35	29047	710	M	1		HOLD		
342	12-Oct	20	39232	420	M	1			1056	22-Oct	35	28825			1				
343	12-Oct	20	28498	765	M	1			1057	22-Oct	35	29048	810	F	1				
344	12-Oct	20	28499	760	F	1			1058	22-Oct	35	29049	845	M	1				
345	12-Oct	20	28500	830	F	1			1059	22-Oct	35	29050	830	F	1				
346	12-Oct	20	28501	865	M	1			1060	22-Oct	35	29051	795	F	1				
347	12-Oct	20	28502	850	M	1			1061	22-Oct	35	28812			1		HOLD		
348	12-Oct	20	28503	940	M	1			1062	22-Oct	35	28908			1				
349	12-Oct	20	28153			1			1063	22-Oct	35	29052	825	F	1		HOLD		
350	12-Oct	20	28504	875	F	1			1064	22-Oct	35	29053	860	F	1				
351	12-Oct	20	28506	870	F	1			1065	22-Oct	35	29054	810	F	1				
352	12-Oct	20	28507	710	M	1			1066	22-Oct	35	29055	940	M	1				
353	12-Oct	20	28508	785	F	1			1067	22-Oct	35	29056	770	M	1				
354	12-Oct	20	28509	830	M	1			1068	22-Oct	35	29057	810	F	1				
355	12-Oct	20	28510	780	M	1			1069	22-Oct	35	29058	830	F	1				
356	12-Oct	20	28511	810	M	1			1070	22-Oct	35	29059	790	F	1				
357	12-Oct	20	28512	840	F	1			1071	22-Oct	35	29060	860	F	1				
358	12-Oct	20	28513	840	M	1			1072	22-Oct	35	29061	860	M	1				
359	12-Oct	20	28514	810	M	1			1073	22-Oct	35	29062	805	F	1				
360	12-Oct	20	28515	885	F	1			1074	22-Oct	35	39304	645	M	1				
361	12-Oct	20	28516	800	M	1			1075	22-Oct	35	29063	810	M	1				
362	12-Oct	20	28517	850	M	1			1076	22-Oct	35	29064	725	F	1				
363	12-Oct	20	28519	830	M	1			1077	22-Oct	35	29065	800	F	1		HOLD		
364	12-Oct	20	28520	890	M	1			1078	22-Oct	35	29066	800	M	1		HOLD		
365	12-Oct	20	28521	860	M	1			1079	22-Oct	35	29067	840	F	1				
366	12-Oct	20	28522	840	F	1			1080	22-Oct	35	29068	725	F	1		HOLD		
367	12-Oct	20	28523	870	M	1			1081	22-Oct	35	29069	860	F	1				
368	12-Oct	20	28524	790	M	1			1082	22-Oct	35	39296			1		HOLD		
369	12-Oct	20	28525	820	F	1			1083	22-Oct	35	39294			1				
370	12-Oct	20	28526	900	M	1			1084	22-Oct	35	29070	830	F	1				
371	12-Oct	20	28527	900	M	1			1085	22-Oct	35	29071	790	F	1				
372	12-Oct	20	28528	905	M	1			1086	22-Oct	35	28942			1				
373	12-Oct	20	28529	765	M	1	AD		1087	22-Oct	35	29072	800	F	1				
374	12-Oct	20	28530	750	M	1			1088	22-Oct	35	29073	870	F	1				
375	12-Oct	20	28531	755	M	1			1089	22-Oct	35	29074	800	F	1				
376	12-Oct	20	28532	795	M	1			1090	22-Oct	35	29075	795	F	1				
377	12-Oct	20	28533	820	F	1			1091	22-Oct	35	29076	825	M	1				
378	12-Oct	20	28534	655	M	1			1092	22-Oct	35	29077	785	M	1		HOLD		
379	12-Oct	20	28535	815	F	1			1093	22-Oct	35	39305	500	M	1				
380	12-Oct	20	28536	830	M	1			1094	22-Oct	35	28639			1		HOLD		
381	12-Oct	20	28537	795	F	1			1095	22-Oct	35	29078	780	F	1				
382	12-Oct	20	28538	845	M	1			1096	22-Oct	35	29041			1				
383	12-Oct	20	28539	850	F	1			1097	22-Oct	35	39306	320	M	1				
384	12-Oct	20	28540	805	F	1			1098	22-Oct	35	39307	580	M	1				
385	12-Oct	20	28541	850	F	1			1099	22-Oct	35	29079	775	F	1				

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
386	12-Oct	20	28542	845	F	1			1100	22-Oct	35	29080	655	F	1				
387	12-Oct	20	28543	780	M	1			1101	22-Oct	35	28810			1				
388	12-Oct	20	28544	770	F	1			1102	22-Oct	35	39308	515	M	1				
389	12-Oct	20	28545	810	M	1			1103	23-Oct	36	29081	930	M	1		HOLD		
390	12-Oct	20	28546	740	M	1			1104	23-Oct	36	29082	760	M	1		HOLD		
391	12-Oct	20	39233	490	M	1			1105	23-Oct	36	28645			1				
392	12-Oct	20	28547	720	F	1	AD		1106	23-Oct	36	29083	865	F	1				
393	12-Oct	20	39234	270	M	1			1107	23-Oct	36	29084	825	F	1		HOLD		
394	13-Oct	21	28548	930	F	1			1108	23-Oct	36	29085	885	F	1				
395	13-Oct	21	28549	850	F	1			1109	23-Oct	36	29086	845	F	1		HOLD		
396	13-Oct	21	28466			1			1110	23-Oct	36	29087	840	F	1				
397	13-Oct	21	28514			1			1111	23-Oct	36	29088	920	F	1		HOLD		
398	13-Oct	21	28550	840	F	1			1112	23-Oct	36	29089	820	F	1				
399	13-Oct	21	28551	865	M	1			1113	23-Oct	36	29090	790	F	1				
400	13-Oct	21	28552	860	F	1			1114	23-Oct	36	29091	775	F	1				
401	13-Oct	21	28553	810	M	1			1115	23-Oct	36	29092	745	F	1		HOLD		
402	13-Oct	21	28554	875	F	1			1116	23-Oct	36	29093	820	F	1				
403	13-Oct	21	28555	865	F	1			1117	23-Oct	36	29094	855	F	1				
404	13-Oct	21	28556	895	F	1			1118	23-Oct	36	29095	730	M	1				
405	13-Oct	21	28547			1			1119	23-Oct	36	28942			1				
406	13-Oct	21	28156			1			1120	23-Oct	36	29096	815	M	1				
407	13-Oct	21	28557	850	F	1			1121	23-Oct	36	29097	770	F	1		HOLD		
408	13-Oct	21	28558	820	M	1			1122	23-Oct	36	29098	810	F	1				
409	13-Oct	21	28559	895	M	1			1123	23-Oct	36	29099	820	F	1				
410	13-Oct	21	28560	780	F	1			1124	23-Oct	36	29100	815	F	1				
411	13-Oct	21	28561	845	M	1			1125	23-Oct	36	29101	755	F	1				
412	13-Oct	21	28562	815	F	1			1126	23-Oct	36	29102	875	F	1				
413	13-Oct	21	28563	840	F	1			1127	23-Oct	36	29103	755	F	1				
414	13-Oct	21	28564	740	F	1			1128	23-Oct	36	29104	810	F	1				
415	13-Oct	21	28565	840	M	1			1129	23-Oct	36	29105	855	F	1				
416	13-Oct	21	39235	610	M	4	AD		1130	23-Oct	36	29106	790	M	1				
417	13-Oct	21	28566	820	F	1			1131	23-Oct	36	29107	840	F	1				
418	13-Oct	21	28567	805	F	1			1132	23-Oct	36	29108	905	M	1		HOLD		
419	13-Oct	21	28568	815	M	1			1133	23-Oct	36	29109	760	F	1				
420	13-Oct	21	28569	830	F	1			1134	23-Oct	36	29110	820	M	1		HOLD		
421	13-Oct	21	28570	915	M	1			1135	23-Oct	36	29111	890	F	1				
422	13-Oct	21	28571	800	M	1			1136	23-Oct	36	29112	900	M	1				
423	13-Oct	21	39236	495	M	1			1137	23-Oct	36	29113	780	F	1				
424	13-Oct	21	28572	785	F	1			1138	23-Oct	36	29114	680	M	1				
425	13-Oct	21	28573	785	F	1			1139	23-Oct	36	29115	835	F	1				
426	13-Oct	21	28515			1			1140	23-Oct	36	29116	925	F	1				
427	13-Oct	21	39237	610	M	1			1141	23-Oct	36	29117	845	M	1		HOLD		
428	13-Oct	21	28472			1			1142	23-Oct	36	29118	825	M	1				
429	13-Oct	21	28533			1			1143	23-Oct	36	29119	850	M	1				
430	13-Oct	21	28508			1			1144	23-Oct	36	29120	805	F	1				
431	13-Oct	21	28530			1			1145	23-Oct	36	29121	910	M	1				
432	13-Oct	21	28478			1			1146	23-Oct	36	29122	850	M	1				
433	13-Oct	21	39238	305	M	1			1147	23-Oct	36	29123	770	F	1				
434	13-Oct	21	28574	720	F	1			1148	23-Oct	36	29124	895	M	1				
435	13-Oct	21	39239	290	M	1			1149	23-Oct	36	39309	610	M	1				
436	13-Oct	22	28575	730	M	1			1150	23-Oct	36	29125	790	F	1		HOLD		
437	13-Oct	22	28576	890	F	1			1151	23-Oct	36	29126	855	F	1	AD			
438	13-Oct	22	28577	785	M	1			1152	23-Oct	36	29127	740	F	1		HOLD		
439	13-Oct	22	28578	835	F	1			1153	23-Oct	36	29128	855	F	1				
440	13-Oct	22	28579	810	F	1			1154	23-Oct	36	29129	885	M	1				

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Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
441	13-Oct	22	28580	825	M	1			1155	23-Oct	36	29130	795	F	1				
442	13-Oct	22	28581	825	F	1			1156	23-Oct	36	39310	465	M	1				
443	13-Oct	22	28535			2			1157	23-Oct	36	29131	745	F	1				
444	13-Oct	22	28582	835	F	1			1158	23-Oct	36	29132	820	F	1				
445	13-Oct	22	28583	880	M	1	AD		1159	23-Oct	36	29133	755	M	1				
446	13-Oct	22	28584	905	M	1			1160	23-Oct	36	29134	810	F	1				
447	13-Oct	22	28585	815	M	1			1161	23-Oct	36	29135	855	F	1				
448	13-Oct	22	28548			1			1162	23-Oct	36	29136	800	F	1				
449	13-Oct	22	28586	855	F	1			1163	23-Oct	36	29137	805	F	1				
450	13-Oct	22	28587	820	F	1			1164	23-Oct	36	29034			1				
451	13-Oct	22	28588	840	F	1			1165	23-Oct	36	28740			1				
452	13-Oct	22	28589	860	F	1			1166	23-Oct	36	29138	780	F	1				
453	13-Oct	22	28590	865	M	1			1167	23-Oct	36	28908			1				
454	13-Oct	22	28591	725	M	1			1168	23-Oct	36	29139	840	F	1				
455	13-Oct	22	28592	810	F	1			1169	23-Oct	36	29140	820	F	1				
456	13-Oct	22	28593	785	M	1			1170	23-Oct	36	29141	860	M	1				
457	13-Oct	22	28567			1			1171	23-Oct	36	29142	790	F	1				
458	13-Oct	22	28555			1			1172	23-Oct	36	29143	810	F	1				
459	13-Oct	22	39217			1			1173	23-Oct	36	29144	795	F	1				
460	13-Oct	22	39240	290	M	1			1174	23-Oct	36	29145	790	F	1				
461	13-Oct	22	28525			1			1175	23-Oct	36	29146	805	F	1	AD			
462	13-Oct	22	28466			1			1176	23-Oct	36	29147	770	F	1		HOLD		
463	13-Oct	22	28549			1			1177	23-Oct	36	29148	840	F	1		HOLD		
464	13-Oct	22	28594	765	F	1			1178	23-Oct	36	28949			1				
465	13-Oct	22	28595	910	M	1			1179	23-Oct	36	29149	890	M	1				
466	13-Oct	22	28487			1			1180	23-Oct	36	29150	800	M	1		HOLD		
467	13-Oct	22	28596	790	F	1			1181	23-Oct	36	28004			5				
468	13-Oct	22	28597	790	F	1			1182	23-Oct	36	29151	825	M	1				
469	13-Oct	22	28484			1			1183	23-Oct	36	29152	770	F	1				
470	13-Oct	22	28598	835	F	1			1184	23-Oct	36	29153	870	M	1				
471	13-Oct	22	28599	860	F	1	AD		1185	23-Oct	36	29154	670	M	1				
472	13-Oct	22	28478			1			1186	23-Oct	36	28799			1				
473	13-Oct	22	28600	790	F	1			1187	23-Oct	36	29155	830	M	1				
474	13-Oct	22	28601	870	M	1			1188	23-Oct	36	29156	695	M	1				
475	13-Oct	22	28602	735	M	1			1189	23-Oct	36	29157	820	F	1		HOLD		
476	13-Oct	22	39241	540	M	1			1190	23-Oct	36	28756			1				
477	13-Oct	22	28603	815	F	1			1191	23-Oct	36	29158	905	M	1				
478	13-Oct	22	28604	775	F	1			1192	23-Oct	36	29159	835	F	1				
479	13-Oct	22	39238			1			1193	23-Oct	36	29160	885	F	1		HOLD		
480	13-Oct	22	39242	280	M	1			1194	23-Oct	36	29161	795	M	1				
481	13-Oct	22	28498			1			1195	23-Oct	36	29162	820	F	1				
482	13-Oct	22	28605	805	F	1			1196	23-Oct	36	29163	870	M	1				
483	13-Oct	22	39243	475	M	1			1197	23-Oct	36	28944			1				
484	14-Oct	23	28606	890	F	1			1198	23-Oct	36	28043			1				
485	14-Oct	23	28607	930	M	1			1199	23-Oct	36	29164	805	M	1				
486	14-Oct	23	28608	925	F	1			1200	24-Oct	37	29165	770	F	1				
487	14-Oct	23	28609	820	F	1			1201	24-Oct	37	29166	835	F	1		HOLD		
488	14-Oct	23	28610	915	M	1			1202	24-Oct	37	29167	880	F	1				
489	14-Oct	23	28611	835	F	1			1203	24-Oct	37	29168	875	F	1		HOLD		
490	14-Oct	23	28612	895	M	1			1204	24-Oct	37	29169	790	F	1		HOLD		
491	14-Oct	23	28613	800	F	1			1205	24-Oct	37	29170	860	F	1				
492	14-Oct	23	28515			1			1206	24-Oct	37	29171	885	M	1				
493	14-Oct	23	28614	785	F	1			1207	24-Oct	37	29172	770	F	1				
494	14-Oct	23	28615	900	F	1			1208	24-Oct	37	29173	820	F	1				
495	14-Oct	23	28481			1			1209	24-Oct	37	29174	775	F	1				

Appendix 1. 1993 Wannock River chinook tagging data. Codes: M= male, F= female, POH= post orbital to hypural plate length in mm, CD= condition, FC= fin clips, Sc= scale, BS= broodstock, DP= dead pitch, AD= adipose, LV= left ventral, RG= regenerate. Condition codes: 1= swam away, 2= resuscitated, 3= bleeding, 4=dead, 5= kelt.

Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
496	14-Oct	23	28616	700	M	1			1210	24-Oct	37	29175	830	M	1				
497	14-Oct	23	28617	805	M	1			1211	24-Oct	37	29176	845	F	1				
498	14-Oct	23	39244	355	M	1			1212	24-Oct	37	29177	860	F	1				
499	14-Oct	23	28618	885	M	1			1213	24-Oct	37	29178	755	F	1		HOLD		
500	14-Oct	23	28619	775	M	1			1214	24-Oct	37	29179	860	F	1				
501	14-Oct	23	28620	825	M	1			1215	24-Oct	37	29180	800	F	1				
502	14-Oct	23	28621	970	M	1			1216	24-Oct	37	29181	805	F	1				
503	14-Oct	23	28522			1			1217	24-Oct	37	29182	810	F	1				
504	14-Oct	23	28622	855	F	1			1218	24-Oct	37	29183	740	F	1				
505	14-Oct	23	28623	865	F	1			1219	24-Oct	37	29184	790	F	1				
506	14-Oct	23	28624	850	F	1	AD		1220	24-Oct	37	29185	770	F	1				
507	14-Oct	23	28466			1			1221	24-Oct	37	29186	840	F	1				
508	14-Oct	23	39245	345	M	1			1222	24-Oct	37	29187	805	F	1				
509	14-Oct	23	28625	840	F	1			1223	24-Oct	37	29188	725	M	1				
510	14-Oct	23	28585			1			1224	24-Oct	37	29121			1				
511	14-Oct	23	28459			1			1225	24-Oct	37	29189	790	F	1		HOLD		
512	14-Oct	23	28626	785	F	1			1226	24-Oct	37	29190	840	F	1		HOLD		
513	14-Oct	23	28627	765	F	1			1227	24-Oct	37	29191	825	F	1				
514	14-Oct	23	39246	385	M	1			1228	24-Oct	37	29192	850	F	1		HOLD		
515	14-Oct	23	28628	825	F	1			1229	24-Oct	37	29193	870	M	1				
516	14-Oct	24	28629	850	M	1			1230	24-Oct	37	29194	840	F	1				
517	14-Oct	24	28630	760	F	1			1231	24-Oct	37	29034			1				
518	14-Oct	24	28631	905	F	1			1232	24-Oct	37	29195	760	F	1				
519	14-Oct	24	28632	910	F	1			1233	24-Oct	37	29196	800	F	1	AD			
520	14-Oct	24	28633	855	F	1			1234	24-Oct	37	29197	885	M	1		HOLD		
521	14-Oct	24	28634	795	M	1			1235	24-Oct	37	29198	875	M	1				
522	14-Oct	24	28635	810	M	1			1236	24-Oct	37	29199	775	F	1				
523	14-Oct	24	28636	905	F	1			1237	24-Oct	37	29200	785	F	1				
524	14-Oct	24	28637	885	F	1			1238	24-Oct	37	29201	755	F	1				
525	14-Oct	24	28564			1			1239	24-Oct	37	29202	850	F	1				
526	14-Oct	24	28638	795	M	1			1240	24-Oct	37	29203	780	M	1				
527	14-Oct	24	28639	820	M	1			1241	24-Oct	37	29204	800	F	1				
528	14-Oct	24	39247	295	M	1			1242	24-Oct	37	29205	815	F	1				
529	14-Oct	24	28640	825	F	1			1243	24-Oct	37	39311	580	M	1		HOLD		
530	14-Oct	24	39245			1			1244	24-Oct	37	39312	510	M	1				
531	14-Oct	24	28641	765	M	1			1245	24-Oct	37	29206	810	F	1				
532	14-Oct	25	28642	895	M	1			1246	24-Oct	37	29207	820	F	1				
533	14-Oct	25	28643	835	F	1			1247	24-Oct	37	29208	665	M	1		HOLD		
534	14-Oct	25	28644	840	F	1			1248	24-Oct	37	29209	850	F	1				
535	14-Oct	25	28620			1			1249	24-Oct	37	29210	800	F	1				
536	14-Oct	25	28645	815	M	1			1250	24-Oct	37	29099			1				
537	14-Oct	25	28611			1			1251	24-Oct	37	39313	510	M	1				
538	14-Oct	25	28646	830	F	1			1252	24-Oct	37	29211	750	F	1		HOLD		
539	14-Oct	25	28596			1			1253	24-Oct	37	29212	825	F	1				
540	14-Oct	25	28647	735	F	1			1254	24-Oct	37	29213	785	F	1	AD			
541	14-Oct	25	28648	885	F	1			1255	24-Oct	37	29214	820	F	1				
542	14-Oct	25	28630			1			1256	24-Oct	37	29215	810	F	1				
543	14-Oct	25	28649	775	F	1			1257	24-Oct	37	28957			1		HOLD		
544	14-Oct	25	28650	915	F	1			1258	24-Oct	37	28911			1				
545	14-Oct	25	28651	730	F	1			1259	24-Oct	37	29216	710	F	1				
546	14-Oct	25	28652	780	F	1			1260	24-Oct	37	29217	730	M	1				
547	14-Oct	25	39247			1			1261	24-Oct	37	39314	510	M	1				
548	14-Oct	25	28653	880	M	1			1262	25-Oct	38	28565			1		HOLD		
549	14-Oct	25	28478			1			1263	25-Oct	38	28941			1		HOLD		
550	14-Oct	25	39217			1			1264	25-Oct	38	28908			1		HOLD		

Appendix 1. 1993 Wannock River chinook tagging data. Codes: M= male, F= female, POH= post orbital to hypural plate length in mm, CD= condition, FC= fin clips, Sc= scale, BS= broodstock, DP= dead pitch, AD= adipose, LV= left ventral, RG= regenerate. Condition codes: 1= swam away, 2= resuscitated, 3= bleeding, 4=dead, 5= kelt.

Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
551	14-Oct	25	28613						1265	25-Oct	38	29188					HOLD		
552	14-Oct	25	28654	845	M				1266	25-Oct	38	39314					HOLD		
553	14-Oct	25	28156						1267	25-Oct	38	29112							
554	15-Oct	26	28655	680	M				1268	25-Oct	38	28154							
555	15-Oct	26	28656	900	M				1269	25-Oct	38	28994							
556	15-Oct	26	28657	890	M				1270	25-Oct	38	29921							
557	15-Oct	26	28658	890	M				1271	23-Oct	BS	28712	F				RELEASED		
558	15-Oct	26	28659	845	F				1272	23-Oct	BS	28713	F				RELEASED		
559	15-Oct	26	28660	865	M				1273	23-Oct	BS	28784	F				RELEASED		
560	15-Oct	26	28661	855	F				1274	23-Oct	BS	28806	F				RELEASED		
561	15-Oct	26	39248	325	M				1275	23-Oct	BS	28819	F				RELEASED		
562	15-Oct	26	28662	780	M				1276	23-Oct	BS	28998	F				RELEASED		
563	15-Oct	26	28663	875	M				1277	23-Oct	BS	29014	F				RELEASED		
564	15-Oct	26	28664	825	M				1278	23-Oct	BS	29805	F				RELEASED		
565	15-Oct	26	28665	805	M				1279	23-Oct	BS	28757	F				DEAD		
566	15-Oct	26	28666	905	M				1280	23-Oct	BS	28921	M				RELEASED		
567	15-Oct	26	28667	860	M				1281	21-Oct	BS	28821						47851	3
568	15-Oct	26	28668	770	M				1282	21-Oct	BS	28899						47851	5
569	15-Oct	26	39249	420	M				1283	21-Oct	BS	28901						47851	6
570	15-Oct	26	28669	790	F				1284	21-Oct	BS	28919						47851	7
571	15-Oct	26	28670	840	F				1285	21-Oct	BS	28910						47851	8
572	15-Oct	26	28466						1286	21-Oct	BS	28962						47851	9
573	15-Oct	26	39250	595	M				1287	21-Oct	BS	28954						47851	10
574	15-Oct	26	39240						1288	21-Oct	BS	28824						47852	4
575	15-Oct	26	28671	840	M				1289	21-Oct	BS	28864						47852	5
576	15-Oct	26	28596						1290	21-Oct	BS	28885						47852	6
577	15-Oct	26	28672	865	F				1291	21-Oct	BS	28972						47852	7
578	15-Oct	26	28673	660	M				1292	21-Oct	BS	28860						47852	8
579	15-Oct	26	28674	885	M				1293	21-Oct	BS	28856					OR28853	47852	9
580	15-Oct	26	28675	745	M				1294	21-Oct	BS	28973					4 AD 370352E	47852	10
581	15-Oct	26	28676	765	F				1295	21-Oct	BS	28966						47853	1
582	15-Oct	26	28564						1296	21-Oct	BS	28898						47853	2
583	15-Oct	26	39251	295	M				1297	21-Oct	BS	28866						47853	3
584	15-Oct	26	39252	320	M				1298	21-Oct	BS	28818						47853	4
585	15-Oct	27	28677	805	F				1299	21-Oct	BS	28903						47853	5
586	15-Oct	27	28678	855	F				1300	21-Oct	BS	28945						47853	6
587	15-Oct	27	28679	900	M				1301	21-Oct	BS	28714						47853	7
588	15-Oct	27	28680	830	F				1302	21-Oct	BS	28900						47853	8
589	15-Oct	27	28655						1303	21-Oct	BS	28931						47853	9
590	15-Oct	27	28681	865	F				1304	21-Oct	BS	28904						47853	10
591	15-Oct	27	28682	795	M				1305	23-Oct	BS	28719		F				30141	1
592	15-Oct	27	28683	820	M				1306	23-Oct	BS	28722		F				30141	2
593	15-Oct	27	28684	840	M				1307	23-Oct	BS	28724		F				30141	3
594	15-Oct	27	28685	795	F				1308	23-Oct	BS	28731		F				30141	4
595	15-Oct	27	28596						1309	23-Oct	BS	28736		F				30141	5
596	15-Oct	27	28686	890	F				1310	23-Oct	BS	28525		F			OR28725	30141	6
597	15-Oct	27	28687	940	M				1311	23-Oct	BS	28757		F				30141	7
598	15-Oct	27	28688	875	F				1312	23-Oct	BS	28758		F				30141	8
599	15-Oct	27	28689	845	M				1313	23-Oct	BS	28760		F				30141	9
600	15-Oct	27	28690	820	F			LV	1314	23-Oct	BS	28677		F				30141	10
601	15-Oct	27	28691	850	M				1315	23-Oct	BS	28678		F				30142	1
602	15-Oct	27	28692	740	M				1316	23-Oct	BS	28814		F				30142	2
603	15-Oct	27	28612						1317	23-Oct	BS	28683		F				30142	3
604	15-Oct	27	28693	775	F				1318	23-Oct	BS	28822		F				30142	4
605	15-Oct	27	39253	465	M				1319	23-Oct	BS	28987		F				30142	5

Appendix 1. 1993 Wannock River chinook tagging data. Codes: M= male, F= female, POH= post orbital to hypural plate length in mm, CD= condition, FC= fin clips, Sc= scale, BS= broodstock, DP= dead pitch, AD= adipose, LV= left ventral, RG= regenerate. Condition codes: 1= swam away, 2= resuscitated, 3= bleeding, 4=dead, 5= kelt.

Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Entry	Date	Set	Tag#	POH	Sex	CD	FC	Comments	Book#	Sc#
606	15-Oct	27	28694	840	M	1			1320	23-Oct	BS	28833		F	4			30142	6
607	15-Oct	28	28695	855	F	1			1321	23-Oct	BS	28834		F	4			30142	7
608	15-Oct	28	28696	870	F	1			1322	23-Oct	BS	29026		F	4			30142	8
609	15-Oct	28	39240			1			1323	23-Oct	BS	28844		F	4			30142	9
610	15-Oct	28	28697	895	F	1			1324	23-Oct	BS	29017		F	4			30142	10
611	15-Oct	28	28698	895	F	1			1325	23-Oct	BS	28873		F	4			47855	1
612	15-Oct	28	28699	915	M	1			1326	23-Oct	BS	28889		F	4			47855	2
613	15-Oct	28	28700	875	M	1			1327	23-Oct	BS	28916		F	4			47855	3
614	15-Oct	28	28701	815	F	1			1328	23-Oct	BS	29036		F	4			47855	4
615	15-Oct	28	28702	855	F	1			1329	23-Oct	BS	29038		F	4			47855	5
616	15-Oct	28	28703	865	M	1			1330	23-Oct	BS	28812		F	4			47855	6
617	15-Oct	28	39254	315	M	1			1331	23-Oct	BS	29052		F	4			47855	7
618	15-Oct	28	28704	780	M	1			1332	23-Oct	BS	29065		F	4			47855	8
619	15-Oct	28	28705	715	M	1			1333	23-Oct	BS	28999		M	4			47855	9
620	15-Oct	28	28706	815	M	1			1334	23-Oct	BS	28930		M	4			47855	10
621	15-Oct	28	28707	795	F	1			1335	23-Oct	BS	28982		M	4			47856	1
622	15-Oct	28	28708	855	M	1			1336	23-Oct	BS	28826		M	4			47856	2
623	15-Oct	28	28564			1			1337	23-Oct	BS	29019		M	4			47856	3
624	15-Oct	28	28709	790	M	1			1338	23-Oct	BS	29033		M	4			47856	4
625	15-Oct	28	28119			1	AD		1339	23-Oct	BS	39281		M	4			47856	5
626	15-Oct	28	28581			1			1340	23-Oct	BS	29013		M	4			47856	6
627	15-Oct	28	28710	805	F	1			1341	23-Oct	BS	29005		M	4			47856	7
628	15-Oct	28	39255	650	M	1			1342	23-Oct	BS	29066		M	4			47856	8
629	15-Oct	28	39252			1			1343	23-Oct	BS	29012		M	4			47856	9
630	15-Oct	28	28547			1			1344	23-Oct	BS	39291		M	4			47856	10
631	15-Oct	28	28711	805	M	1			1345	23-Oct	BS	29030		M	4			47857	1
632	19-Oct	29	28712	870	F	1	HOLD		1346	23-Oct	BS	28912		M	4			47857	2
633	19-Oct	29	28713	825	F	1	HOLD		1347	23-Oct	BS	29150		M	4			47857	3
634	19-Oct	29	28714	910	M	1			1348	23-Oct	BS	28979		M	4			47857	4
635	19-Oct	29	28715	775	M	1			1349	23-Oct	BS	29077		M	4			47857	5
636	19-Oct	29	28716	895	M	1			1350	23-Oct	BS	29081		M	4			47857	6
637	19-Oct	29	28717	795	F	1			1351	23-Oct	BS	28639		M	4			47857	7
638	19-Oct	29	28718	860	F	1			1352	23-Oct	BS	39284		M	4			47857	8
639	19-Oct	29	28719	815	F	1	HOLD		1353	23-Oct	BS	29082		M	4			47857	9
640	19-Oct	29	28720	845	F	1			1354	23-Oct	BS	29108		M	4			47857	10
641	19-Oct	29	28721	825	M	1			1355	25-Oct	BS	29190		F	4			30147	1
642	19-Oct	29	28722	800	F	1	HOLD		1356	25-Oct	BS	29192		F	4			30147	2
643	19-Oct	29	28723	795	M	1			1357	25-Oct	BS	28957		F	4			30147	3
644	19-Oct	29	28724	795	F	1	HOLD		1358	25-Oct	BS	0	870	F	4			30147	4
645	19-Oct	29	28725	830	F	1			1359	25-Oct	BS	0	910	F	4			30147	5
646	19-Oct	29	28726	870	F	1			1360	25-Oct	BS	0	870	F	4			30147	6
647	19-Oct	29	28727	835	F	1	AD		1361	25-Oct	BS	28737		F	4			30147	7
648	19-Oct	29	28728	795	F	1			1362	25-Oct	BS	0	805	F	4			30147	8
649	19-Oct	29	28729	905	M	1			1363	25-Oct	BS	0	865	F	4			30147	9
650	19-Oct	29	28730	795	M	1			1364	25-Oct	BS	0	865	F	4			30147	10
651	19-Oct	29	28731	850	F	1	HOLD		1365	25-Oct	BS	28048		F	4			30148	1
652	19-Oct	29	28732	800	F	1			1366	25-Oct	BS	0	905	F	4			30148	2
653	19-Oct	29	28733	860	M	1			1367	25-Oct	BS	0	905	F	4			30148	3
654	19-Oct	29	28734	810	F	1			1368	25-Oct	BS	0	870	F	4			30148	4
655	19-Oct	29	28735	930	M	1			1369	25-Oct	BS	0	925	F	4			30148	5
656	19-Oct	29	28736	850	F	1	HOLD		1370	25-Oct	BS	28995		F	4			30148	6
657	19-Oct	29	28737	885	F	1	HOLD		1371	25-Oct	BS	29988		F	4			30148	7
658	19-Oct	29	28181			1			1372	25-Oct	BS	29160		F	4			30148	8
659	19-Oct	29	28738	830	F	1			1373	25-Oct	BS	29166		F	4			30148	9
660	19-Oct	29	28739	820	F	1			1374	25-Oct	BS	28200	930	M	4			30149	1

Appendix 2. 1993 Wannock River chinook dead plitch data. Codes are as in Appendix 1, except the M/U column refers to marked (M) or unmarked (U) with an opercular punch, %Egg= percent egg retention, UK= unknown. Areas are shown in the text.

#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#
1	28-Oct	N3	888	M		U						601	11-Nov	SB	730	F	0	U					
2	28-Oct	N3	830	M		U						602	11-Nov	SB	854	F	0	U					
3	28-Oct	S3	757	F		U		43628		1		603	11-Nov	SB	847	F	0	U			43643		2
4	29-Oct	N4	883	F	10	U		43628		2		604	11-Nov	SB	854	F	0	U					
5	29-Oct	N4	800	F		UK						605	11-Nov	SB	929	F	0	U					
6	29-Oct	N2	914	M		M	28961		43628		3	606	11-Nov	N4	807	M		U					
7	29-Oct	S2	824	F	0	U			43628		4	607	11-Nov	N4	876	M		U					
8	29-Oct	S2	718	F	0	U						608	11-Nov	N4	852	F	UK	U					
9	29-Oct	S1	690	F	0	U			43628		5	609	11-Nov	N4	830	F	UK	U					
10	29-Oct	S1	758	F	0	U			43628		6	610	11-Nov	N4	796	F	0	U					
11	30-Oct	N3	890	M		U			43628		7	611	11-Nov	N4	834	F	0	U					
12	30-Oct	S2	754	M		U						612	11-Nov	N4	810	F	UK	U					
13	30-Oct	S2	880	M		U			43628		8	613	11-Nov	N4	829	F	UK	U					
14	30-Oct	S3	764	M		U						614	11-Nov	N4	780	F	0	U					
15	30-Oct	S2	870	F	0	U			43628		9	615	11-Nov	N4	736	F	0	U					
16	30-Oct	S2	762	F	0	U			43628		10	616	12-Nov	S2F	865	F	0	U					
17	30-Oct	S2	935	M		U						617	12-Nov	S2F	857	M		U					
18	30-Oct	S1	842	F	0	U						618	12-Nov	S2F	800	F	0	U					
19	31-Oct	S3	932	M		U			43629		1	619	12-Nov	S2F	823	F	0	U					
20	31-Oct	S2	842	F	0	U			43629		2	620	12-Nov	S2F	UK	F	UK	U			UK		
21	31-Oct	S3	935	F	0	U			43629		3	621	12-Nov	S2F	826	F	0	U					
22	31-Oct	S2	838	M		U						622	12-Nov	S1	730	F	0	U					
23	31-Oct	N3	950	M		M	28447					623	12-Nov	N4	806	M		U					
24	31-Oct	N3	786	M		U						624	12-Nov	N4	784	M		U					
25	31-Oct	N3	833	F	0	U						625	12-Nov	N4	753	M		M	28115				
26	1-Nov	N4	874	F	0	U						626	12-Nov	S2	752	F	0	U					
27	1-Nov	S3	865	M		U						627	12-Nov	S1	789	F	0	U					
28	1-Nov	S3	832	M		U						628	12-Nov	S1	825	F	0	U			43643		6
29	1-Nov	S2	727	F	0	U						629	12-Nov	S2	784	F	0	U			43643		7
30	1-Nov	S2	878	M		U						630	12-Nov	N2	884	F	0	U					
31	1-Nov	S2	804	M		U						631	12-Nov	N2	904	F	0	U					
32	1-Nov	S2	773	F	0	U						632	12-Nov	N2	874	F	0	U					
33	1-Nov	S1	860	F	0	U						633	12-Nov	N2	823	F	5	U					
34	1-Nov	N2	845	M		U						634	12-Nov	N2	854	F	0	U					
35	1-Nov	N2	858	M		U						635	12-Nov	N2	900	M		U					
36	2-Nov	S4	866	M		U						636	12-Nov	N2	708	M		U					
37	2-Nov	N4	753	M		U						637	12-Nov	N2	783	F	50	U			43643		8
38	2-Nov	S3	830	M		U						638	12-Nov	N2	860	M		U					
39	3-Nov	N4	950	M		M	29028		43629		4	639	12-Nov	N2F	848	M		U					
40	3-Nov	N4	858	M		U			43629		5	640	12-Nov	N2F	787	F	0	U					
41	3-Nov	N4	780	F		UK						641	12-Nov	N2F	744	F	0	U					
42	3-Nov	S3	745	F	0	U			43629		6	642	12-Nov	N2F	851	M		U					
43	3-Nov	S3	825	F	0	U			43629		7	643	12-Nov	N2F	798	F	0	U			43643		9
44	4-Nov	N2	804	F	0	M	29181		43629		8	644	12-Nov	N1	938	F	100	U					
45	4-Nov	S4	836	M		U						645	12-Nov	N1	940	M		U					
46	4-Nov	S4	884	M		U						646	12-Nov	N3	800	M		M	28005				
47	4-Nov	N4	780	F		UK						647	12-Nov	N3	714	M		U					
48	4-Nov	S4	854	M		U			43629		9	648	12-Nov	N3	870	F	0	U					
49	4-Nov	S2	813	F	0	U						649	12-Nov	N3	870	F	100	U					
50	4-Nov	N3	878	F	0	M	28913		43629		10	650	12-Nov	N3	730	M		U			43644		3
51	4-Nov	N3	827	M		U			43630		1	651	12-Nov	N3	825	M		U					
52	4-Nov	S3	890	F	0	U						652	12-Nov	N3	895	M		M	28700				
53	4-Nov	S2	871	F	0	U						653	12-Nov	N3	775	M		U					
54	5-Nov	S2	838	F	5	M	29134		43630		2	654	12-Nov	N3	895	M		U					
55	5-Nov	N4	855	M		U	28742					655	12-Nov	N3	905	M		U					
56	5-Nov	N4	860	M		U						656	12-Nov	N2	780	F	2	U					
57	5-Nov	N3	743	M		U						657	12-Nov	N2	880	F	0	U			UK		
58	5-Nov	N3	764	F	0	M	29211		43630		3	658	12-Nov	N2	900	F	0	U					
59	5-Nov	N3	862	F	5	U			43630		4	659	12-Nov	N3	780	F	0	U					
60	5-Nov	N3	833	M		U						660	12-Nov	N2	785	F	1	U			43642		7
61	5-Nov	S3	846	F	0	U			43630		5	661	12-Nov	N2	890	F	0	U			UK		
62	5-Nov	S2	827	F	0	U			43630		6	662	12-Nov	N2	805	F	2	U					
63	5-Nov	S2	830	F	0	U			43630		7	663	12-Nov	N2	UK	M		U			UK		

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	
64	5-Nov	S2	815	F	0	U						664	12-Nov	N2	925	F	0	U						
65	5-Nov	S2	766	M		U						665	12-Nov	N2	800	F	0	U						
66	5-Nov	S2	797	F	0	U						666	12-Nov	N4	UK	M		U				UK		
67	5-Nov	S2	734	M		M	28602		43630	8		667	12-Nov	N4	804	F	0	U						
68	5-Nov	S2	896	F	0	M	28823		43630	9		668	12-Nov	N4	UK	F	UK	M	28774			UK		
69	5-Nov	S2	816	F	0	U			43630	10		669	12-Nov	N4	UK	F	UK	U					UK	
70	5-Nov	S2	828	F	0	U						670	12-Nov	N4	788	F	0	U						
71	5-Nov	S2	917	F	25	U						671	12-Nov	N4	812	F	0	U						
72	6-Nov	S3	890	M		U						672	12-Nov	N4	874	F						28823	pitched twice - belly slit	
73	6-Nov	S3	890	F	0	U						673	12-Nov	N4	823	F	0	U						
74	6-Nov	S3	866	F	0	U						674	12-Nov	N4	846	F	0	U						
75	6-Nov	S3	856	F	0	U		AD	43636	1	370354E	675	12-Nov	N4	UK	F	UK	U					UK	
76	6-Nov	S3	728	F	0	U		AD	43636	2	370355E	676	12-Nov	N3	790	M		U						
77	6-Nov	S3	818	F	10	U						677	12-Nov	N2	850	M		U				43642	5	
78	6-Nov	S3	890	M		U						678	12-Nov	N2	880	M		U						
79	6-Nov	S3	844	F	0	U						679	12-Nov	N2	775	F	0	U						
80	6-Nov	S3	830	M		U						680	12-Nov	N2	850	F	0	M	28943					
81	6-Nov	S3	938	M		U			43636	3		681	12-Nov	N2	840	F	2	U						
82	6-Nov	S2	852	F	15	U						682	12-Nov	N2	UK	M		U						
83	6-Nov	S2	836	F	0	U						683	12-Nov	N2	890	F	1	U						
84	6-Nov	S2	835	F	0	U						684	12-Nov	N2	840	F	0	U						
85	6-Nov	S2	812	F	0	U						685	12-Nov	N2	865	M		U				43642	6	
86	6-Nov	S2	UK	F	UK	U		UK				686	12-Nov	N3	910	M		U						
87	6-Nov	S2	UK	M		U		UK				687	12-Nov	N3	870	F	0	U						
88	6-Nov	S2	900	F	0	U						688	12-Nov	N3	830	F	1	U						
89	6-Nov	S2	846	M		U						689	12-Nov	N3	800	M		M	29002					
90	6-Nov	S2	800	F	100	M	29144		43636	4		690	12-Nov	N3	UK	M		U				UK		
91	6-Nov	S2	798	M		U						691	12-Nov	N3	830	F	6	U						
92	6-Nov	S2	870	F	0	U						692	12-Nov	N3	890	M		U				43642	10	
93	6-Nov	S2	829	F	0	U						693	12-Nov	N3	UK	M		U				UK		
94	6-Nov	S2	808	M		U						694	12-Nov	N3	830	F	3	U						
95	6-Nov	S2	863	F	0	U						695	12-Nov	N3	710	F	15	U						
96	6-Nov	S2	889	M		U						696	12-Nov	N2	UK	M		U				UK		
97	6-Nov	S2	880	F	0	U						697	12-Nov	N2	UK	F	0	U				UK		
98	6-Nov	S2	783	M		M	28857		43636	5		698	12-Nov	N2	750	F	UK	U				UK		
99	6-Nov	S2	845	F	0	M	28893		43636	6		699	12-Nov	N2	760	M		U				43642	8	
100	6-Nov	S2	800	F	0	U						700	12-Nov	N2	850	F	0	U				UK		
101	6-Nov	S2	762	F	5	U						701	12-Nov	N3	890	M		U						
102	6-Nov	S2	840	F	0	U			43636	7		702	12-Nov	N3	UK	M		U				UK		
103	6-Nov	S2	800	F	0	U			43636	8		703	12-Nov	N3	860	F	3	U				43642	9	
104	6-Nov	S2	757	F	UK	U						704	12-Nov	N3	850	M		U						
105	6-Nov	S2	753	M		U						705	12-Nov	N3	830	F	0	U						
106	6-Nov	S2	728	F	0	U						706	12-Nov	S2	844	F	0	U						
107	6-Nov	S2	UK	F	UK	U						707	12-Nov	S2	822	F	0	U				AD	43643	4 370368E
108	6-Nov	S2	814	F	0	U						708	12-Nov	S2	740	F	0	U						
109	6-Nov	S2	810	F	0	U						709	12-Nov	S2	880	F	0	U						
110	6-Nov	N3	898	F	0	M	28808					710	12-Nov	S2	805	F	0	U						
111	6-Nov	N3	872	M		U						711	12-Nov	S2	640	M		U						
112	6-Nov	N4	765	F	0	U						712	12-Nov	S2	808	F	1	U				43643	5	
113	6-Nov	N4	780	M		U						713	12-Nov	S2	764	F	0	U						
114	6-Nov	N3	920	M		U			43636	9		714	12-Nov	S2	868	F	0	U						
115	6-Nov	N4	790	F	0	U			43636	10		715	12-Nov	S2	825	M		U						
116	6-Nov	S3	803	M		M	28023					716	12-Nov	S2	850	F	0	U						
117	6-Nov	S3	824	F	0	U						717	12-Nov	S2	706	M		U						
118	6-Nov	S3	816	F	0	U						718	12-Nov	S2	869	F	0	U						
119	7-Nov	S4	812	F	0	U						719	12-Nov	S2	779	F	0	U						
120	7-Nov	N3	851	M		U						720	12-Nov	S2	896	F	0	U						
121	7-Nov	N4	808	F	0	M	29120		43637	1		721	12-Nov	S2	820	F	0	U						
122	7-Nov	N4	840	F	0	U			43637	2		722	12-Nov	S2	730	M		U						
123	7-Nov	N4	837	M		U			43637	3		723	12-Nov	S2	831	F	0	U						
124	7-Nov	S3	877	F	0	U						724	12-Nov	S2	855	F	0	U						
125	7-Nov	S3	890	M		U						725	12-Nov	S2	762	F	0	U						
126	7-Nov	N3	705	M		U						726	12-Nov	S3	778	M		U						

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#
127	7-Nov	N3	803	F	0	U						727	12-Nov	S3	845	F	0	U					
128	7-Nov	S3	815	F	0	U						728	12-Nov	S3	839	M		U			43643		3
129	7-Nov	S3	872	F	0	U						729	12-Nov	S3	830	M		U					
130	7-Nov	S3	888	M		M	29153		43637	4		730	12-Nov	S3	790	F	0	U					
131	7-Nov	S3	803	F	0	U			43637	5		731	12-Nov	N4	838	F	0	U					
132	7-Nov	S3	722	M		U						732	12-Nov	N4	855	F	0	U					
133	7-Nov	S2	812	F	0	U						733	12-Nov	N4	790	F	0	U					
134	7-Nov	S2	890	M		U			43637	6		734	12-Nov	N4	890	F	0	U					
135	7-Nov	S2	803	F	0	U			43637	7		735	12-Nov	N4	931	M		U					
136	7-Nov	S2	822	F	0	U						736	12-Nov	N4	948	M		U					
137	7-Nov	S2	848	F	0	U						737	12-Nov	N4	854	M		U					
138	7-Nov	S2	852	M		U						738	12-Nov	N4	868	F	0	U					
139	7-Nov	S3	852	F	0	U						739	12-Nov	N4	856	M		U					
140	7-Nov	S3	875	F	0	U						740	12-Nov	N3	875	F	0	U			43644		4
141	7-Nov	S2	836	F	0	U						741	12-Nov	S4	820	F	0	U					
142	7-Nov	S2	820	F	0	U			43637	8		742	12-Nov	S4	810	F	3	U					
143	7-Nov	S2	860	M		U			43637	9		743	12-Nov	S4	914	M		U			43643		10
144	7-Nov	S2	794	F	0	U			43637	10		744	12-Nov	S4	910	M		U					
145	7-Nov	S2	814	F	0	U						745	12-Nov	S4	850	F	0	U					
146	7-Nov	S2	836	F	0	U			43638	1		746	12-Nov	S4	780	F	5	U					
147	7-Nov	S2	815	M		U			43638	2		747	12-Nov	S4	450	F	0	U					
148	7-Nov	S2	837	F	0	U			43638	3		748	12-Nov	N2	730	F	0	U			43644		1
149	7-Nov	S2	891	F	0	U						749	12-Nov	N2	890	F	0	U					
150	7-Nov	S2	837	F	0	U						750	12-Nov	N2	830	F	0	U					
151	7-Nov	S2	818	F	0	U						751	12-Nov	N2	866	M		U					
152	7-Nov	S2	863	F	0	U						752	12-Nov	N2	850	F	0	U					
153	7-Nov	S2	831	F	0	M	28623		43638	4		753	12-Nov	N2	810	F	50	U					
154	7-Nov	S4	810	M		U			43638	5		754	12-Nov	N2	870	M		U					
155	7-Nov	N3	704	F	0	U			43638	6		755	12-Nov	N2	860	M		U					
156	7-Nov	N4	UK	M		M	28969	UK				756	12-Nov	N2	775	F	0	U					
157	7-Nov	N4	UK	F		UK		UK				757	12-Nov	N2	805	F	0	U			43644		2
158	7-Nov	N3	885	M		U			43638	7		758	12-Nov	N3	880	F	0	U					
159	7-Nov	S2	873	F	0	U						759	12-Nov	N3	960	F	20	U			30220		1
160	7-Nov	S2	745	F	0	U						760	12-Nov	N3	920	M		U					
161	7-Nov	S2	860	F	0	U						761	12-Nov	N3	860	F	0	U					
162	7-Nov	S2	765	F	0	U						762	12-Nov	N3	730	M		U					
163	7-Nov	S2	780	F	0	U						763	12-Nov	N3	810	F	1	U					
164	7-Nov	S2	830	F	0	U						764	12-Nov	N3	680	F	0	M		28437	UK		
165	7-Nov	S2	832	F	0	U						765	13-Nov	S2F	834	F	0	U					
166	7-Nov	S2	824	F	0	U						766	13-Nov	S2	935	M		U					
167	7-Nov	S2	881	F	0	M	28997					767	13-Nov	S2	932	M		U					
168	7-Nov	S2	812	F	0	U						768	13-Nov	S2	812	F	0	U					
169	7-Nov	S2	772	F	0	U						769	13-Nov	S2	886	F	0	U					
170	7-Nov	S3	870	F	0	M	29182					770	13-Nov	S2	835	F	0	U					
171	7-Nov	S3	795	M		U						771	13-Nov	S3	855	F	0	U					
172	7-Nov	S3	842	F	0	U						772	13-Nov	S3	872	F	0	U					
173	7-Nov	S3	832	F	0	U						773	13-Nov	N3	852	F	0	U					
174	7-Nov	N2	934	F	0	U			43638	8		774	13-Nov	N3	862	M		U					
175	7-Nov	N2	930	M		U			43638	9		775	13-Nov	S2	804	F	0	U					
176	7-Nov	S2	788	M		M	28872					776	13-Nov	S2	847	F	0	U					
177	7-Nov	S2	774	F	0	U						777	13-Nov	S2	858	F	0	U					
178	7-Nov	S2	840	F	0	U						778	13-Nov	S2	UK	F	UK	U			UK		
179	7-Nov	N3	861	M		M	29119					779	13-Nov	S2	896	F	0	U					
180	7-Nov	N3	832	M		U						780	13-Nov	S2	864	F	0	U					
181	7-Nov	N3	840	F	0	U						781	13-Nov	S2	906	F	0	U					
182	7-Nov	S2	872	F	0	U						782	13-Nov	S2	843	F	0	U					
183	7-Nov	S1	778	F	0	U						783	13-Nov	S2	856	F	0	U					
184	8-Nov	S2	1000	M		U			43639	2		784	13-Nov	S2	940	M		U					
185	8-Nov	S2	814	F	0	U						785	13-Nov	S2	776	M		U					
186	8-Nov	S2	788	F	0	U			RV	43639	1	786	13-Nov	N4	833	F	0	U					
187	8-Nov	S2	845	F	0	U			43639	3		787	13-Nov	N4	801	F	UK	U					
188	8-Nov	S2	862	F	75	U						788	13-Nov	N4	808	F	0	U					
189	8-Nov	S2	930	F	0	U			43639	4		789	13-Nov	N4	806	M		U					

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#
190	8-Nov	S2	772	M		U						790	13-Nov	N4	820	M		U					
191	8-Nov	S2	883	F	0	M	28741					791	13-Nov	N4	828	F	0	U					
192	8-Nov	S2	810	F	0	U						792	13-Nov	S2	780	F	0	U					
193	8-Nov	S2	782	F	0	U						793	13-Nov	S2	630	M		U					
194	8-Nov	S2	855	F	1	U						794	13-Nov	S2	870	M		U					
195	8-Nov	S2	809	F	0	U						795	13-Nov	S2	860	M		U					
196	8-Nov	S2	802	F	0	U						796	13-Nov	S2	890	F	0	U					
197	8-Nov	S2	804	F	0	U						797	13-Nov	S2	810	F	0	U			43644		5
198	8-Nov	S3	820	F	0	U						798	13-Nov	S2	900	M		U					
199	8-Nov	S3	772	F	0	U		AD	43639	5	370356E	799	13-Nov	S2	870	F	0	U					
200	8-Nov	S3	784	M		U						800	13-Nov	S2	950	F	0	U					
201	8-Nov	N2	778	M		U						801	13-Nov	S2	850	M		U					
202	8-Nov	N4	813	M		U						802	13-Nov	N2	890	F	0	M	28124				
203	8-Nov	N4	912	M		U						803	13-Nov	N2	835	F	0	U					
204	8-Nov	N4	873	M		M	28854					804	13-Nov	N2	890	F	0	U					
205	8-Nov	N4	845	M		U						805	13-Nov	N2	835	F	0	U					
206	8-Nov	N4	865	M		U						806	13-Nov	N2	825	F	100	U					
207	8-Nov	S3	828	F	0	U			43639	6		807	13-Nov	N2	835	F	0	U			43646		4
208	8-Nov	S3	822	M		U			43639	7		808	13-Nov	N2	UK	F	UK	U		UK			
209	8-Nov	S3	728	M		U			43639	8		809	13-Nov	N2	UK	M		U		UK			
210	8-Nov	S2	843	F	0	U						810	13-Nov	N2	785	F	100	U					
211	8-Nov	S2	847	M		U						811	13-Nov	N2	825	F	0	U					
212	8-Nov	S2	834	F	0	U						812	13-Nov	N2	980	M		U			30220		1
213	8-Nov	S2	UK	M		U		UK				813	13-Nov	N2	850	F	2	U			30220		2
214	8-Nov	N2	750	F	0	U						814	13-Nov	N2	785	F	3	M	29090				
215	8-Nov	N2	905	F	0	U						815	13-Nov	N2	700	F	0	U					
216	8-Nov	N2	865	F	50	U			51893	1		816	13-Nov	N2	780	F	0	U					
217	8-Nov	N2	802	F	0	U						817	13-Nov	N2	730	F	0	U			UK		
218	8-Nov	N2	835	F	0	U			51893	2		818	13-Nov	N2	680	M		U					
219	8-Nov	N2	860	F	0	U			51893	3		819	13-Nov	N2	950	M		U			30220		3
220	8-Nov	N2	758	M		U			51893	4		820	13-Nov	N2	810	M		U			30220		4
221	8-Nov	N2	890	F	0	U			51893	5		821	13-Nov	N2	830	F	0	U					
222	8-Nov	N2	832	F	0	U			51893	6		822	13-Nov	N2	650	M		U			UK		
223	8-Nov	N2	830	F	0	U		AD	51893	7	155753	823	13-Nov	N2	840	F	2	U					
224	8-Nov	S2	830	F	0	U			43639	9		824	13-Nov	N2	710	F	0	U					
225	8-Nov	S2	805	F	0	U			43639	10		825	13-Nov	N2	780	F	0	U					
226	8-Nov	N2	902	M		U			51893	8		826	13-Nov	N2	820	M		U					
227	8-Nov	N2	875	M		U						827	13-Nov	N2	820	F	0	U					
228	8-Nov	S2	864	F	0	U			51893	9		828	13-Nov	N2	810	F	0	M	28836				
229	8-Nov	S2	850	F	0	U			51893	10		829	13-Nov	N3	820	F	1	U					
230	8-Nov	S2	900	M		U						830	13-Nov	N3	770	M		U					
231	8-Nov	S2	850	M		U						831	13-Nov	N3	660	M		U					
232	8-Nov	S2	860	F	0	U						832	13-Nov	S2	830	F	0	U					
233	8-Nov	S2	860	F	0	U						833	13-Nov	S2	910	F	0	U					
234	8-Nov	S2	910	F	1	U						834	13-Nov	S2	905	F	0	U					
235	8-Nov	S2	790	M		U						835	13-Nov	N2	824	F	0	U			43646		2
236	8-Nov	S2	910	F	0	U						836	13-Nov	N2	712	F	0	U					
237	8-Nov	S2	860	M		U						837	13-Nov	N2	880	M		U					
238	8-Nov	S2	860	M		U						838	13-Nov	N2	930	F	0	U					
239	8-Nov	S2	877	F	10	M	29207					839	13-Nov	N2	800	F	0	U					
240	8-Nov	S2	895	F	0	U						840	13-Nov	N2	830	F	0	U					
241	8-Nov	S2	844	F	0	U						841	13-Nov	N2	854	F	2	U			43646		3
242	8-Nov	S2	787	F	0	U						842	13-Nov	N3	820	M		U					
243	8-Nov	S2	749	M		U						843	13-Nov	N3	890	M		U					
244	8-Nov	N2	880	M		U			43641	1		844	13-Nov	N3	870	M		U					
245	8-Nov	N2	823	F	0	U						845	13-Nov	S2	760	M		U					
246	8-Nov	N2	900	F	0	U						846	13-Nov	S2	860	M		U			43644		6
247	8-Nov	N2	750	F	0	U						847	13-Nov	S2	890	F	0	U					
248	8-Nov	N2	745	F	0	U						848	13-Nov	S2	920	M		U					
249	8-Nov	N2	790	F	0	U						849	13-Nov	S2	890	F	0	U					
250	8-Nov	N2	810	F	0	M	29062		43641	2		850	13-Nov	S2	810	F	0	M	28609		43644		7
251	8-Nov	N2	760	F	0	U						851	13-Nov	S2	860	F	0	U					
252	8-Nov	N2	570	M		U						852	13-Nov	S2	790	F	0	U					

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#		
253	8-Nov	N2	790	F	0	U			43641	3		853	13-Nov	S2	730	F	0	U			43644	8			
254	8-Nov	N2	795	F	5	U						854	13-Nov	S2	704	M		U							
255	8-Nov	N2	900	F	0	U			43641	4		855	13-Nov	S2	810	F	0	U							
256	8-Nov	N2	800	F	0	U						856	13-Nov	S2	730	F	2	U				43644	9		
257	8-Nov	N2	750	F	0	U						857	13-Nov	S2	690	M		U				43644	10		
258	8-Nov	N2	845	F	0	U						858	13-Nov	S2	780	F	100	U							
259	8-Nov	N2	780	F	0	U						859	13-Nov	S2	790	F	0	U							
260	8-Nov	N2	786	F	0	U			43641	5		860	13-Nov	S2	890	M		U							
261	8-Nov	N2	918	M		U						861	13-Nov	S2	840	F	0	U							
262	8-Nov	N2	890	M		U						862	13-Nov	S2	880	F	0	U							
263	8-Nov	N2	940	M		U						863	13-Nov	S2	784	M		U							
264	8-Nov	N2	788	F	0	U						864	13-Nov	S2	690	M		U				43646	1		
265	8-Nov	N2	740	F	0	U						865	13-Nov	N1	755	M		U							
266	8-Nov	N2	777	F	0	U		AD	43641	6	370357E	866	13-Nov	N1	770	F	100	U							
267	8-Nov	N2	751	F	0	U						867	13-Nov	N1	800	M		U							
268	8-Nov	N2	790	F	0	U						868	13-Nov	N1	930	F	0	U							
269	8-Nov	N2	800	F	0	U						869	13-Nov	N1	935	M		U							
270	8-Nov	N2	784	F	0	M	29200		43641	7		870	13-Nov	N3	840	F	0	U							
271	8-Nov	N2	763	F	0	U						871	13-Nov	N3	830	F	0	U				30220	5		
272	8-Nov	N2	814	F	0	U						872	14-Nov	S3	818	F	0	U							
273	8-Nov	N2	762	M		U						873	14-Nov	S4	802	F	0	U							
274	8-Nov	S2	832	F	0	U		AD	43641	8	370361E	874	14-Nov	S4	826	F	0	U							
275	8-Nov	S2	UK	M		U		UK				875	14-Nov	N4	770	F	0	U							
276	9-Nov	S2	905	F	0	U			43641	9		876	14-Nov	N4	900	F	0	U							
277	9-Nov	S2	820	F	0	U			43641	10		877	14-Nov	N3	859	F	0	U							
278	9-Nov	S2	764	F	0	U						878	14-Nov	S2	767	F	0	U							
279	9-Nov	S2	748	M		U						879	14-Nov	S2	776	F	1	U							
280	9-Nov	S2	843	M		U			43640	1		880	14-Nov	S2	794	F	0	U							
281	9-Nov	S2	807	F	0	U						881	14-Nov	S2	860	F	0	U							
282	9-Nov	S2	810	F	0	U						882	14-Nov	S2	848	F	0	U							
283	9-Nov	S2	813	M		U						883	14-Nov	S2	877	F	0	U							
284	9-Nov	S2	786	M		U			43640	2		884	14-Nov	S2	773	F	0	U							
285	9-Nov	S2	684	F	0	U			43640	3		885	14-Nov	S2	745	F	0	U							
286	9-Nov	S2	828	F	0	U						886	14-Nov	S2	765	M		M	28635						
287	9-Nov	S2	846	M		U						887	14-Nov	S2	863	F	0	U							
288	9-Nov	S2	884	M		U						888	14-Nov	S3	869	F	0	U							
289	9-Nov	S2	833	F	0	U						889	14-Nov	S3	898	M		U							
290	9-Nov	S2	835	F	0	U						890	14-Nov	S3	820	F	0	M	29053						
291	9-Nov	S2	852	F	0	U						891	14-Nov	S2	837	M		U		RV	43647	1			
292	9-Nov	S2	787	F	0	U			43640	4		892	14-Nov	S2	865	F	0	U							
293	9-Nov	S2	824	F	0	U			43640	5		893	14-Nov	S2	592	M		U							
294	9-Nov	S2	868	F	0	U			43640	6		894	14-Nov	S2	850	M		U							
295	9-Nov	S2	837	F	100	U			43640	7		895	14-Nov	S2	852	F	0	U				AD	43647	2	37058E
296	9-Nov	S2	890	F	0	U			43640	8		896	14-Nov	N2	790	F	0	U				AD	43647	3	37059E
297	9-Nov	S3	846	F	0	U			43640	9		897	14-Nov	N2	737	F	0	U				AD	43647	4	37060E
298	9-Nov	S3	805	F	0	U			43640	10		898	14-Nov	N3	893	M		U							
299	9-Nov	S3	784	M		U						899	14-Nov	N4	882	F	0	U							
300	9-Nov	S4	932	M		U						900	14-Nov	N4	877	M		U							
301	9-Nov	S4	867	M		U						901	14-Nov	S3	828	F	0	U							
302	9-Nov	N4	853	M		U						902	14-Nov	S2	790	F	0	U							
303	9-Nov	N4	877	F	0	U						903	14-Nov	S2	884	F	0	U							
304	9-Nov	S4	845	M		U						904	14-Nov	S2	844	F	0	U							
305	9-Nov	N3	753	M		U						905	14-Nov	S2	873	F	100	U							
306	9-Nov	N3	815	M		U						906	14-Nov	S2	888	F	100	U							
307	9-Nov	N3	960	F	0	U						907	14-Nov	S2	880	F	0	U							
308	9-Nov	N3	763	F	0	U						908	14-Nov	S2	810	M		U							
309	9-Nov	N3	814	M		U						909	14-Nov	S2	785	F	0	U							
310	9-Nov	N3	818	F	0	U						910	14-Nov	S2	800	F	0	U							
311	9-Nov	N4	782	M		U						911	14-Nov	S2	796	F	0	U							
312	9-Nov	N4	876	M		U						912	14-Nov	S2	820	M		U							
313	9-Nov	N4	847	F	0	U						913	14-Nov	S2	714	M		U							
314	9-Nov	N4	862	F	0	U						914	14-Nov	N4	764	F	0	U							
315	9-Nov	N3	796	M		U						915	14-Nov	N4	837	M		U							

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	
316	9-Nov	S3	823	F	0	U						916	14-Nov	S2	830	M		U						
317	9-Nov	S3	808	M		U						917	14-Nov	S2	870	F	0	U						
318	9-Nov	S3	800	F	0	U						918	14-Nov	S2	840	F	0	U						
319	9-Nov	S2	862	F	0	U						919	15-Nov	S4	842	F	0	U						
320	9-Nov	S2	866	F	0	U						920	15-Nov	S3	800	M		U						
321	9-Nov	S2	917	M		U						921	15-Nov	N4	823	F	0	U						
322	9-Nov	S2	844	F	0	U						922	15-Nov	N4	874	F	0	U						
323	9-Nov	S2	798	M		U						923	15-Nov	N4	826	F	0	U						
324	9-Nov	S2	780	M		U						924	15-Nov	N4	747	F	0	M	28467					
325	9-Nov	S2	854	F	0	U						925	15-Nov	N4	826	F	0	U						
326	9-Nov	S2	UK	F	UK	U		UK				926	15-Nov	N4	UK	F	UK	U		UK				
327	10-Nov	S1	775	F	0	U						927	15-Nov	N4	815	F	0	M	29100					
328	10-Nov	S3	788	F	0	U						928	15-Nov	N4	UK	M		U						
329	10-Nov	S3	765	F	0	U						929	15-Nov	N4	832	M		U						
330	10-Nov	S4	862	F	0	U						930	15-Nov	S2	845	F	0	U						
331	10-Nov	S4	848	F	0	U						931	15-Nov	S2	850	F	0	U						
332	10-Nov	S4	820	F	0	U						932	15-Nov	S2	786	F	0	M	29109					
333	10-Nov	S4	838	M		U						933	15-Nov	S2	837	F	0	U						
334	10-Nov	S2	806	F	0	U						934	15-Nov	S2	905	F	0	U						
335	10-Nov	S2	UK	F	UK	U		UK				935	15-Nov	N2	734	F	0	U						
336	10-Nov	S2	915	F	0	U						936	15-Nov	N2	880	M		U						
337	10-Nov	S2	926	M		U						937	15-Nov	N2	807	F	0	U						
338	10-Nov	S2	844	M		U						938	15-Nov	N2	753	M		U						
339	10-Nov	S2	874	F	0	U						939	15-Nov	N2	833	F	0	U						
340	10-Nov	S2	875	F	0	U						940	15-Nov	N2	860	F	0	U						
341	10-Nov	S2	892	F	0	U						941	15-Nov	N2	725	F	0	U						
342	10-Nov	S2	843	F	0	U						942	15-Nov	N2	950	M		U						
343	10-Nov	S2	830	F	0	U						943	15-Nov	N2	787	F	1	U						
344	10-Nov	S2	681	F	0	U						944	15-Nov	N2	925	M		U						
345	10-Nov	S2	746	F	100	U		AD	30221	1	370362E	945	15-Nov	N2	890	M		U						
346	10-Nov	N4	852	F	0	U			30221	2		946	15-Nov	N2	864	F	0	U						
347	10-Nov	N4	856	F	0	U			30221	3		947	15-Nov	N2	900	M		U			30220	6		
348	10-Nov	N4	808	M		U						948	15-Nov	N2	805	F	1	U			30220	7		
349	10-Nov	N4	755	M		U						949	15-Nov	N2	910	F	0	U						
350	10-Nov	N4	827	M		U						950	15-Nov	S2	750	F	0	U						
351	10-Nov	N4	838	F	UK	U						951	15-Nov	S2	850	F	0	U						
352	10-Nov	N4	834	F	UK	U						952	15-Nov	S2	765	M		U						
353	10-Nov	N4	868	F	UK	U						953	15-Nov	S2	820	F	0	U			30220	8		
354	10-Nov	N4	UK	F	UK	M	28580	UK				954	15-Nov	S2	810	F	0	U						
355	10-Nov	N4	UK	F	UK	M	28676	UK				955	15-Nov	N3	750	M		U						
356	10-Nov	N4	814	F	0	U			30221	4		956	15-Nov	N3	890	F	0	U						
357	10-Nov	N4	823	F	0	U						957	15-Nov	N3	770	F	0	U						
358	10-Nov	N4	801	F	0	U						958	15-Nov	S2	810	M		U						
359	10-Nov	N3	782	M		U						959	15-Nov	S2	880	F	0	U						
360	10-Nov	N3	845	M		U		LV	30221	5		960	15-Nov	S2	890	F	0	U						
361	10-Nov	N3	857	F	0	U			30221	6		961	15-Nov	S2	890	F	0	M	28105					
362	10-Nov	N3	860	F	0	U			30221	7		962	15-Nov	S2	820	M		M	29106					
363	10-Nov	N3	837	F	0	U			30221	8		963	15-Nov	S2	840	F	0	U						
364	10-Nov	N3	830	M		M	28108		30221	9		964	15-Nov	S2	764	F	0	U						
365	10-Nov	N3	758	F	0	U			30221	10		965	15-Nov	S2	860	F	0	U						
366	10-Nov	N3	840	F	0	U						966	15-Nov	S2	780	F	0	U			30220	9		
367	10-Nov	N3	772	F	0	U						967	15-Nov	S2	744	F	0	U						
368	10-Nov	N3	813	M		U						968	15-Nov	S2	770	F	0	U						
369	10-Nov	N3	776	M		U						969	15-Nov	S2	950	F	0	U						
370	10-Nov	S1	890	F	0	U			30216	1		970	15-Nov	S2	810	F	0	U						
371	10-Nov	N1	810	F	0	U			30216	2		971	15-Nov	N1	800	F	0	U			AD	30220	10	37069E
372	10-Nov	N1	890	M		U						972	15-Nov	N1	860	F	0	U						
373	10-Nov	N1	810	F	0	U						973	15-Nov	N3	810	F	0	U						
374	10-Nov	N1	885	M		U						974	15-Nov	N3	805	F	0	U						
375	10-Nov	N1	688	M		U						975	15-Nov	SB	803	F	0	U						
376	10-Nov	N1	810	F	0	U			30216	3		976	15-Nov	N2	800	M		U						
377	10-Nov	S2	798	F	0	U						977	15-Nov	N2	UK	M		U			UK			
378	10-Nov	S2	795	F	0	U			30216	4		978	15-Nov	N2	871	F	0	M	29067					

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	
379	10-Nov	S2	874	F	0	U						979	15-Nov	N2	890	F	0	U						
380	10-Nov	N2	894	F	5	U						980	15-Nov	N2	785	M		U						
381	10-Nov	N2	800	F	25	U			30216	5		981	15-Nov	N2	865	M		U						
382	10-Nov	N2	835	F	0	U			30216	6		982	15-Nov	N2	885	M		U						
383	10-Nov	N2	893	F	0	U						983	15-Nov	N2	UK	M		U				UK		
384	10-Nov	N2	773	F	0	U						984	15-Nov	N2	890	F	0	U						
385	10-Nov	N2	872	F	0	U						985	15-Nov	N1	750	F	0	U						
386	10-Nov	N2	801	F	0	M	29138		30216	7		986	15-Nov	N1	895	F	0	U						
387	10-Nov	N2	815	F	0	U						987	15-Nov	N1	UK	F	0	U					UK	
388	10-Nov	N2	864	F	0	U						987.5	16-Nov	UK	UK	M		M	28445				UK	
389	10-Nov	N2	804	F	100	U						988	16-Nov	S2	838	F	0	U						
390	10-Nov	N2	853	F	100	U			30216	8		989	16-Nov	N3	846	M		M	28561					
391	10-Nov	N2	895	F	0	U						990	16-Nov	N3	722	F	0	U						
392	10-Nov	N2	841	F	0	U						991	16-Nov	N3	825	F	0	U						
393	10-Nov	N2	825	F	0	U						992	16-Nov	N3	764	M		U						
394	10-Nov	N2	711	M		U						993	16-Nov	N2	813	M		U						
395	10-Nov	N2	829	F	0	U						994	16-Nov	N2	827	M		U						
396	10-Nov	N2	795	F	0	U						995	16-Nov	S2	880	F	0	U						
397	10-Nov	N2	814	F	0	U						996	16-Nov	S2	742	M		U						
398	10-Nov	N2	870	F	0	U						997	16-Nov	S2	766	F	0	U						
399	10-Nov	N2	846	F	0	U						998	16-Nov	S2F	908	F	0	U						
400	10-Nov	N2	845	F	1	U						999	16-Nov	S2F	884	F	0	U						
401	10-Nov	N2	814	M		U						1000	16-Nov	S2F	840	M		U						
402	10-Nov	N2	820	M		U						1001	16-Nov	S2	836	F	0	U						
403	10-Nov	N2	792	M		U		AD	30216	9	UK	1002	16-Nov	N3	840	F	0	U						
404	10-Nov	N2	824	F	0	U						1003	16-Nov	N3	865	F	0	U						
405	10-Nov	S2	900	F	0	U						1004	16-Nov	N3	922	F	0	U						
406	10-Nov	S2	880	F	1	U						1005	16-Nov	N3	830	F	0	U				43646	6	
407	10-Nov	S2	800	F	0	U						1006	16-Nov	N3	910	F	2	U						
408	10-Nov	S2	865	F	0	U						1007	16-Nov	N3	960	M		U						
409	10-Nov	S2	875	F	0	U			30216	10		1008	16-Nov	N3	760	F	0	U						
410	10-Nov	S2	880	F	0	U			30106	1		1009	16-Nov	N3	780	F	0	U						
411	10-Nov	S2	910	F	5	U						1010	16-Nov	N3	765	F	2	U				43646	7	
412	10-Nov	S2	874	F	0	U						1011	16-Nov	N3	825	F	1	U				AD	43646	8
413	10-Nov	S2	810	F	0	U						1012	16-Nov	N1	960	F	0	U					370370E	
414	10-Nov	S2	910	M		U						1013	16-Nov	S2	860	F	0	U						
415	10-Nov	S2	762	F	0	U						1014	16-Nov	S2	840	F	0	U						
416	10-Nov	N4	944	M		U			30106	2		1015	16-Nov	S2	910	F		U				29001	pitched twice - see below	
417	10-Nov	N4	870	M		M	28012		30106	3		1016	16-Nov	S2	920	F	0	U						
418	10-Nov	N4	770	F	10	U						1017	16-Nov	S3	744	F	0	U						
419	10-Nov	N4	840	M		U						1018	16-Nov	S3	700	M		U						
420	10-Nov	N4	870	M		M	28787		30106	4		1019	16-Nov	S3	810	M		U						
421	10-Nov	N4	805	F	15	U						1020	16-Nov	S3	860	F	0	U						
422	10-Nov	N4	795	F	0	U						1021	16-Nov	S2	764	F	0	U						
423	10-Nov	N4	845	F	0	U						1022	16-Nov	S2	680	M		U						
424	10-Nov	SB	830	F	0	U			30106	5		1023	16-Nov	S2	832	M		U						
425	10-Nov	SB	770	M		U						1024	16-Nov	N3	905	F	0	U						
426	10-Nov	SB	820	F	20	U						1025	16-Nov	N3	UK	F	100	U				52251	1	
427	10-Nov	SB	870	F	5	U						1026	17-Nov	S3	893	M		U						
428	10-Nov	SB	780	F	100	U			30106	6		1027	17-Nov	S3	905	F	0	U						
429	10-Nov	SB	830	F	1	U						1028	17-Nov	S3	843	F	0	U				43647	5	
430	10-Nov	SB	810	F	0	U						1029	17-Nov	S2	900	F	0	U				43647	6	
431	10-Nov	SB	840	F	0	U						1030	17-Nov	S2	UK	F	UK	U				UK		
432	10-Nov	SB	810	F	0	U						1031	17-Nov	S2	813	F	0	U						
433	10-Nov	SB	840	F	0	U						1032	17-Nov	S2	900	F	0	U						
434	10-Nov	SB	890	F	0	U						1033	17-Nov	N3	860	M		U						
435	10-Nov	SB	850	F	2	U						1034	17-Nov	N3	867	F	0	U						
436	10-Nov	SB	860	F	0	U		UK				1035	17-Nov	N3	865	F	0	U						
437	10-Nov	SB	UK	F	0	U		UK				1036	17-Nov	N3	693	F	100	U						
438	10-Nov	SB	UK	F	0	U		UK				1037	17-Nov	N3	883	M		U						
439	10-Nov	N2	750	F	0	U			30217	1		1038	17-Nov	N3	864	M		U						
440	10-Nov	N2	808	M		U			30217	2		1039	17-Nov	N2	853	M		U						
441	11-Nov	S2	875	M		U						1040	17-Nov	N2	776	F	0	U						

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#
442	11-Nov	S2	498	M		U						1041	17-Nov	N2	900	M		U					
443	11-Nov	S4	815	M		U						1042	17-Nov	N2	875	M		U					
444	11-Nov	S2 UK		M		U		UK				1043	17-Nov	N2	UK	F	UK	U		UK			
445	11-Nov	S2	758	F	0	U						1044	17-Nov	N2	840	M		U					
446	11-Nov	S2	806	M		U						1045	17-Nov	N2	723	F	0	U					
447	11-Nov	S2	786	F	0	U						1046	17-Nov	N2	880	M		U					
448	11-Nov	S2	844	F	0	U						1047	17-Nov	N2	900	F	0	U					
449	11-Nov	S2	777	F	0	U						1048	17-Nov	S2	820	F	0	U			52252	1	
450	11-Nov	S2	734	M		U						1049	17-Nov	S2	790	F	0	U					
451	11-Nov	S2	908	M		U						1050	17-Nov	S2	860	F	0	U					
452	11-Nov	S2	950	M		U		AD	30218	1	370364E	1051	17-Nov	S2	720	M		U					
453	11-Nov	S2 UK		F	0	M	28188		30218	2		1052	17-Nov	N3	600	M		U			52252	2	
454	11-Nov	S2	376	M		U						1053	17-Nov	N3	700	F	0	U					
455	11-Nov	S2	834	F	0	U						1054	17-Nov	N3	900	M		U					
456	11-Nov	S2	698	M		U			3021B	3		1055	17-Nov	N3	870	F	0	U			43646	9	
457	11-Nov	S2	780	M		U			30218	4		1056	17-Nov	N3	840	F	0	U					
458	11-Nov	S2	687	M		U						1057	17-Nov	N3	850	M		U					
459	11-Nov	S2	856	F	0	U						1058	17-Nov	S2	870	F	0	U					
460	11-Nov	S2	817	F	100	U						1059	17-Nov	S2	820	F	0	U					
461	11-Nov	N1	885	F	0	U						1060	17-Nov	S2	804	F	2	U			43646	10	
462	11-Nov	N3	860	F	0	U						1061	17-Nov	S2	775	F	0	U					
463	11-Nov	N3	862	F	0	U						1062	17-Nov	S2	700	F	0	U					
464	11-Nov	N3	675	F	0	U						1063	17-Nov	S2	930	F	0	U					
465	11-Nov	N4 UK		M		U		UK				1064	17-Nov	N4	1000	M		M	29055				
466	11-Nov	S2	857	F	0	U						1065	17-Nov	N4	780	M		U					
467	11-Nov	S2	624	F	0	U						1066	17-Nov	N4	850	F	0	U					
468	11-Nov	S3	863	M		U						1067	17-Nov	S2	800	M		U					
469	11-Nov	N3	806	M		U						1068	17-Nov	S2	880	F	0	U					
470	11-Nov	N3	914	F	0	U			30218	5		1069	17-Nov	S2	840	F	0	U					
471	11-Nov	N3	793	F	1	U			30218	6		1070	17-Nov	S2	880	F	0	U					
472	11-Nov	N3	907	F	0	M	29085					1071	17-Nov	S2	840	F	0	U					
473	11-Nov	N3	775	F	0	U			30218	7		1072	17-Nov	S2	840	F	0	U					
474	11-Nov	N3	470	M		U			30218	8		1073	17-Nov	S2	780	F	0	U					
475	11-Nov	N4 UK		F	UK	U		UK				1074	18-Nov	N2	907	M		U					
476	11-Nov	N4	824	F	0	U						1075	18-Nov	N2	842	F	0	U					
477	11-Nov	N4	825	F	0	M	29205					1076	18-Nov	N2	808	F	0	U					
478	11-Nov	N4	817	F	0	U						1077	18-Nov	N2	840	F	0	U			43647	7	
479	11-Nov	N4	816	F	0	U						1078	18-Nov	N3	753	M		U			43647	8	
480	11-Nov	N4	785	F	0	U			30218	10		1079	18-Nov	S2	770	M		U					
481	11-Nov	S1	770	M		U			30106	7		1080	18-Nov	S2	924	F	0	U			52252	5	
482	11-Nov	S1	910	M		U			30106	8		1081	18-Nov	S2	850	M		U					
483	11-Nov	S1	850	M		U						1082	18-Nov	S2	960	F	0	M	29116		52252	6	
484	11-Nov	S1	870	F	15	U			30106	9		1083	18-Nov	S2	890	F	0	M	29001		52252	7	
485	11-Nov	S1	770	M		U						1084	18-Nov	S2	810	F	0	U					
486	11-Nov	S3	900	F	0	U						1085	18-Nov	S2	830	F	0	U					
487	11-Nov	S3	840	F	0	U						1086	18-Nov	S2	UK	F	0	U					
488	11-Nov	N4	730	M		U						1087	18-Nov	S2	UK	F	0	U					
489	11-Nov	N4	830	F	0	U						1088	18-Nov	S2	780	M		U					
490	11-Nov	N4	820	F	0	U			30106	10		1089	18-Nov	S2	830	M		U					
491	11-Nov	S1	870	F	0	U						1090	18-Nov	S2	905	F	0	U					
492	11-Nov	S1	820	F	0	U						1091	18-Nov	S2	745	F	0	M	28141				
493	11-Nov	S1	880	F	1	U						1092	18-Nov	S2	875	F	0	U					
494	11-Nov	S1	890	F	20	U			30217	3		1093	18-Nov	S2	837	M		U					
495	11-Nov	S1	870	F	0	U						1094	18-Nov	S2	820	F	0	U					
496	11-Nov	S1	800	F	1	U						1095	18-Nov	S2	765	M		U					
497	11-Nov	S1	960	F	0	U						1096	18-Nov	S2	837	F	UK	U		UK			
498	11-Nov	S2	820	F	0	U						1097	18-Nov	S2	918	M		U		AD		370399E	
499	11-Nov	S2	890	M		U			30217	4		1098	18-Nov	S1	820	F	0	U					
500	11-Nov	S2	700	M		U						1099	18-Nov	S1	880	F	0	U					
501	11-Nov	N2	790	F	0	U						1100	18-Nov	S1	850	M		U					
502	11-Nov	N2	820	F	2	U						1101	18-Nov	S1	910	M		U			52252	3	
503	11-Nov	N2	800	F	0	M	UK		30217	5		1102	18-Nov	S1	720	F	0	U					
504	11-Nov	N2	890	F	0	U						1103	18-Nov	S1	700	F	0	U					

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#
505	11-Nov	N2	840	M		U						1104	18-Nov	S1	860	F	0	U					
506	11-Nov	N3	880	M		U						1105	18-Nov	S2	814	M		U		AD	52252	4	
507	11-Nov	N3	750	M		U						1106	18-Nov	S2	730	M		U					
508	11-Nov	N3	800	F	1	U		30217		6		1107	18-Nov	S2	850	M		U					
509	11-Nov	N3	870	F	0	U						1108	18-Nov	S2	780	M		U					
510	11-Nov	N3	845	F	1	U						1109	18-Nov	S1	780	F	0	U					
511	11-Nov	N3	790	M		U						1110	18-Nov	S1	860	F	0	U					
512	11-Nov	N3	910	F	0	U		30217		7		1111	18-Nov	S1	890	F	0	U					
513	11-Nov	UK	900	F	2	U						1112	18-Nov	S1	810	F	0	U					
514	11-Nov	S4	770	F	0	U						1113	18-Nov	S2	720	F	0	U					
515	11-Nov	S3	820	F	0	U						1114	18-Nov	N4	550	F	0	U					
516	11-Nov	S3	844	F	30	U		30217		8		1115	18-Nov	N4	800	F	0	U					
517	11-Nov	S3	840	F	0	U						1116	18-Nov	N3	760	M		U					
518	11-Nov	S2	770	M		U						1117	18-Nov	N3	710	M		U					
519	11-Nov	S2	770	M		U						1118	18-Nov	N3	750	F	0	U					
520	11-Nov	S2	760	F	0	U						1119	19-Nov	S2	846	F	0	U					
521	11-Nov	S2	860	M		U						1120	19-Nov	S2	792	F	0	U					
522	11-Nov	S2	860	M		U						1121	19-Nov	S2	UK	F	UK	U			UK		
523	11-Nov	S2	890	M		U						1122	19-Nov	S2	UK	M		U			UK		
524	11-Nov	S2	980	M		U						1123	19-Nov	S3	806	F	0	U					
525	11-Nov	S2	900	M		U						1124	19-Nov	S3	792	F	0	U					
526	11-Nov	S2	800	F	0	U						1125	19-Nov	S3	710	F	0	U					
527	11-Nov	S2	910	F	0	U						1126	19-Nov	S3	876	M		U					
528	11-Nov	S2	910	F	0	U						1127	19-Nov	N1	UK	F	UK	U			UK		
529	11-Nov	S2	910	F	0	U		30217		9		1128	19-Nov	S2	710	F	0	U					
530	11-Nov	S2	810	F	0	U						1129	19-Nov	N1	895	M		U					
531	11-Nov	S2	870	F	0	U						1130	19-Nov	N1	UK	M		U			UK		
532	11-Nov	S2	UK	F	0	U		UK				1131	19-Nov	N1	830	F	0	U					
533	11-Nov	Sinlet	825	M		U			30217	10		1132	19-Nov	N1	840	F	0	U					
534	11-Nov	Sinlet	UK	M		U						1133	19-Nov	N1	840	F	0	U					
535	11-Nov	Sinlet	UK	M		U		UK				1134	19-Nov	S1	900	M		U					
536	11-Nov	Sinlet	740	F	0	U						1135	19-Nov	S2	840	F	0	U					
537	11-Nov	Sinlet	740	M		U						1136	19-Nov	S2	835	F	0	U					
538	11-Nov	N3	845	F	0	U						1137	19-Nov	N2	840	M		U					
539	11-Nov	SB	UK	M		U						1138	19-Nov	N2	710	F	0	U					
540	11-Nov	SB	UK	F	0	U						1139	19-Nov	N2	810	F	0	U					
541	11-Nov	N2F	865	F	0	U			43642	1		1140	19-Nov	N2	680	F	0	U					
542	11-Nov	N2F	820	F	0	U						1141	19-Nov	N2	825	F	0	U					
543	11-Nov	N2F	773	F	0	M	28196		43642	2		1142	19-Nov	N2	835	F	0	U					
544	11-Nov	N2F	838	M		U						1143	19-Nov	N2	840	F	100	U					
545	11-Nov	N2F	847	M		U						1144	19-Nov	N2	865	F	0	U					
546	11-Nov	N2F	822	F	0	U						1145	19-Nov	S2	810	F	0	U					
547	11-Nov	N2F	743	M		U						1146	19-Nov	S2	830	F	0	U					
548	11-Nov	N2F	772	F	0	U						1147	19-Nov	S2	870	F	0	U					
549	11-Nov	N2	768	F	0	U						1148	19-Nov	S2	UK	M		U					
550	11-Nov	N2	655	M		U						1149	19-Nov	S2	790	M		U					
551	11-Nov	N2	854	F	0	U						1150	20-Nov	S3	834	F	0	U					
552	11-Nov	N2	560	M		U						1151	20-Nov	S3	UK	F	UK	U			UK		
553	11-Nov	N2	740	F	0	U			43642	3		1152	20-Nov	S2	UK	F	UK	U			UK		
554	11-Nov	N2	853	F	0	U						1153	20-Nov	S2	843	F	0	U					
555	11-Nov	N2	845	F	0	U						1154	20-Nov	S2	778	F	0	U					
556	11-Nov	N2	805	F	0	U						1155	20-Nov	S3	854	M		U					
557	11-Nov	N2	690	F	0	U			43642	4		1156	20-Nov	S3	890	M		U					
558	11-Nov	N1	775	F	0	U						1157	20-Nov	S3	838	F	0	U				43647	10
559	11-Nov	N1	793	F	0	U						1158	20-Nov	S3	863	M		U					
560	11-Nov	N2	784	F	100	U						1159	20-Nov	S3	851	F	0	U					
561	11-Nov	N4	980	M		U						1160	20-Nov	S2	760	F	0	U					
562	11-Nov	N2	780	M		U						1161	20-Nov	N4	890	F	0	U					
563	11-Nov	N2	910	F	2	U			43645	1		1162	20-Nov	N4	840	F	0	U					
564	11-Nov	N2	880	F	2	U			43645	2		1163	20-Nov	N4	860	F	0	U					
565	11-Nov	N2	590	M		U						1164	20-Nov	N3	814	F	0	U					
566	11-Nov	N2	890	M		U						1165	20-Nov	N3	865	F	0	U				52252	7
567	11-Nov	N2	910	F	15	M	28974		43645	3		1166	20-Nov	S3	834	F	0	U				52252	8

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#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	#	DATE	Area	POH	Sex	%Egg	M/U	Tag#	FC	Book	Sc	Head#	
568	11-Nov	N2	860	F	20	U			43645	4		1167	20-Nov	N2	890	F	0	U						
569	11-Nov	N2	830	F	0	U						1168	20-Nov	N2	831	F	0	U						
570	11-Nov	N1	900	F	0	U						1169	20-Nov	S2	810	F	0	U						
571	11-Nov	N2	865	M		U						1170	20-Nov	S2	UK	F	0	U				UK		
572	11-Nov	N2	800	F	20	U						1171	20-Nov	N2	810	F	0	U						
573	11-Nov	N2	830	F	0	M	29027		43645	5		1172	20-Nov	N2	784	F	0	U						
574	11-Nov	S2	810	F	0	U						1173	20-Nov	N2	820	F	0	U						
575	11-Nov	S2	775	F	10	U			43645	6		1174	20-Nov	N2	700	M		U						
576	11-Nov	S2	880	F	0	U						1175	21-Nov	S3	845	M		U						
577	11-Nov	S2	865	M		U						1176	21-Nov	S3	916	M		U						
578	11-Nov	S2	880	F	5	U			43645	7		1177	21-Nov	S3	740	F	0	U				52252	9	
579	11-Nov	S2	900	F	0	U						1178	21-Nov	S2	807	F	0	U					52252	10
580	11-Nov	S2	730	M		U						1179	21-Nov	S3	826	F	0	U						
581	11-Nov	S2	840	F	0	U						1180	21-Nov	N3	737	F	0	U						
582	11-Nov	S2	855	F	1	U		AD	43645	8	370366E	1181	22-Nov	N2	790	F	5	U						
583	11-Nov	S2	870	F	2	U						1182	22-Nov	N2	837	F	1	U						
584	11-Nov	S2	880	M		U			43645	9		1183	22-Nov	N2	815	F	0	U						
585	11-Nov	S2	820	F	2	U						1184	22-Nov	S2	826	F	0	U						
586	11-Nov	S2	930	M		U						1185	22-Nov	S2	804	F	0	U						
587	11-Nov	S2	875	M		U						1186	22-Nov	N4	900	F	0	U						
588	11-Nov	S2	865	F	0	U						1187	22-Nov	N3	784	M		U						
589	11-Nov	S2	810	F	1	U						1188	22-Nov	N3	872	F	0	U						
590	11-Nov	S1	830	F	100	U			43645	10		1189	23-Nov	N4	896	F	0	U						
591	11-Nov	SB	834	F	0	U						1190	23-Nov	S2	UK	F	0	U						
592	11-Nov	SB	803	F	0	U						1191	23-Nov	N2	814	F	UK	U				UK		
593	11-Nov	SB	857	F	0	U						1192	23-Nov	N4	850	F	0	U						
594	11-Nov	SB	870	M		U						1193	23-Nov	N4	750	F	0	U						
595	11-Nov	SB	836	M		U						1194	23-Nov	N3	870	M		U						
596	11-Nov	SB	806	F	0	U		AD	43643	1	370637E	1195	23-Nov	N3	900	F	0	U						
597	11-Nov	SB	775	M		U						1196	23-Nov	N3	870	F	0	U						
598	11-Nov	SB	748	M		U						1197	24-Nov	S2	823	F	0	U						
599	11-Nov	SB	885	F	0	U						1198	24-Nov	S2	845	F	0	U						
600	11-Nov	SB	786	F	0	U						1199	24-Nov	S3	848	F	0	U						
												1200	25-Nov	N3	818	M		U						
												1201	25-Nov	S4	833	M		U						
												1202	25-Nov	N2	896	F	1	U						
												1203	25-Nov	N4	890	F	0	U						
												1204	25-Nov	N4	830	F	0	U						
												1205	25-Nov	N3	920	F	0	U						
												1206	26-Nov	S2	864	F	0	U						

Appendix 3. 1993 Wannock River Chinook mark recoveries.

Codes are as in Appendix 1 with additions of RC= number of recapture and Condition codes (CD): 1=OK on release, 7 = held then released

Mark Date	Recovery Date	Set	Tag#	RC	Tag POH	DP POH	Tag Sex	DP Sex	CD	Scale Book	Scale
2-Oct	15-Nov	6	28105		860	890	F	F	1		
4-Oct	13-Nov	7	28124		860	890	F	F	1		
4-Oct	18-Nov	9	28141		780	745	F	F	1		
6-Oct	11-Nov	13	28188		825	UK	F	F	1	30218	2
6-Oct	11-Nov	13	28196		795	773	F	F	1	43642	2
7-Oct	12-Nov	16	28437		695	680	F	F	1		
8-Oct	15-Nov	18	28467		780	747	F	F	1		
13-Oct	10-Nov	22	28580		825	UK	M	F	1		
14-Oct	7-Nov	23	28623		865	831	F	F	1	43638	4
14-Oct	13-Nov	23	28609	1	820	810	F	F	1		
15-Oct	10-Nov	26	28676		765	UK	F	F	1		
19-Oct	8-Nov	29	28741		910	883	F	F	1		
19-Oct	12-Nov	29	28774		830	UK	F	F	1		
20-Oct	5-Nov	30	28823		915	896	F	F	1	43630	9
20-Oct	6-Nov	30	28808		945	898	F	F	1		
20-Oct	6-Nov	31	28893		845	845	F	F	1	43636	6
20-Oct	13-Nov	30	28836		820	810	F	F	7		
21-Oct	4-Nov	32	28913		900	878	F	F	1	43629	10
21-Oct	12-Nov	33	28943		850	850	F	F	1		
22-Oct	7-Nov	34	28997		850	881	F	F	1		
22-Oct	8-Nov	35	29062		805	810	F	F	1	43641	2
22-Oct	11-Nov	34	28974		840	910	F	F	1	43645	3
22-Oct	11-Nov	34	29027		810	830	F	F	1	43645	5
22-Oct	14-Nov	35	29053		860	820	F	F	1		
22-Oct	15-Nov	35	29067		840	871	F	F	1		
22-Oct	18-Nov	34	29001		855	890	F	F	1	52252	7
23-Oct	5-Nov	36	29134		810	838	F	F	1	43630	2
23-Oct	6-Nov	36	29144		795	800	F	F	1	43636	4
23-Oct	7-Nov	36	29120		805	808	F	F	1	43637	1
23-Oct	10-Nov	36	29138		780	801	F	F	1	30216	7
23-Oct	11-Nov	36	29085		885	907	F	F	1		
23-Oct	13-Nov	36	29090		790	785	F	F	1		
23-Oct	15-Nov	36	29100		815	815	F	F	1		
23-Oct	15-Nov	36	29109		760	786	F	F	1		
23-Oct	18-Nov	36	29116		925	960	F	F	1	52252	6
24-Oct	4-Nov	37	29181		805	804	F	F	1	43629	8
24-Oct	5-Nov	37	29211		750	764	F	F	7	43630	3
24-Oct	7-Nov	37	29182		810	870	F	F	1		
24-Oct	8-Nov	37	29200		785	784	F	F	1	43641	6
24-Oct	8-Nov	37	29207		820	UK	F	F	1		
24-Oct	11-Nov	37	29205		815	825	F	F	1		
	11-Nov	DP	UK		800		F			30217	5

Appendix 3. 1993 Wannock River Chinook mark recoveries.

Codes are as in Appendix 1 with additions of RC= number of recapture and Condition codes (CD): 1=OK on release, 7 = held then released

Mark Date	Recovery Date	Set	Tag#	RC	Tag POH	DP POH	Tag Sex	DP Sex	CD	Scale Book	Scale
30-Sep	6-Nov	1	28023		785	803	M	M	1		
30-Sep	10-Nov	1	28012		840	870	M	M	1	30106	3
30-Sep	12-Nov	1	28005		795	800	M	M	1		
2-Oct	10-Nov	6	28108		865	830	M	M	1	30221	9
4-Oct	12-Nov	7	28115		770	753	M	M	1		
7-Oct	31-Oct	16	28447		970	950	M	M	1		
7-Oct	16-Nov	16	28445		945	UK	M		1		
13-Oct	5-Nov	22	28602		735	734	M	M	1	43630	8
13-Oct	16-Nov	21	28561		845	846	M	M	1		
14-Oct	14-Nov	24	28635		810	765	M	M	1		
15-Oct	12-Nov	28	28700		875	895	M	M	1		
19-Oct	5-Nov	29	28742	1	875	855	M	M	1		
19-Oct	10-Nov	29	28787		835	870	M	M	1	30106	4
20-Oct	6-Nov	30	28857		810	783	M	M	1	43636	5
20-Oct	7-Nov	30	28872		790	788	M	M	1		
20-Oct	8-Nov	30	28854		915	873	M	M	1		
21-Oct	29-Oct	33	28961		905	914	M	M	7	43628	3
21-Oct	7-Nov	33	28969		715	UK	M	M	1		
22-Oct	3-Nov	34	29028		920	950	M	M	1	43629	4
22-Oct	12-Nov	34	29002		835	800	F	M	1		
22-Oct	17-Nov	35	29055		940	1000	M	M	1		
23-Oct	7-Nov	36	29119		850	861	M	M	1		
23-Oct	7-Nov	36	29153		870	888	M	M	1	43637	4
23-Oct	15-Nov	36	29106		790	820	M	M	1		

Appendix 4. Weather and water conditions during the 1993 Wannock River chinook mark-recapture program.

Date	River level	River Level (m)	Secchi depth (m)	Weather
30-Sep	7	2.14		clear
1-Oct	7	2.14	1	clear
2-Oct	6.9	2.10	1	clear
3-Oct				clear
4-Oct	7.3	2.23	1	fog
5-Oct	7.4	2.26	1	cloudy, rain
6-Oct	7.8	2.38	1	clear
7-Oct	7.8	2.38	1	clear
8-Oct				clear
9-Oct				
10-Oct				
11-Oct				
12-Oct	6.6	2.01	1	clear
13-Oct	6.4	1.95	1	clear
14-Oct	6.2	1.89	0.95	cloudy
15-Oct	6	1.83	1	overcast
16-Oct				clear
17-Oct				clear
18-Oct	5.7	1.74		cloudy, rain
19-Oct	5.6	1.71	1	partly cloudy
20-Oct	5.9	1.80	1	overcast, rain
21-Oct	5.9	1.80	1.1	overcast, rain
22-Oct	7.1	2.17	1.1	overcast, light rain
23-Oct	8.2	2.50	1	cloudy, rain
24-Oct	8.7	2.65	1.2	partly cloudy, rain
25-Oct	8.4	2.56	1	cloudy, rain
26-Oct				
27-Oct				
28-Oct	8.8	2.68		partly cloudy
29-Oct	8.7	2.65	1	partly cloudy
30-Oct	8.4	2.56	1.1	cloudy
31-Oct	8.3	2.53	1.1	overcast, rain
1-Nov	8	2.44	1.1	heavy rain
2-Nov	9	2.75	1	heavy rain
3-Nov	13.4	4.09	1.05	overcast, sunny breaks
4-Nov	12.4	3.78	1.05	overcast, sunny breaks
5-Nov	11	3.36		overcast, light rain
6-Nov	10.1	3.08	1	partly cloudy
7-Nov	9.2	2.81		
8-Nov	8.6	2.62	1	partly cloudy
9-Nov	7.9	2.41		
10-Nov	7.5	2.29	1	clear, frost in AM
11-Nov	7.1	2.17	1	partly cloudy
12-Nov	6.8	2.07	1	
13-Nov	6.5	1.98	1	clear, frost in AM
14-Nov	6.3	1.92	1	rain
15-Nov	6.6	2.01	1	rain
16-Nov	6.6	2.01	1	rain, clear breaks
17-Nov	6.4	1.95	1	cloudy, showers
18-Nov	6.3	1.92	1	overcast
19-Nov	6.3	1.92	1	rain
20-Nov	7.3	2.23	1	rain
21-Nov	8.1	2.47	1	clear, freezing
22-Nov	7.9	2.41	1	clear, cold
23-Nov	7.4	2.26	1	partly cloudy, cold
24-Nov	6.8	2.07	1	clear, cold
25-Nov			1	clear, freezing in AM
26-Nov	6.3	1.92	1	overcast

