Fisheries and Oceans Canada | Pêches et Océans Canada
Ecosystems and Oceans Science | Sciences des écosystèmes et des océans

Canadian Science Advisory Secretariat (CSAS)

Research Document 2020/001

Central and Arctic Region

Genetic mixed-stock analyses, catch-effort, and biological characteristics of Dolly Varden (*Salvelinus malma malma*) from the Rat River collected from subsistence harvest monitoring programs: 2009-2014

Colin P. Gallagher, Robert Bajno, James D. Reist, and Kimberly L. Howland

Fisheries and Oceans Canada
Freshwater Institute
501 University Crescent
Winnipeg, Manitoba, R3T-2N6

November 2020

Canada

Foreword

This series documents the scientific basis for the evaluation of aquatic resources and ecosystems in Canada. As such, it addresses the issues of the day in the time frames required and the documents it contains are not intended as definitive statements on the subjects addressed but rather as progress reports on ongoing investigations.

Published by:

Fisheries and Oceans Canada
Canadian Science Advisory Secretariat
200 Kent Street
Ottawa ON K1A 0E6

http://www.dfo-mpo.gc.ca/csas-sccs/
csas-sccs@dfo-mpo.gc.ca

ISSN 1919-5044

Correct citation for this publication:

Gallagher, C.P., Bajno, R., Reist, J.D., and Howland, K.L. 2020. Genetic mixed-stock analyses, catch-effort, and biological characteristics of Dolly Varden (*Salvelinus malma malma*) from the Rat River collected from subsistence harvest monitoring programs: 2009-2014. DFO Can. Sci. Advis. Sec. Res. Doc. 2020/001. iv + 134 p.

Aussi disponible en français :

*Gallagher, C.P., Bajno, R., Reist, J.D., et Howland, K.L. 2020. Analyses génétiques de stocks mélangés, effort de capture et caractéristiques biologiques du Dolly Varden (*Salvelinus malma malma*) de la rivière Rat pêché dans le cadre de programmes de surveillance des prises de subsistance : 2009-2014. Secr. can. de consult. sci. du MPO. Doc. de rech. 2020/001. iv + 146 p.*

TABLE OF CONTENTS

ABSTRACT IV
INTRODUCTION 1
OBJECTIVES 2
METHODS 3
HARVEST MONITORING PROGRAMS 3
GENETIC MIXED-STOCK FISHERY ANALYSES AND HARVEST ESTIMATES 3
AGE ESTIMATION 4
CATCH-EFFORT AND BIOLOGICAL INFORMATION 5
RESULTS 6
GENETIC MIXED-STOCK FISHERY ANALYSIS AND HARVEST ESTIMATES 6
CATCH-EFFORT 7
BIOLOGICAL INFORMATION 7
Length and weight 7
Age and survival/mortality 8
Growth 8
Proportion of non-spawners and spawners 9
DISCUSSION 9
GENETIC MIXED-STOCK FISHERY ANALYSES AND HARVEST ESTIMATES 9
CATCH-EFFORT 10
BIOLOGY 10
CONCLUSION 11
ACKNOWLEDGEMENTS 11
REFERENCES CITED 12
TABLES AND FIGURES 15
APPENDIX 1. BIOLOGICAL INFORMATION OF ANADROMOUS DOLLY VARDEN FROM THE RAT RIVER HARVEST MONITORING PROGRAM (2009-2014). 40
APPENDIX 2. STATISTICAL RESULTS AND SUPPLEMENTARY BIOLOGICAL INFORMATION 129

ABSTRACT

Data collected from fishery dependent monitoring programs between 2009 and 2014 were used to inform a population assessment of the anadromous Dolly Varden (*Salvelinus malma malma*) from the Rat River, Northwest Territories. Dolly Varden from the Rat River stock are harvested in subsistence fisheries by Gwich'in and Inuvialuit people on the Beaufort Sea coast during summer and in the Mackenzie Delta and Rat River in late summer and early fall during their return (upstream) migration to spawning and overwintering habitats. Coastal monitoring programs collected harvest information and tissue samples between 2011 and 2014 to use in genetic mixed-stock analyses to estimate the contribution of the stock to the harvest. The annual monitoring program in the Mackenzie Delta and Rat River, established in its current form in 1995, collected harvest, catch-effort, and biological data including tissues for genetic mixed-stock analysis (starting in 2011). Genetic mixed-stock fishery analyses of coastal samples revealed the Rat River stock accounted for 5.1%–28.7% of the harvest at Shingle Point, represented by 21–40 fish. There were no confident detections of individuals from this stock occurring in fisheries further west. The fisheries in the Mackenzie Delta and Rat River were almost exclusively comprised of the Rat River stock. The estimated total number of Dolly Varden harvested from the Rat River from all fisheries averaged 362 fish, ranging between 300 (in 2009) and 427 (in 2014), with an estimated annual harvest rate averaging 4.7%. Catch-per-unit-effort was variable with relatively high values in 2010–2012 and low values in 2013–2014 (i.e., mean of ~ ≥10 and ~ ≤5 fish/25 m gillnet/24 hours, respectively). The sizes of fish captured between 2009 and 2014 were among the largest observed since 1995 (range of mean sizes = 463–509 mm) and demonstrated an increasing trend since 2006. Furthermore, an increasing trend in the presence of older ages between 2009 and 2014 suggested a higher rate of annual survival (increase from 33% to 55%). Additionally, a high proportion of current-year spawners (range = 29–67%) was observed in most years between 2009 and 2014. The time-series of information from the Rat River Harvest Monitoring Program indicates that the Rat River population of Dolly Varden is currently stable and sustainably harvested.

INTRODUCTION

The population of northern-form Dolly Varden (*Salvelinus malma malma*) from the Rat River is one of several known to originate from rivers located in the Richardson Mountains. The watershed of the Rat River is situated in both the Yukon and Northwest Territories (688 km^2) and is fed by many small and shallow high-gradient tributaries (Jessop et al. 1973). One of these, Fish Creek, the spawning tributary for the stock, has areas where ground water flows on a perennial basis into the creek that provides suitable locations for Dolly Varden to spawn and overwinter (Mochnacz et al. 2010). The water flows out of the ground at a constant temperature (~4°C) maintaining small areas of open water in some stretches of the creek during the winter that produces an aufeis field (layered ice) further downstream, believed to delineate the lower extent of overwintering habitat (see Sandstrom et al. 2001). Given the importance of Fish Creek for spawning, it is also a critical location for juvenile rearing and feeding.

The Rat River population exhibits partial migration where a stream resident (predominantly males) and a migratory (female biased) (anadromous) phenotype share a common gene pool and spawn and overwinter in sympatry (see Gallagher et al. 2020). After rearing in freshwater for three to five years, the migratory component begins to undertake annual migrations between freshwater (i.e., Fish Creek) and marine feeding habitats in the Beaufort Sea (Gallagher et al. 2018). In the spring (May–June; Benson 2010), anadromous fishes travel down the Rat River and Mackenzie Delta to the Beaufort Sea. Once in the marine environment, Dolly Varden from the Rat River and other populations feed along coastal (Craig 1984) and offshore habitats (Courtney et al. 2018, DFO unpublished data). The fishes from the multiple populations will mix together in the Beaufort Sea (e.g., Herschel Island, Ptarmigan Bay, King Point, and Shingle Point), although little information exists on the spatio-temporal characteristics of the mixing or the contribution of populations to subsistence fisheries along the coast (e.g., Krueger et al. 1999; Figure 1). Dolly Varden from the Rat River return to the Mackenzie Delta in approximately late July to begin their upstream migration to Fish Creek. In the Mackenzie Delta, the contribution of the Rat River and Vittrekwa populations (i.e., the only two populations whose natal watershed drain into the Mackenzie Delta south of Aklavik) to subsistence fisheries in Aklavik and further south is unknown.

Anadromous Dolly Varden from the Rat River are an important cultural and subsistence resource for both Gwich'in and Inuvialuit people from communities in the Mackenzie Delta, in particular Aklavik and Fort McPherson, NT (Figure 1). The Gwich'in have harvested Dolly Varden in the Mackenzie Delta and lower reaches of the Rat River during the upstream migration for generations (Benson 2010). They have also traditionally harvested Dolly Varden from the pools of Fish Creek at the spawning and overwintering area (locally described as 'Fish Hole') by sweeping the pools (with a small-mesh gill net) and setting fish traps in early winter (Benson 2010). However, this area is currently closed to fishing activity except for scientific and educational purposes. Dolly Varden from the Rat River population are also harvested by Inuvialuit in the Beaufort Sea as part of a mixed-stock fishery during summer and during the upstream migration in the Mackenzie Delta in Aklavik (Figure 1).

Gwich'in harvesters identified a decline in the abundance of the Rat River stock in the early 1980s (Benson 2010). In response, the Rat River Working Group (RRWG) was established in 1995 to provide advice to the co-management bodies responsible for the fisheries management in the Mackenzie Delta and Rat River. Additionally, an annual harvest monitoring program in the Rat River (at Destruction City) was established in 1989 to monitor stock status by collecting harvest and biological information from the subsistence fishery. The program was expanded to additional locations in 1995 including the Mackenzie Delta (Harwood 2001). Other data used in the monitoring and population assessment of the Rat River stock were collected through a

mark-recapture study conducted in the fall at the spawning and overwintering area in Fish Creek (Sandstrom et al. 2009). The preliminary results of the data collected in the Rat River Harvest Monitoring and the mark-recapture programs have been reported to the RRWG on an annual basis.

A further decline in abundance observed in 2004 prompted the RRWG to establish a voluntary closure of the fishery for Dolly Varden in the Mackenzie Delta and Rat River between 2006 and 2008 (inclusive), with the exception of a small harvest (n = 120) from the annual monitoring program (Howland et al. 2012). The decline observed in the Rat River in addition to past declines in the Big Fish River stock contributed to the listing of northern-form Dolly Varden in Canada as a species of 'Special Concern' by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2010 (COSEWIC 2010). Concomitantly, an Integrated Fisheries Management Plan (IFMP) was signed in 2010 among the Gwich'in Renewable Resources Board, Fisheries Joint Management Committee, Fisheries and Oceans Canada, and Parks Canada to guide the management of Dolly Varden in the western Arctic over the next five years (2011–2015).

One of the objectives of the IFMP is the accurate collection of harvest information. Gaps in past assessments of Dolly Varden from the Rat River included the number of fish from the stock that were harvested in the mixed-stock fisheries (Beaufort Sea coast and Mackenzie Delta). Previously, it was assumed that 50% of the reported harvest at Shingle Point was from the Rat River based on t-bar tag return data (DFO 2001, Harwood 2001, Harwood et al. 2009, Roux et al. 2012). However, it was acknowledged that the 50% contribution was likely an overestimate (DFO 2001). Furthermore, based on the 50% contribution assumption, it was estimated that on average 120 fish per year (between 1986 and 2000) from the Rat River stock were harvested at Shingle Point (DFO 2001). For fisheries conducted in the Mackenzie Delta, it is assumed that the majority of Dolly Varden harvested are from the Rat River given the presumably smaller population abundance of the Vittrekwa stock. Identifying stock-of-origin for fish captured in mixed-stock fisheries will improve the harvest information used in population assessments.

The Rat River stock was formally assessed in 2001 (DFO 2001, Harwood 2001; data up to 2001), and 2008 (Roux et al. 2012, DFO 2014; data up to 2008 and 2007, respectively) using the time series of data from the sampling programs, including annual harvest monitoring for the Rat River and periodic population estimates from mark-recapture studies. The proper implementation of the IFMP and any future evaluation by COSEWIC requires an updated assessment.

OBJECTIVES

Data collected from fishery dependent monitoring programs between 2009 and 2014 were used to assess the population status of anadromous Dolly Varden from the Rat River, specifically to:

1. Examine the contribution of Dolly Varden from the Rat River to the mixed-stock-fishery along the Beaufort Sea coast (e.g., Herschel Island and Shingle Point) and in the Mackenzie Delta and Rat River based on results from genetic mixed-stock analysis of samples collected between 2011 and 2014;
2. Estimate the annual harvest rate of the stock between 2009 and 2014; and,
3. Summarize catch-per-unit-effort (CPUE) and biological data (length, weight, age, survival/mortality, growth, and maturity) collected from the subsistence harvest monitoring program for the Rat River.

METHODS

HARVEST MONITORING PROGRAMS

An annual community-based harvest monitoring program, established in its current form in 1995, collects harvest, catch-effort, and biological data (Appendix 1: Table A1) from Dolly Varden harvested in the Mackenzie Delta and Rat River during the upstream migration from approximately the end of July to early September. The fishery dependent sampling program uses subsistence harvesters stationed at several traditionally used locations to collect data throughout the majority of the migration period from their own fishing efforts and that of others who camp nearby (Harwood 2001, Harwood et al. 2009). Although the number of monitoring locations have changed over time, three locations have been consistently utilized by the same three harvesters: Big Eddy in the Husky channel of the Mackenzie Delta (N 67.96425°, W 135.34080°), mouth of the Rat River (N 67.75958°, W 135.13894°), and a location in the Rat River locally known as Destruction City (N 67.74563°, W 135.38124°) (Figure 1).

The three monitors were instructed to record the number of fish they harvested or released, their catch-effort (number captured and soak time of net), and, starting in 2001, gear configuration (net length and stretched mesh size). Note, the monitor at Destruction City may not have recorded catch-effort data from every net set between 2006 and 2010; therefore, while the data were summarized they were not used in this report to compare with other years. The monitors were also instructed to obtain a random dead-sample of Dolly Varden over the duration of the monitoring program. Fork length, round weight, sex, and maturity ('immature' or 'mature') were recorded while otoliths (ageing) and a fin clip (genetics; starting in 2012) were collected. Due to the difficulty distinguishing gonads between a resting adult and sexually immature juvenile, these were categorized as 'immature', while fish spawning in the current year were classified as 'mature'. Starting in 2012, some of the Dolly Varden that were released from gill nets were measured to supplement length information. Any recapture of tagged fish was reported (tag number and colour) with the number of tags deployed in the previous year used in a mark-recapture study to estimate population abundance (see Sandstrom et al. 2009, Gallagher et al. 2020). On a daily basis the monitors recorded the height of the water in the river and the amount of debris in the water using a categorical scale ('high', 'normal', 'low'). Harvesters report that high levels of water and debris negatively affect catches of fish.

Starting in 2011, an annual comprehensive harvest monitoring program has collected harvest, catch-effort, and biological information including tissues for genetic analysis from fisheries along the Beaufort Sea coast focusing primarily at Herschel Island and Shingle Point (Figure 1; Gallagher et al. 2013). The data collected by the programs have been used to estimate the number of fish harvested at both locations each summer between 2011 and 2014 and the contribution of the Rat River stock to the harvest.

GENETIC MIXED-STOCK FISHERY ANALYSES AND HARVEST ESTIMATES

Prior to mixed-stock analysis (MSA), the stock structure of northern-form Dolly Varden was identified (Harris et al. 2015). Success of MSA relies on a reasonable understanding of the genetic structure of fish stocks that contribute to the mixed-stock fishery (Utter and Ryman 1993). The accuracy and precision of contribution estimates to a mixed-fishery depends on a genetic baseline represented by all putative contributing unit-stocks and genetic markers capable of delineating differences among those stocks. Dolly Varden populations which contribute to the mixed-fishery, but which have not been sampled and incorporated into the genetic baseline, may influence results and affect the precision of MSA. Samples from known Canadian anadromous stocks (Firth River drainage, Babbage River, Big Fish River, Rat River, and the Vittrekwa River) were used in the development of the genetic baseline using fifteen

microsatellite DNA markers. Subsets of Dolly Varden samples from rivers on the North Slope of Alaska were also included for baseline development as they have been previously reported to contribute to Canadian coastal fishing sites (Krueger et al. 1999). Alaskan Dolly Varden were assigned to three regional reporting groups and categorized based on genetic data and geography. The Dolly Varden from the Kongakut River (Alaska) were pooled with the Canadian Firth River drainage stock as genetic stock identification was unable to delineate sufficient genetic differences between these two groups (DFO unpublished data).

To assess the efficacy of the genetic baseline for MSA, simulated mixture and individual assignment analyses were employed using the 100% simulation and leave-one-out tests using the program ONCOR (Kalinowski et al. 2007). The 100% simulation evaluated the accuracy of the genetic baseline by simulating, using the method of Anderson et al. (2008), a fishery sample from which all individuals are taken from the same baseline stock. One thousand simulations were done for each baseline stock. A mixture analysis reported on the success of the assignment of individuals to their baseline sample. In the leave-one-out test, the genetic baseline was evaluated by how well individuals, which were removed from the baseline, were assigned back to their population of origin and to which population individuals were most often incorrectly assigned.

Two methods were used for mixture-stock analysis. A conditional maximum likelihood method implemented in ONCOR was used to estimate mixture proportions and assign individuals captured in the mixed fishery to a baseline population. For the mixture analysis, 95% confidence intervals were reported by bootstrapping 1,000 times. The second approach used a Bayesian mixture model as implemented in the program BAYES (Pella and Masuda 2001). In this analysis, stock composition estimates were generated using nine 10,000 iteration Markov Chain Monte Carlo (MCMC) chains. For eight of the nine MCMC chains, the initial proportion values were set to 0.86 for a particular population, with that population changing for each chain. For the remaining seven stocks, proportion values of 0.14 were equally distributed. For the remaining MCMC chain, initial proportion values were equally distributed across all eight baseline Dolly Varden stocks. Convergence of chains was assessed with the Gelman and Rubin shrink factor. Calculation of stock composition was accomplished by combining the last 1000 iterations of each chain.

Fifteen microsatellite DNA markers were assayed from tissue samples collected as follows: A) along the Beaufort Sea coast between 2011 and 2014 [Herschel Island (n= 420), Ptarmigan Bay (n= 87), King and Sabine points (n= 118), and Shingle Point (n= 889)], and B) from the Mackenzie Delta and Rat River between 2012 and 2014 [Big Eddy (n= 168), mouth of Rat River (n= 199), Destruction city (n= 169)] (see Figure 1 for locations).

The harvest rate was calculated by dividing the estimated total number of Dolly Varden from Rat River that were reportedly harvested by the estimated population abundance (based on the mark-recapture study at the spawning and overwintering area) in the previous or most recent years (Appendix 2, Figure A2.1). Specifically, the harvest rates for 2009, 2010-2011, and 2013-2014 were calculated using the 2009 (5,792), 2010 (5,820), and 2013 (11,919) population estimates, respectively.

AGE ESTIMATION

Otoliths were prepared and aged according to the methods outlined in Gallagher et al. (2016). Whole otoliths immersed in water in a glass petri dish placed on a black background using a Leica (model MZ6) dissecting microscope (20 - 40 X magnification) and reflected light. A confidence index rating was assigned for each age: ‘good’, ‘fairly good’, ‘fair’, ‘fairly poor’, and ‘poor’ (ICES 2006). Ages that received a rating of fair, fairly poor, or poor, or that were ≥ 9 years

were embedded in epoxy, thin sectioned (0.35 mm thick), and re-aged. Whenever there was disagreement in the age between the whole and section method for a single sample, the reader selected the final age based on the method providing the highest confidence index.

The age reader used to produce age data for the assessment (i.e., 'Reader 1' in Gallagher et al. 2016) was different from the original age reader consistently used in previous years (e.g., Harwood et al. 2009, Roux et al. 2012). Furthermore, the original age reader exclusively aged otoliths whole. Otoliths collected between 2007 and 2012 were aged whole independently by both readers to determine the level of between-reader bias. The between-reader coefficient of variation (see Chang 1982) was 8% based on a single read of whole otoliths. The age data from 2009–2014 were not compared to earlier years due to the inconsistency in readers and methods and the possibility that the original reader may have under aged samples ≥ 6 years of age. Specifically, the contemporary age reader obtained older ages compared to the original age reader when ageing whole otoliths (Appendix 2, Figure A2.2). The greater precision/reproducibility by the contemporary reader using thin-sectioned otoliths compared to whole (particularly for ages > 9 years) (Gallagher et al. 2016) suggests the current ageing protocol provides more accurate age estimates. Age data from 2007 and 2008 generated by the contemporary age reader were not included in Roux et al. (2012) (i.e., used data from original age reader) but can be found in Appendix 2 (Figure A2.3).

CATCH-EFFORT AND BIOLOGICAL INFORMATION

The CPUE was calculated as number of Dolly Varden captured per 25 m of gill net per 24 hours for both 102 mm and 114 mm mesh combined. CPUE data from Destruction City between 2006 and 2010 were not summarized due to uncertainty regarding whether the metric was recorded for all fish captured in gill nets. The mean, standard deviation, and range of values were calculated for each sampling year among monitoring locations.

Length data among gill net mesh sizes collected between 2009 and 2014 were $\log_{10}$ transformed and differences among mesh sizes were evaluated using a Mann-Whitney (non-parametric) or two-sample t-test (parametric) for each year. The length of males and females within each mesh size for each year were evaluated using the same tests. The 102 mm mesh data had consistently high sample size for length among years and were therefore tested for inter-annual differences in length using a Kruskal-Wallis test. Due to the low number of current-year spawners among mesh sizes and sampling years, the years were pooled together to determine whether there was a difference in length between male and female current-year spawners captured in the 102 and 114 mm meshes using a Mann-Whitney test and t-test, respectively.

The survival rate (S) was calculated using the age data from the total sample for each sampling year and the combined total among years according to Robson and Chapman (1961):

$$S = \left(\frac{T}{\sum N + T - 1}\right)$$

$$T = \sum_{x=0}^{k} x(N_x)$$

where N = total number of fish fully recruited to the gear (modal age +1), and x is the sequential coded age (first age is 0, second is 1, third is 2, etc.) of those fully recruited. T is derived from the vulnerable ages in the samples. Additionally, the survival of the combined total of females and males were also calculated to evaluate differences between the sexes.

The standard error of S (SE_S):

$$SE_S = \sqrt{S\left(S - \frac{T-1}{\sum N + T - 2}\right)}$$

and 95% confidence intervals = S ± 1.96(SE_S) were also calculated. Annual mortality was calculated as 1-S.

Growth of Dolly Varden was characterized by plotting both length and weight against age for females and males separately (all sampling years combined). Inter-annual difference in mean length-at-age was examined for ages 4 to 9 given the low sample sizes for those < 4 and ≥ 10 years.

RESULTS

GENETIC MIXED-STOCK FISHERY ANALYSIS AND HARVEST ESTIMATES

The genetic baseline was suitable for MSA based on the current knowledge of contributing Canadian Dolly Varden unit-stocks to the North Slope coastal fishery. Performance of the baseline using the 100% simulation test in ONCOR indicated that precision of the genetic baseline was high and ranged from 95.9% to 100.0% (mean 99.2%). Accuracy of the individual assignments based on the leave-one-out test in ONCOR ranged from 83.3% to 100% (mean = 95.2%). The largest misidentification in the individual assignments was for fish from one of the Alaskan reporting groups (Alaska2) comprised largely of the most easterly Alaskan rivers to the Firth Drainage and Kongakut reporting group (12.1%). For the other baseline stocks, the proportion of baseline individuals incorrectly assigned ranged from 0% (Vittrekwa River) to 5.1% (Alaska3 reporting group individuals were misidentified to the Firth drainage and Kongagut reporting group). For the Rat River, 99.5% of baseline individuals were correctly assigned with the largest portion incorrectly assigned to the Big Fish River (0.3%).

Both conditional maximum likelihood and Bayesian mixture methods produced similar results during the mixed-stock analyses (Table 1). Bayesian methods have been shown to more accurately estimate the stock composition of known mixture samples than conditional maximum likelihood methods (Griffiths et al. 2010, Bradbury et al. 2015). Therefore, the Bayesian methods were used for fishery harvest calculations.

The genetic MSA revealed that Dolly Varden from the Rat River were only confidently detected (i.e., lower 95% C.I. ≥ 1) in coastal harvests at Shingle Point (Table 2). The contribution of the Rat River stock to the harvests at Shingle Point ranged from a low of 5.1% (21 fish harvested in 2012) to a high of 28.7% (33 fish harvested in 2013), although a contribution of 9.9% in 2014 resulted in the highest number harvested (n = 40) (Table 2). The fisheries in the Mackenzie Delta and Rat River were almost exclusively comprised of the Rat River stock (Table 2). It is noted that other stocks that may have contributed to the harvest at the mouth of Rat River and Destruction City in 2013, and Destruction City in 2012 were either from the Vittrekwa or Big Fish rivers.

The estimated total number of Dolly Varden harvested annually from the Rat River among all fisheries averaged 362 fish and ranged between 300 (in 2009) and 427 (in 2014) (Table 3). The estimated annual harvest rate of the population averaged 4.7% and ranged between 2.7% (2013) and 6.5% (2011) (Table 3).

CATCH-EFFORT

Harvest monitoring activities averaged 32 days among sites with start and end dates typically occurring earlier at Big Eddy compared to locations further upstream in the Rat River (Table 4). The mesh sizes most commonly used by harvesters between 2009 and 2014 was the 102 mm mesh (65.4 % of net sets). Only the monitor at Big Eddy consistently used both the 102 and 114 mm mesh while the one stationed at the mouth of the Rat River predominantly used 114 mm mesh in 2013 and 2014. The monitor at Destruction City mainly used 102 mm mesh and was the only one to use a 127 mm mesh gill net (in 2014). The Big Eddy and mouth of Rat River CPUE increased between 2009 and 2012 then declined during 2013-2014 (Table 5, Figure 2). Over the time series (1996–2014), mean/median CPUE demonstrated a sinusoidal pattern with high values in the late 1990s and in 2010–2012, and low values from 2002–2006 and 2013–2014 (Figure 2).

BIOLOGICAL INFORMATION

Length and weight

Between 2009 and 2014,the harvest monitors collected length and weight information from nearly 200 to 300 fish from the Rat River population annually (Table 6). Samples were mainly (> 85%) taken from the 102 mm mesh size apart from 2012 and 2014 when these accounted for nearly half (2012) to one third (2014) of the samples taken. As would be expected, length and weight were highly correlated (weight in g = 9^{-5} x fork length in mm $^{2.67}$, r^2= 0.88 [Power function curve]) and it was therefore assumed that any analyses conducted for length would produce similar results for weight.

Dolly Varden harvested in the subsistence fishery were mainly between 350 mm/567 g and 550 mm/1,896 g. An effect of mesh size was observed for length with larger-sized char captured in the 114 mm mesh compared to the 102 mm mesh in 2009, 2010, 2013, and 2014, although no effect was observed in 2011 and 2012 (Table 6, Appendix 2: Table A2.1). In 2014, the only year with data from 127 mm mesh, the mean length of fish captured in the 127 mm mesh was higher than that from the 114 mm mesh, and unexpectedly not different from fish captured in the 102 mm mesh (Table 6, Appendix 2: Table A2.1). Length was evaluated separately among gill net mesh sizes given the high prevalence of differences observed.

Statistically significant differences in length between males and females among mesh sizes and sampling years were only detected in 2010 and 2013 (Appendix 2: Table A2.2). Males were larger than females in the 102 mm mesh in 2010 while females were larger in size in the 102 mm and 114 mm mesh in 2013 (Table 6). Furthermore, when all sampling years were pooled, no significant difference in length between males and females was observed in the 102 mm and 114 mm mesh (Appendix 2, Table A2.2). Length was not investigated separately between females and males given the low incidence of differences in length between sexes.

Significant differences in length for the total sample captured in the 102 mm mesh were detected among years (X^2 = 195, d.f.= 5, p > 0.001). Between 2009 and 2014, mean length of the total sample of Dolly Varden varied between 460-505 mm for the 102 mm mesh and 438-547 mm for the 114 mm mesh (Table 6, Figure 3). Similarly, weight was lower in 2012 compared to other years between 2009 and 2014, particularly in the 114 mm mesh (Figure 4).

A relatively high proportion (≥ 50%) of Dolly Varden > 500 mm was harvested in the fishery during 2009–2014 with the exception of 2009 and 2012 (Figure 5). Fish captured in either 102 mm or 114 mm mesh gill nets demonstrated different patterns in length frequency as a higher proportion of fish ≤ 450 mm were observed in the 102 mm mesh, while neither mesh size appeared to consistently select for larger sizes (≥ 600 mm) (Figure 5). Males and females had

relatively similar distributions, although males tended to be more prevalent among size classes ≥ 650 mm (Figure 6).

The average length of current-year spawners harvested between 2009 and 2014 were within the range observed since 1995; typically > 500 mm although some were as small as 372 mm (male) and 398 mm (female) (Table 7, Figure 7). No significant differences were observed between sexes in the 102 mm mesh (U = 2027, p = 0.54) or 114 mm (F = 7.1; d.f. = 1,88; p = 0.084) (all years combined) (Table 7, Figure 8). The weight of female and male current-year spawners was mainly between 1,400 and 2,500 g (Figures 7 and 9). Similar to the combined sample, length and weight of current-year spawners were relatively low in 2012.

The lack of mesh size information between 1995 and 2000 limits our ability to evaluate the length and weight data for the whole Rat River Harvest Monitoring Program time-series. Regardless, it was assumed that because Dolly Varden were sampled from the subsistence fishery, the mesh sizes would be similar to those documented between 2001 and 2014. Median values from box plots and length frequency distributions suggest that Dolly Varden captured since 2010 (with the exception of 2012) are among the largest in the time-series and that length and weight have demonstrated an increasing trend since 2006 (Figures 3, 4, and 7–9, Appendix 2, Figure A2.4). Additionally, during 2010, 2011, and 2013 the proportion of fish ≥ 550 mm was higher than previously observed while the proportion among the largest size classes (≥ 600 mm) for 2010–2014 exceeded the long term average (Figure 10).

Age and survival/mortality

The annual sample size of age data collected between 2009 and 2014 ranged between 131 and 207 (Table 6). Ages of Dolly Varden harvested in the fishery ranged between 3 and 13 years and were mainly distributed between 4 and 7 years (Figure 11). No significant differences in age were detected between fish from the 102 and 114 mm mesh sizes in 2009, 2011, 2012, and 2014 (Appendix 2: Table A2.3). However, significantly older ages were observed in the 114 mm mesh in 2010 and in the 102 mm mesh 2013, although the differences in the means between mesh sizes were ≤ 1 year (Table 6, Figure 11, Appendix 2: Table A2.3). Age data from mesh sizes were combined given the low prevalence of and small differences in age. No significant differences were observed between males and females (all mesh sizes combined) in 2009, 2010, 2012, and 2014 while older females were observed in 2011 and 2013 (Table 6, Figure 12, Appendix 2: Table A2.4).

Between 2009 and 2014, mean and modal values ranged between 5 and 7 years of age with no trend, apart from relatively younger char in 2009 and in 2012 (Table 6). There was a relatively high proportion (37%) of older ages (≥ 8 years) in 2013. Significant differences in age were detected among years in the total sample (X^2 = 120, d.f. = 5, p > 0.001) captured in the 102 mm mesh (Figure 11).

Estimates of survival based on the age information from the subsistence harvest increased between 2009 (S = 0.33) and 2014 (S = 0.55) (Table 8). The combined total sample revealed an annual survival estimate of 52% with females demonstrating a higher rate of survival (S = 0.56) compared to males (S = 0.43).

Growth

The length-at-age of Dolly Varden from the Rat River revealed a wide range of sizes among ages, particularly for ages 5 (300–650 mm), 6 (353–712 mm), and 7 (372–695 mm) years (Figure 13). Males demonstrated a greater mean length-at-age compared to females starting at approximately age 5 (Figure 13). Upon reaching age 8 (~ 550 mm) the average annual growth of females did not change considerably. However, males did not demonstrate an obvious

asymptote although sample size for ages ≥ 10 years was low. A similar pattern was observed for weight-at-age where a wide range of weights was evident among age classes, although differences between sexes were evident starting at approximately age 6 (Figure 14). Females infrequently surpassed 2,500 g while some males attained up to 4,000–5,000 g. Between 2009 and 2014, the mean fork length among ages four to nine did not change substantially for females or males (Figure 15).

Proportion of non-spawners and spawners

The composition of male and female current-year non-spawners and spawners sampled from the subsistence fishery between 2009 and 2014 was variable. Approximately 1.2 to 1.7 times more female non-spawners compared to male non-spawners were sampled between 2009 and 2012 with twice as many males sampled in 2013 and a near equal number of both sexes sampled in 2014 (Table 9, Figure 16). Female spawners consistently outnumbered male spawners by approximately 4 to 6 times. Although relatively low in 2012, the proportion of both female and male spawners increased from 7.4% and 1.6%, respectively in 2009 to 20% and 7.7%, respectively in 2014 (Table 9, Figure 16).

Data from 2009-2014 were consistent with earlier years where female non-spawners tended to outnumber males (Table 9, Figure 16). The proportion of spawners in the fishery in 2013 and 2014 was similar to years 1999–2001 and had increased from relatively low values (~ <10% for females, < 4% for males) from 2004 to 2010.

DISCUSSION

GENETIC MIXED-STOCK FISHERY ANALYSES AND HARVEST ESTIMATES

Four years of genetic data indicate that Dolly Varden from the Rat River likely do not frequent coastal habitats west of Shingle Point. Additional fishery-independent coastal sampling throughout the open water period would be required to confirm coastal dispersal patterns. In Canada, the Vittrekwa and Rat River stocks undertake the longest migrations in freshwater compared to other known anadromous populations to utilize the Beaufort Sea for summer feeding (~391 and ~345 river km, respectively [one way]). The long migration distance may be one reason why the Rat River population does not appear to occupy coastal locations west of Shingle Point although further distances are conceivable given the possible dispersal into offshore habitat (Courtney et al. 2016, Courtney et al. 2018).

Results from the genetic mixed-stock analyses estimated the percent contribution (mean = 14%) and number (mean = 29 fish) of Dolly Varden from the Rat River harvested at Shingle Point between 2011 and 2014. These estimates indicate that the coastal subsistence fishery consists of a lower proportion of the Rat River population than what would have been estimated had the 50% assumption been utilized (DFO 2001, Harwood 2001, Harwood et al. 2009, Roux et al. 2012). Additional sampling years are required to elucidate the level of inter-annual variation in contribution and harvest of the Rat River stock among coastal fisheries, particularly given the wide range observed in the proportion between 2012 (5.1%) and 2013 (28.7%). Many factors may influence the contribution of stocks to the fishery at Shingle Point including the timing and effort of the fishery as well as environmental conditions that could affect the distribution of fish.

The high contribution of the Rat River stock observed in fisheries situated in the Mackenzie Delta (south of Aklavik) and or Rat River would be expected given the high degree of philopatry among Canadian populations (Harris et al. 2015) and the presumably greater population abundance in the Rat River stock compared to Vittrekwa River. The apparent detection of a

small number of fish originating from the Vittrekwa and Big Fish rivers in the Rat River underscores the low level of dispersal among stocks of fish that will likely not spawn in the current-year (Harris et al. 2015).

CATCH-EFFORT

Catch-effort values have fluctuated over the time series, with an increase in the frequency of relatively high CPUE values since 2006. The relatively high amount of inter-annual variation in CPUE may or may not indicate variation in population abundance. According to harvesters, factors negatively influencing catchability include high water levels and debris. Comprehensive analyses characterizing the interaction between environmental conditions and CPUE, and how these influence the modelling of population dynamics have been undertaken and will be published elsewhere (X. Zhu, DFO, pers. comm.).

BIOLOGY

Length and weight information collected from the Rat River Harvest Monitoring Program between 2009 and 2014 indicates a wide range of sizes of Dolly Varden were harvested in the fishery. The size of fish appears to have increased since 2007, apart from a noticeable decrease in mean/median length and weight in 2012. The reason for the decrease is unknown. In 2012 there was a high number of non-spawners (90.6 %) sampled in the fishery that were either juveniles or resting adults. There was also a low number of mature males, although there was no statistical difference between male and female spawning fish among years. A positive correlation was observed between the proportion of current-year spawners and the mean length of fish in the Rat River Harvest Monitoring Program using data collected between 1995 and 2014 (Pearson correlation $r = 0.71$, $p < 0.001$). This indicates that smaller sizes would be expected in the subsistence fishery in years when there was a high contribution of non-spawners. A low contribution of spawners in the fishery may result if a high proportion of adults do not undertake an ocean migration in the spring and instead remained in Fish Creek to spawn (Gallagher et al. 2018). It is noted that a high proportion (59.9%) of Dolly Varden live-sampled at the spawning location in Fish Creek at the end of September in 2012 were current-year spawners (Gallagher et al. 2020).

The lack of consistency in the differences in size between males and females captured in the subsistence fishery among years stands in contrast to the larger-size males consistently observed in the annual mark-recapture program conducted in Fish Creek (Gallagher et al. 2020). However, differences in gear selectivity likely contributed to these differences since the harvest monitoring program used gill nets and the mark-recapture program used a seine net.

Age frequency information between 2009 and 2014 demonstrated a similar pattern to length data. The modal age of harvested fish ranged between 5 and 7 years every year between 2009 and 2014 with an increasing proportion among older ages (≥8 years) over time suggesting improved survival of adults. The higher mortality estimates observed in males compared to females suggest that male spawning behaviour may increase the risk of mortality. Iteroparous salmonids that invest heavily in reproduction such as male Dolly Varden (i.e., vivid colouration, secondary sexual characters, and defending optimal spawning habitat and mates) experience reduced survival and longevity (Fleming and Reynolds 2004).

The reasons for the wide range in length among ages in anadromous Dolly Varden likely includes a combination of variable age-at-smoltification, differences in individual energy accumulation while feeding at sea, spawning frequency, and annual ocean migration patterns (i.e., either conduct annual migration or periodically forgo annual migration). The relatively little inter-annual change in growth observed between 2009 and 2014 (Figure 15) likely did not have

as much influence maintaining the presence of large-size fish in the population compared to the increase in survival rate.

The relatively high contribution of current-year female and male spawners observed in the harvest monitoring programs in years 2011, 2013, and 2014 (~ >30%) contrasts with the period of time between 2004-2010 when spawners were less frequent (mainly < 15%) and the population was transitioning from low to increased abundance. Interestingly, starting in 2011, the proportion of male current-year spawners was among the highest (>5%) since 1998–2001. The number of male spawners is expected to be lower compared to females not only because the population exhibits partial but because anadromous males skip annual spawning (87.5%) more often than females (49.1%) (Gallagher et al. 2018). Further, anadromous individuals that skip spawning will more often forgo an annual migration to the sea and remain in freshwater over the summer to spawn (Gallagher et al. 2018). Males may have an increased tendency to periodically skip an annual ocean migration since they skip spawning more often than females. Hendry et al. (2004) predicted that when costs and benefits differ between sexes, males and females should differ in migratory tendencies. Anadromous fish remaining in freshwater in the same year as they spawn removes the mortality risks associated with migration. If anadromous males tended to skip migration more often it could help explain why a relatively small number of male current-year spawners are typically captured in fisheries. Therefore, variation in the number of male spawners among years may be explained by the proportion of the population that skip an ocean migration.

Assuming a positive correlation between body-size and fecundity (Crespi and Teo 2002), the high prevalence of female spawners combined with the increase in size in recent years suggests more eggs are produced for spawning which would promote greater reproductive success for the population assuming environmental factors influencing embryo development do not negatively affect survival.

CONCLUSION

Information from the Rat River Harvest Monitoring Program indicates that the Rat River population of Dolly Varden is currently stable and sustainably harvested. Indicators of improved stock status in recent years were the: increased instances of years with relatively high CPUE values, increasing trend in size of fish, the presence of older ages suggesting higher rate of survival, and the frequency of years with high proportions of current-year spawners.

The use of genetic mixed-stock analyses has increased the power to estimate the number of fish from the Rat River that are harvested and the harvest rate, and has improved the delineation of the geographic occurrence of the population along coastal habitats. Continuing to collect genetic information, including from Dolly Varden populations that could potentially contribute to mixed-fisheries yet have not been sampled, will substantially improve data used in the population assessment and provide greater confidence in its conclusions. It is important to maintain the annual harvest monitoring program for Dolly Varden from the Rat River, including to ensure data necessary to monitor trends in population status are available and the best possible science advice is provided to co-management partners.

ACKNOWLEDGEMENTS

The Rat River Harvest Monitoring Program and Coastal Harvest Monitoring Program were made possible by implementation funds under the Gwich'in Comprehensive Land Claim Agreement and the Inuvialuit Final Agreement (both administered by Larry Dow, DFO Inuvik) provided to C.G. and K.H. Genetic mixed-stock fishery analyses were made possible through

DFO Fisheries Management (Larry Dow), DFO Species at Risk (Ray Ratynski) and DFO's Genomics Research and Development Initiative Program awarded to R.B and J.R. We acknowledge the invaluable assistance from the following: *Rat River Harvest Monitoring*- John and Tyler Carmichael (Big Eddy), Billy Wilson (mouth of Rat River), Selwyn Kay (Destruction City), and Kevin Bill and Ellen Lea (DFO Inuvik); *Shingle Point*- Jordan McLeod, Dennis Arey, Andrew Gordon, Cody Kogiak, and Cecilia Greenland (Aklavik); Tracey Loewen, Alex Hare, Dana Neumann, and David Boguski (DFO Winnipeg), Lilian Tran (U. Waterloo), Ben Kissinger (U. Manitoba), Darcy McNicholl (U. Manitoba), Jasmine Brewster (Aurora Research Institute), and Kristin Hynes and Danny Swainson (Fisheries Joint Management Committee); *Herschel Island*- Yukon Territorial Park Rangers (particularly Richard Gordon); *Ptarmigan Bay*- Danny C. Gordon; *DFO genetics laboratory*- Lucy Johnson for laboratory support and Penelope Crane for providing samples of Alaskan Dolly Varden. We are grateful for the support provided by the Ehdiitat Renewable Resources Council, Tetlit Gwich'in Renewable Resources Council, Aklavik Hunters and Trappers committee, Rat River Working Group, and West Side Working Group.

REFERENCES CITED

Anderson, E., Waples, R.S., and Kalinowski, S.T. 2008. An improved method for estimating the accuracy of genetic stock identification. Can. J. Fish. Aquat. Sci. 65:1475–1486.

Armstrong, R.H., and Morrow, J.E. 1980. The Dolly Varden charr, Salvelinus malma. In Charrs: salmonid fishes of the genus Salvelinus. Edited by E.K. Balon. Dr. W. Junk Publishers, The Hague. pp. 99–140.

Benson, K. 2010. Gwich'in traditional knowledge: Rat River Dolly Varden char. Report prepared for the Gwich'in Renewable Resources Board, Inuvik. Gwich'in Social and Cultural Institute, Tsiigehtchic, NT. 50 p.

Bradbury, I.R., Hamilton, L.C., Rafferty, S., Meerburg, D., Poole, R., Dempson, J.B., Robertson, M.J., Reddin, D.G., Bourret, V., Dionne, M., Chaput, G., Sheehan, T.F., King, T.L., Candy, J.R., and Bernatchez, L. 2015. Genetic evidence of local exploitation of Atlantic salmon in a coastal subsistence fishery in the Northwest Atlantic. Can. J. Fish. Aquat. Sci. 72: 83–95.

Chang, W.Y. B. 1982. A statistical method for evaluating the reproducibility of age determination. Can. J. Fish. Aquat. Sci. 39:1208–1210.

COSEWIC (Committee on the Status of Endangered Wildlife in Canada). 2010. COSEWIC assessment and status report on the Dolly Varden Salvelinus malma malma (Western Arctic populations) in Canada. Committee on the Status of Endangered Wildlife in Canada, Ottawa, ON. x + 65 p.

Craig, P.C. 1984. Fish use of coastal waters of the Alaskan Beaufort Sea: a review. Trans. Am. Fish. Soc. 113: 265–282.

Crespi, B.J., and Teo, R. 2002. Comparative phylogenetic analysis of the evolution of semelparity and life history in salmonid fishes. Evol. 56: 1008–1020.

Courtney, M.B., Scanlon, B.S., Rikardsen, A.H., and Seitz, A.C. 2016. Marine behavior and dispersal of an important subsistence fish in Arctic Alaska, the Dolly Varden. Env. Biol. Fish. 99: 209–222.

Courtney, M.B., Scanlon, B.S., Brown, R.J., Rikardsen, A.H., Gallagher C.P., and Seitz, A.C. 2018. Offshore ocean dispersal of adult Dolly Varden Salvelinus malma in the Beaufort Sea. Pol. Biol. Fish. 41: 817–825.

DFO. 2001. Rat River Dolly Varden. DFO Science Stock Status Report D5-61(2001): 15 p.

DFO. 2014. Assessment of Dolly Varden (*Salvelinus malma*) from the Rat River, Northwest Territories, 2002-2007. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2014/036.

Fleming, I.A., and Reynolds, J.D. 2004. Salmonid breeding systems. *In* Evolution illuminated: salmon and their relatives. Edited by A.P. Hendry and S.C. Stearns. Oxford University Press, Oxford. pp 264-294.

Gallagher, C.P., Howland, K.L., Harris, L.N., Bajno, R., Sandstrom, S., Loewen, T., and Reist, J. 2013. Dolly Varden (*Salvelinus malma malma*) from the Big Fish River: abundance estimates, effective population size, biological characteristics, and contribution to the coastal mixed-stock fishery. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/059. v + 46 p.

Gallagher, C.P, Howland, K.L, and Wastle, R.J. 2016. A comparison of different structures and methods for estimating age of northern-form Dolly Varden *Salvelinus malma malma* from the Canadian Arctic. Polar Biol. 39: 1257–1265.

Gallagher, C.P., Howland, K.L., Sandstrom, S.J., and Halden, N.M. 2018. Migration tactics affect spawning frequency in an iteroparous salmonid (*Salvelinus malma*) from the Arctic. Plos One 13(12): e0210202.

Gallagher, C.P., Howland, K.L., and Sandstrom, S.J. 2020. Population abundance and biological characteristics of Dolly Varden (*Salvelinus malma malma*) from the Rat River collected from a mark-recapture program: 2009–2014. DFO Can. Sci. Advis. Sec. Res. Doc. 2020/066. iv + 143 p.

Griffiths, A. M., Machado-Schiaffino, G., Dillane, E., Coughlan, J., Horreo, J.L., Bowkett, A.E., Minting, P., Toms, S., Roche, W., Gargan, P., McGinnity, P., Cross, T., Bright, D., Garcia-Vazquez, E., and Stevens, J.R. 2010. Genetic stock identification of Atlantic salmon (*Salmo salar*) populations in the southern part of the European range. BMC Genetics 11: 31.

Harris L.N., Bajno, R., Gallagher, C.P., Koizumi, I., Johnson, L.K., Howland, K.L., Taylor, E.B., and Reist, J.D. 2015. Life-history characteristics and landscape attributes as drivers of genetic variation, gene flow and fine-scale population structure in Northern Dolly Varden (*Salvelinus malma malma*) in Canada. Can. J. Fish. Aquat. Sci. 72: 1477–1493.

Harwood, L.A. 2001. Status of anadromous Dolly Varden (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through community-based sampling of the subsistence fishery, August-September 1989–2000. DFO Can. Sci. Advis. Sec. Res. Doc. 2001/090. 30 p.

Harwood, L.A., Sandstrom, S., and Linn, E. 2009. Status of anadromous Dolly Varden (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through sampling of the subsistence fishery (1995-2007). Can. Manuscr. Rep. Fish. Aquat. Sci. 2891: vii + 52 p.

Howland, K. Mochnacz, N., Gallagher C., Tallman, R., Ghamry, H. Roux, M.J., Sandstrom, S., and Reist, J. 2012. Developing strategies for improved assessment and ecosystem-based management of Canadian northern Dolly Varden. *In* Global progress in ecosystem-based fisheries management. Edited by G.H. Kruse, H.I. Browman, K.L. Cochrane, D. Evans, G.S. Jamieson, P.A. Livingston, D. Woodby, and C.I. Zhang. University of Alaska Fairbanks, Alaska. pp. 169–168.

Hendry, A.P., Bohlin, T., Jonsson, B., and Berg, O.K. 2004. To sea or not to sea? Anadromy versus residency in salmonids. *In* Evolution illuminated: salmon and their relatives. Edited by A.P. Hendry and S.C. Stearns. Oxford University Press, Oxford. pp 92–125.

ICES (International Council for Exploration of the Sea). 2006. Working Group Name: Workshop on Age Determination of Redfish (WKADR), 28 August – 1 September 2006, Vigo, Spain. ICES CM 2006/RMC:09. 43 pp.

Jessop, C.S., Porter, T.R., Blouw, M., and Sopuck, R. 1973. Fish resources of the Mackenzie River valley: an intensive study of the fish resources of two main stem tributaries. Canada Task Force on Northern Oil Development, Environmental-Social Programs, Northern Pipelines. 198 p.

Kalinowski, S.T., Manlove, K.R., and Taper, M.L. 2007. ONCOR: software for genetic stock identification. Montana State University, Bozeman, MT.

Krueger, C.C., Wilmot, R.L., and Everett, R.J. 1999. Stock origins of Dolly Varden collected from Beaufort Sea coastal sites of Arctic Alaska and Canada. Trans. Am. Fish. Soc. 128: 49–57.

Mochnacz, N.J., Schroeder, B.S., Sawatzky, C.D., and Reist, J.D. 2010. Assessment of northern Dolly Varden, *Salvelinus malma malma* (Walbaum, 1792), habitat in Canada. Can. Manuscr. Rep. Fish. Aquat. Sci. 2926: vi + 48 p.

Pella, J., and Masuda, M.. 2001. Bayesian methods for analysis of stock mixtures from genetic markers. Fish. Bull., U.S. 99: 151–167.

Robson, D.A., and Chapman, D.G. 1961. Catch curves and mortality rates. Trans. Am. Fish. Soc. 90: 181–189.

Roux, M.-J., Howland, K.L., Gallagher, C.P., and Tallman, R.F. 2012. Synthesis of biological and harvest information used to assess populations of northern form Dolly Varden (*Salvelinus malma malma*) in Canada. Part I: Rat River. DFO Can. Sci. Advis. Sec. Res. Doc. 2011/132. 77 p.

Sandstrom, S.J., Chetkiewicz, C.B., and Harwood, L.A. 2001. Overwintering habitat of juvenile Dolly Varden (*Salvelinus malma*)(W.) in the Rat River, NT, as determined by radio telemetry. DFO Can. Sci. Advis. Sec. Res. Doc. 2001/092.

Sandstrom, S., Harwood, L., and Howland, K. 2009. Status of anadromous Dolly Varden char (*Salvelinus malma*) of the Rat River, Northwest Territories, as assessed through mark-recapture and live sampling at the spawning and overwintering site (1995-2007). Can. Tech. Rep. Fish. Aquat. Sci. 2842.

Utter, F., and Ryman, N. 1993. Genetic markers and mixed stock fisheries. Fisheries 18: 11–21.

TABLES AND FIGURES

Table 1. Sample size (n), contribution rates (%) and 95% confidence intervals (in brackets) of Dolly Varden from the Rat River among sampling years and harvest locations A) along the Beaufort Sea coast and B) in the Mackenzie Delta and Rat River based on stock mixture analyses using Bayesian and conditional maximum likelihood approaches with BAYES and ONCOR software, respectively.

A: BEAUFORT SEA COAST

Year	Herschel Island			Ptarmigan Bay*			King Pt./ Sabine Pt.			Shingle Point		
	BAYES	ONCOR	n	BAYES	ONCOR	n	BAYES	ONCOR	n	BAYES	ONCOR	n
2014	1.4 (0.2-3.7)	1.4 (0-3.5)	143	-	-	-	0.9 (0-8.1)	0 (0-0)	14	9.9 (7.1-12.9)	9.8 (7.2-12.9)	384
2013	0.1 (0-1.3)	0 (0-0)	107	-	-	-	0.8 (0-6.1)	0 (0-0)	16	28.7 (20.9-37.8)	28.7 (20.4-38.8)	107
2012	0.2 (0-1.4)	0 (0-0)	87	-	-	-	0.2 (0-1.4)	0 (0-0)	65	5.1 (2.7-8.1)	5.1 (2.5-8.1)	236
2011	0.2 (0-1.6)	0 (0-0)	83	1.2 (0.1-4.4)	1.1 (0-4.4)	87	0.6 (0-5.1)	0 (0-0)	23	11.7 (7.4-16.8)	11.5 (7.3-17)	162

* no genetic samples available from Ptarmigan Bay 2012-2014

B: MACKENZIE DELTA AND RAT RIVER

Year	Big Eddy (Mackenzie Delta)			Mouth of Rat River			Destruction City (Rat River)		
	BAYES	ONCOR	n	BAYES	ONCOR	n	BAYES	ONCOR	n
2014	98.5 (94.2-100)	100 (100-100)	58	99 (96.4-100)	100 (98.7-100)	91	98.6 (94.8-100)	100 (100-100)	59
2013	98.5 (94.0-100)	100 (100-100)	60	95.1 (88-99)	96.6 (91.5-100)	59	93.7 (86.1-94.2)	95 (90-100)	60
2012	98.3 (93.6-100)	100 (100-100)	50	98.3 (93.3-100)	100 (100-100)	49	96.4 (90-99.6)	98 (94-100)	50

*Table 2.Timing and catch information (location, year, dates, number of fish) for Dolly Varden harvested at subsistence fishing locations along the Canadian Beaufort Sea coast and in the Mackenzie Delta and Rat River. Percent contribution (± 95% confidence interval) and number of harvested fish (± 95% confidence interval) from the Rat River stock based on a genetic mixed-stock fishery analysis (Bayesian mixture methods) is also provided. No fishing occurred at Ptarmigan Bay in 2014, and * no genetic samples collected; assumed that contribution of Rat River stock was negligible.*

Locations	Year	Dates of harvest and sampling	Total number of Dolly Varden harvested	% contribution to harvest from Rat River stock	Number of Rat River stock harvested
Beaufort Sea Coast					
Herschel Island	2014	June 21-August 11	151	1.4 (0.2-3.7)	2 (0.3-6)
	2013	June 29-August 29	189	0.1 (0-1.3)	0 (0-2)
	2012	July 15-August 19	118	0.2 (0-1.4)	0 (0-2)
	2011	June 13-August 4	129	0.2 (0-1.6)	0 (0-2)
Ptarmigan Bay	2014	-	-	-	-
	2013	Early July	12	*	*
	2012	Early July	1	*	*
	2011	July 1-4	93	1.2 (0-1.6)	1 (0-4)
King Pt./ Sabine Pt.	2014	July 18 & August 1	16	0.9 (0-8.1)	0 (0-1)
	2013	August 2 & 3	19	0.8 (0-6.1)	0 (0-1)
	2012	July 20-23	66	0.2 (0-1.4)	0 (0-1)
	2011	July 22-23 & August 2	43	0.6 (0-5.1)	0 (0-2)
Shingle Point	2014	July 17-August 8	404	9.9 (7.1-12.9)	40 (29-52)
	2013	July 30-August 14	115	28.7 (20.9-37.8)	33 (24-44)
	2012	July 16-August 9	412	5.1 (2.7-8.1)	21 (11-33)
	2011	July 22-August 9	193	11.7 (7.4-16.8)	23 (14-32)
Mackenzie Delta[1]/ Rat River[2]					
Big Eddy[1]	2014	July 30-August 28	60	98.5 (94.2-100)	59 (57-60)
	2013	July 24-August 31	60	98.5 (94-100)	59 (56-60)
	2012	July 29-September 1	50	98.3 (93.6-100)	49 (47-50)
Mouth of Rat River[2]	2014	August 7-September 8	60	99 (96.4-100)	59 (58-60)
	2013	August 5-September 6	60	95.1 (88-99)	57 (53-59)
	2012	August 9-September 2	50	98.3 (93.3-100)	49 (47-50)
Destruction City[2]	2014	August 6-September 10	60	98.6 (94.8-100)	59 (57-60)
	2013	August 11-September 12	60	93.7 (86.1-94.2)	56 (52-56)
	2012	August 6-September 7	50	96.4 (90-99.6)	48 (45-50)

Table 3. Estimated number of Dally Varden from the Rat River stock harvested between 2009 and 2014 among inland fisheries monitored from within communities (Aklavik and Fort McPherson, NT) or by Rat River Harvest monitors and coastal fisheries (Herschel Island and Shingle Point, YT). Dead-sampled fish from fishery-independent research (at the spawning and overwintering location in Fish Creek) is also reported. Harvest rate was calculated by dividing total harvest by population estimates.

Year	Aklavik & Ft. McPherson[+]	Rat River Harvest Monitors	Beaufort Sea coast	Research	Total harvest	Harvest rate
2014	167	178*	42*	0	387	3.2
2013	113	172*	33*	0	318	2.7
2012	195	146*	21*	0	362	6.2
2011	199	147	24*	9	379	6.5
2010	59	220	?*	0	279[‡]	4.8
2009	69	192	?*	0	261[‡]	4.5

[+]Source: E. Lea, DFO Fisheries Management, Inuvik, NT. Based on community surveys and reported harvest.
*Based on results from genetic mixed-stock fishery analyses. Note, no genetic mixed- stock analyses data available for Beaufort Sea coast prior to 2011.
[‡]Underestimated due to lack of information from coastal genetic mixed-stock analyses.

Table 4. Start and end dates, and total number of days at three sampling locations of the Rat River Harvest Monitoring Program (2009-2014).

Year	Big Eddy			Mouth of Rat River			Destruction City		
	Start date	End date	No. days	Start date	End date	No. days	Start date	End date	No. days
2014	July 30	August 28	29	August 7	September 8	32	August 6	September 10	35
2013	July 24	August 31	38	August 5	September 6	34	August 11	September 12	32
2012	July 29	September 1	34	August 9	September 2	24	August 6	September 7	32
2011	July 30	August 31	32	July 30	August 31	31	August 7	September 6	30
2010	August 3	September 5	33	August 3	September 4	32	August 12	September 10	29
2009	August 7	September 10	34	August 8	September 9	32	August 13	September 11	29

Table 5. Number of gill net sets (n), mean (standard deviation in brackets) and range of catch-per-unit-effort (CPUE, number per 25 m per 24 hours) of Dolly Varden from the Rat River Harvest Monitoring Program among 102, 114, and 127** mm gill net mesh size (2009-2014) at: A) Big Eddy, B) mouth of Rat River, and C) in the Rat River at a location named Destruction City.*

A: BIG EDDY

Year	102 mm			114 mm			Combined		
	n	CPUE	Range	n	CPUE	Range	n	CPUE	Range
2014	22	4.5 (3.6)	0 – 10.9	26	7.9 (18.8)	0 – 98.4	48	6.3 (14.0)	0 – 98.4
2013	30	3.8 (4.0)	0 – 12.3	27	3.2 (5.1)	0 – 21.9	57	3.5 (4.5)	0 – 21.9
2012	12	16.4 (9.3)	2.7 – 32.8	23	14.5 (10.5)	2.7 – 45.1	35	15.2 (10)	2.7 – 45.1
2011	11	22.2 (11.4)	4.1 – 43.7	20	26.3 (15.3)	1.4 – 57.4	31	24.8 (14.0)	1.4 – 57.4
2010	30	10.3 (7.1)	0 – 26.2	12	5.9 (5.4)	0 – 16.4	42	9.0 (6.9)	0 – 26.2
2009	26	3.6 (4.5)	0 – 16.4	10	5.8 (4.3)	1.4 – 16.4	36	4.2 (4.5)	0 – 16.4

B: MOUTH OF RAT RIVER

Year	102 mm			114 mm			Combined		
	n	CPUE	Range	n	CPUE	Range	n	CPUE	Range
2014	9	10.3 (8.6)	0 – 28.4	45	5.0 (5.5)	0 – 26.2	54	5.9 (6.4)	0 – 28.4
2013	14	2.9 (2.0)	0 – 5.5	30	3.7 (2.5)	0 – 8.2	44	3.5 (2.3)	0 – 8.2
2012	32	7.8 (6.0)	0 – 24.6	-	-	-	32	7.8 (6.0)	0 – 24.6
2011	33	15.3 (27.3)	1.1 – 131.7	2	29.2 (20.6)	14.6 – 43.7	35	16.1 (26.9)	1.1 – 131.7
2010	58	8.3 (6.5)	0 – 43.7	-	-	-	58	8.3 (6.5)	0 – 43.7
2009	68	5.9 (9.5)	0 – 52.2	-	-	-	68	5.9 (9.5)	0 – 50.2

C: DESTRUCTION CITY

Year	102 mm			114 mm			Combined		
	n	CPUE	Range	n	CPUE	Range	n	CPUE	Range
2014**	-	-	-	-	-	-	70	7.4 (6.4)	0 – 23.9
2013	63	4.1 (4.9)	0 – 20.2	-	-	-	63	4.1 (4.9)	0 – 20.2
2012	-	-	-	60	6.0 (5.6)	0 – 16.4	60	6.0 (5.6)	0 – 16.4
2011	61	8.2 (6.7)	0 – 26.2	-	-	-	61	8.2 (6.7)	0 – 26.2
2010	87	3.6 (4.6)	0 – 17.5	-	-	-	87	3.6 (4.6)	0 – 17.5
2009	57	4.7 (5.3)	0 – 23.9	-	-	-	57	4.7 (5.3)	0 – 23.9

* n=values includes data from harvesters other than the monitor in the same location
**127mm mesh used

Table 6. Sample size (n), mean, mode (age only), and range of fork length and age for male and female, and the total sample of Dolly Varden from the Rat River Harvest Monitoring Program (2009-2014) captured using A) 102 mm, B) 114 mm, and C) 127 mm mesh gill nets, and D) the combined total sample. Note that the Total includes samples where sex or mesh size was not recorded.*

Year	Male							Female							Total*						
	Fork Length (mm)			Age (years)				Fork Length (mm)			Age (years)				Fork Length (mm)			Age (years)			
	n	Mean	Range	n	Mean	Mode	Range	n	Mean	Range	n	Mean	Mode	Range	n	Mean	Range	n	Mean	Mode	Range
A: 102 mm Mesh Gill Nets																					
2014	20	496	395–580	18	6.4	7	5–8	23	488	380–570	22	6.4	5	4–12	87	460	165–604	40	6.4	5	4–12
2013	36	475	372–646	35	6.2	6	5–10	66	524	369–617	59	7.6	6	4–13	169	491	160–646	99	7	6	4–13
2012	36	471	345–665	31	5	5	3–8	31	460	378–632	27	5	5	4–7	184	434	310–716	58	5	5	3–8
2011	36	518	342–709	36	6.3	6	4–10	85	501	342–625	82	6.8	7	4–12	126	505	342–709	123	6.6	7	4–12
2010	73	504	326–706	71	5.9	5	4–10	128	467	319–635	118	5.8	5	3–10	207	481	319–706	194	5.8	5	3–10
2009	75	465	398–579	65	5.3	5	4–7	100	459	382–620	93	5.6	5	3–11	177	461	382–620	160	5.5	5	3–11
B: 114 mm Mesh Gill Nets																					
2014	39	542	307–767	71	5.9	5	4 – 11	38	537	456–650	35	6.9	6	5–13	97	525	195–767	72	6.4	6	4–13
2013	24	526	428–625	23	6.5	6	5 – 8	48	566	452–640	48	7.8	7.8	6–11	122	535	378–671	71	7.4	7	5–11
2012	28	480	296–721	26	5.1	4	3 – 11	53	468	176–631	45	5.3	5	3–9	176	438	176–721	73	5.2	4	3–11
2011	7	501	417–581	7	6.6	5.6	5 – 9	13	520	401–642	13	7.1	6.7	5–11	20	514	401–642	20	6.9	6	5–11
2010	9	572	496–626	7	7.1	7	6 – 8	5	514	426–551	5	6.4	7	5–7	15	547	426–626	13	6.8	7	5–8
2009	8	501	401–584	6	5.8	5	5 – 7	7	472	435–525	7	5.6	5	4 – 8	15	488	401–584	13	5.7	5	4–8
C: 127 mm Mesh Gill Nets																					
2014	16	542	307-767	37	5.9	5	4-11	40	537	456-650	35	6.9	6	5-13	60	471	383-650	57	5.9	5	4-11

Year	Male							Female							Total*						
	Fork Length (mm)			Age (years)				Fork Length (mm)			Age (years)				Fork Length (mm)			Age (years)			
	n	Mean	Range	n	Mean	Mode	Range	n	Mean	Range	n	Mean	Mode	Range	n	Mean	Range	n	Mean	Mode	Range
D: TOTAL COMBINED SAMPLE																					
2014	75	514	307–767	71	5.9	5	4–11	101	501	380–650	94	6.5	5	4–13	289	491	165–767	169	6.2	5	4–13
2013	60	496	372–646	58	6.3	6	5–10	114	540	369–640	108	7.6	6	4–13	293	509	160–671	172	7.1	6	4–13
2012	64	475	296–721	57	5.1	5	3–11	84	465	176–632	72	5.2	5	3–9	364	436	176–721	131	5.1	5	3–11
2011	43	515	342–709	43	6.3	6	4–10	99	504	342–642	96	6.8	7	4–12	147	506	342–709	144	6.6	7	4–12
2010	82	511	326–706	78	6	5.6	4–10	134	471	319–850	123	5.8	5	3–10	222	486	319–850	207	5.9	5	3–10
2009	83	468	398–584	71	5.3	5	4–7	107	460	382–620	100	5.6	5	3–11	192	463	382–620	173	5.5	5	3–11

Table 7. Sample size (n), mean, mode (age only), and range of fork length and age for male and female, and the total sample of Dolly Varden from the Rat River Harvest Monitoring Program identified as current-year spawners (2009-2014) captured using: A) 102 mm, B) 114 mm, and C) 127 mm mesh gill nets, and D) the combined total sample.

Year	Male							Female						
	Fork Length (mm)			Age (years)				Fork Length (mm)			Age (years)			
	n	Mean	Range	n	Mean	Mode	Range	n	Mean	Range	n	Mean	Mode	Range
A: 102 mm Mesh Gill Nets														
2014	9	514	465–580	8	6.6	6	6–8	10	532	481–571	9	7.7	8	5–12
2013	9	522	372–646	9	7.3	7	5–10	54	541	398–617	49	8.0	6	5–13
2012	0	-	-	0	-	-	-	3	574	495–632	2	7.0	7	7–7
2011	9	533	446–692	9	6.7	7	5–8	39	526	424–625	39	7.2	7	5–12
2010	3	576	438–690	3	7.0	7	7–7	12	528	462–591	10	6.5	6	6–8
2009	3	518	488–563	3	6.0	6	6–6	14	519	444–620	10	6.7	6.7	5–8
B: 114 mm Mesh Gill Nets														
2014	5	530	413–650	5	6.4	5	5–9	15	554	456–650	13	7.7	6	6–13
2013	11	563	504–625	11	6.9	8	5–8	42	571	498–640	42	8	7	6–11
2012	2	456	437–472	2	5.5	-	5–6	9	560	481–631	7	6.9	7	6–8
2011	2	502	433–571	2	7.0	-	5–9	4	546	531–563	4	9	11	6–11
2010	0	-	-	0	-	-	-	0	-	-	0	-	-	-
2009	0	-	-	0	-	-	-	0	-	-	0	-	-	-
C: 127 mm Mesh Gill Nets														
2014	0	-	-	0	-	-	-	0	-	-	0	-	-	-
D: Combined Total Sample														
2014	14	520	413–650	13	6.5	6	5–9	37	542	456–650	32	7.6	6.8	5–13
2013	20	544	372–646	20	7.1	7	5–10	96	554	398–640	91	8.0	7	5–13
2012	2	455	437–472	2	5.5	5.6	5–6	12	563	481–632	9	6.9	7	6–8
2011	11	544	433–692	11	6.7	7	5–9	43	528	424–625	44	7.4	7	5–12
2010	3	576	438–690	3	7.0	7	7–7	12	528	462–591	10	6.5	6	6–8
2009	3	518	488–563	3	6.0	6	6–6	14	519	444–620	14	6.7	6.7	5–8

Table 8. Robson-Chapman estimates of annual survival (S), 95% confidence intervals (CI), mortality (A), and range of age for Dolly Varden from the Rat River Harvest Monitoring Program among sampling years (2009-2014) and years combined.

Year	Annual Survival (S)	Confidence Interval (± 95%)	Mortality (A)	Range of Age
2014	0.55	0.07	0.45	6-13
2013	0.57	0.07	0.43	7-13
2012	0.49	0.12	0.51	6-11
2011	0.41	0.14	0.59	8-12
2010	0.42	0.07	0.58	6-10
2009	0.33	0.09	0.67	6-11
Total sample	**0.52**	**0.03**	**0.48**	**6-13**
Total female	**0.56**	**0.03**	**0.44**	**6-13**
Total male	**0.43**	**0.57**	**0.57**	**6-11**

*Table 9. Percent (number in brackets) of dead-sampled anadromous Dolly Varden from the Rat River Harvest Monitoring Program identified as female (F) and male (M) current-year non-spawners and spawners (1995-2014). Female to male ratios (F:M) are also provided. The * denotes when sex data is available. Note: the number of fish that had undetermined sex/maturity among sampling years varied between 0 and 3%.*

Year	Female non-spawner	Male non-spawner	Female spawner	Male spawner	Total (n)*	F:M non-spawner	F:M spawner	F:M total	% non-spawner	% spawner
2014	36.4 (64)	34.7 (61)	21.1 (37)	8 (14)	176	1.0:1	2.6:1	1.3:1	71.1	29.1
2013	9.9 (17)	23.2 (40)	55.5 (96)	11.6 (20)	173	0.4:1	4.8:1	1.9:1	33.0	67.1
2012	48.7 (72)	41.9 (62)	8.2 (12)	1.4 (2)	148	1.2:1	6.0:1	1.3:1	90.6	9.6
2011	38.8 (55)	22.6 (32)	31 (44)	7.8 (11)	142	1.7:1	4.0:1	2.3:1	61.3	38.8
2010	55.8 (122)	37.5 (82)	5.5 (12)	1.4 (3)	219	1.5:1	4.0:1	1.6:1	93.2	6.9
2009	49 (93)	42.2 (80)	7.4 (14)	1.6 (3)	190	1.2:1	4.7:1	1.3:1	91.1	9.0
2008	55.2 (64)	39.7 (46)	2.6 (3)	2.6 (3)	116	1.4:1	1.0:1	1.4:1	94.9	5.2
2007	42.2 (48)	42.2 (48)	12.3 (14)	3.6 (4)	114	1.0:1	3.5:1	1.2:1	84.3	15.9
2006	47.4 (54)	39.5 (45)	8.8 (10)	4.4 (5)	114	1.2:1	2.0:1	1.3:1	86.9	13.2
2005	41.2 (104)	35.6 (90)	21 (53)	2.4 (6)	253	1.2:1	8.8:1	1.6:1	76.7	23.4
2004	49.8 (112)	43.2 (97)	5.8 (13)	1.4 (3)	225	1.2:1	4.3:1	1.3:1	92.9	7.2
2003	52.1 (203)	29 (113)	16.5 (64)	2.6 (10)	390	1.8:1	6.4:1	2.2:1	81.1	19.1
2002	51.7 (189)	28.7 (105)	16.7 (61)	3.1 (11)	366	1.8:1	5.5:1	2.2:1	80.4	19.8
2001	28.2 (142)	26 (131)	35.2 (177)	10.8 (54)	504	1.1:1	3.3:1	1.7:1	54.2	46.0
2000	38.9 (193)	30 (149)	22.4 (111)	8.9 (44)	497	1.3:1	2.5:1	1.6:1	68.9	31.3
1999	20.7 (90)	21 (91)	39.1 (170)	19.4 (84)	435	1.0:1	2.0:1	1.5:1	41.7	58.5
1998	51.7 (340)	32.3 (212)	8.1 (53)	8.1 (53)	658	1.6:1	1.0:1	1.5:1	83.9	16.2
1997	57.8 (394)	33.2 (226)	5.8 (39)	3.4 (23)	682	1.7:1	1.7:1	1.7:1	91.0	9.2
1996	42.3 (309)	26.6 (194)	24.5 (179)	6.9 (50)	732	1.6:1	3.6:1	2.0:1	68.8	31.4
1995	56 (467)	27.5 (229)	12 (100)	4.6 (38)	834	2.0:1	2.6:1	2.1:1	83.5	16.6

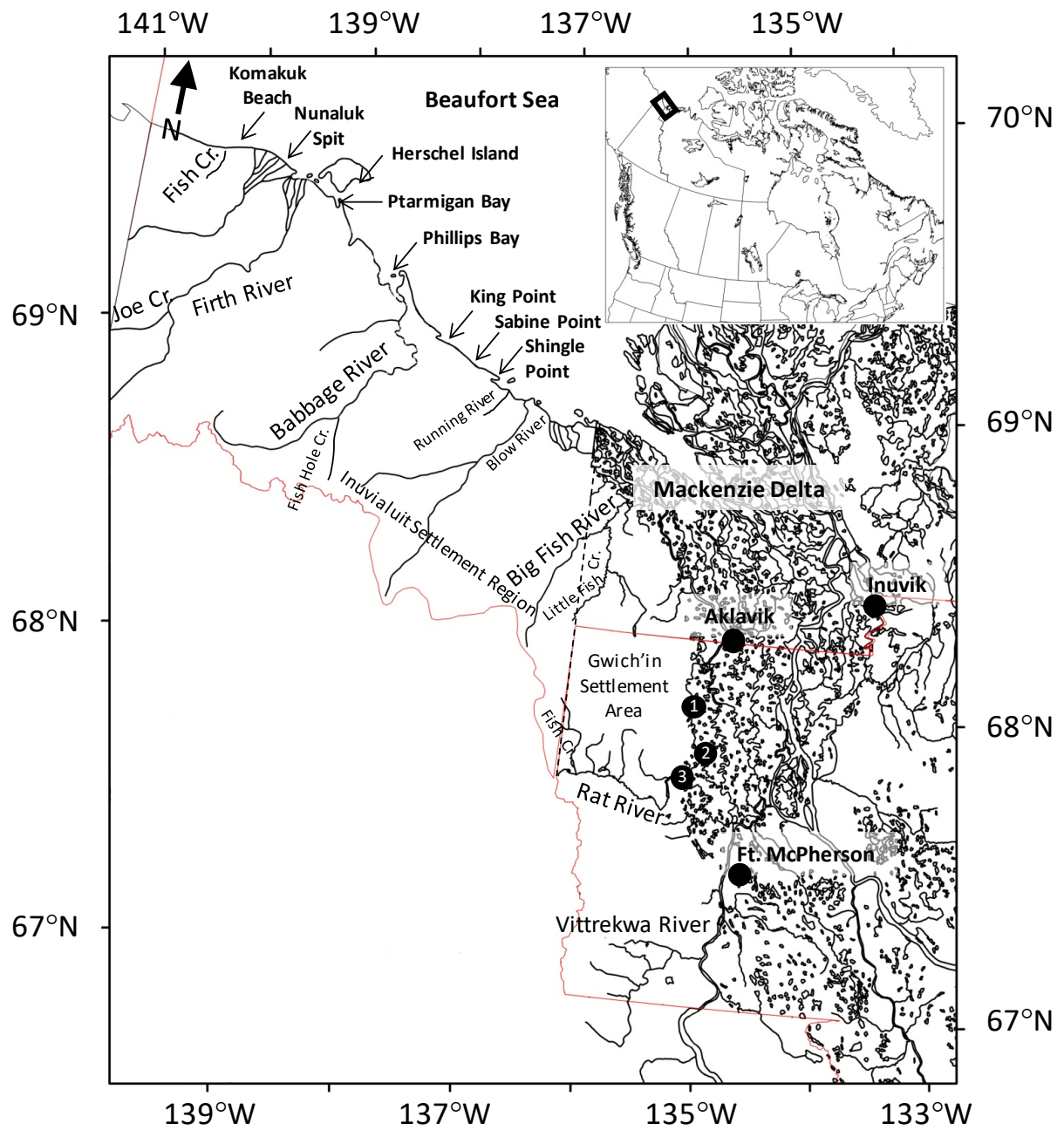

Figure 1. Location of rivers and creeks in the Inuvialuit Settlement Region and Gwich'in Settlement Area (red lines delineate borders) known to have anadromous Dolly Varden and locations along the Beaufort Sea coast where harvesting of Dolly Varden occur. Locations where harvest monitors annually collect fisheries information during the upstream migration of the Rat River stock (end of July-September) in the Mackenzie Delta (Husky Channel) at (1) Big Eddy, and in the Rat River at (2) the mouth and (3) Destruction City. *Fish Cr., Joe Cr., Firth R., Babbage R./Fish Hole Cr., Big Fish R./Little Fish Cr., Rat R./Fish Cr., and Vittrekwa R.*

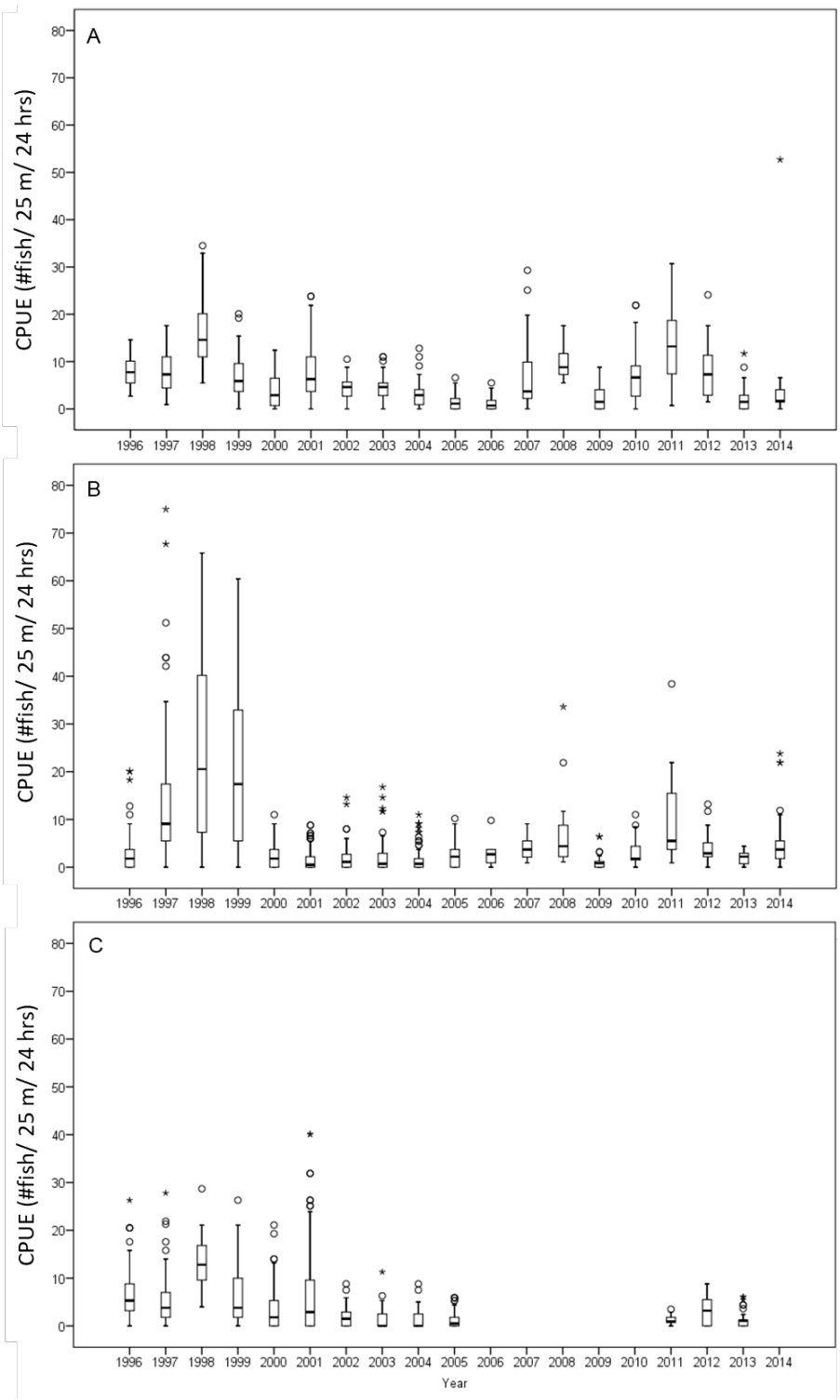

Figure 2. Catch-per-unit-effort (CPUE) (median, quartiles and outliers (○, ✶)) of Dolly Varden captured in 102 and 114 mm mesh gill nets in the Rat River Harvest Monitoring Program at: A) Big Eddy, B) mouth of Rat River, and C) in the Rat River at a location named Destruction City (1996-2014). Note: one outlier in 2011 at mouth of Rat River had a CPUE equal to 132 (not shown for graphical purposes). CPUE data for Destruction City 2006-2010 were not summarized due to uncertainty. Neither 102 or 114 mm mesh gill nets were used at Destruction City in 2014.

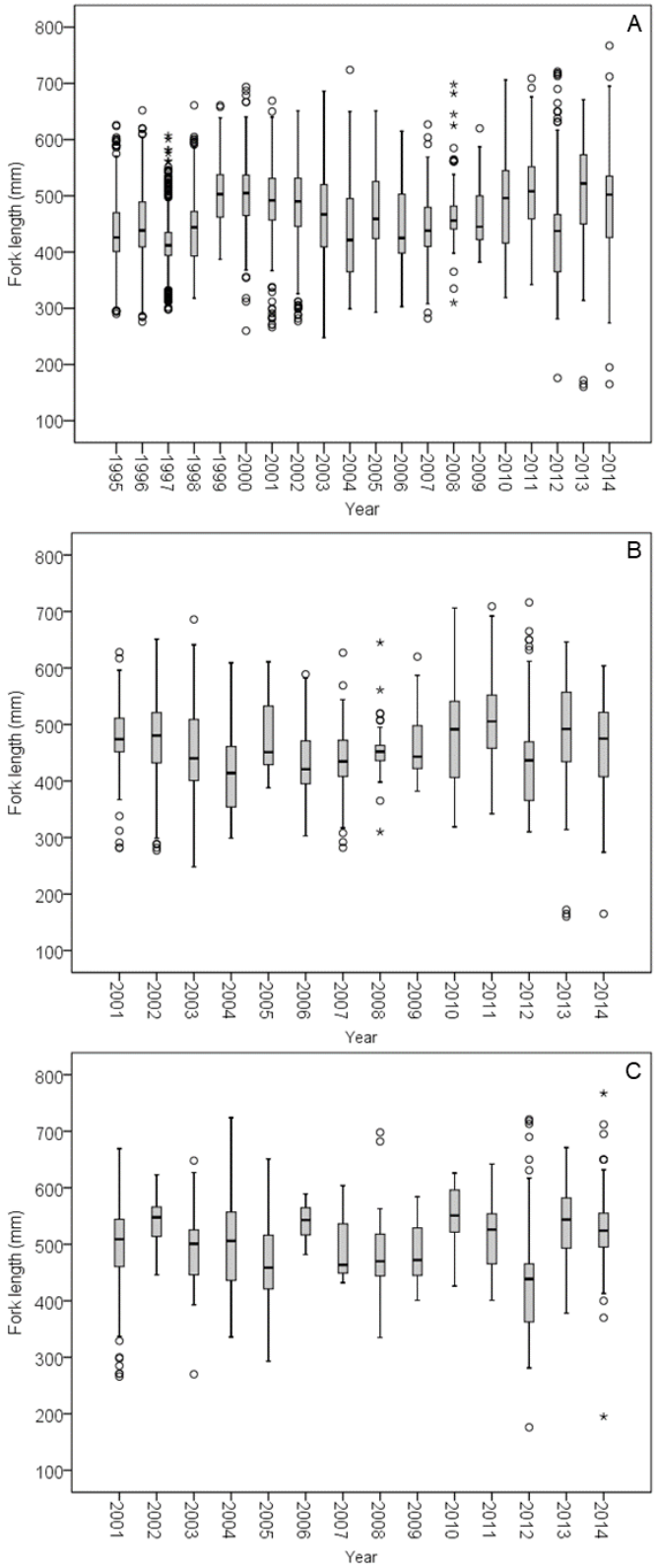

Figure 3. Box plot of fork length (median, quartiles and outliers (○, ✶)) of Dolly Varden from the Rat River Harvest Monitoring Program with: A) all gill net mesh sizes combined (1995-2014), and B) 102 mm and C) 114 mm mesh gill nets (2001-2014). Note, recording mesh size started in 2001.

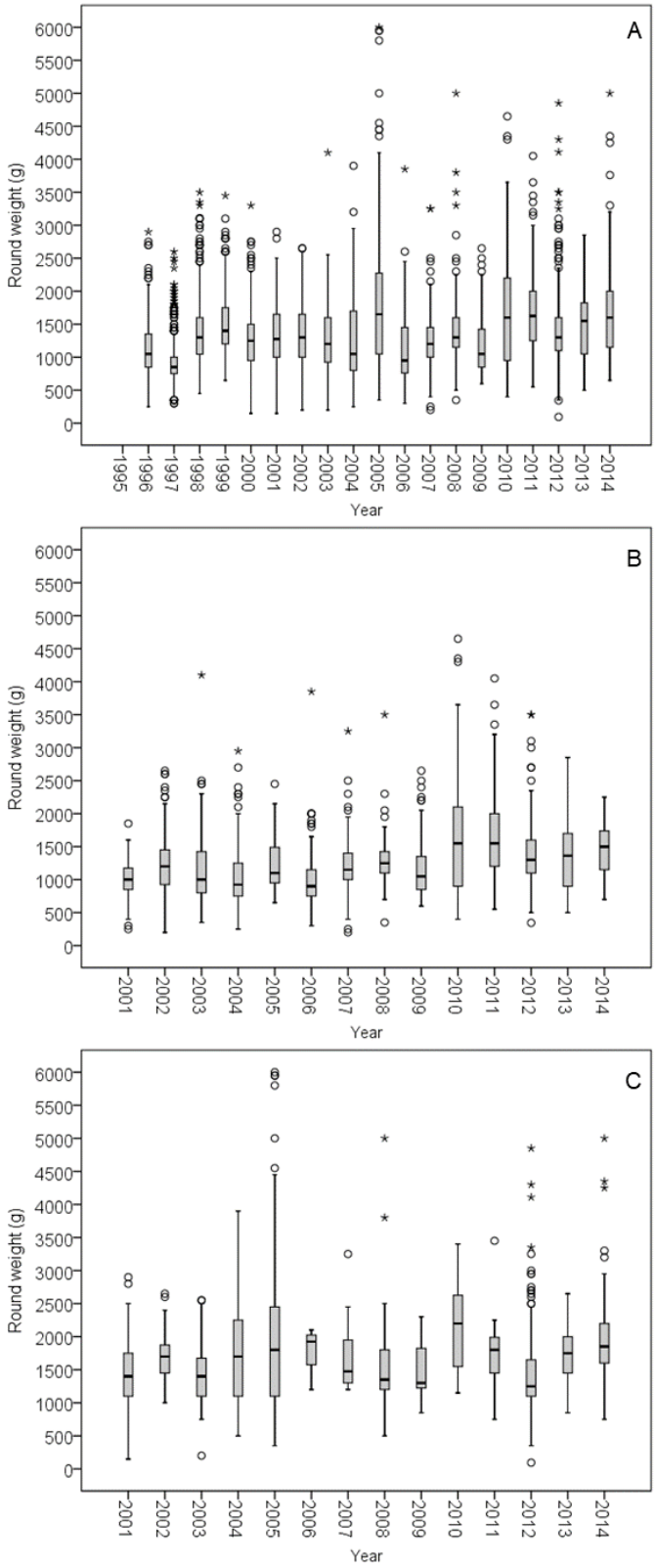

Figure 4. Box plot of weight (median, quartiles and outliers (○, ★)) of Dolly Varden from the Rat River Harvest Monitoring Program with: A) all mesh sizes combined (1996-2014), and B) 102 mm and C) 114 mm mesh gill nets (2001-2014). Note: weight not recorded in 1995; recording mesh size started in 2001.

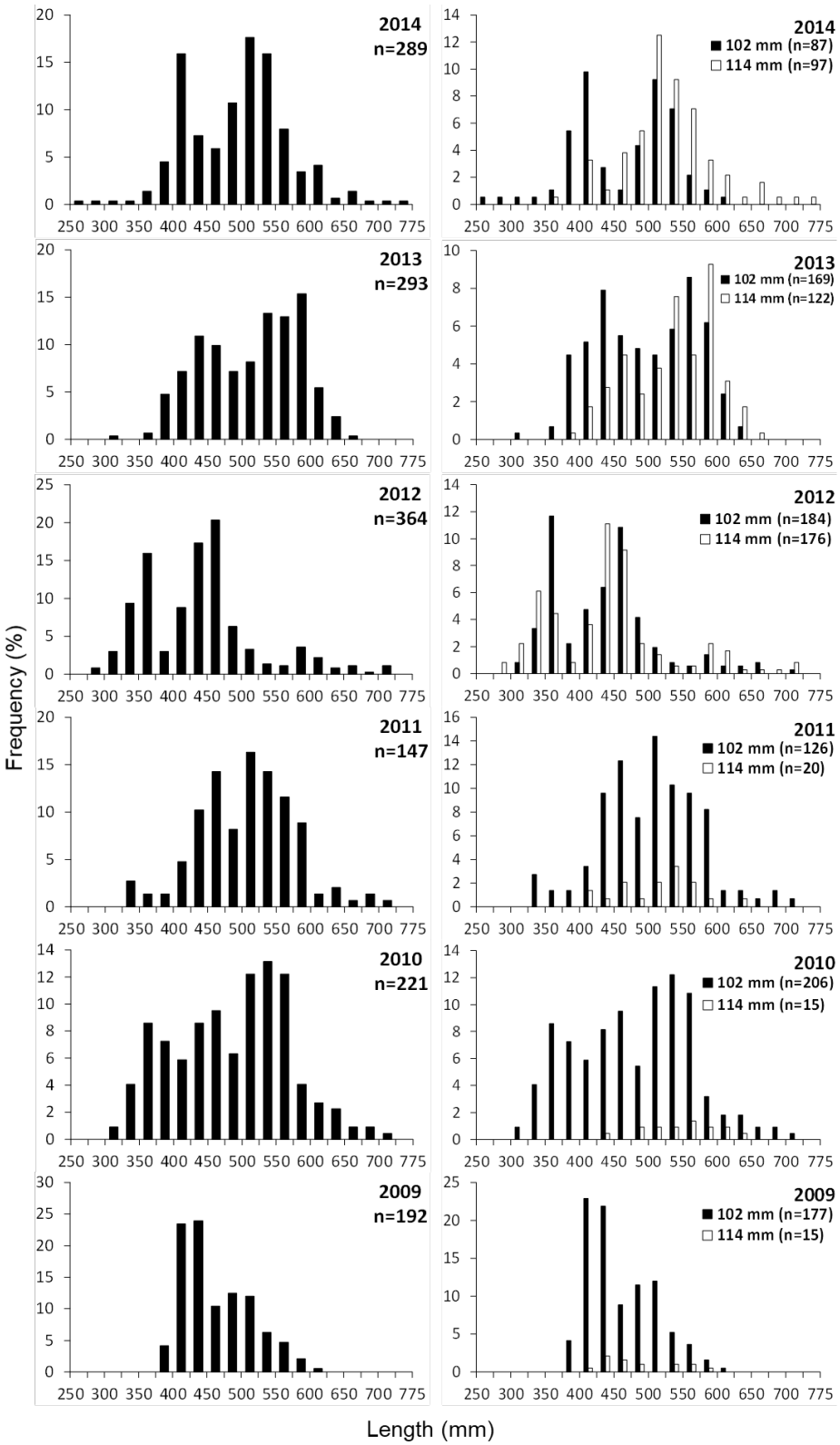

Figure 5. Fork length frequency of Dolly Varden from the Rat River Harvest Monitoring Program with: A) all gill net mesh sizes combined, and B) 102 mm and 114 mm mesh gill nets (2009-2014). Note: in 2012 n = 1, 2013 n = 3, and 2014 n = 2 Dolly Varden were < 250 mm.

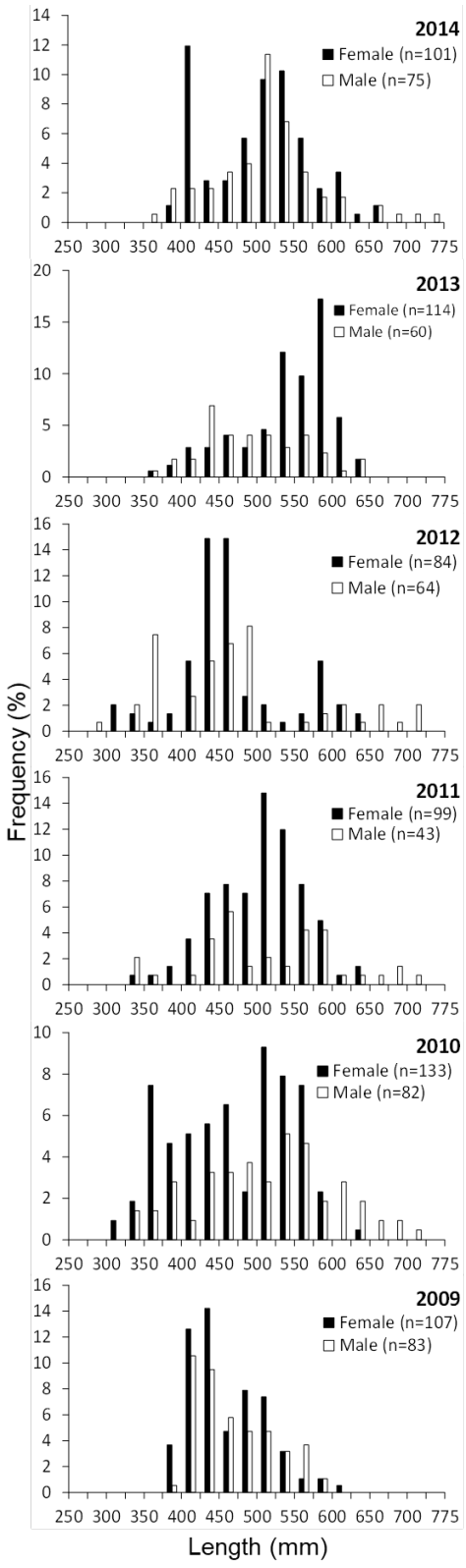

Figure 6. Fork length frequency distribution of female and male Dolly Varden from the Rat River Harvest Monitoring Program (2009-2014). Note: in 2012 n = 1 (female), 2013 n = 3, and 2014 n = 2 (sex not determined) Dolly Varden were < 250 mm.

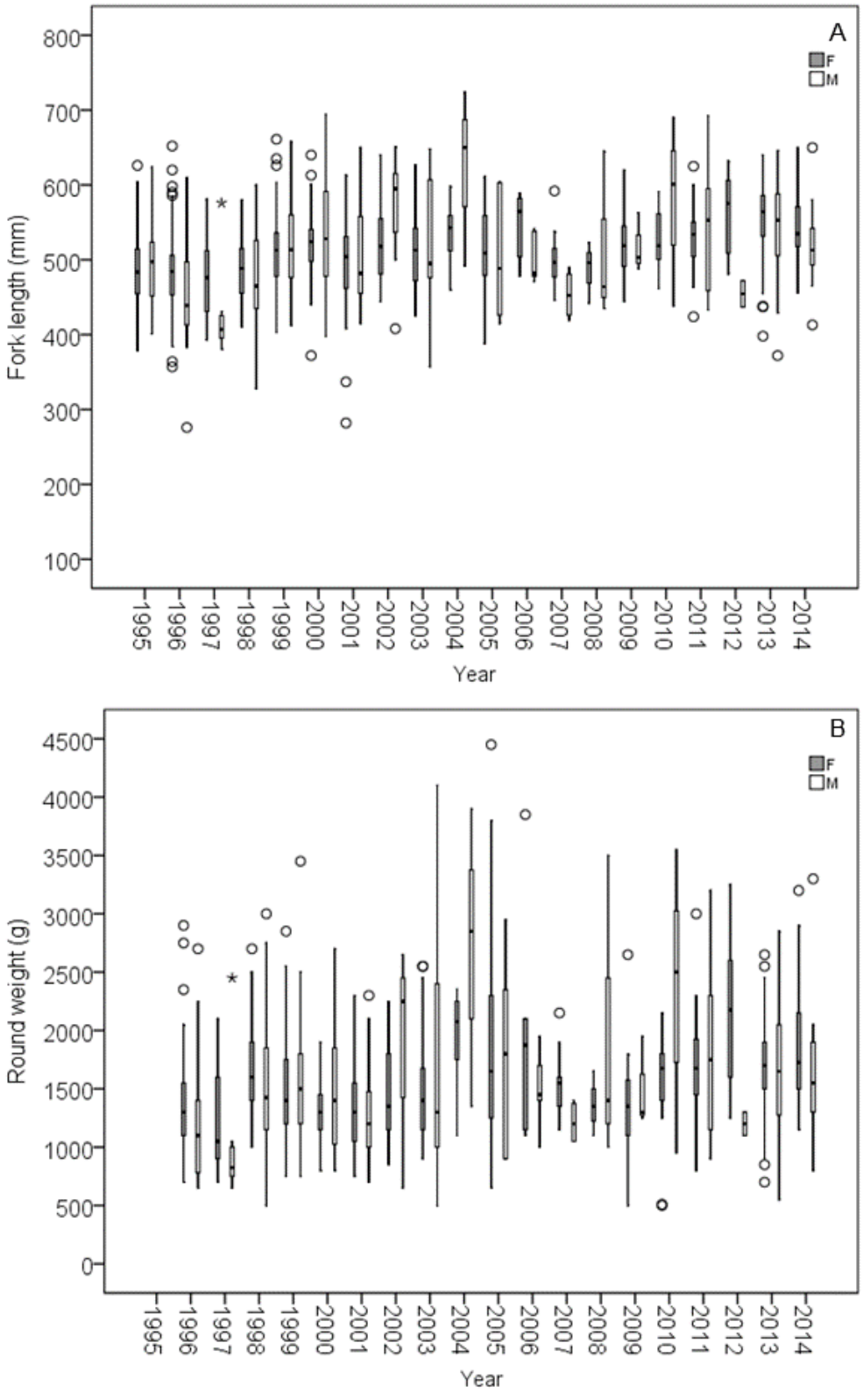

Figure 7. Box plot of: A) fork length and B) weight (median, quartiles and outliers (○, ★)) of female (F) and male (M) Dolly Varden from the Rat River Harvest Monitoring Program identified as current-year spawners (1995-2014; all gill net mesh sizes combined). Note, weight not recorded in 1995.

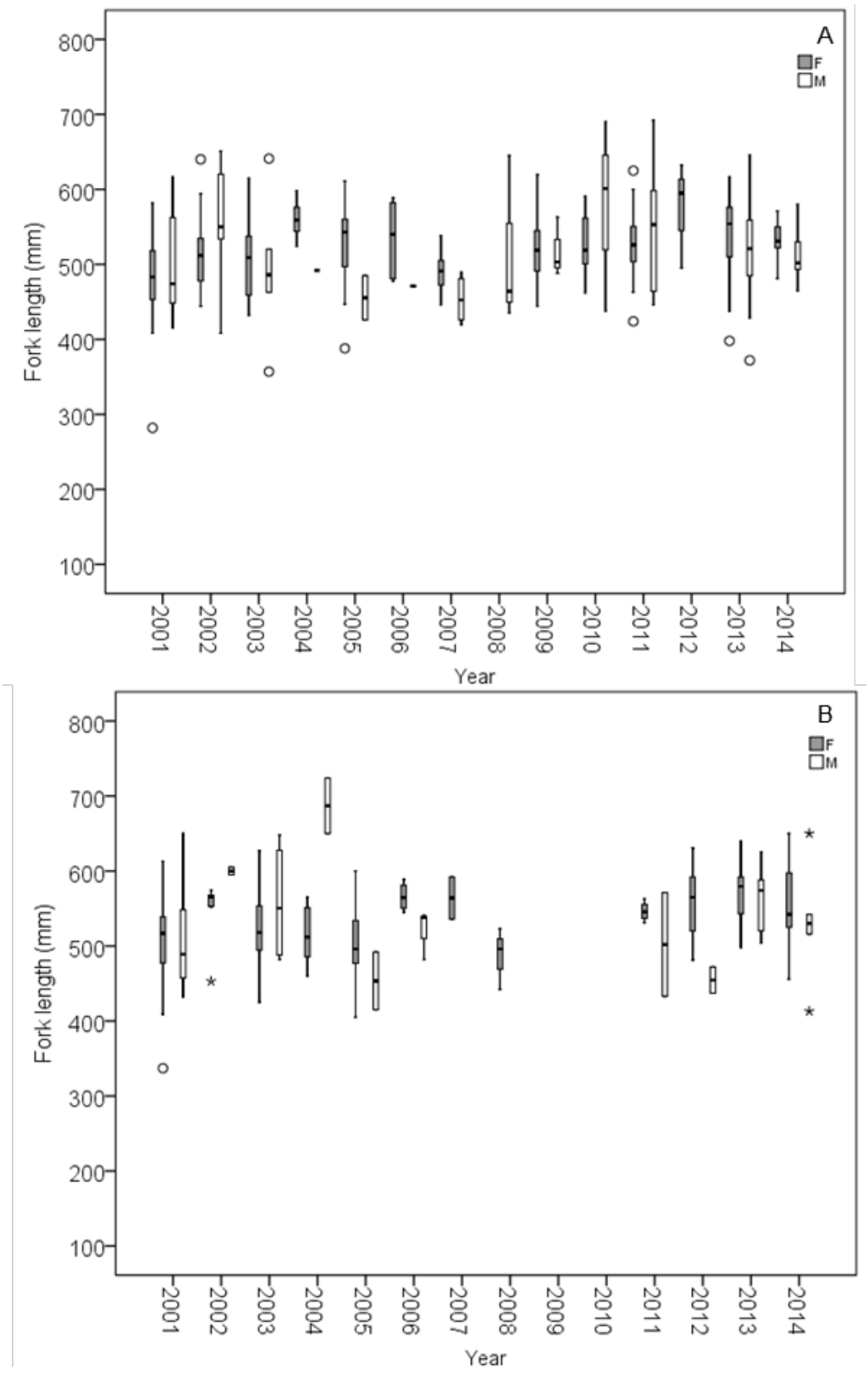

Figure 8. Box plot of fork length (median, quartiles and outliers (○, ★)) of female (F) and male (M) Dolly Varden from the Rat River Harvest Monitoring Program identified as current-year spawners captured using: A) 102 mm and B) 114 mm mesh gill nets (2001-2014). Note: recording mesh size started in 2001.

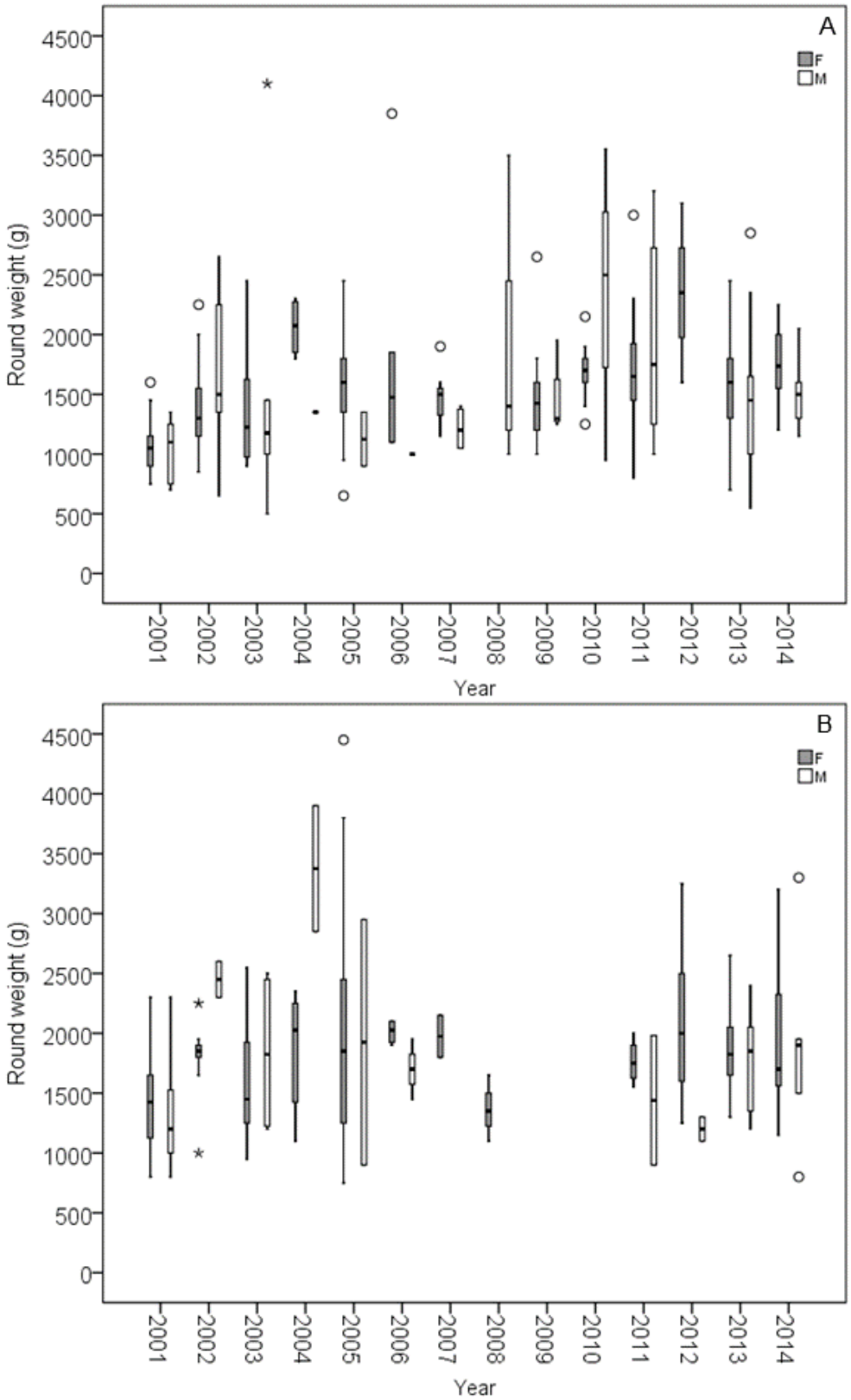

Figure 9. Box plot of weight (median, quartiles and outliers (○, ★)) of female (F) and male (M) Dolly Varden from the Rat River Harvest Monitoring Program identified as current-year spawners captured using: A) 102 mm and B) 114 mm mesh gill nets (2001-2014). Note: recording mesh size started in 2001.

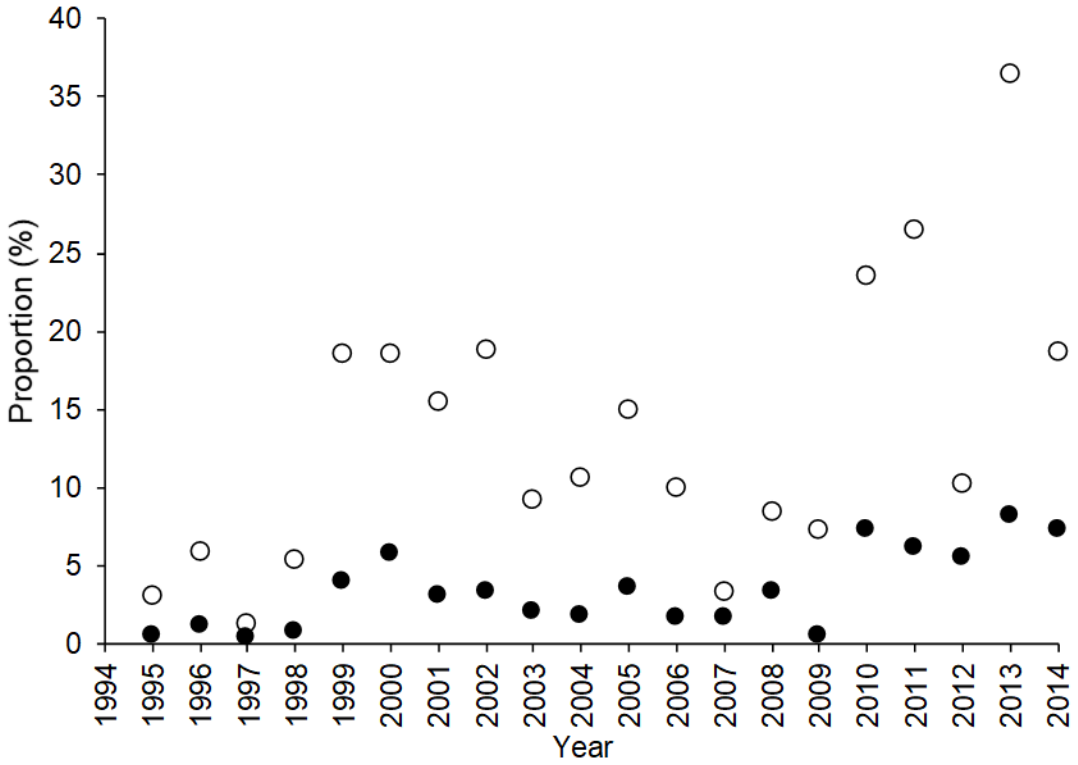

Figure 10. Proportion (%) of sizes ≥ 550 (○) and ≥ 600 (●) mm of Dolly Varden captured in the Rat River Harvest Monitoring Program (1995-2014).

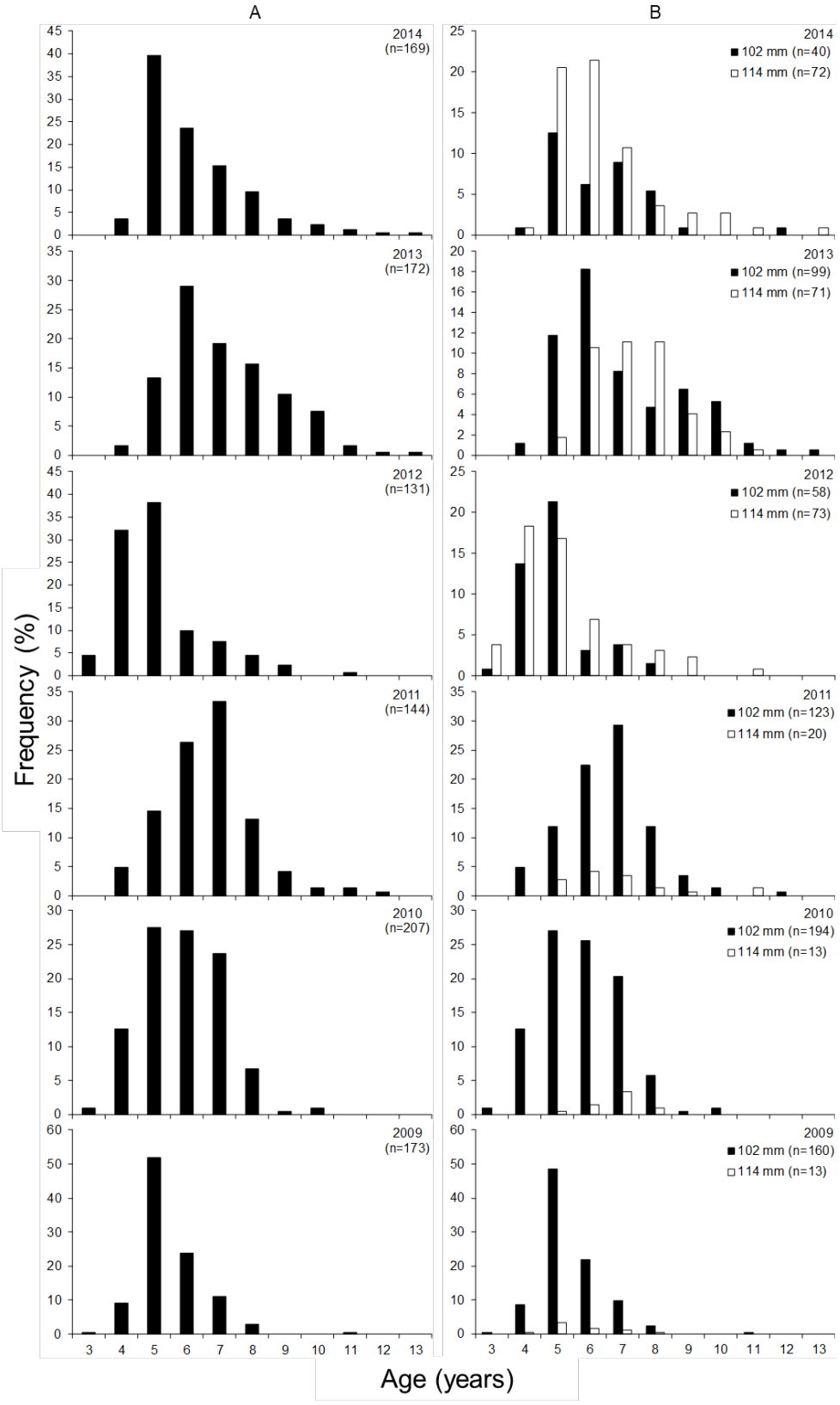

Figure 11. Age frequency distribution of Dolly Varden from the Rat River Harvest Monitoring Program: A) with all gill net mesh sizes combined and B) using 102 mm and 114 mm mesh gill nets (2009-2014).

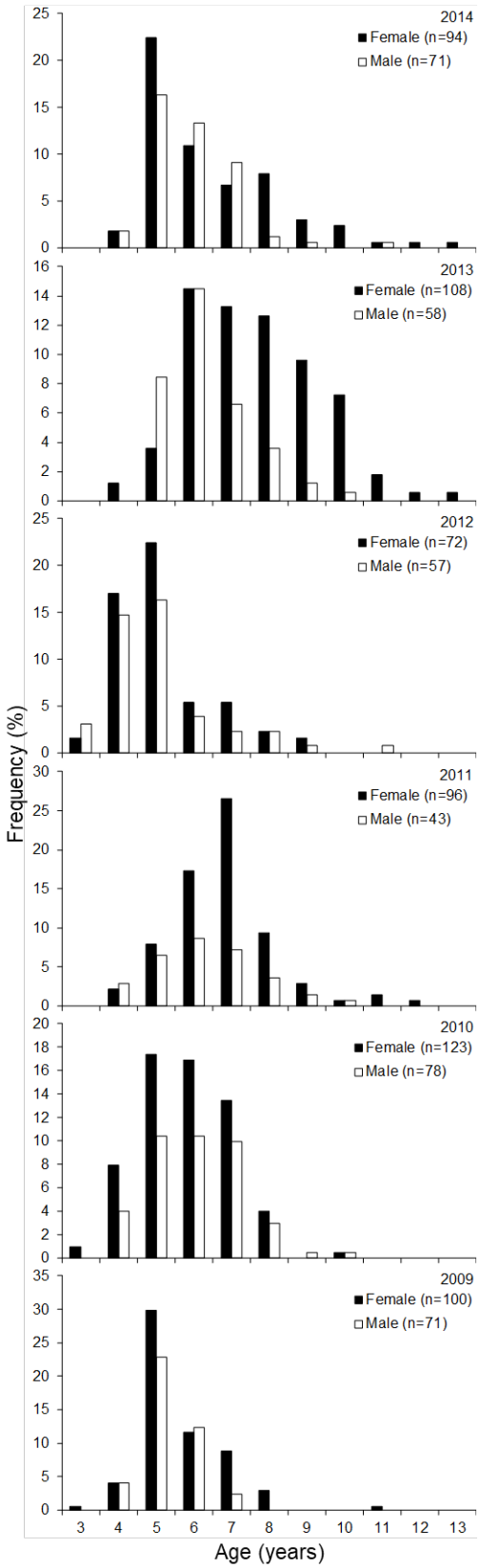

Figure 12. Age frequency distribution of female and male Dolly Varden from the Rat River Harvest Monitoring Program (2009 and 2014).

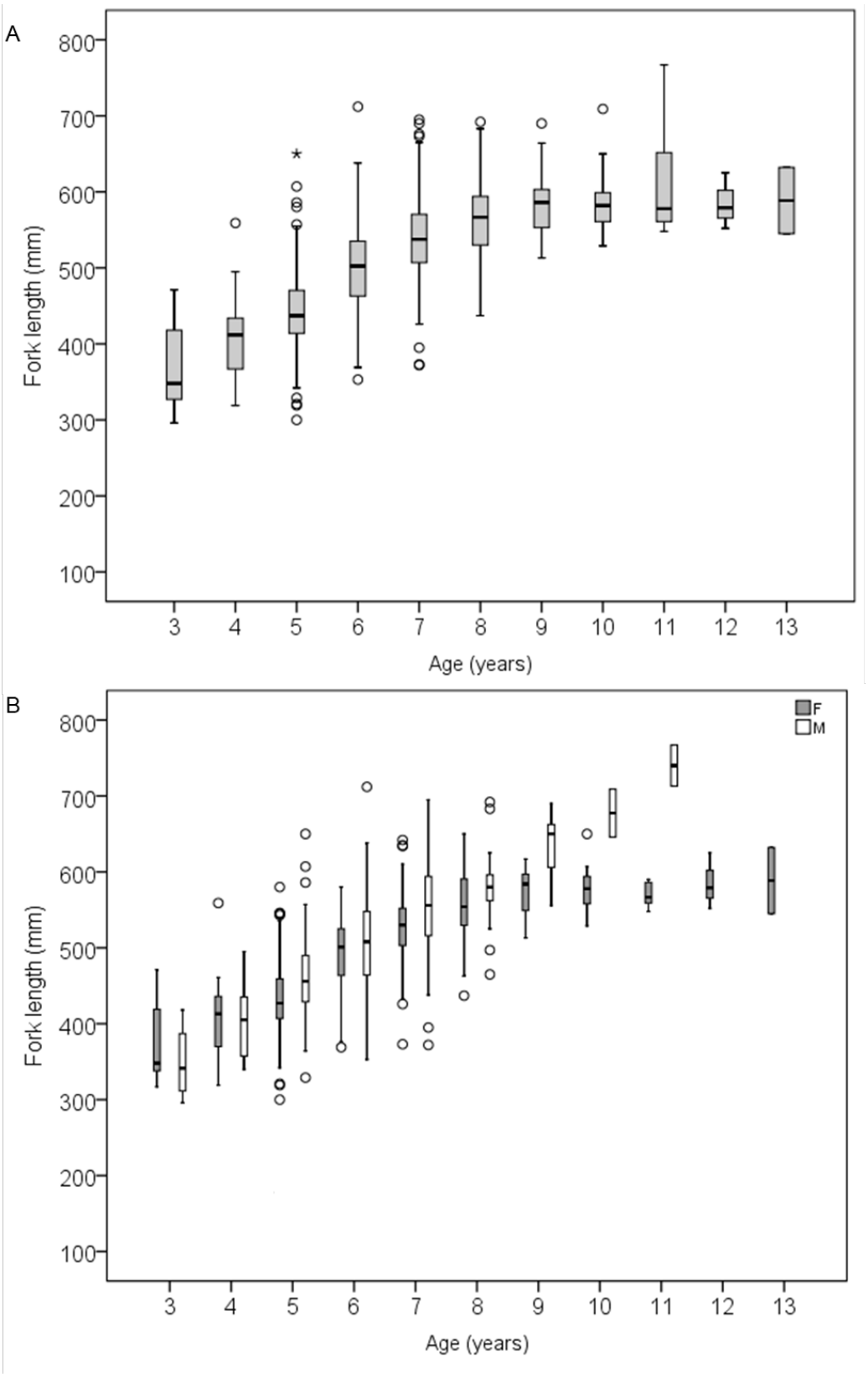

Figure 13. Box plot of length-at-age (median, quartiles and outliers (○, ✶)) for: A) the total sample and B) female (F) and male (M) Dolly Varden from the Rat River Harvest Monitoring Program (2009 and 2014).

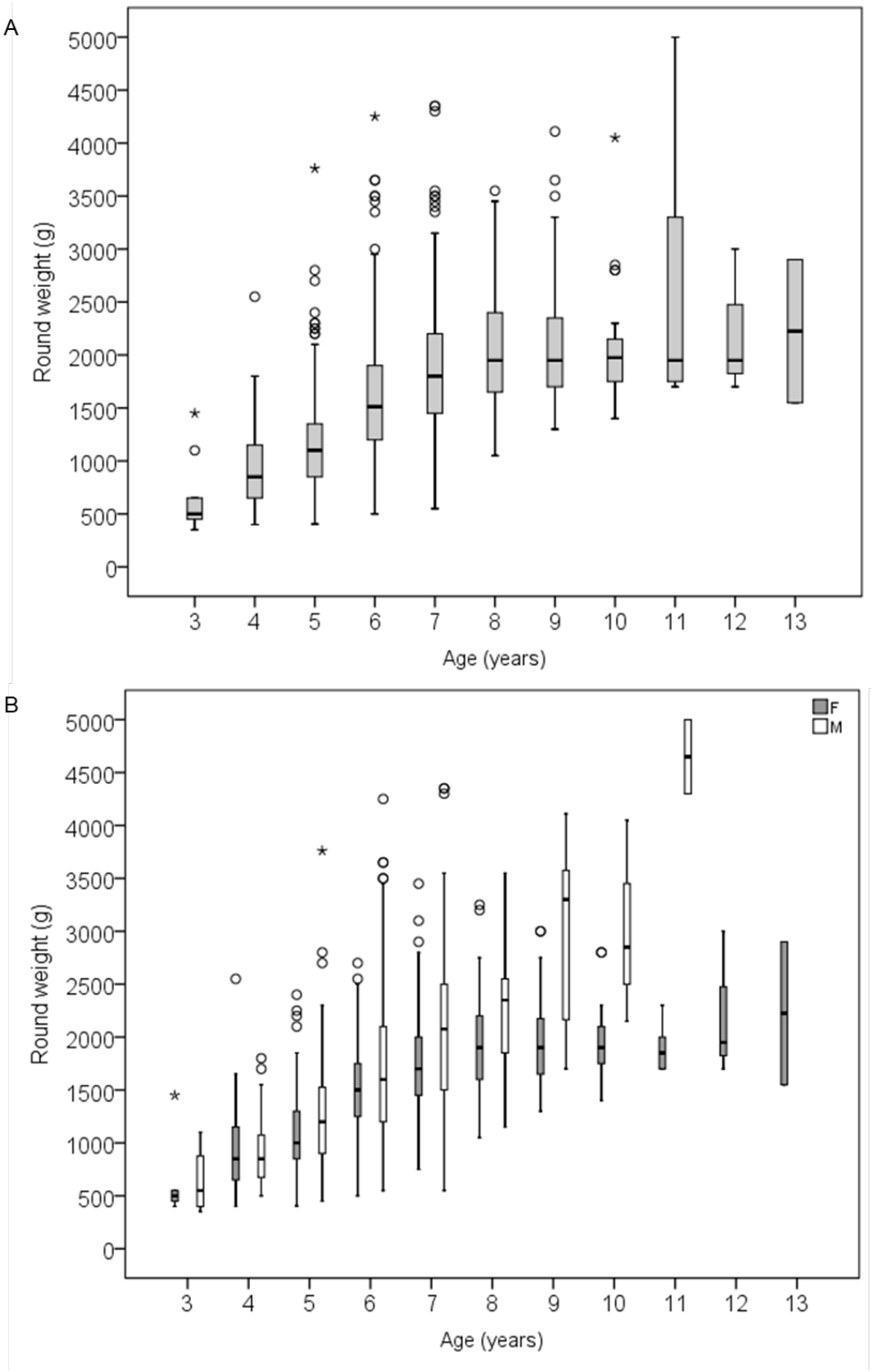

Figure 14. Box plot of weight-at-age (median, quartiles and outliers (○, ★)) for: A) the total sample and B) female (F) and male (M) Dolly Varden from the Rat River Harvest Monitoring Program (2009-2014).

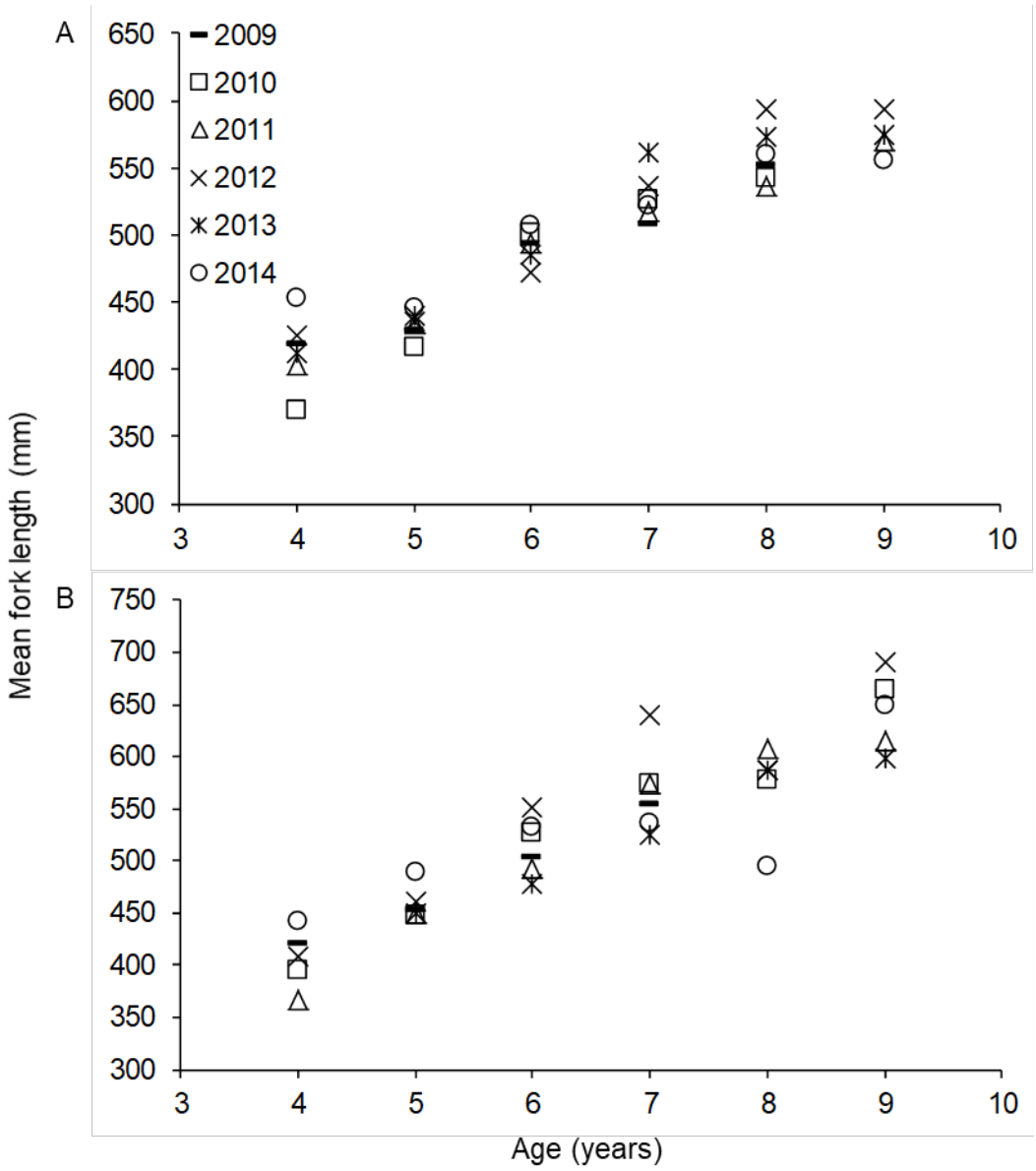

Figure 15. Mean fork length at ages of 4 to 9 years for: A) female and B) male Dolly Varden from the Rat River Harvest Monitoring Program (2009-2014).

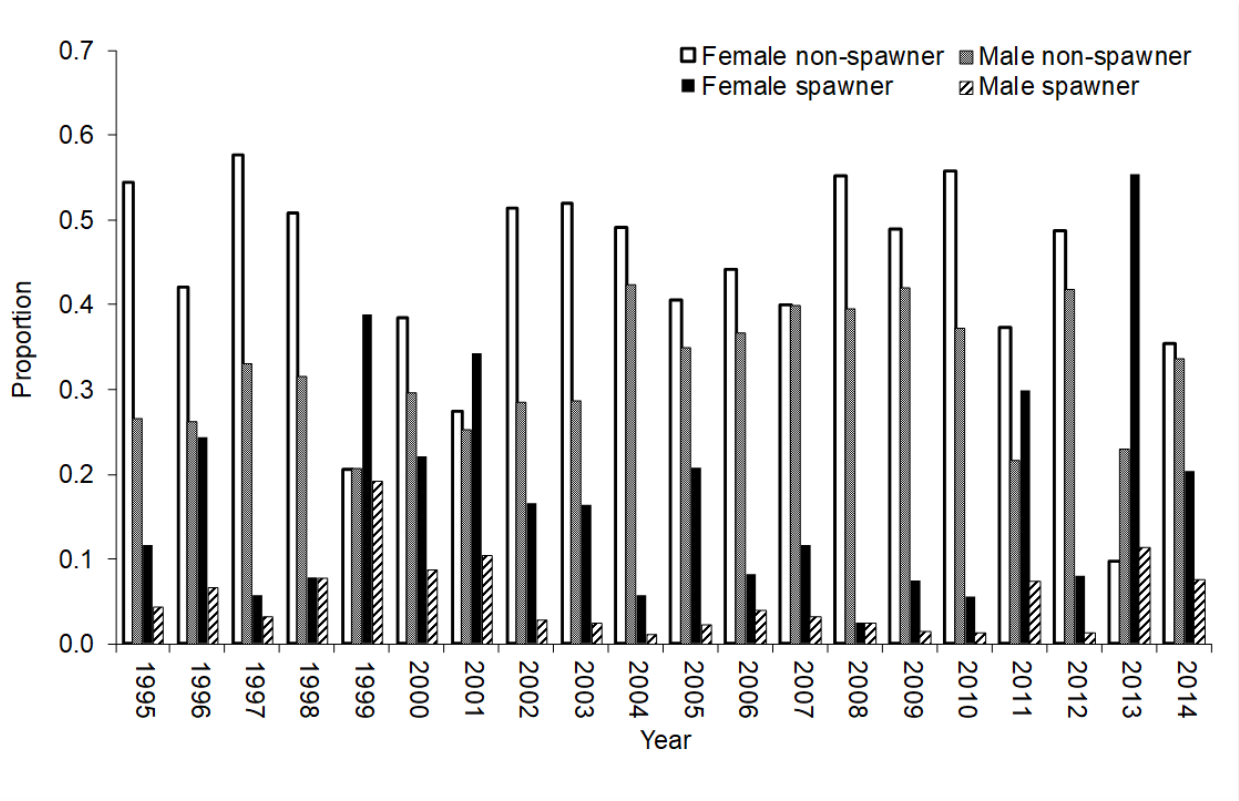

Figure 16. Proportion of anadromous Dolly Varden from the Rat River Harvest Monitoring Program identified as female and male current-year non-spawners and spawners (1995-2014).

APPENDIX 1. BIOLOGICAL INFORMATION OF ANADROMOUS DOLLY VARDEN FROM THE RAT RIVER HARVEST MONITORING PROGRAM (2009-2014).

Table A1. Biological information of Dolly Varden collected from the Rat River Harvest Monitoring Program between 2009 and 2014. Notes about data: capture date format: dd-month-yy; gonad weight was taken starting in 2013; all aged according to Gallagher et al. (2016); mature= current-year spawner, immature= juvenile or adult fish not spawning in current year; mesh size= size of stretched mesh of gill net; recapture tag ID= unique number of Dolly Varden from the Rat River stock previously tagged in Fish Creek; capture location given in the text of Figure 1.

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-01	7-Aug-09	571	1700	-	8	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-02	7-Aug-09	488	1300	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-03	8-Aug-09	554	1100	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-04	8-Aug-09	545	1600	-	5	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-05	9-Aug-09	563	1950	-	6	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-06	9-Aug-09	520	1500	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-07	9-Aug-09	538	1550	-	8	Female	Mature	102	88	Green	Big Eddy	John Carmichael	Dead-sampled
BE-08	10-Aug-09	533	1800	-	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-09	10-Aug-09	494	1250	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-10	11-Aug-09	401	1050	-	-	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-11	11-Aug-09	435	850	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-12	12-Aug-09	491	1350	-	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-13	12-Aug-09	418	800	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-14	13-Aug-09	521	1500	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-15	13-Aug-09	468	1100	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-16	14-Aug-09	424	850	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-17	15-Aug-09	518	1500	-	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-18	15-Aug-09	446	1150	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-19	15-Aug-09	475	1300	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-20	16-Aug-09	456	1150	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-21	16-Aug-09	422	800	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-22	17-Aug-09	508	1500	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-23	17-Aug-09	495	1350	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-24	17-Aug-09	506	1350	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-25	18-Aug-09	491	1250	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-26	18-Aug-09	410	700	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-27	18-Aug-09	513	1500	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-28	18-Aug-09	478	1250	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-29	19-Aug-09	445	1150	-	4	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-30	20-Aug-09	468	1300	-	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-31	20-Aug-09	558	2200	-	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-32	21-Aug-09	445	1250	-	-	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-33	21-Aug-09	525	1700	-	6	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-34	22-Aug-09	584	2300	-	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-35	22-Aug-09	428	900	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-36	23-Aug-09	508	1500	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-37	23-Aug-09	437	1850	-	5	Female	Immature	114	299	Green	Big Eddy	John Carmichael	Dead-sampled
BE-38	23-Aug-09	472	1200	-	6	Female	Immature	114	128	Green	Big Eddy	John Carmichael	Dead-sampled
BE-39	24-Aug-09	508	1400	-	6	Female	Immature	102	101	Green	Big Eddy	John Carmichael	Dead-sampled
BE-40	24-Aug-09	499	1400	-	8	Female	Immature	114	140	Green	Big Eddy	John Carmichael	Dead-sampled
BE-41	25-Aug-09	459	1300	-	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-42	26-Aug-09	562	2250	-	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-43	27-Aug-09	558	2050	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-44	28-Aug-09	573	2500	-	7	Male	Immature	102	126	Green	Big Eddy	John Carmichael	Dead-sampled
BE-45	29-Aug-09	431	950	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-46	2-Sep-09	432	800	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
RR-01	8-Aug-09	503	1300	-	6	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-02	9-Aug-09	488	1250	-	6	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-03	9-Aug-09	535	1800	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-04	9-Aug-09	494	1350	-	7	Female	Mature	102	316	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-05	10-Aug-09	516	1800	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-06	11-Aug-09	415	800	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-07	11-Aug-09	620	2650	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-08	11-Aug-09	426	950	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-09	12-Aug-09	493	1250	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-10	12-Aug-09	442	800	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-11	13-Aug-09	427	900	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-12	13-Aug-09	437	900	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-13	14-Aug-09	445	1100	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-14	14-Aug-09	424	750	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-15	16-Aug-09	421	850	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-16	16-Aug-09	430	850	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-17	16-Aug-09	410	800	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-18	17-Aug-09	502	1500	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-19	17-Aug-09	552	1900	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-20	17-Aug-09	413	750	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-21	18-Aug-09	425	800	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-22	18-Aug-09	443	1100	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-23	18-Aug-09	507	1400	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-24	19-Aug-09	410	800	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-25	20-Aug-09	422	800	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-26	21-Aug-09	432	1000	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-27	21-Aug-09	480	1550	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-28	22-Aug-09	454	1000	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-29	22-Aug-09	423	900	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-30	23-Aug-09	500	1450	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-31	23-Aug-09	411	850	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-32	23-Aug-09	492	1300	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-33	23-Aug-09	398	750	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-34	23-Aug-09	521	1700	-	6	Female	Immature	102	388	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-35	24-Aug-09	522	1600	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-36	24-Aug-09	468	1200	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-37	24-Aug-09	523	1700	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-38	25-Aug-09	455	1150	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-39	25-Aug-09	533	1850	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-40	25-Aug-09	487	1350	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-41	25-Aug-09	485	1300	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-42	25-Aug-09	578	2000	-	10	Female	Immature	102	377	Pink	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-43	26-Aug-09	451	1150	-	6	Female	Immature	102	301	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-44	26-Aug-09	500	1450	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-45	26-Aug-09	420	800	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-46	26-Aug-09	434	900	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-47	28-Aug-09	471	1450	-	3	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-48	28-Aug-09	445	1100	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-49	29-Aug-09	498	1300	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-50	29-Aug-09	450	1100	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-51	29-Aug-09	503	1500	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-52	29-Aug-09	425	1000	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-53	31-Aug-09	543	1850	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-54	31-Aug-09	518	1600	-	-	Female	Immature	102	141	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-55	1-Sep-09	405	800	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-56	1-Sep-09	495	1250	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-57	2-Sep-09	497	1650	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-58	2-Sep-09	402	750	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-59	2-Sep-09	414	750	-	-	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-60	3-Sep-09	400	750	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-61	3-Sep-09	420	850	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-62	3-Sep-09	410	750	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-63	4-Sep-09	498	1100	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-64	4-Sep-09	411	750	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-65	4-Sep-09	405	700	-	-	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-66	5-Sep-09	420	800	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-67	5-Sep-09	424	950	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-68	6-Sep-09	425	1000	-	-	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-69	6-Sep-09	535	1700	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-70	7-Sep-09	540	1700	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-71	7-Sep-09	544	2200	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
DC-01	15-Aug-09	437	1000	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-02	15-Aug-09	418	850	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-03	15-Aug-09	476	1200	-	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-04	16-Aug-09	438	1050	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-05	18-Aug-09	436	1050	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-06	19-Aug-09	506	1550	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-07	19-Aug-09	514	1550	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-08	19-Aug-09	393	650	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-09	19-Aug-09	397	700	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-10	20-Aug-09	515	1450	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-11	20-Aug-09	418	800	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-12	20-Aug-09	532	1650	-	8	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-13	20-Aug-09	470	1150	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-14	20-Aug-09	557	2250	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-15	20-Aug-09	502	1550	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-16	20-Aug-09	470	1200	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-17	20-Aug-09	394	750	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-18	20-Aug-09	398	650	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-19	20-Aug-09	432	900	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-20	20-Aug-09	433	950	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-21	21-Aug-09	543	1850	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-22	21-Aug-09	461	1050	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-23	21-Aug-09	587	2200	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-24	21-Aug-09	448	1000	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-25	21-Aug-09	493	700	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-26	21-Aug-09	411	850	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-27	21-Aug-09	382	600	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-28	21-Aug-09	407	800	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-29	21-Aug-09	491	1350	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-30	21-Aug-09	435	1050	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-31	21-Aug-09	437	1000	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-32	22-Aug-09	441	1050	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-33	22-Aug-09	443	950	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-34	22-Aug-09	417	750	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-35	22-Aug-09	451	950	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-36	22-Aug-09	393	650	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-37	23-Aug-09	426	900	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-38	23-Aug-09	437	1100	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-39	23-Aug-09	422	950	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-40	23-Aug-09	428	1050	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-41	23-Aug-09	427	900	-	4	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-42	24-Aug-09	444	1000	-	6	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-43	24-Aug-09	426	1000	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-44	24-Aug-09	418	800	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-45	24-Aug-09	468	1100	-	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-46	25-Aug-09	404	700	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-47	25-Aug-09	426	950	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-48	25-Aug-09	414	900	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-49	26-Aug-09	434	1000	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-50	26-Aug-09	416	850	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-51	27-Aug-09	418	1000	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-52	27-Aug-09	479	1350	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-53	28-Aug-09	422	1050	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-54	28-Aug-09	394	650	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-55	29-Aug-09	412	800	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-56	30-Aug-09	427	900	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-57	30-Aug-09	451	1000	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-58	30-Aug-09	400	750	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-59	31-Aug-09	443	1050	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-60	31-Aug-09	458	1050	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-61	31-Aug-09	432	900	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-62	1-Sep-09	443	1050	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-63	1-Sep-09	432	1000	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-64	1-Sep-09	579	2400	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-65	2-Sep-09	413	800	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-66	2-Sep-09	411	850	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-67	3-Sep-09	407	750	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-68	4-Sep-09	452	1050	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-69	5-Sep-09	420	900	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-70	5-Sep-09	408	750	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-71	6-Sep-09	439	900	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-72	6-Sep-09	419	800	-	4	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-73	7-Sep-09	451	1150	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-74	7-Sep-09	432	900	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-75	8-Sep-09	487	1350	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
BE-01	3-Aug-10	523	1750	-	8	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-02	3-Aug-10	501	1650	-	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-03	3-Aug-10	553	1800	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-04	4-Aug-10	407	850	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-05	4-Aug-10	498	1650	-	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-06	4-Aug-10	601	2500	-	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-07	4-Aug-10	586	1800	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-08	5-Aug-10	521	1800	-	-	Female	Immature	102	452	Blue	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-09	5-Aug-10	-	2150	-	10	Male	Immature	102	61	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-10	5-Aug-10	514	1700	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-11	5-Aug-10	545	1850	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-12	6-Aug-10	557	2250	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-13	6-Aug-10	523	1850	-	-	Female	Immature	102	82	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-14	6-Aug-10	545	2300	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-15	6-Aug-10	591	1700	-	-	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-16	6-Aug-10	552	2550	-	8	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-17	6-Aug-10	513	1750	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-18	6-Aug-10	476	1400	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-19	7-Aug-10	524	1700	-	7	Female	Immature	102	75	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-20	7-Aug-10	495	1500	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-21	7-Aug-10	541	1750	-	7	Female	Immature	102	83	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-22	7-Aug-10	602	2500	-	7	Male	Immature	114	257	Green	Big Eddy	John Carmichael	Dead-sampled
BE-23	8-Aug-10	483	1450	-	6	-	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-24	8-Aug-10	396	900	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-25	9-Aug-10	524	1650	-	7	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-26	9-Aug-10	533	1900	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-27	9-Aug-10	496	1800	-	-	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-28	10-Aug-10	543	2600	-	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-29	10-Aug-10	562	2450	-	8	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-30	10-Aug-10	596	2650	-	8	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-31	11-Aug-10	554	2100	-	6	Male	Immature	102	315	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-32	11-Aug-10	402	1450	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-33	12-Aug-10	527	1450	-	7	Male	Immature	114	292	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-34	12-Aug-10	596	2800	-	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-35	13-Aug-10	426	1150	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-36	13-Aug-10	604	3400	-	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-37	14-Aug-10	423	1050	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-38	14-Aug-10	416	800	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-39	14-Aug-10	551	2200	-	7	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-40	15-Aug-10	443	1200	-	-	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-41	15-Aug-10	626	2850	-	-	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-42	16-Aug-10	453	1250	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-43	16-Aug-10	519	1450	-	6	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-44	16-Aug-10	551	1850	-	7	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-45	17-Aug-10	403	850	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-46	18-Aug-10	461	1562	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-47	18-Aug-10	416	1100	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-48	19-Aug-10	482	1800	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-49	19-Aug-10	442	1250	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-50	20-Aug-10	581	2800	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-51	20-Aug-10	373	750	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-52	20-Aug-10	365	650	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-53	21-Aug-10	572	2750	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-54	21-Aug-10	405	850	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-55	21-Aug-10	460	900	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-56	22-Aug-10	564	2500	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-57	22-Aug-10	540	2200	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-58	22-Aug-10	343	600	-	4	-	-	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-59	23-Aug-10	431	1050	-	-	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-60	23-Aug-10	319	750	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-61	23-Aug-10	612	3450	-	6	Male	Immature	102	498	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-62	23-Aug-10	634	3650	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-63	25-Aug-10	514	2250	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-64	25-Aug-10	376	700	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-65	25-Aug-10	706	4650	-	-	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-66	26-Aug-10	369	650	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-67	27-Aug-10	321	800	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-68	28-Aug-10	371	650	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-69	29-Aug-10	428	1100	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-70	30-Aug-10	514	2250	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-71	31-Aug-10	386	650	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-72	1-Sep-10	361	700	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-73	2-Sep-10	385	750	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-74	3-Sep-10	358	650	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-75	5-Sep-10	434	1150	-	-	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
RR-01	3-Aug-10	570	2150	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-02	3-Aug-10	462	1250	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-03	4-Aug-10	500	1550	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-04	4-Aug-10	534	1900	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-05	5-Aug-10	530	1900	-	10	Female	Immature	102	69	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-06	5-Aug-10	690	3550	-	7	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-07	6-Aug-10	515	1400	-	7	Female	Mature	102	12	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-08	6-Aug-10	465	1450	-	-	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-09	10-Aug-10	556	2350	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-10	10-Aug-10	530	1800	-	8	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-11	10-Aug-10	526	2000	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-12	11-Aug-10	538	1850	-	7	Female	Immature	102	356	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-13	11-Aug-10	497	1700	-	8	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-14	12-Aug-10	510	1900	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-15	12-Aug-10	521	1850	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-16	13-Aug-10	495	1500	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-17	13-Aug-10	535	1950	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-18	14-Aug-10	448	1150	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-19	14-Aug-10	394	850	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-20	15-Aug-10	384	750	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-21	15-Aug-10	516	1900	-	-	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-22	16-Aug-10	541	1750	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-23	16-Aug-10	580	2400	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-24	17-Aug-10	683	3550	-	8	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-25	17-Aug-10	452	1150	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-26	18-Aug-10	400	900	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-27	18-Aug-10	545	2050	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-28	19-Aug-10	536	2200	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-29	20-Aug-10	664	3500	-	9	Male	Immature	102	28	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-30	21-Aug-10	490	1900	-	6	Male	Immature	102	-	-	Mouth of Rat River	Peter Francis	Dead-sampled
RR-31	22-Aug-10	430	1150	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-32	23-Aug-10	452	1500	-	5	Female	Immature	102	-	-	Mouth of Rat River	Peter Francis	Dead-sampled
RR-33	24-Aug-10	474	1350	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-34	25-Aug-10	529	2100	-	8	Female	Immature	102	241	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-35	25-Aug-10	622	3500	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-36	25-Aug-10	555	2250	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-37	25-Aug-10	470	1600	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-38	26-Aug-10	643	4300	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-39	26-Aug-10	518	2000	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-40	26-Aug-10	459	1450	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-41	26-Aug-10	527	2000	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-42	27-Aug-10	561	2350	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-43	27-Aug-10	450	1350	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-44	27-Aug-10	550	2750	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-45	27-Aug-10	422	1300	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-46	27-Aug-10	428	1100	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-47	28-Aug-10	546	2200	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-48	28-Aug-10	591	3050	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-49	28-Aug-10	571	2500	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-50	28-Aug-10	380	800	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-51	28-Aug-10	552	2300	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-52	29-Aug-10	628	3650	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-53	29-Aug-10	443	1300	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-54	29-Aug-10	635	3100	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-55	29-Aug-10	543	2250	-	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-56	29-Aug-10	432	1300	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-57	30-Aug-10	440	1250	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-58	30-Aug-10	534	2300	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-59	30-Aug-10	577	2900	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-60	30-Aug-10	446	1250	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-61	31-Aug-10	468	1650	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-62	31-Aug-10	370	850	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-63	31-Aug-10	406	900	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-64	31-Aug-10	622	3500	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-65	31-Aug-10	552	2500	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-66	1-Sep-10	542	2200	-	6	Female	Immature	102	-	-	Mouth of Rat River	George Blake	Dead-sampled
RR-67	1-Sep-10	490	1550	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-68	1-Sep-10	385	900	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-69	1-Sep-10	460	1250	-	5	Male	Immature	102	-	-	Mouth of Rat River	George Blake	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-70	2-Sep-10	390	900	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-71	2-Sep-10	460	1250	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-72	2-Sep-10	554	3000	-	6	Male	Immature	102	-	-	Mouth of Rat River	George Blake	Dead-sampled
RR-73	3-Sep-10	470	1550	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-74	3-Sep-10	476	1500	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-75	4-Sep-10	384	800	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
DC-01	12-Aug-10	517	1750	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-02	12-Aug-10	529	1950	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-03	12-Aug-10	508	1700	-	-	Female	Mature	102	70	Blue	Destruction City	Selwyn Kay	Dead-sampled
DC-04	12-Aug-10	466	1150	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-05	12-Aug-10	467	1150	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-06	12-Aug-10	551	2100	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-07	12-Aug-10		1550	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-08	13-Aug-10	495	1550	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-09	13-Aug-10	514	1650	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-10	13-Aug-10	470	1350	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-11	13-Aug-10	557	2200	-	8	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-12	14-Aug-10	541	1950	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-13	14-Aug-10	438	950	-	7	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-14	14-Aug-10	544	2350	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-15	14-Aug-10	496	1600	-	6	Female	Immature	102	198	Blue	Destruction City	Selwyn Kay	Dead-sampled
DC-16	15-Aug-10	528	2000	-	8	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-17	15-Aug-10	554	2100	-	8	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-18	15-Aug-10	592	2600	-	8	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-19	15-Aug-10	-	3450	-	8	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-20	15-Aug-10	523	1750	-	7	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-21	16-Aug-10	519	1900	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-22	16-Aug-10	537	1950	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-23	16-Aug-10	558	2200	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-24	16-Aug-10	524	1500	-	8	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-25	17-Aug-10	524	1850	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-26	17-Aug-10	521	1700	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-27	18-Aug-10	411	950	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-28	18-Aug-10	493	1600	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-29	20-Aug-10	451	1300	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-30	21-Aug-10	466	1550	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-31	21-Aug-10	368	700	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-32	23-Aug-10	354	600	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-33	23-Aug-10	438	1000	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-34	23-Aug-10	534	2000	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-35	23-Aug-10	569	2700	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-36	23-Aug-10	568	2800	-	7	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-37	23-Aug-10	558	2550	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-38	23-Aug-10	352	600	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-39	24-Aug-10	411	950	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-40	24-Aug-10	513	1850	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-41	25-Aug-10	354	600	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-42	26-Aug-10	429	1150	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-43	26-Aug-10	562	2550	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-44	26-Aug-10	442	1050	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-45	26-Aug-10	519	2000	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-46	26-Aug-10	433	1300	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-47	26-Aug-10	534	2300	-	5	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-48	27-Aug-10	377	850	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-49	27-Aug-10	461	1500	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-50	27-Aug-10	351	550	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-51	27-Aug-10	354	600	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-52	27-Aug-10	326	450	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-53	28-Aug-10	341	-	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-54	28-Aug-10	351	600	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-55	28-Aug-10	373	650	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-56	28-Aug-10	673	4350	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-57	29-Aug-10	352	500	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-58	29-Aug-10	353	550	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-59	29-Aug-10	339	500	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-60	29-Aug-10	358	550	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-61	30-Aug-10	384	750	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-62	30-Aug-10	382	750	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-63	30-Aug-10	382	750	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-64	30-Aug-10	366	650	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-65	31-Aug-10	348	550	-	3	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-66	31-Aug-10	327	400	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-67	1-Sep-10	405	800	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-68	2-Sep-10	436	1150	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-69	3-Sep-10	338	500	-	3	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-70	4-Sep-10	-	405	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-71	5-Sep-10	394	850	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-72	6-Sep-10	399	900	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-73	7-Sep-10	329	450	-	4	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-74	8-Sep-10	569	2550	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-75	10-Sep-10	329	450	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
BE-01	30-Jul-11	551	1850	-	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-02	31-Jul-11	522	1400	-	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-03	31-Jul-11	506	1550	-	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-04	1-Aug-11	490	1900	-	8	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-05	1-Aug-11	521	1450	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-06	2-Aug-11	531	1550	-	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-07	2-Aug-11	487	1300	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-08	3-Aug-11	433	900	-	5	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-09	3-Aug-11	571	1980	-	9	Male	Mature	114	755	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-10	3-Aug-11	548	1700	-	11	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-11	4-Aug-11	587	2100	-	9	Female	Mature	102	753	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-12	4-Aug-11	510	1450	-	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-13	4-Aug-11	471	1100	-	8	Female	Mature	102	854	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-14	5-Aug-11	692	3200	-	8	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-15	5-Aug-11	501	1450	-	8	Female	Immature	102	567	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-16	5-Aug-11	676	3150	-	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-17	6-Aug-11	503	1250	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-18	7-Aug-11	543	2000	-	8	Female	Mature	114	416	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-19	8-Aug-11	445	1050	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-20	8-Aug-11	553	1950	-	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-21	9-Aug-11	483	1250	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-22	9-Aug-11	581	2100	-	8	Male	Immature	114	539	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-23	10-Aug-11	532	1900	-	7	Female	Immature	114	262	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-24	10-Aug-11	546	1650	-	7	Female	Mature	-	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-25	11-Aug-11	417	1100	-	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-26	11-Aug-11	563	1800	-	11	Female	Mature	114	398	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-27	12-Aug-11	478	1450	-	6	Female	Immature	114	915	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-28	13-Aug-11	426	1050	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-29	13-Aug-11	432	950	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-30	14-Aug-11	438	1050	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-31	14-Aug-11	535	1950	-	7	Female	Immature	102	600	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-32	16-Aug-11	392	900	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-33	17-Aug-11	401	750	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-34	19-Aug-11	476	1950	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-35	20-Aug-11	415	850	-	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-36	20-Aug-11	584	2250	-	9	Female	Immature	102	664	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-37	21-Aug-11	453	584	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-38	22-Aug-11	433	1000	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-39	23-Aug-11	535	2200	-	7	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-40	24-Aug-11	560	2250	-	6	Female	Immature	114	946	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-41	25-Aug-11	520	1800	-	6	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-42	26-Aug-11	458	1450	-	7	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-43	27-Aug-11	512	1800	-	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-44	28-Aug-11	521	1950	-	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-45	29-Aug-11	453	1200	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-46	30-Aug-11	642	3450	-	7	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-47	31-Aug-11	473	1450	-	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
RR-01	30-Jul-11	485	1350	-	7	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-02	30-Jul-11	540	1800	-	7	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-03	31-Jul-11	526	1650	-	8	Female	Mature	102	434	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-04	31-Jul-11	552	1900	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-05	1-Aug-11	550	1900	-	7	Female	Mature	102	107	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-06	1-Aug-11	508	1650	-	6	Female	Mature	102	23	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-07	2-Aug-11	575	2050	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-08	2-Aug-11	503	1500	-	7	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-09	3-Aug-11	543	1850	-	5	Female	Mature	102	86	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-10	3-Aug-11	560	2000	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-11	4-Aug-11	574	2200	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-12	4-Aug-11	584	2200	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-13	5-Aug-11	600	2300	-	10	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-14	5-Aug-11	464	1450	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-15	6-Aug-11	513	1650	-	9	Female	Mature	102	802	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-16	6-Aug-11	424	850	-	5	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-17	7-Aug-11	540	2000	-	7	Female	Mature	102	96	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-18	7-Aug-11	575	2150	-	8	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-19	8-Aug-11	535	1950	-	8	Female	Mature	102	103	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-20	8-Aug-11	513	1700	-	7	Female	Mature	102	353	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-21	9-Aug-11	507	1500	-	7	Female	Mature	102	697	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-22	9-Aug-11	625	3000	-	12	Female	Mature	102	404	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-23	10-Aug-11	558	1650	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-24	11-Aug-11	585	2500	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-25	12-Aug-11	505	1600	-	7	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-26	12-Aug-11	615	1950	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-27	13-Aug-11	491	1450	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-28	14-Aug-11	460	1250	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-29	15-Aug-11	473	1350	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-30	16-Aug-11	483	1500	-	8	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-31	16-Aug-11	475	1550	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-32	17-Aug-11	480	1400	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-33	17-Aug-11	464	1350	-	5	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-34	18-Aug-11	470	1400	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-35	18-Aug-11	455	1250	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-36	19-Aug-11	443	1200	-	-	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-37	20-Aug-11	431	1050	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-38	21-Aug-11	548	1900	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-39	22-Aug-11	504	1350	-	7	Female	Immature	102	625	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-40	22-Aug-11	539	1900	-	7	Female	Immature	102	124	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-41	23-Aug-11	554	2100	-	7	Male	Immature	102	378	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-42	24-Aug-11	569	2800	-	7	Female	Immature	102	250	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-43	25-Aug-11	453	1350	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-44	26-Aug-11	556	2150	-	7	Female	Immature	102	829	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-45	27-Aug-11	504	1750	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-46	28-Aug-11	594	2750	-	8	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-47	29-Aug-11	597	3000	-	9	Female	Immature	102	210	Green	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-48	30-Aug-11	520	1750	-	6	Female	Immature	102	649	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-49	31-Aug-11	661	3650	-	9	Male	Immature	102	833	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-50	1-Sep-11	426	1200	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
DC-01	8-Aug-11	476	1300	-	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-02	8-Aug-11	542	2000	-	7	Female	Mature	102	883	Yellow	Destruction City	Selwyn Kay	Dead-sampled
DC-03	9-Aug-11	543	1800	-	8	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-04	9-Aug-11	504	1650	-	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-05	10-Aug-11	592		-	7	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-06	10-Aug-11	598	2300	-	8	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-07	10-Aug-11	467	1150	-	6	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-08	11-Aug-11	463	1250	-	6	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-09	11-Aug-11	446	1000	-	5	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-10	12-Aug-11	555	2300	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-11	13-Aug-11	533	800	-	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-12	13-Aug-11	474	1350	-	7	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-13	14-Aug-11	453	1150	-	6	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-14	15-Aug-11	529	2050	-	8	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-15	16-Aug-11	639	3350	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-16	16-Aug-11	469	1350	-	6	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-17	17-Aug-11	458	1250	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-18	18-Aug-11	549	1900	-	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-19	19-Aug-11	519	1650	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-20	20-Aug-11	364	600	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-21	21-Aug-11	539	2050	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-22	21-Aug-11	391	750	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-23	22-Aug-11	596	2450	-	8	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-24	22-Aug-11	418	900	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-25	23-Aug-11	432	950	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-26	24-Aug-11	511	1750	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-27	25-Aug-11	564	2400	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-28	25-Aug-11	342	550	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-29	25-Aug-11	428	1050	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-30	26-Aug-11	439	1200	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-31	26-Aug-11	499	1500	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-32	26-Aug-11	709	4050	-	10	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-33	26-Aug-11	464	1400	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-34	27-Aug-11	431	1150	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-35	27-Aug-11	403	800	-	5	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-36	27-Aug-11	539	2050	-	6	-	-	102	396	Blue	Destruction City	Selwyn Kay	Dead-sampled
DC-37	28-Aug-11	413	1050	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-38	29-Aug-11	522	1950	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-39	29-Aug-11	444	1100	-	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-40	30-Aug-11	587	2900	-	7	Female	Immature	102	35	Green	Destruction City	Selwyn Kay	Dead-sampled
DC-41	30-Aug-11	368	600	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-42	31-Aug-11	468	1550	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-43	1-Sep-11	552	2350	-	7	Male	Immature	102	905	Yellow	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-44	1-Sep-11	521	2000	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-45	2-Sep-11	342	550	-	5	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-46	2-Sep-11	468	1450	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-47	3-Sep-11	347	550	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-48	4-Sep-11	508	1700	-	7	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-49	5-Sep-11	348	550	-	4	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-50	6-Sep-11	559	2250	-	7	Female	Immature	102	274	Green	Destruction City	Selwyn Kay	Dead-sampled
BE-01	29-Jul-12	592	2356	-	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-02	29-Jul-12	548	1950	-	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-03	30-Jul-12	481	1250	-	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-04	30-Jul-12	401	1250	-	6	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-05	31-Jul-12	472	1300	-	5	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-06	1-Aug-12	470	1500	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-07	1-Aug-12	631	3250	-	8	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-08	2-Aug-12	418	1000	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-09	3-Aug-12	617	2700	-	-	Female	Mature	114	672	yellow	Big Eddy	John Carmichael	Dead-sampled
BE-10	3-Aug-12	565	2500	-	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-11	4-Aug-12	586	2000	-	-	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-12	4-Aug-12	498	1600	-	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-13	5-Aug-12	456	1150	-	-	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-14	6-Aug-12	378	650	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-15	6-Aug-12	443	1150	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-16	6-Aug-12	345	345	-	-	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-17	7-Aug-12	632	3100	-	-	Female	Mature	102	175	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-18	8-Aug-12	432	1200	-	6	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-19	9-Aug-12	398	1200	-	-	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-20	10-Aug-12	441	1150	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-21	11-Aug-12	603	2600	-	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-22	12-Aug-12	616	2450	-	8	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-23	12-Aug-12	458	1350	-	4	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-24	13-Aug-12	598	2750	-	9	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-25	14-Aug-12	440	1210	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-26	15-Aug-12	448	1300	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-27	16-Aug-12	554	1200	-	8	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-28	16-Aug-12	721	4850	-	-	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-29	17-Aug-12	690	4110	-	9	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-30	17-Aug-12	445	1450	-	4	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-31	18-Aug-12	464	-	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-32	18-Aug-12	458	1400	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-33	19-Aug-12	463	1300	-	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-34	19-Aug-12	508	1800	-	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-35	20-Aug-12	638	3500	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-36	21-Aug-12	482	1250	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-37	22-Aug-12	490	1700	-	4	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-38	23-Aug-12	450	1300	-	-	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-39	24-Aug-12	718	-	-	-	Male	Immature	114	329	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-40	24-Aug-12	463	1400	-	6	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-41	25-Aug-12	460	1650	-	4	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-42	25-Aug-12	596	2500	-	8	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-43	26-Aug-12	457	1200	-	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-44	26-Aug-12	470	1450	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-45	27-Aug-12	370	800	-	4	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-46	27-Aug-12	713	4300	-	11	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-47	28-Aug-12	476	1650	-	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-48	29-Aug-12	176	95	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-49	30-Aug-12	300	550	-	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-50	31-Aug-12	340	650	-	4	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
-	30-Jul-12	501	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	31-Jul-12	402	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	2-Aug-12	382	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	3-Aug-12	432	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	3-Aug-12	461	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	3-Aug-12	346	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-12	460	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-12	445	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-12	454	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-12	463	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	5-Aug-12	501	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	6-Aug-12	421	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-12	412	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	7-Aug-12	426	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	7-Aug-12	362	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-12	443	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-12	401	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-12	452	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-12	346	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-12	408	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-12	445	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-12	402	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-12	415	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-12	453	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-12	435	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-12	453	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-12	438	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-12	387	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	10-Aug-12	381	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-12	426	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-12	594	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-12	495	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-12	447	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-12	365	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-12	463	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	425	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	516	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	487	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	450	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	328	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	379	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	412	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-12	520	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-12	421	-	-	-	-	-	-	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-12	464	-	-	-	-	-	-	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	13-Aug-12	472	-	-	-	-	-	-	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-12	416	-	-	-	-	-	-	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-12	464	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	15-Aug-12	350	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	15-Aug-12	340	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-12	438	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-12	460	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-12	436	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-12	425	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-12	467	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-12	452	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-12	447	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-12	450	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-12	453	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-12	426	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-12	326	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	312	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	18-Aug-12	407	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	343	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	420	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	426	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	345	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	371	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-12	360	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	445	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	340	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	383	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	460	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	363	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	342	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	434	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	371	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	19-Aug-12	363	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-12	360	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	20-Aug-12	423	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-12	458	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-12	350	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-12	311	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-12	432	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-12	406	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-12	379	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-12	342	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	22-Aug-12	363	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	23-Aug-12	310	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	23-Aug-12	341	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	23-Aug-12	451	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	24-Aug-12	442	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	24-Aug-12	530	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	24-Aug-12	334	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-12	420	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-12	650	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	27-Aug-12	320	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-12	430	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	28-Aug-12	350	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
RR-01	9-Aug-12	410	750	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-02	9-Aug-12	448	1050	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-03	10-Aug-12	495	1600	-	7	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-04	10-Aug-12	434	1050	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-05	11-Aug-12	595	2350	-	7	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-06	11-Aug-12	350	500	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-07	12-Aug-12	650	3000	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-08	12-Aug-12	420	1000	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-09	13-Aug-12	450	1300	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-10	13-Aug-12	576	2500	-	8	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-11	14-Aug-12	567	2700	-	8	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-12	14-Aug-12	469	1450	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-13	15-Aug-12	457	1300	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-14	15-Aug-12	418	1100	-	3	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-15	16-Aug-12	459	1350	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-16	16-Aug-12	496	1350	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-17	16-Aug-12	490	1600	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-18	16-Aug-12	437	1150	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-19	17-Aug-12	462	1350	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-20	17-Aug-12	415	1100	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-21	17-Aug-12	424	1150	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-22	17-Aug-12	490	1700	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-23	18-Aug-12	462	1400	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-24	18-Aug-12	665	3500	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-25	18-Aug-12	442	1100	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-26	19-Aug-12	473	1550	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-27	19-Aug-12	462	1300	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-28	19-Aug-12	482	1500	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-29	20-Aug-12	460	1400	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-30	20-Aug-12	475	1400	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-31	20-Aug-12	447	1100	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-32	21-Aug-12	650	2000	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-33	21-Aug-12	501	1800	-	6	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-34	22-Aug-12	423	1000	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-35	22-Aug-12	436	1400	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-36	22-Aug-12	361	700	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-37	23-Aug-12	480	1800	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-38	23-Aug-12	367	750	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-39	24-Aug-12	471	1400	-	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-40	24-Aug-12	413	900	-	4	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-41	25-Aug-12	446	1200	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-42	26-Aug-12	479	1600	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-43	27-Aug-12	500	1600	-	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-44	27-Aug-12	360	600	-	-	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-45	28-Aug-12	480	1400	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-46	29-Aug-12	590	2700	-	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-47	30-Aug-12	450	1300	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-48	31-Aug-12	370	700	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-49	31-Aug-12	370	700	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-50	1-Sep-12	370	750	-	4	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
-	10-Aug-12	325	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-12	455	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-12	570	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-12	350	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-12	450	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-12	400	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-12	500	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-12	414	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-12	337	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	13-Aug-12	575	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	13-Aug-12	456	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	13-Aug-12	605	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	13-Aug-12	450	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	14-Aug-12	435	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	14-Aug-12	464	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	15-Aug-12	445	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	15-Aug-12	454	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	15-Aug-12	425	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	16-Aug-12	452	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	16-Aug-12	445	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	16-Aug-12	432	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	16-Aug-12	520	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	17-Aug-12	540	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	17-Aug-12	542	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	17-Aug-12	450	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	18-Aug-12	612	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	18-Aug-12	595	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	18-Aug-12	473	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	19-Aug-12	471	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	19-Aug-12	465	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	19-Aug-12	457	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	20-Aug-12	508	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	20-Aug-12	543	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	20-Aug-12	460	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	20-Aug-12	483	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	21-Aug-12	716	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	363	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	367	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	422	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	475	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	460	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	22-Aug-12	471	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	362	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	366	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	369	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	480	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	23-Aug-12	460	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	482	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	458	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	335	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	377	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	340	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	364	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	361	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	348	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	23-Aug-12	352	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	440	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	380	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	433	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	500	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	457	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	24-Aug-12	363	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	25-Aug-12	358	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	25-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	25-Aug-12	363	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	26-Aug-12	365	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	26-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	26-Aug-12	361	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-12	365	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-12	345	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	28-Aug-12	341	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	28-Aug-12	367	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-12	350	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-12	370	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-12	350	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-12	360	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-12	343	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	1-Sep-12	370	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-12	450	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-12	380	-	-		-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
DC-01	9-Aug-12	520	1600	-	7	Female	Mature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-02	10-Aug-12	319	450	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-03	11-Aug-12	459	1350	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-04	12-Aug-12	439	1150	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-05	12-Aug-12	434	1100	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-06	12-Aug-12	589	3000	-	9	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-07	13-Aug-12	439	1150	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-08	13-Aug-12	437	1100	-	6	Male	Mature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-09	13-Aug-12	436	1150	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-10	13-Aug-12	450	1200	-	-	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-11	14-Aug-12	597	2650	-	-	Female	Immature	114	115	Blue	Destruction City	Selwyn Kay	Dead-sampled
DC-12	14-Aug-12	427	1100	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-13	14-Aug-12	439	1150	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-14	14-Aug-12	412	1100	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-15	15-Aug-12	333	450	-	-	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-16	15-Aug-12	617	2950	-	-	Female	Immature	114	427	Blue	Destruction City	Selwyn Kay	Dead-sampled
DC-17	15-Aug-12	466	1250	-	5	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-18	16-Aug-12	452	1200	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-19	16-Aug-12	433	1050	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-20	16-Aug-12	353	600	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-21	17-Aug-12	483	1550	-	6	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-22	17-Aug-12	296	350	-	3	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-23	17-Aug-12	591	2950	-		Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-24	18-Aug-12	437	1250	-	5	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-25	18-Aug-12	471	1300	-	5	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-26	19-Aug-12	441	1150	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-27	19-Aug-12	456	1250	-	5	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-28	20-Aug-12	604	3350	-	6	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-29	20-Aug-12	468	1450	-	6	-	-	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-30	21-Aug-12	447	1200	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-31	22-Aug-12	327	450	-	3	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-32	22-Aug-12	488	1450	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-33	23-Aug-12	434	1200	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-34	23-Aug-12	432	1150	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-35	24-Aug-12	421	1200	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-36	24-Aug-12	432	1100	-	4	-	-	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-37	25-Aug-12	446	2250	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-38	26-Aug-12	458	1200	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-39	26-Aug-12	602	2700	-	-	Female	Immature	114	525	yellow	Destruction City	Selwyn Kay	Dead-sampled
DC-40	27-Aug-12	333	500	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-41	27-Aug-12	443	1200	-	5	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-42	28-Aug-12	444	1250	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-43	28-Aug-12	461	1450	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-44	29-Aug-12	467	1350	-	5	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-45	29-Aug-12	419	400	-	3	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-46	30-Aug-12	436	1200	-	4	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-47	30-Aug-12	367	600	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-48	31-Aug-12	356	650	-	3	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-49	1-Sep-12	317	450	-	3	Female	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-50	2-Sep-12	352	650	-	4	Male	Immature	114	-	-	Destruction City	Selwyn Kay	Dead-sampled
-	11-Aug-12	445	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	11-Aug-12	477	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	12-Aug-12	403	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	13-Aug-12	362	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	14-Aug-12	353	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	15-Aug-12	465	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	16-Aug-12	361	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	17-Aug-12	362	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	17-Aug-12	346	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	18-Aug-12	338	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	18-Aug-12	349	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	19-Aug-12	428	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	19-Aug-12	419	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	20-Aug-12	341	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	20-Aug-12	442	-	-		-	-	114	-	-	Destruction City	Selwyn Kay	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	21-Aug-12	452	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	21-Aug-12	434	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	21-Aug-12	347	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	22-Aug-12	319	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	22-Aug-12	332	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	23-Aug-12	322	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	23-Aug-12	285	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	23-Aug-12	328	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	24-Aug-12	357	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	24-Aug-12	306	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	25-Aug-12	281	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	25-Aug-12	314	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	26-Aug-12	334	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
-	26-Aug-12	339	-	-	-	-	-	114	-	-	Destruction City	Selwyn Kay	Live-released
BE-01	3-Aug-13	515	1400	98.5	6	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-02	4-Aug-13	507	1200	79	7	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-03	5-Aug-13	485	1000	68	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-04	6-Aug-13	610	2300	137.5	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-05	6-Aug-13	504	1050	112.5	-	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-06	6-Aug-13	525	1300	84	6	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-07	7-Aug-13	621	2200	157.5	7	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-08	7-Aug-13	548	1400	119	8	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-09	7-Aug-13	521	1325	69	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-10	7-Aug-13	510	1150	94.5	5	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-11	7-Aug-13	474	1050	100.5	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-12	8-Aug-13	556	1480	57	7	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-13	8-Aug-13	485	1000	95.5	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-14	9-Aug-13	576	1400	158.5	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-15	9-Aug-13	485	900	-	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-16	9-Aug-13	550	1525	152.5	9	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-17	9-Aug-13	535	1400	167	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-18	10-Aug-13	641	2350	144.5	9	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-19	10-Aug-13	593	1650	144	10	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-20	10-Aug-13	575	1650	229	10	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-21	10-Aug-13	565	1750	179	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-22	11-Aug-13	576	1750	153	-	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-23	11-Aug-13	580	1800	147.5	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-24	11-Aug-13	545	1550	161.5	13	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-25	13-Aug-13	584	1850	207.5	10	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-26	13-Aug-13	568	1650	188	9	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-27	13-Aug-13	617	1950	186	9	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-28	14-Aug-13	521	1250	-	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-29	14-Aug-13	625	2400	156.5	8	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-30	15-Aug-13	535	1500	125	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-31	15-Aug-13	520	1600	132.5	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-32	15-Aug-13	590	2000	189	11	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-33	15-Aug-13	594	1800	144	9	Female	Mature	102	727	yellow	Big Eddy	John Carmichael	Dead-sampled
BE-34	16-Aug-13	560	1850	198	-	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-35	16-Aug-13	559	1700	189	11	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-36	16-Aug-13	602	2100	159.5	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-37	16-Aug-13	585	1700	168	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-38	16-Aug-13	640	2650	330.5	8	Female	Mature	114	805	yellow	Big Eddy	John Carmichael	Dead-sampled
BE-39	16-Aug-13	546	1550	124	8	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-40	16-Aug-13	550	1500	20.5	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-41	17-Aug-13	438	900	84	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-42	17-Aug-13	555	1550	169.5	10	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-43	17-Aug-13	455	1000	78.5	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-44	17-Aug-13	634	2550	274.5	7	Female	Mature	114	187	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-45	17-Aug-13	578	1850	196.5	8	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-46	18-Aug-13	487	1300	151	6	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-47	18-Aug-13	606	1400	70.5	8	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-48	19-Aug-13	501	1500	154.5	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-49	19-Aug-13	607	2150	264	8	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-50	20-Aug-13	501	1450	143	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-51	20-Aug-13	578	2200	144.5	7	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-52	22-Aug-13	592	2400	220	8	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-53	23-Aug-13	646	2850	170.5	10	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-54	24-Aug-13	586	2050	196.5	7	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-55	24-Aug-13	595	2100	293.5	10	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-56	25-Aug-13	428	1000	4.5	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-57	25-Aug-13	581	2000	199	8	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-58	26-Aug-13	563	1900	93.5	6	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-59	1-Sep-13	433	850	87	6	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-60	2-Sep-13	574	1800	187	8	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
-	6-Aug-13	485	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-13	530	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-13	440	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-13	482	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	7-Aug-13	570	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-13	544	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-13	505	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-13	451	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-13	450	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-13	562	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-13	557	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	9-Aug-13	583	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-13	602	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-13	553	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-13	551	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-13	471	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-13	549	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-13	532	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	11-Aug-13	442	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-13	602	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	12-Aug-13	558	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-13	520	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	15-Aug-13	671	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	15-Aug-13	497	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	15-Aug-13	500	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-13	556	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-13	592	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-13	515	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	16-Aug-13	585	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-13	580	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	16-Aug-13	575	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-13	594	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-13	568	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	17-Aug-13	545	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-13	486	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	18-Aug-13	591	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-13	471	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-13	497	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-13	585	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-13	172	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-13	470	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-13	165	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-13	160	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	24-Aug-13	405	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	24-Aug-13	387	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	24-Aug-13	462	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-13	471	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-13	420	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-13	401	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-13	403	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-13	390	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	402	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	416	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	382	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	314	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	436	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	482	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	573	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	27-Aug-13	502	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	455	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	378	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	423	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	29-Aug-13	527	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	427	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	391	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	454	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	29-Aug-13	442	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-13	391	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-13	382	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-13	445	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-13	568	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-13	476	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-13	585	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	1-Sep-13	442	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	2-Sep-13	542	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
RR-01	8-Aug-13	544	1700	322	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-02	9-Aug-13	504	1250	108	5	Male	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-03	10-Aug-13	580	1700	3.5	6	Female	Mature	114	242	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-04	10-Aug-13	580	1900	0.5	8	Male	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-05	11-Aug-13	577	1750	175	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-06	11-Aug-13	585	1900	30.5	8	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-07	12-Aug-13	543	1300	169.5	9	Female	Mature	114	146	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-08	12-Aug-13	586	1800	167	10	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-09	13-Aug-13	638	2200	228	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-10	13-Aug-13	596	1850	182	8	Male	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-11	14-Aug-13	455	900	29	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-12	16-Aug-13	485	1150	159	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-13	17-Aug-13	592	1900	192	9	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-14	17-Aug-13	544	1650	224	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-15	17-Aug-13	573	1900	223	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-16	17-Aug-13	553	1750	176.5	10	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-17	18-Aug-13	560	1750	194	9	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-18	18-Aug-13	535	1500	100	6	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-19	18-Aug-13	527	1650	225.5	9	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-20	19-Aug-13	533	1450	30	7	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-21	19-Aug-13	547	1500	184	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-22	19-Aug-13	605	1950	257.5	9	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-23	20-Aug-13	522	1550	227.5	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-24	20-Aug-13	582	2000	238	10	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-25	20-Aug-13	528	1500	187.5	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-26	21-Aug-13	586	2050	222	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-27	21-Aug-13	589	2050	215.5	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-28	21-Aug-13	533	1550	153.5	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-29	22-Aug-13	530	1600	210.5	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-30	24-Aug-13	597	2000	242.5	9	Female	Mature	114	411	Blue	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-31	25-Aug-13	608	2300	262	9	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-32	25-Aug-13	606	2400	356	8	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-33	25-Aug-13	540	1800	351.5	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-34	25-Aug-13	498	1400	165.5	6	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-35	26-Aug-13	496	1300	31.5	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-36	27-Aug-13	520	1450	199.5	-	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-37	27-Aug-13	575	1900	314.5	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-38	28-Aug-13	579	1850	250.5	7	Female	Mature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-39	28-Aug-13	456	1050	28.5	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-40	28-Aug-13	580	2200	71.5	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-41	29-Aug-13	412	800	31.5	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-42	29-Aug-13	556	1700	30.5	9	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-43	29-Aug-13	417	800	31	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-44	30-Aug-13	477	950	29	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-45	30-Aug-13	542	1650	42.5	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-46	31-Aug-13	470	1200	28.5	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-47	31-Aug-13	570	2250	30	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-48	1-Sep-13	422	900	28.5	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-49	1-Sep-13	507	1600	30	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-50	2-Sep-13	452	1200	31.5	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-51	2-Sep-13	428	1000	29	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-52	3-Sep-13	493	1400	28.5	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-53	3-Sep-13	467	1300	30	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-54	4-Sep-13	460	1100	28.5	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-55	4-Sep-13	435	850	30	-	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-56	5-Sep-13	538	1750	28.5	7	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-57	5-Sep-13	525	1700	31	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-58	6-Sep-13	464	1300	28	6	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-59	6-Sep-13	445	1050	28.5	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-60	6-Sep-13	458	1050	28	5	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
-	11-Aug-13	555	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-13	545	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-13	605	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-13	595	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	12-Aug-13	622	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	26-Aug-13	564	-	-	-	-	-	114	731	Yellow	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-13	642	-	-	-	-	-	114	328	Green	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-13	560	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-13	518	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-13	445	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-13	434	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-13	457	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	31-Aug-13	472	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-13	543	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-13	518	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-13	545	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-13	496	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-13	430	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-13	465	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-13	565	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-13	490	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-13	421	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	1-Sep-13	435	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	2-Sep-13	452	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	2-Sep-13	428	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	2-Sep-13	530	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	3-Sep-13	380	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	3-Sep-13	450	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	4-Sep-13	420	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	4-Sep-13	520	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	5-Sep-13	452	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	5-Sep-13	518	-	-	-	-	-	114	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	5-Sep-13	448	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
DC-01	12-Aug-13	595	1850	-	8	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-02	12-Aug-13	474	1100	-	5	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-03	13-Aug-13	559	1650	72	8	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-04	13-Aug-13	602	1900	-	9	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-05	13-Aug-13	548	1550	-	9	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-06	14-Aug-13	578	1800	-	8	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-07	14-Aug-13	566	1600	-	8	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-08	15-Aug-13	547	1650	68.09	6	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-09	16-Aug-13	599	1950	-	10	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-10	16-Aug-13	372	550	44	7	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-11	16-Aug-13	579	1700	-	12	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-12	18-Aug-13	459	1050	-	6	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-13	18-Aug-13	563	1700	245.5	9	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-14	18-Aug-13	572	1850	-	-	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-15	18-Aug-13	529	1400	-	10	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-16	18-Aug-13	382	650	-	-	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-17	18-Aug-13	463	1150	183.5	8	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-18	18-Aug-13	429	800	88.5	5	Male	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-19	19-Aug-13	574	1800	231	10	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-20	19-Aug-13	398	700	91	6	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-21	19-Aug-13	369	500	-	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-22	19-Aug-13	398	650	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-23	20-Aug-13	518	1600	243.5	8	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-24	20-Aug-13	437	850	114	5	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-25	20-Aug-13	561	1750	202	10	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-26	20-Aug-13	535	1750	277	-	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-27	20-Aug-13	608	2450	254	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-28	20-Aug-13	553	1750	373	9	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-29	21-Aug-13	443	900	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-30	22-Aug-13	487	1200	164.5	6	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-31	23-Aug-13	586	1900	212	11	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-32	24-Aug-13	574	1900	234.5	9	Female	Mature	102	608	yellow	Destruction City	Selwyn Kay	Dead-sampled
DC-33	30-Aug-13	541	1600	248	7	Female	Mature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-34	30-Aug-13	428	850	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-35	30-Aug-13	432	850	-	6	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-36	30-Aug-13	482	1150	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-37	30-Aug-13	426	1450	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-38	30-Aug-13	416	850	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-39	30-Aug-13	417	850	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-40	31-Aug-13	398	700	-	5	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-41	31-Aug-13	393	800	68	5	Female	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-42	1-Sep-13	439	900	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-43	1-Sep-13	528	1450	77.5	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-44	1-Sep-13	437	900	51	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-45	1-Sep-13	414	800	40	-	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-46	1-Sep-13	439	950	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-47	2-Sep-13	413	800	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-48	2-Sep-13	572	1950	-	7	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-49	2-Sep-13	434	900	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-50	3-Sep-13	407	750	-	4	-	-	-	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-51	4-Sep-13	492	1650	111.5	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-52	5-Sep-13	412	850	-	4	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-53	5-Sep-13	517	1600	117	6	Female	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-54	6-Sep-13	414	900	-	5	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-55	7-Sep-13	460	1150	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-56	8-Sep-13	397	800	-	5	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-57	9-Sep-13	447	1000	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-58	10-Sep-13	438	950	-	6	Male	Immature	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-59	11-Sep-13	421	850	-	5	-	-	102	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-60	12-Sep-13	429	850	-	6	-	-	-	-	-	Destruction City	Selwyn Kay	Dead-sampled
-	25-Aug-13	587	-	-	-	-	-	102	-	-	Destruction City	Selwyn Kay	Live-released
-	25-Aug-13	537	-	-	-	-	-	102	-	-	Destruction City	Selwyn Kay	Live-released
-	25-Aug-13	539	-	-	-	-	-	102	-	-	Destruction City	Selwyn Kay	Live-released
-	26-Aug-13	617	-	-	-	-	-	102	-	-	Destruction City	Selwyn Kay	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-01	30-Jul-14	650	2800	259.5	10	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-02	30-Jul-14	516	1500	125.5	7	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-03	30-Jul-14	505	1525	102.0	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-04	31-Jul-14	520	1500	116.5	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-05	31-Jul-14	468	1150	140.0	5	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-06	31-Jul-14	530	1600	144.5	9	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-07	31-Jul-14	485	1250	6.5	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-08	1-Aug-14	515	1625	3.5	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-09	1-Aug-14	456	1400	74.0	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-10	2-Aug-14	515	1600	3.5	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-11	2-Aug-14	530	1900	110.5	5	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-12	2-Aug-14	465	1150	84.5	8	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-13	3-Aug-14	521	1700	1.0	5	Male	Immature	102	1045	Orange	Big Eddy	John Carmichael	Dead-sampled
BE-14	3-Aug-14	536	1725	131.5	-	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-15	3-Aug-14	505	1675	0.0	6	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-16	3-Aug-14	520	1500	96.0	8	Female	Mature	102	1356	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-17	4-Aug-14	580	1900	124.5	7	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-18	4-Aug-14	535	2000	176.5	9	Female	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-19	4-Aug-14	500	1500	0.0		Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-20	4-Aug-14	525	1800	1.0	8	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-21	5-Aug-14	545	1900	153.5	8	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-22	5-Aug-14	550	1850	183.0	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-23	5-Aug-14	535	1675	142.0	6	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-24	6-Aug-14	632	2900	241.5	13	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-25	6-Aug-14	530	1600	105.5	6	Male	Mature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-26	7-Aug-14	650	3300	227.5	9	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-27	7-Aug-14	575	2150	191.0	10	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-28	8-Aug-14	650	3200	339.0	8	Female	Mature	114	21	Blue	Big Eddy	John Carmichael	Dead-sampled
BE-29	8-Aug-14	620	2500	183.5	-	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-30	9-Aug-14	413	800	58.0	5	Male	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-31	9-Aug-14	472	1500	10.0	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-32	10-Aug-14	542	1700	151.0	7	Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-33	10-Aug-14	410	800	0.0	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-34	11-Aug-14	530	1900	3.5	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-35	11-Aug-14	420	900	5.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-36	12-Aug-14	530	1650	148.0		Female	Mature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-37	12-Aug-14	405	750	3.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-38	13-Aug-14	520	1700	16.0	8	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-39	13-Aug-14	410	850	4.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-40	14-Aug-14	530	1850	17.5	7	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-41	14-Aug-14	390	700	2.0	4	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-42	15-Aug-14	557	2050	4.0	7	Male	Mature	102	1328	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-43	15-Aug-14	434	1000	6.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-44	18-Aug-14	498	1650	1.0	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-45	18-Aug-14	495	1350	11.0	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-46	19-Aug-14	405	800	3.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-47	19-Aug-14	475	1550	12.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-48	20-Aug-14	695	4350	8.0	7	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-49	21-Aug-14	610	2950	3.0	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-50	21-Aug-14	395	850	0.0	5	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-51	22-Aug-14	585	2300	30.0	9	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
BE-52	22-Aug-14	520	2250	1.0	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-53	22-Aug-14	395	900	1.0	7	Male	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-54	23-Aug-14	485	1750	11.0	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-55	24-Aug-14	712	4250	8.5	6	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-56	25-Aug-14	380	900	5.0	5	Female	Immature	102	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-57	26-Aug-14	553	2200	16.5	6	Female	Immature	114	1280	Yellow	Big Eddy	John Carmichael	Dead-sampled
BE-58	27-Aug-14	452	1200	0.0	5	Male	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-59	1-Sep-14	485	850	5.0	5	Female	Immature	114	-	-	Big Eddy	John Carmichael	Dead-sampled
BE-60	2-Sep-14	545	2100	15.4	5	Female	Immature	114	1370	Yellow	Big Eddy	John Carmichael	Dead-sampled
-	4-Aug-14	534	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-14	475	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-14	195	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	4-Aug-14	524	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	5-Aug-14	489	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-14	460	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-14	580	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-14	520	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	6-Aug-14	475	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-14	520	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	6-Aug-14	460	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	8-Aug-14	495	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	9-Aug-14	345	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	555	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	560	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	400	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	390	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	570	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	415	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	400	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	390	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	10-Aug-14	420	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-14	420	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-14	380	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-14	370	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	13-Aug-14	430	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	13-Aug-14	410	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-14	165	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	20-Aug-14	420	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-14	370	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-14	385	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-14	420	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	21-Aug-14	500	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-14	430	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-14	460	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-14	420	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-14	415	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	25-Aug-14	410	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-14	415	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-14	480	-	-	-	-	-	114	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-14	405	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-14	400	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	26-Aug-14	410	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	26-Aug-14	390	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-14	380	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-14	440	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-14	420	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	30-Aug-14	431	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-14	274	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-14	285	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-14	310	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-14	420	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-14	410	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
-	31-Aug-14	440	-	-	-	-	-	102	-	-	Big Eddy	John Carmichael	Live-released
RR-01	7-Aug-14	527	1600	-	7	Female	Mature	102	1052	Orange	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-02	8-Aug-14	484	1150	-	6	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-03	9-Aug-14	510	1550	-	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-04	9-Aug-14	481	1200	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-05	9-Aug-14	571	2100	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-06	10-Aug-14	552	1950	-	12	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-07	10-Aug-14	550	2250	-	8	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-08	10-Aug-14	522	1550	-	6	Female	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-09	10-Aug-14	501	1300	-	7	Male	Mature	102	1442	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-10	11-Aug-14	493	1400	-	6	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-11	11-Aug-14	510	1500	-	-	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-12	11-Aug-14	524	1750	-	5	Female	Mature	102	1389	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-13	13-Aug-14	516	1400	2.8	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-14	13-Aug-14	497	1400	2.5	7	Male	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-15	13-Aug-14	502	1600	17.5	6	Male	Mature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-16	14-Aug-14	480	1350	10.7	7	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-17	14-Aug-14	535	1850	14.3	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-18	14-Aug-14	517	1500	12.9	5	Female	Immature	102	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-19	15-Aug-14	542	1950	20.1	6	Male	Mature	114	-	-	Mouth of Rat River	Willie Blake	Dead-sampled
RR-20	15-Aug-14	557	2200	4.2	5	Male	Immature	114	-	-	Mouth of Rat River	Willie Blake	Dead-sampled
RR-21	15-Aug-14	471	1500	1.0	5	Male	Immature	114	-	-	Mouth of Rat River	Willie Blake	Dead-sampled
RR-22	16-Aug-14	508	1450	4.4	7	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-23	16-Aug-14	507	1450	7.8	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-24	16-Aug-14	550	2100	33.2	10	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-25	16-Aug-14	577	2350	10.8	7	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-26	17-Aug-14	495	1550	2.3	4	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-27	17-Aug-14	569	2100	3.7	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-28	17-Aug-14	555	2050	2.7	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-29	18-Aug-14	520	1550	2.0	-	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-30	18-Aug-14	519	1700	1.7	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-31	19-Aug-14	607	2850	2.2	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-32	19-Aug-14	527	1750	1.3	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-33	19-Aug-14	517	1850	13.2	8	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-34	19-Aug-14	524	1900	0.9	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-35	20-Aug-14	500	1700	8.6	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-36	20-Aug-14	559	1900	2.6	7	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-37	20-Aug-14	530	1800	17.1	7	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-38	20-Aug-14	517	1650	2.5	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-39	20-Aug-14	767	5000	9.3	11	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-40	20-Aug-14	607	2800	2.1	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-41	21-Aug-14	552	2200	18.3	-	Female	Immature	114	-	-	Mouth of Rat River	John Roberts	Dead-sampled
RR-42	21-Aug-14	502	1700	10.6	6	Female	Immature	114	-	-	Mouth of Rat River	John Roberts	Dead-sampled
RR-43	21-Aug-14	532	1750	12.2	5	Female	Immature	114	-	-	Mouth of Rat River	John Roberts	Dead-sampled
RR-44	21-Aug-14	534	2000	10.4	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-45	21-Aug-14	436	1200	1.4	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-46	22-Aug-14	370	750	0.7	-	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-47	22-Aug-14	563	2100	3.2	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-48	22-Aug-14	545	1850	14.1	8	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-49	23-Aug-14	562	2500	3.0	7	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-50	23-Aug-14	522	1950	17.8	7	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-51	24-Aug-14	537	2100	12.8	7	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-52	25-Aug-14	586	2700	5.4	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-53	26-Aug-14	513	1850	13.7	6	Female	Immature	114	1430	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-54	27-Aug-14	547	2300	3.0	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-55	28-Aug-14	584	2750	14.2	7	Female	Immature	114	1305	Yellow	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-56	28-Aug-14	534	1900	1.2	6	Male	Immature	114	1120	Orange	Mouth of Rat River	Billy Wilson	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
RR-57	30-Aug-14	516	1800	11.3	6	Female	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-58	31-Aug-14	522	2000	2.6	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-59	1-Sep-14	476	1400	1.4	5	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
RR-60	2-Sep-14	545	1900	2.2	6	Male	Immature	114	-	-	Mouth of Rat River	Billy Wilson	Dead-sampled
-	8-Aug-14	505	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	8-Aug-14	517	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	8-Aug-14	527	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	8-Aug-14	604	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	9-Aug-14	505	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	9-Aug-14	515	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	9-Aug-14	545	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	9-Aug-14	540	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	9-Aug-14	595	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	9-Aug-14	547	-	-	-	-	-	102	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	490	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	534	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	557	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	10-Aug-14	644	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	529	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	507	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	489	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	528	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	10-Aug-14	497	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	537	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	435	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	496	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	425	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	513	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	480	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	510	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	528	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	11-Aug-14	591	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	14-Aug-14	542	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	14-Aug-14	520	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	14-Aug-14	528	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	14-Aug-14	555	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	14-Aug-14	360	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-14	402	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-14	546	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-14	504	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-14	531	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	27-Aug-14	562	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	28-Aug-14	384	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	28-Aug-14	480	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	28-Aug-14	420	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	28-Aug-14	425	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-14	490	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-14	554	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-14	523	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-14	456	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	29-Aug-14	624	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
-	30-Aug-14	525	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-14	480	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-14	613	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	30-Aug-14	490	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	31-Aug-14	428	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	2-Sep-14	530	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	2-Sep-14	460	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
-	2-Sep-14	437	-	-	-	-	-	-	-	-	Mouth of Rat River	Billy Wilson	Live-released
DC-01	8-Aug-14	481	1350	-	7	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-02	8-Aug-14	518	1550	-	5	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-03	8-Aug-14	570	2300	-	11	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-04	8-Aug-14	603	2550	-	9	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-05	9-Aug-14	601	2150	-	8	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-06	9-Aug-14	489	1350	-	5	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-07	10-Aug-14	527	1850	-		Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-08	10-Aug-14	584	2400	-	8	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-09	10-Aug-14	458	1150	-	8	-	-	127	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-10	11-Aug-14	482	1350	-	7	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-11	11-Aug-14	624	2750	-	8	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-12	12-Aug-14	470	1250	-	-	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-13	13-Aug-14	420	1000	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-14	13-Aug-14	383	700	132.0	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-15	14-Aug-14	469	1250	-	6	Female	Mature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-16	14-Aug-14	413	900	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-17	15-Aug-14	404	750	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-18	15-Aug-14	515	1600	336.0	6	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-19	15-Aug-14	439	1000	282.0	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-20	16-Aug-14	424	950	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-21	16-Aug-14	559	2550	-	4	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-22	18-Aug-14	502	1450	-	6	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-23	18-Aug-14	405	750	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-24	19-Aug-14	650	3760	138.0	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-25	20-Aug-14	525	1550	90.0	6	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-26	20-Aug-14	437	1050	-	8	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-27	22-Aug-14	407	900	-	6	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-28	22-Aug-14	543	2200	187.5	7	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-29	23-Aug-14	454	1300	180.5	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-30	23-Aug-14	410	800	-	4	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-31	23-Aug-14	406	1000	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-32	24-Aug-14	384	650	29.5	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-33	24-Aug-14	414	950	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-34	24-Aug-14	426	950	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-35	25-Aug-14	412	900	56.5	4	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-36	25-Aug-14	407	800	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-37	25-Aug-14	438	1050	62.5	6	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-38	25-Aug-14	524	1550	-	9	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-39	26-Aug-14	607	2800	-	10	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-40	26-Aug-14	414	1000	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-41	26-Aug-14	418	1000	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-42	27-Aug-14	407	950	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-43	27-Aug-14	401	850	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled

Sample ID	Capture Date	Fork Length (mm)	Round Weight (g)	Gonad Weight (g)	Age (Year)	Sex	Maturity	Mesh size (mm)	Recapture tag ID	Tag Color	Capture Location	Harvester/ Monitor	Fate of Fish
DC-44	27-Aug-14	400	800	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-45	28-Aug-14	412	850	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-46	28-Aug-14	421	900	-	5	-		127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-47	29-Aug-14	532	2100	-	7	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-48	29-Aug-14	426	1000	-	5	-	-	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-49	29-Aug-14	418	1050	72.5	4	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-50	30-Aug-14	422	1050	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-51	30-Aug-14	426	1150	94.5	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-52	31-Aug-14	619	2700	-	8	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-53	1-Sep-14	506	1700	-	6	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-54	2-Sep-14	463	1450	88.0	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-55	3-Sep-14	457	1500	100.0	5	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-56	4-Sep-14	532	2100	350.0	6	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-57	5-Sep-14	433	1150	-	-	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-58	6-Sep-14	429	1100	-	5	-	-	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-59	8-Sep-14	490	1750	128.0	6	Male	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled
DC-60	10-Sep-14	428	1050	-	5	Female	Immature	127	-	-	Destruction City	Selwyn Kay	Dead-sampled

APPENDIX 2. STATISTICAL RESULTS AND SUPPLEMENTARY BIOLOGICAL INFORMATION

Table A2.1. Fork length (log_{10} transformed) characterized as following parametric (P) or non-parametric (NP) distributions and results of Mann-Whitney test (U) or two-sample t-test to examine for difference in length of Dolly Varden between gill net mesh size captured among years in the Rat River Harvest Monitoring Program (2009-2014). Statistically significant results (p ≤ 0.05) are in bold.

Year	102 mm	114 mm	127 mm	102 mm vs 114 mm	102 mm vs 127 mm	114 mm vs 127 mm
2009	NP	P	-	**U = 899, p = 0.038**	-	-
2010	NP	P	-	**U = 795, p = 0.002**	-	-
2011	P	P	-	t = -0.52; d.f.= 1,144; p = 0.6	-	-
2012	NP	NP	-	U = 16,030, p = 0.87	-	-
2013	NP	NP	-	**U = 7,062, p < 0.001**	-	-
2014	NP	NP	NP	**U = 2,551, p < 0.001**	U = 2,492, p = 0.64	**U = 1,563, p < 0.001**

Table A2.2 Fork length (log_{10} transformed) characterized as following parametric (P) or non-parametric (NP) distributions and results of Mann-Whitney (U) or two-sample t-test to examine for differences in length between male (M) and female (F) Dolly Varden (all maturity stages combined) within gill net mesh size captured among years in the Rat River Harvest Monitoring Program (2009-2014). Sample sizes were too low (n = < 10) in some years to test while the 127 mm mesh was only used in 2014. Statistically significant results (p ≤ 0.05) are in bold.*

Year	102 mm		114 mm		127 mm		102 mm	114 mm	127 mm
	M	F	M	F	M	F			
2009	NP	NP	P	P	-	-	U = 3,398, p = 0.29	*	-
2010	P	NP	P	NP	-	-	**U = 3,735, p = 0.015**	*	-
2011	P	NP	P	P	-	-	U = 1,359, p = 0.3	*	-
2012	P	P	NP	NP	-	-	t = -0.6; d.f.= 1,65; p = 0.56	U = 708, p= 0.74	-
2013	P	NP	P	NP	-	-	**U = 718, p = 0.001**	**U = 324, p= 0.003**	-
2014	NP	NP	P	P	P	NP	U = 222, p = 0.84	t = -3.1, d.f.=1,75; p = 0.76	U= 307, p= 0.81
Combined	P	NP	P	NP	-	-	U = 58799, p = 0.72	U = 9174, p = 0.7	-

Table A2.3. Results of Mann-Whitney test (U) to examine for difference in ages of Dolly Varden between gill net mesh size captured among years in the Rat River Harvest Monitoring Program (2009-2014). Statistically significant results (p ≤ 0.05) are in bold.

Year	102 mm vs 114 mm	102 mm vs 127 mm	114 mm vs 127 mm
2009	U = 917, p = 0.44	-	-
2010	**U = 659, p = 0.003**	-	-
2011	U = 1199, p = 0.85	-	-
2012	U = 2097, p = 0.92	-	-
2013	**U = 2808, p = 0.02**	-	-
2014	U = 1404, p = 0.8	**U = 882, p = 0.46**	**U = 1559, p = 0.14**

Table A2.4. Results of Mann-Whitney test (U) to examine for difference in ages between male (M) and female (F) Dolly Varden captured among years in the Rat River Harvest Monitoring Program (2009-2014). Statistically significant results (p ≤ 0.05) are in bold.

Year	M vs F
2009	U = 3133, p =0.15
2010	U = 4336, p = 0.23
2011	**U = 1640, p = 0.046**
2012	U = 1881, p = 0.40
2013	**U = 1673, p < 0.001**
2014	U = 2943, p = 0.18

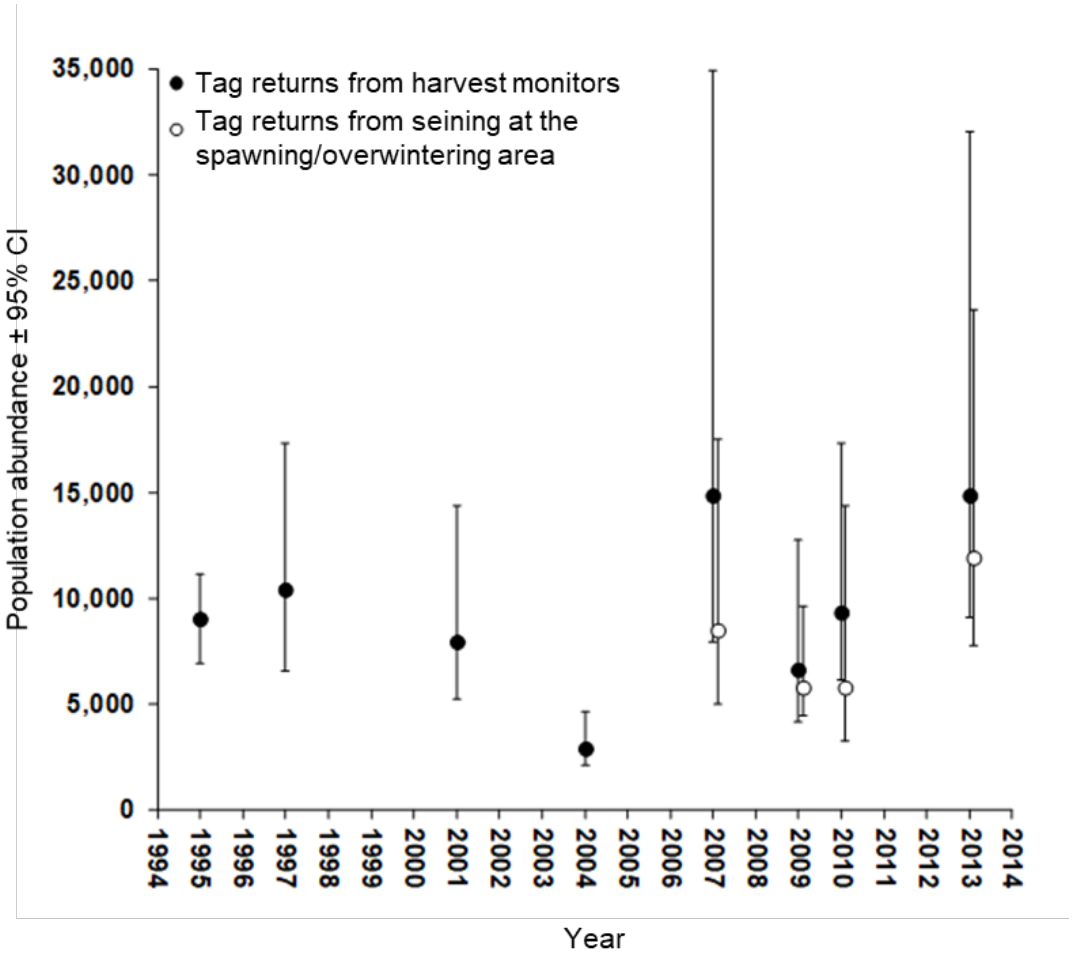

Figure A2.1. Population abundance estimates of anadromous Dolly Varden from the Rat River between 1995 and 2013. Error bars represent 95% confidence intervals.

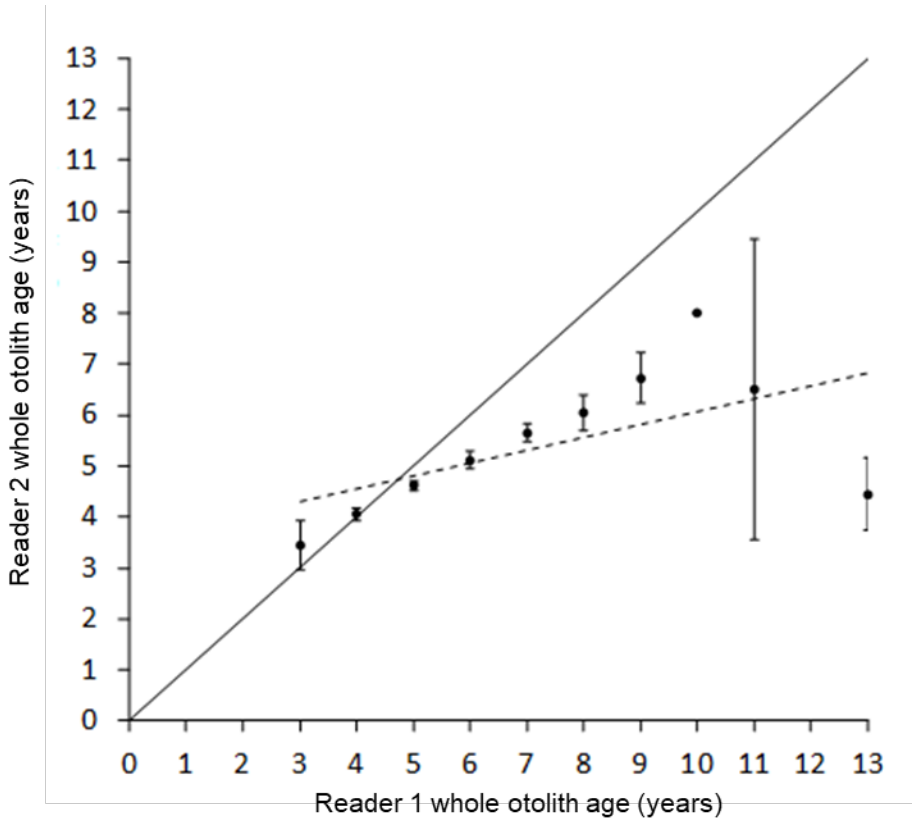

Figure A2.2. Age comparison between-readers based on whole otolith preparation method using samples of Dolly Varden collected from the Rat River Harvest Monitoring Program between 2007 and 2012. Each error bar represents 95 % confidence intervals from the average reading of the second age reader. Solid line indicates the 1:1 line. Note, Reader 1 is the same Reader 1 in Gallagher et al. (2016) while Reader 2 is not the same Reader 2 in Gallagher et al. (2016) yet had aged all Dolly Varden from the Rat River prior to 2007.

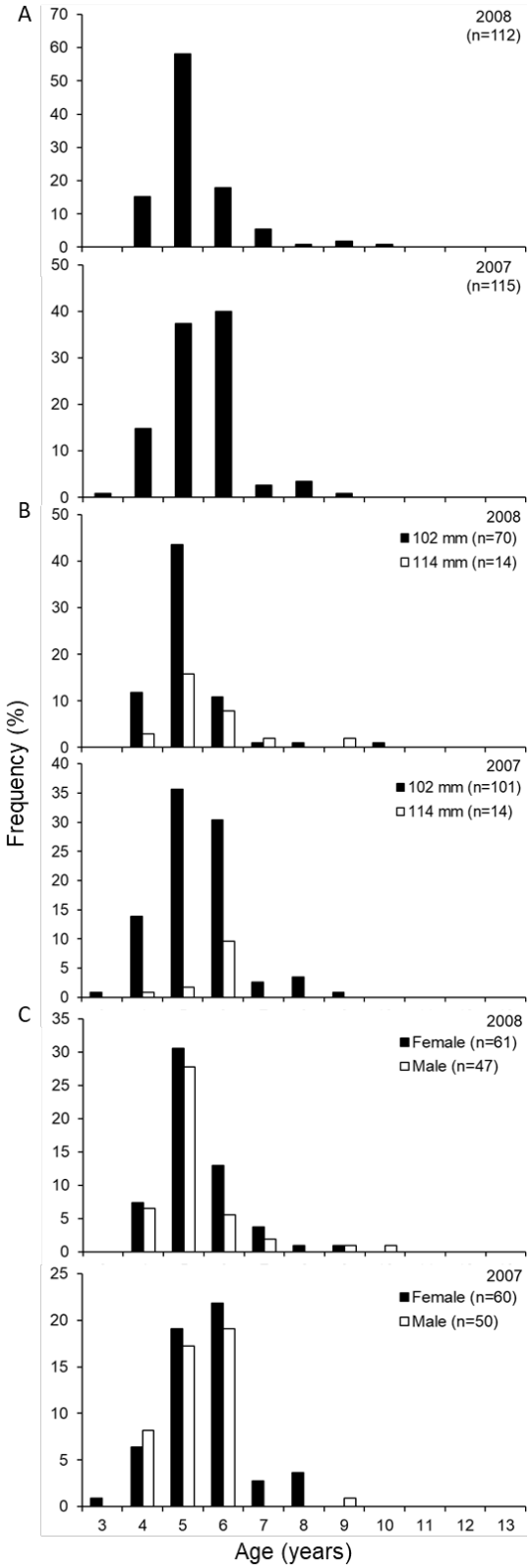

Figure A2.3. Age frequency distribution of Dolly Varden from the Rat River Harvest Monitoring Program in 2007 and 2008: A) with all gill net mesh sizes and sexes combined, B)separated by mesh size, and C) separated by sex. Note, the sex of some fish were not recorded.

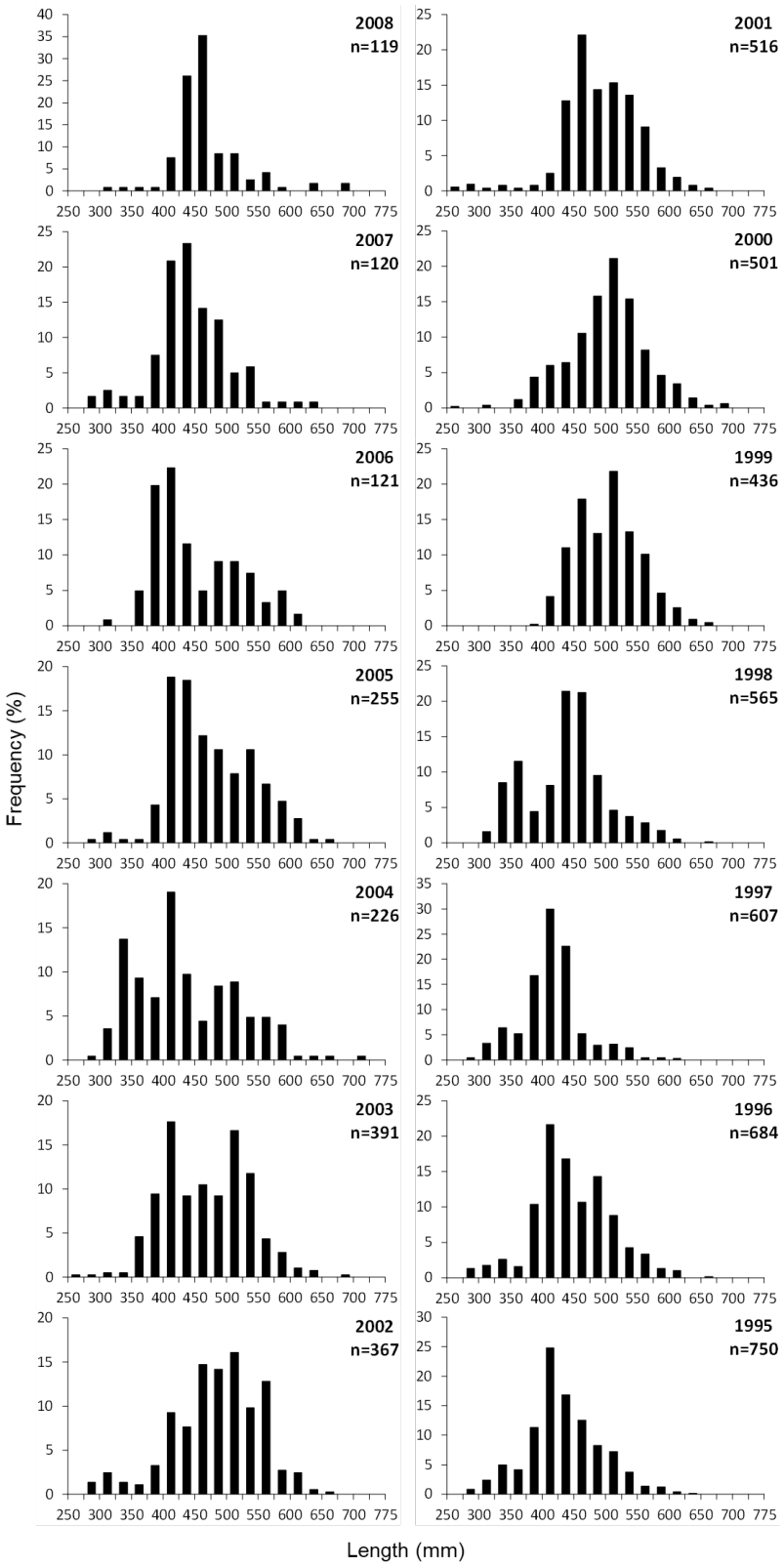

Figure A2.4. Length frequency distribution of the total sample of Dolly Varden from the Rat River Harvest Monitoring Program (all gill net mesh sizes combined) (1995-2008). Note: in 2003 n = 1 Dolly Varden was < 250 mm.