

Vetch Creek Fishery Assessment

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Alberta Conservation Association
East Slopes Buck for Wildlife Riparian Management Program
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1.0 Introduction

1.1 Background

The Alberta Conservation Association (ACA) has been responsible for management and maintenance of Buck for Wildlife Streambank Fencing projects through the Fisheries Habitat Development Program since the ACA's inception in 1997. In response to concerns related to a lack of clear focus for the ACA's riparian programs and the funding necessary for maintenance of existing projects, a new East Slopes Buck for Wildlife Riparian Management Strategy was developed in 2000 (McLeod 2000). An integral component of the Riparian Management Strategy was to, 'evaluate [existing projects] to determine the cost of project maintenance relative to the benefit to the resource' (McLeod 2000). In an effort to begin this evaluation process, fisheries assessments were conducted on project streams in the Rocky Mountain House area in 2001. These streams included Clear Creek, Vetch Creek, and the lower North Raven River. Current survey methodologies attempted to replicate, as closely as possible, those of previous studies performed on that particular stream for comparative purposes. The remainder of this report will deal with the Vetch Creek assessment only.

1.2 Objectives

The major objectives of this initiative were:

- To collect and assess data on species composition and abundance of sport fish in priority streams (i.e. Vetch Creek) within the Rocky Mountain House area.
- To collect fisheries data, wherever possible, in such a manner to facilitate comparison to historical records where such records exist.

- To report survey findings in a timely and efficient manner enabling meaningful evaluation of the ACA's East Slopes Buck for Wildlife East Riparian Management Program project priorities.
- To enter fisheries data collected during assessments into the Provincial Fisheries Management Information Database (FMIS).

1.3 Study Area

Vetch Creek is centrally located within the ACA's East Slopes management region near Rocky Mountain House. Locally known as the South Fork of Prairie Creek, Vetch Creek is a tributary to Prairie Creek located some 23 kilometers southwest of Rocky Mountain House (see Figure 1.1). Originating in Alberta's Green Zone, Vetch Creek enters the White Zone immediately upstream of its confluence with Prairie Creek near the end of its approximately 17.7 km length. Vetch Creek is classified as a small (<5m wide), high priority stream according to the Riparian Management Program classification system (McLeod 2000). Approximately 6.5 km of riparian corridor fence was erected in the late 1980's along Vetch Creek. Fence maintenance and agreement management is currently administered by the ACA in the White Zone and Alberta Sustainable Resource Development, Lands and Forest Service in the Green Zone.

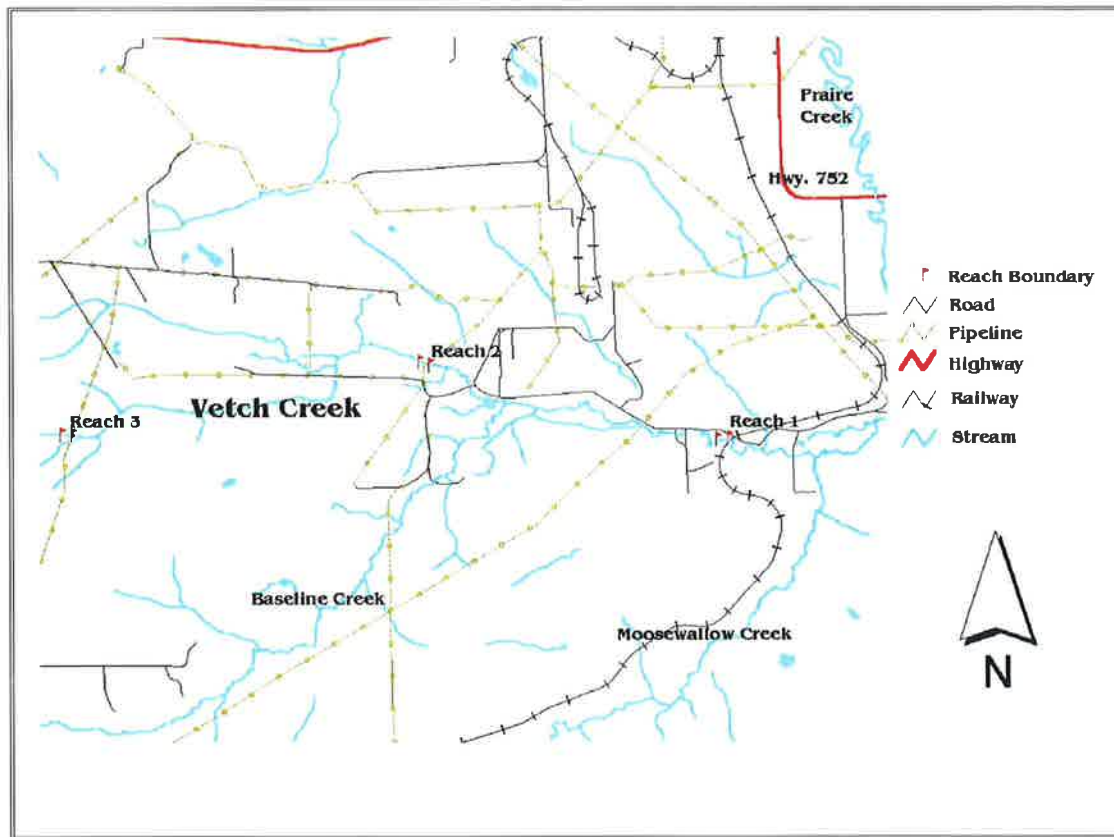


Figure 1.1 Location of fishery assessment sites on Vetch Creek, 2001.

1.4 Literature Review

A number of reports concerning the Vetch Creek fishery have been written over the years. Under the Buck for Wildlife program a streambank evaluation was undertaken in 1978 (Borutski 1980). Crouser and Konynenbelt (1987), and Willis (1997) have performed subsequent streambank evaluations of Vetch Creek. In 1984 Alberta Forestry and Fish and Wildlife staff undertook a joint watershed assessment of Vetch Creek (McCammon and Rhude 1985). This assessment included an attempt to document the land use practices negatively affecting the watershed as well as a fishery assessment. A number of recommendations aimed at maintaining the watershed's integrity were the result of this report. An addendum to this report was included in 1985, resulting from the

replication of the 1984 fishery assessment (McCammon and Rhude 1985^b). Finally, a streambank fencing project completion report for Vetch Creek is also on file (McDonald 1988).

2.0 Methods

2.1 Fish Population Assessment

Unless noted otherwise, fish population assessment methodologies followed those outlined in McCammon and Rhude's 'Progress Report Joint Watershed Assessment of Vetch Creek' (1985).

All three sites identified in McCammon and Rhude's (1985) study were surveyed during the 2001 assessment. Precise location of sample reaches was possible using the maps and descriptive text contained in the 1985 study. Fish sampling occurred between August 15-21, 2001.

A mark-recapture strategy was utilized to obtain fish population density estimates for Vetch Creek. Electrofishing was conducted using a Smith-Root type 15-D backpack electrofisher; comparable equipment to that used in the 1984 assessment. Typically the electrofisher operator was positioned in the middle of the stream with a netter on either side, and slightly behind the operator. Field operations and procedures for this survey followed the guidelines contained in Kraft et.al. (1982). Marking runs for Reach 1 and 2 were performed on August 15th, and August 16th for Reach 3. Recapture runs for all three reaches were performed on August 21st.

Captured fish were placed in a mesh holding pen positioned in-stream, downstream of the reach being actively electrofished. Fish were identified and enumerated, and life history

data was obtained prior to release into the reach at the approximate location of capture. During the marking run all fish ≥ 80 mm fork length were marked by clipping a small portion of the upper lobe of the caudal fin before release. Life history data recorded included fork length (nearest mm), and weight (nearest g). Sex and maturity information was recorded for any fish that could be manually expressed at time of capture. Fish were weighed using an Acculab model 2001 electronic scale.

Population density estimates were derived using Chapman's modification of the Peterson formula as recommended by Kraft et al. (1982). Calculations were performed using the POP-EST program, a BASIC program available through Alberta Sustainable Resource Development staff, according to the procedure outlined in Kraft et al. (1982). Statistical treatment of life history data and graphing was performed using the Microsoft Excel 97 software package. For comparative purposes population estimates were standardized to number of fish per 100 m of stream length. Standing crop estimates were calculated as kilograms of fish per hectare of stream using the estimated population densities and observed mean weight values of each reach. Stream area was calculated using McCammon and Rhude's (1985) mean habitat measurements. Comparison of historic and current air photographs was employed to determine if any major alterations in stream morphology have occurred during the interim. Trout biomass figures reported in McCammon and Rhude's (1985^b) addendum were not used for this comparison, as it was not clear how the values were derived. Historic and current standing crop estimates were compared using a paired *t* test with a significance level of 5% ($P \leq 0.05$). Insufficient data and/or discrepancies in the data sets precluded statistical comparison of historical and current data in many instances.

2.2 Aquatic Habitat Assessment

2.2.1 Aquatic Habitat Documentation

A minimum of one representative color photograph showing streamside vegetation, surrounding land use, and channel characteristics was taken at each survey site. Unique habitat features noted within sites were photographed as well. Color plates of select photographs are contained in Section 3.2.

2.2.2 Water Quality

Water quality measurements were taken at every survey site before each sampling event. Parameters measured included water temperature, pH, and conductivity. Measurements were taken with a YSI model 63 meter.

3.0 Results and Discussion

3.1 Fish Population Assessment

Reach specific data and catch-per-unit-effort information are contained in Appendix A. Appendix B contains life history data for individual fish.

3.1.1 Species Composition

In total, 701 fish representing three species were captured in the Vetch Creek study area during the assessment (Table 3.1).

Table 3.1 Total number of fish captured historically and during this study for all sampling sites combined on Vetch Creek.

Common Name	Scientific Name	Vetch Creek		
		1984 ^a	1985 ^a	2001
Brook Trout	<i>Salvelinus fontinalis</i>	414	258	650
Brown Trout	<i>Salmo trutta</i>	29	42	44
Burbot	<i>Lota lota</i>	0	1 ^b	0
Mountain Whitefish	<i>Prosopium williamsoni</i>	2	0	7
White Sucker	<i>Catostomus commersoni</i>	Not Reported	2 ^b	0
Total		445	303	701

a. Historic Vetch Creek data from McCammon and Rhude (1985, 1985^b).

b. Species reported in McCammon and Rhude's 1985^b raw data sheets (Fish and Wildlife Files, Rocky Mountain House).

All three salmonid species collected in McCammon and Rhude's (1985, 1985^b) assessments were also encountered during this study. Records of burbot and white sucker appear on the raw data sheets for McCammon and Rhude's (1985^b) study although their presence was not included in the formal report. As numbers of each of these species were quite low their absence in the 2001 catch is not surprising.

3.1.2 Species Distribution

All three species of salmonid captured in Vetch Creek were present in Reach 1. Mountain Whitefish occurred exclusively in this reach while brown trout also occurred upstream in Reach 2. Only brook trout were captured throughout the stream, at all three reaches. Table 3.2 summarizes the number of sport fish captured per site on Vetch Creek, McCammon and Rhude's (1985, 1985^b) catch data is included for comparative purposes.

Table 3.2 Numbers of sport fish captured at sampling sites on Vetch Creek in 1984, 1985, and 2001.

Reach	Brown Trout			Brook Trout			Mountain Whitefish		
	1984	1985	2001	1984	1985	2001	1984	1985	2001
1	29	42	16	194	125	218	2	0	7
2	0	0	28	127	106	329	0	0	0
3	0	0	0	93	27	103	0	0	0
Total	29	42	44	414	258	650	2	0	7

Distributions of both brook trout and mountain whitefish did not change between the 1984, 1985, and 2001 assessments. Distribution of brown trout in the Vetch Creek drainage expanded during this timeframe as they are now found in Reach 2, which represents a maximum upstream movement of approximately 3.5 kilometers.

3.1.3 Population Densities

Due to an insufficient sample size a mountain whitefish population density estimate could not be calculated. Both brook trout and brown trout estimated population densities were greatest in Reach 2. Estimated brook trout densities in Reach 3, the uppermost reach surveyed in the Vetch Creek drainage, are approximately half of the estimated density in the lowermost section (Reach 1). Table 3.3 summarizes the 2001 data and includes historical data for comparison.

Table 3.3 Estimates of brown trout, and brook trout population density standardized to number of fish per 100 m at mark-recapture population estimate sites on Vetch Creek, 1984, 1985, and 2001 (95% confidence intervals are in brackets).

Reach	Brown Trout			Brook Trout		
	1984 ^a	1985 ^a	2001	1984 ^a	1985 ^a	2001
1	17.2	47.0	5.7 (+15.7)	166.4 (+47.4)	112.7 (79.6-197.4)	147.9 (117.4-177.4)
2	NA	NA	18.9 (15.4-24.6)	115.7 (83.4-186.3)	106.1 (70.3-195.4)	154.9 (126.3-182.9)
3	NA	NA	NA	49 (37-70.5)	NA	72 (59-92.5)

a. Population density historic data adapted from McCammon and Rhude (1985, 1985^b).
NA = Not Available

Estimates of brook trout population density in Vetch Creek have increased since 1984 in every reach except Reach 1. Estimated brown trout density has decreased in Reach 1 but the high brown trout density in 1985 is probably attributable to the stocking of 1000 brown trout at this site the year before (McCammon and Rhude 1985^b).

3.1.4 Size Distribution

Only 4.3% of brook trout (n = 28) and 50.0% of brown trout (n = 22) captured in Vetch Creek during this assessment were of catchable size (i.e. >150 mm fork length (McCammon and Rhude 1985)). Brown trout made up 44.0% of all catchable fish in Vetch Creek despite the fact that they only made up 6.3% of the sport fish catch. Table 3.4 displays the summarized size distribution information for all trout collected from Vetch Creek in 1984, 1985, and 2001.

Table 3.4 Size distribution of brown trout, and brook trout collected from Vetch Creek in 1984, 1985, and 2001.

Measurement	Brown Trout	Brook Trout
-------------	-------------	-------------

	1984 ^a	1985 ^a	2001	1984 ^a	1985 ^a	2001
Mean Fork Length (mm)	127.3 (n=29)	113.4 (n=42)	146.2 (n=44)	122.9 (n=414)	119.4 (n=258)	107.4 (n=650)
Fork Length Range	92-323	58-173 ^c	41-236	32-232 ^b	32-204 ^c	37-286
Mean Weight (g)	34.6 (n=29)	20.1 (n=42)	42.5 (n=44)	27.5 (n=414)	22.4 (n=258)	19.5 (n=650)
Weight Range	5-375	NA	1-153	1-145 ^b	NA	1-244

a. Size distribution historic data adapted from McCammon and Rhude (1985, 1985^b).

b. Length and weight ranges are for brook trout captured in reaches 1 and 2 only.

c. Length range derived from McCammon and Rhude's 1985^b raw data sheets (Fish and Wildlife files, Rocky Mountain House).

During the 1984 study approximately 18% of all brook trout were of catchable size and 10% of all brown trout (McCammon and Rhude 1985). Thus the proportion of catchable sized brook trout in Vetch Creek has declined considerably while the proportion of catchable sized brown trout has increased since 1984. Figures 3.1 and 3.2 display the frequency of occurrence in 10-millimeter size classes of brook trout and brown trout respectively in Vetch Creek.

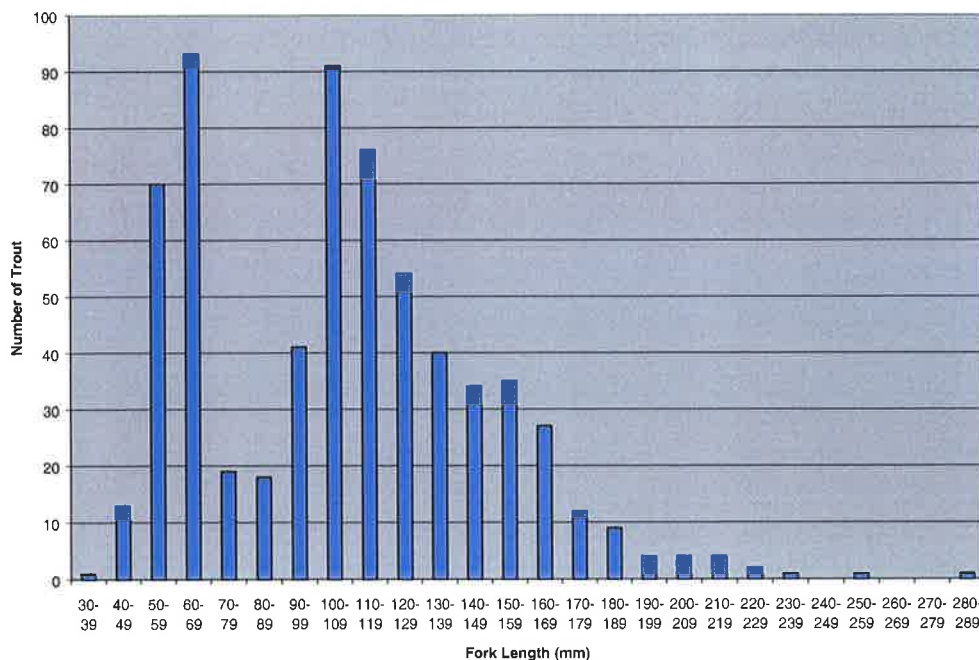


Figure 3.1 Length-frequency histogram of brook trout (n = 650) captured in Vetch Creek, August 2001.

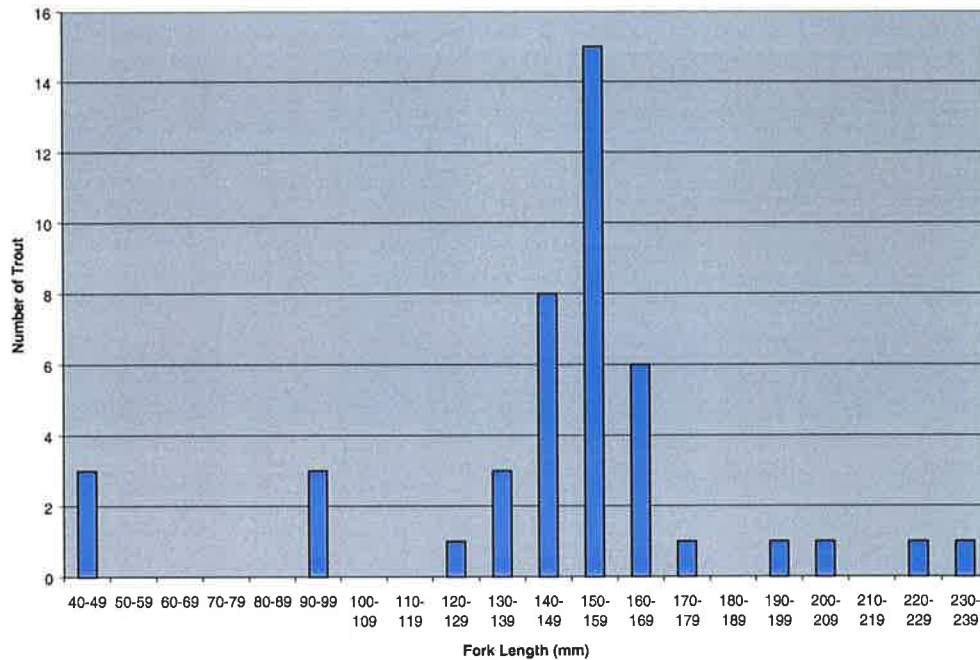


Figure 3.2 Length-frequency histogram of brown trout (n = 44) captured in Vetch Creek, August 2001.

As figures 3.1 and 3.2 illustrate, a number of size classes of both brook and brown trout were captured in Vetch Creek. No apparent fish mortalities occurred during the current assessment of Vetch Creek. Using the Petersen method (for a discussion of the Petersen method and its limitations see Mackay et al. 1990) the approximate mean fork length of age 0 brook trout is 60 mm, age 1 is 100 mm, age 2 is 150 mm, and age 3 is 200 mm. The low number of brown trout collected during this assessment precludes the use of the Petersen method to assign ages for this species.

3.1.5 Standing Crop Estimates

Historical and current standing crop estimates (method outlined on page 5) for Vetch Creek are contained in Table 3.5 below. Standing crop estimates for the 1985 assessment were not calculated due to gaps in the data set.

Table 3.5 Standing crop estimates (kilograms of fish per hectare) for brown trout, and brook trout in Vetch Creek, 1984, and 2001.

Reach	Brown Trout			Brook Trout		
	1984 ^a	2001	Difference	1984 ^a	2001	Difference
1	12.4	5.4	7.0	72.8	67.0	5.8
2	0	20.1	-20.14	69.1	63.0	6.1
3	0	0	0	104.4	92.7	11.7
Total	12.4	25.5	-13.1	246.3	222.7	23.6

a. Standing crop estimate data derived from McCammon and Rhude (1985).

Standing crop estimates for brown trout in Vetch Creek have decreased in Reach 1 and increased in Reach 2, while brook trout standing crop estimates have decreased somewhat in every reach since 1984. However, changes in standing crop estimates between 1984 and 2001 are not significant (paired *t* test, $P \leq 0.05$) for brook trout ($df = 2$), brown trout ($df = 1$) or all trout combined ($df = 2$) in any reach.

3.2 Aquatic Habitat Assessment

3.2.1 Aquatic Habitat Documentation

Representative color plates of each survey site on Vetch Creek are displayed in Figures 3.3-3.8 below.



Figure 3.3 Railway crossing marking the beginning of Reach 1 on Vetch Creek, habitat typical of lower end of the reach.



Figure 3.4 Typical habitat of upper end of Reach 1 on Vetch Creek, note recreational vehicle trail to the right of stream.



Figure 3.5 Reach 2 on Vetch Creek upstream of the pipeline crossing, typical habitat.



Figure 3.6 Downstream of the pipeline crossing of Reach 3 on Vetch Creek. Beginning of reach is visible in background at the upstream end of a drained beaver pond.



Figure 3.7 Reach 3 on Vetch Creek immediately downstream of the culvert; foreground of photo is a pipeline right-of-way, background is native forest.



Figure 3.8 Upstream section of Reach 3, Vetch Creek; note heavily undercut banks, deeply incised channel, and abundant canopy cover.

3.2.2 Water Quality

Water quality measurement results for Vetch Creek are summarized in Table 3.6.

Table 3.6 Water quality measurements for Vetch Creek, August 2001.

Reach	Date Sampled	Time of Sampling ^a	pH	Temperature (°C)	Conductivity (µS/cm)
1 (marking run)	August 15, 2001	9:45	8.29	11.3	300.5
1 (recapture run)	August 21, 2001	8:00	8.36	9.0	423.9
2 (marking run)	August 15, 2001	14:15	8.34	12.3	291.6
2 (recapture run)	August 21, 2001	11:00	8.41	8.4	263.7
3 (marking run)	August 16, 2001	11:45	8.18	6.6	230.0
3 (recapture run)	August 21, 2001	Not Recorded	8.03	7.4	234.9

a. Based on a 24-hour clock.

4.0 Conclusion and Recommendations

4.1 Fish Population Assessment

No major change in species composition has occurred in Vetch Creek since 1984. Brown trout and brook trout were captured during every assessment. Mountain whitefish were captured in low numbers during the 1984 assessment, were not reported in the 1985 assessment, and were captured again in low numbers during the 2001 assessment. Extremely low numbers of burbot and white sucker were captured during the 1985 assessment only.

Brook trout and mountain whitefish distribution in Vetch Creek appears to have remained constant in the years between assessments. Brook trout continue to be distributed throughout the stream at all three reaches sampled while mountain whitefish were captured exclusively in the lowermost reach, Reach 1. Brown trout were captured in Reach 2 for the first time during this assessment. This range expansion represents a

maximum 3.5 kilometer upstream movement of brown trout in Vetch Creek. Breaching of beaver dams downstream of Reach 2, which were intact in 1984 (McCammon and Rhude 1985), may have facilitated this upstream dispersal.

The total sport fish catch for the 2001 fishery assessment of Vetch Creek represents an approximate 158% increase over the 1984 catch and a 233% increase over the 1985 catch. Despite an apparent increase in sport fish abundance, a closer examination of the data suggests that brook trout abundance has not changed remarkably since 1984 (Figure 4.1), while brown trout abundance has only increased notably in Reach 2 (Figure 4.2). The 2001 brook trout population density estimates were somewhat higher than those of previous assessments in every reach except Reach 1. The current estimated brown trout population density for Reach 1 was slightly lower than the 1984 estimate and considerably lower than the 1985 estimated value. The 1985 brown trout population estimate for Reach 1 was undoubtedly confounded by the stocking of 1000 brown trout fry into the reach the previous year (McCammon and Rhude 1985^b). Current density estimates were largely within the 95% confidence intervals of estimates in previous years (Figures 4.1 and 4.2). Documented inter-year catch variability of Vetch Creek is considerable; the 1984 sport fish catch was 148% greater than the 1985 catch, again suggesting that no long-term increase in sport fish abundance has occurred in Vetch Creek.

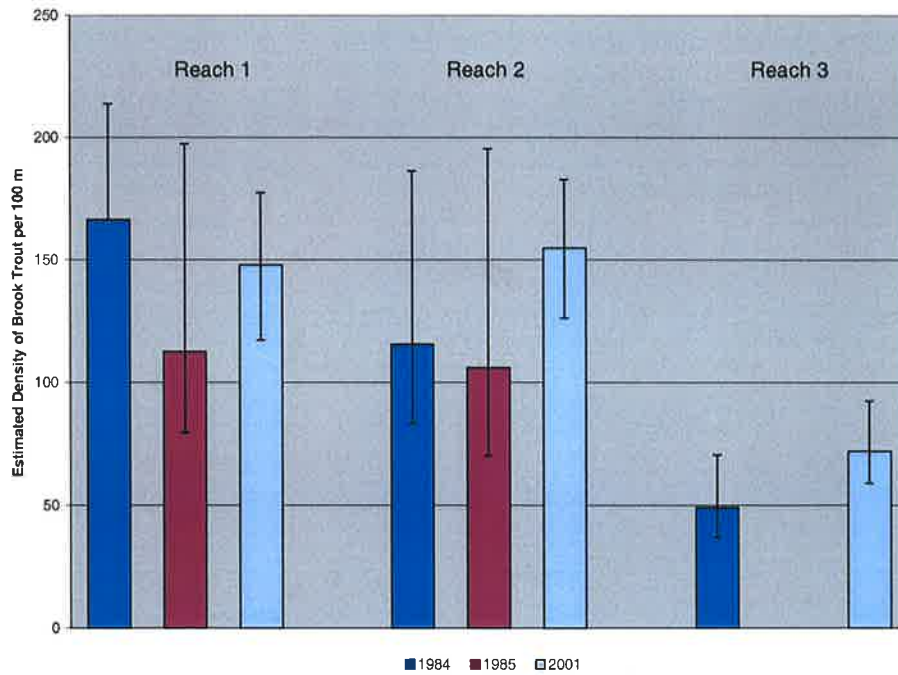


Figure 4.1 Comparison of 1984, 1985, and 2001 brook trout population density estimates for all reaches in Vetch Creek. Error bars represent the ninety-five percent confidence interval for that estimate (historical information adapted from McCammon and Rhude 1985^b).

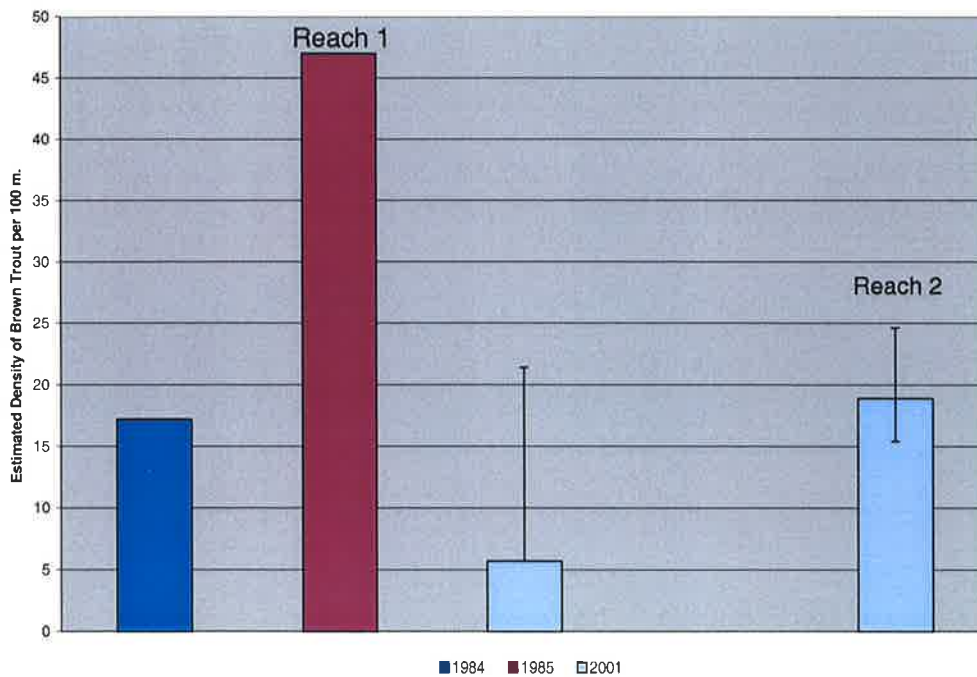


Figure 4.2 Comparison of 1984, 1985, and 2001 brown trout population density estimates for Reach 1 and 2 in Vetch Creek. Error bars represent the ninety-five percent confidence interval for that estimate (historical information adapted from McCammon and Rhude 1985^b).

Mean fork length and weight of brown trout captured in 2001 was greater than that of brown trout captured in 1984 but the range of values was narrower. Mean values for brown trout length and weight in 1985 (113.4 mm, 20.1 g) appear to have been heavily influenced by the stocking of 1000, 80 mm long fry, into the reach the previous year (McCammon and Rhude 1985^b). Brown trout now make up 44% of all catchable sport fish within the reaches sampled on Vetch Creek. Mean brook trout length in Vetch Creek has decreased steadily since 1984, from a high of 122.9 mm in 1984 to a low of 107.4 mm in 2001. A comparable decrease is also evident in mean weight, while the range of weight and fork length values has increased during this same period. During the 1984 assessment the authors noted that in Reach 1 young-of-the-year (yoy) brook trout were 'very numerous', but that few were sampled (McCammon and Rhude 1985). During the 2001 assessment all sizes of brook trout were sampled, this difference in methodology may weaken any conclusions drawn from comparison of these data sets. Approximately 53% of all sport fish captured during the 2001 assessment would be considered yoy according to the criteria outlined in Gardiner et al. (2001); i.e. fork length <100 mm, parr marks visible.

Examination of historical and current air photographs verified that no major alterations in stream habitat have occurred since 1984 at the study reaches, thus mean habitat measurement values reported in McCammon and Rhude (1985) were used for calculation of the 2001 standing crop estimates. Brook trout standing crop estimates in 2001 were slightly lower than the 1984 estimates at every reach, but no significant difference between the 1984 and 2001 assessment standing crop estimates for brown trout, brook trout, and all trout combined was detected (Table 3.5).

Variances in study timing may potentially confound any conclusions drawn from comparison of the Vetch Creek assessments. The 1984 assessment was conducted in July, the 1985 assessment in June, while the 2001 assessment was conducted in August.

However, stream temperature at time of sampling varied on average only -1.6°C between the 1984 and 2001 assessments (1985 temperature data not available). No supplemental stocking of trout has occurred in Vetch Creek since 1984 (Steve Herman pers. comm.).

4.2 Aquatic Habitat Assessment

Time constraints precluded replication of McCammon and Rhude's (1985) assessment of significant disturbances (natural or of human origin) occurring within 20 m of the creek. Despite this, a number of broad conclusions based on observations made while assessing the Vetch Creek fishery can be drawn. None of the sample reaches in the Vetch Creek assessment had fenced riparian areas.

In Reach 1 disturbances associated with cattle grazing and recreational activity are still prevalent. Random camp sites and all-terrain vehicle (ATV) trails are situated within the creek's riparian area at several points and undoubtedly impact the stream. The beaver dams at either end of Reach 2 have breached since 1984 and no recent sign of beaver activity was observed in this reach. A pipeline crossing and associated right-of-way, located approximately midway in the reach, continues to limit stream canopy cover at this location. Observed disturbances associated with ATV use and cattle grazing in this reach were concentrated at the pipeline crossing. Similar to the 1984 findings, Reach 3 appears to be the least disturbed of the sample reaches on Vetch Creek. The pipeline crossing of this reach is well vegetated and woody species are regenerating along the stream's bank throughout the pipeline right-of-way. At time of sampling, the culvert at this crossing did not appear to present a barrier to fish passage. Those previous water quality measurements repeated in 2001 (pH and conductivity) did not vary markedly from the 1984 measurements (mean difference between 1984 and present measurements, all sites combined: pH $+0.12$, conductivity $-93.23\ \mu\text{S}/\text{cm}$).

4.3 Recommendations

The following actions are recommended for Vetch Creek:

- Riparian protection measures should be pursued on those quarters along Vetch Creek within the White Zone as outlined in McLeod (2000).
- Arbitrary jurisdictional boundaries are meaningless to fish and other wildlife; ACA staff should continue to work closely with Alberta Sustainable Resource Development staff to mitigate land use practices within the Green Zone detrimental to Vetch Creek's ecological health.
- A fourth assessment reach should be established on Vetch Creek in a section of stream in which the riparian area has been fenced for the exclusion of livestock.

5.0 References

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Personal Communications

Steven Herman. November 2001. Alberta Sustainable Resource Development, Natural Resources Service, Fisheries Management, Rocky Mountain House. SUBJECT: Recent stocking of fish into Clear and Vetch Creek.

Appendix A: Reach Specific Data

Table A1 Sampling information for Vetch Creek population estimate sites 2001.

Location	Reach Length (m)	Date Sampled	Pass Number	Electrofishing Effort (seconds)	Catch-per-unit-effort (fish per 100 seconds)
Reach 1	230	August 15, 2001	1	2862	4.79
		August 21, 2001	2	2770	5.23
Reach 2	175	August 15, 2001	1	2414	8.91
		August 21, 2001	2	2248	8.54
Reach 3	200	August 16, 2001	1	1760	3.30
		August 21, 2001	2	1974	3.55

Table A2 Catch-per-unit-effort (fish per 100 seconds) for individual fish species captured at survey reaches during marking and recapture runs in Vetch Creek during the 2001 fishery assessment.

Location	Pass Number	Brown Trout	Brook Trout	Mountain Whitefish
Reach 1	1	0.21	4.44	0.14
	2	0.47	4.69	0.072
Reach 2	1	0.75	8.16	0.00
	2	0.93	7.65	0.00
Reach 3	1	0.00	3.30	0.00
	2	0.00	3.55	0.00

Table A3 UTM coordinates (Map Datum NAD 83) of lower and upper boundaries of sample reaches in the 2001 fishery assessment of Vetch Creek.

Location	Downstream Easting	Downstream Northing	Upstream Easting	Upstream Northing
Reach 1	626794.24	5785119.29	626640.63	5785098.36
Reach 2	622592.35	5786140.60	622444.00	5786178.06
Reach 3	617572.35	5785161.32	617418.57	5785175.74

Appendix B: Life History Data

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
1	BKTR	119	16	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
2	BKTR	151	34	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
3	BKTR	106	13	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
4	BKTR	99	10	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
5	BKTR	70	5	U	Unknown			1-Marking
6	BKTR	58	2	U	Unknown			1-Marking
7	BKTR	96	12	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
8	BKTR	66	3	U	Unknown			1-Marking
9	BKTR	134	25	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
10	BKTR	112	16	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
11	BKTR	114	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
12	BKTR	125	21	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
13	BKTR	98	12	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
14	BKTR	160	46	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
15	BKTR	159	47	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
16	BKTR	126	21	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
17	BKTR	134	28	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
18	BKTR	115	15	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
19	BKTR	73	5	U	Unknown			1-Marking
20	BKTR	113	15	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
21	BKTR	116	17	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
22	BKTR	131	29	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
23	BKTR	123	18	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
24	BKTR	111	16	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
25	BKTR	138	33	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
26	BKTR	123	22	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
27	BKTR	104	11	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
28	BKTR	127	21	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
29	BKTR	109	15	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
30	BKTR	112	15	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
31	BKTR	69	4	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
32	BKTR	180	70	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
33	BNTR	96	9	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
34	BKTR	137	24	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
35	BKTR	89	7	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
36	BKTR	149	33	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
37	BKTR	226	119	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
38	BKTR	217	122	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
39	BKTR	142	33	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
40	BKTR	144	30	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
41	BKTR	140	25	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
42	BKTR	167	51	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
43	BKTR	112	11	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
44	BNTR	169	52	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
45	BKTR	113	9	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
46	BKTR	138	27	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
47	BKTR	219	102	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
48	BKTR	120	12	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
49	BKTR	141	27	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
50	BKTR	188	76	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
51	BKTR	121	17	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
52	BKTR	68	2	U	Unknown			1-Marking
53	BKTR	112	10	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
54	BKTR	187	76	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
55	BKTR	133	23	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
56	BKTR	99	5	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
57	BKTR	180	67	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
58	BKTR	120	10	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
59	BKTR	158	40	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
60	BKTR	117	11	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
61	BKTR	102	7	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
62	BKTR	168	49	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
63	BKTR	108	9	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
64	BKTR	174	66	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
65	BKTR	114	15	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
66	BKTR	122	14	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
67	BKTR	114	8	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
68	BKTR	122	17	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
69	MNWH	131	20	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
70	BKTR	151	35	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
71	BKTR	123	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
72	BKTR	106	10	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
73	BNTR	153	46	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
74	BKTR	107	11	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
75	BKTR	148	29	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
76	BKTR	160	43	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
77	BKTR	85	5	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
78	MNWH	92	26	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
79	BKTR	121	16	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
80	BKTR	235	172	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
81	BKTR	125	23	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
82	BKTR	131	22	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
83	BKTR	126	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
84	BKTR	80	3	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
85	BKTR	103	8	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
86	BKTR	113	14	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
87	BKTR	94	8	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
88	BKTR	145	30	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
89	BKTR	122	17	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
90	BKTR	140	35	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
91	BKTR	120	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
92	BKTR	69	2	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
93	BKTR	118	16	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
94	BKTR	121	20	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
95	BKTR	116	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
96	BKTR	101	11	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
97	BKTR	132	28	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
98	MNWH	134	30	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
99	BKTR	119	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
100	BKTR	100	12	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
101	BKTR	120	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
102	BKTR	120	17	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
103	BKTR	127	19	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
104	BNTR	163	52	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
105	BKTR	124	20	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
106	BKTR	94	8	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
107	BKTR	128	9	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
108	BKTR	130	14	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
109	BKTR	92	4	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
110	BKTR	163	41	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
111	BKTR	93	3	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
112	BKTR	89	3	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
113	BKTR	134	21	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
114	BKTR	144	29	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
115	BKTR	96	5	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
116	BKTR	192	74	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
117	BKTR	106	9	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
118	MNWH	64	1	U	Unknown			1-Marking
119	BKTR	73	1	U	Unknown			1-Marking
120	BKTR	89	5	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
121	BKTR	99	8	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
122	BKTR	116	14	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
123	BNTR	228	127	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
124	BKTR	52	1	U	Unknown			1-Marking
125	BKTR	119	16	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
126	BKTR	167	48	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
127	BKTR	122	17	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
128	MNWH	65	1	U	Unknown			1-Marking
129	BKTR	110	13	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
130	BKTR	69	2	U	Unknown			1-Marking
131	BKTR	71	2	U	Unknown			1-Marking
132	BKTR	67	2	U	Unknown			1-Marking
133	BKTR	135	27	U	Unknown	Fin Clip-Upper Lobe Caudal		1-Marking
134	BNTR	41	1	U	Unknown			1-Marking
135	BKTR	46	1	U	Unknown			1-Marking
136	BKTR	64	2	U	Unknown			1-Marking
137	BKTR	87	6	U	Unknown			1-Marking
1	BKTR	125	19	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
2	BKTR	121	17	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
3	BKTR	108	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
4	BNTR	146	34	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
5	BNTR	158	46	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
6	BKTR	107		U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
7	BNTR	156	45	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
8	BNTR	157	42	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
9	BKTR	114	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
10	BKTR	156	42	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
11	BKTR	208	88	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
12	BKTR	124	20	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
13	BKTR	107	12	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
14	BKTR	64	3	U	Unknown			2-Marking
15	BKTR	70	4	U	Unknown			2-Marking
16	BKTR	66	3	U	Unknown			2-Marking
17	BKTR	147	39	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
18	BKTR	139	28	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
19	BKTR	170	56	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
20	BKTR	112	17	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
21	BKTR	104	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
22	BKTR	152	41	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
23	BKTR	121	21	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
24	BKTR	116	17	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
25	BKTR	117	18	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
26	BKTR	96	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
27	BNTR	149	43	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
28	BKTR	164	53	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
29	BNTR	132	25	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
30	BKTR	154	41	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
31	BNTR	158	50	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
32	BKTR	114	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
33	BKTR	121	19	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
34	BNTR	145	33	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
35	BKTR	179	63	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
36	BKTR	142	29	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
37	BKTR	104	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
38	BKTR	107	13	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
39	BKTR	107	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
40	BKTR	60	2	U	Unknown			2-Marking
41	BKTR	136	27	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
42	BKTR	164	53	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
43	BKTR	140	28	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
44	BKTR	105	13	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
45	BKTR	67	4	U	Unknown			2-Marking
46	BKTR	63	3	U	Unknown			2-Marking
47	BKTR	164	49	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
48	BKTR	100	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
49	BKTR	106	12	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
50	BKTR	63	3	U	Unknown			2-Marking
51	BKTR	64	4	U	Unknown			2-Marking
52	BKTR	115	18	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
53	BKTR	54	1	U	Unknown			2-Marking
54	BKTR	67	3	U	Unknown			2-Marking
55	BKTR	65	4	U	Unknown			2-Marking
56	BKTR	105	13	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
57	BKTR	67	5	U	Unknown			2-Marking
58	BKTR	49	2	U	Unknown			2-Marking
59	BKTR	66	4	U	Unknown			2-Marking
60	BKTR	56	3	U	Unknown			2-Marking
61	BKTR	97	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
62	BKTR	109	14	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
63	BKTR	64	3	U	Unknown			2-Marking
64	BKTR	67	3	U	Unknown			2-Marking
65	BKTR	57	2	U	Unknown			2-Marking
66	BKTR	66	2	U	Unknown			2-Marking
67	BKTR	52	1	U	Unknown			2-Marking
68	BKTR	116	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
69	BKTR	65	2	U	Unknown			2-Marking
70	BKTR	56	2	U	Unknown			2-Marking
71	BKTR	60	3	U	Unknown			2-Marking
72	BKTR	60	3	U	Unknown			2-Marking
73	BKTR	53	3	U	Unknown			2-Marking
74	BKTR	67	4	U	Unknown			2-Marking
75	BKTR	57	3	U	Unknown			2-Marking
76	BKTR	51	2	U	Unknown			2-Marking
77	BKTR	61	4	U	Unknown			2-Marking
78	BKTR	59	3	U	Unknown			2-Marking
79	BKTR	60	3	U	Unknown			2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
80	BKTR	67	4	U	Unknown			2-Marking
81	BKTR	53	3	U	Unknown			2-Marking
82	BKTR	64	4	U	Unknown			2-Marking
83	BKTR	59	3	U	Unknown			2-Marking
84	BKTR	65	4	U	Unknown			2-Marking
85	BKTR	54	3	U	Unknown			2-Marking
86	BKTR	48	2	U	Unknown			2-Marking
87	BKTR	60	4	U	Unknown			2-Marking
88	BKTR	59	3	U	Unknown			2-Marking
89	BKTR	66	5	U	Unknown			2-Marking
90	BKTR	57	4	U	Unknown			2-Marking
91	BKTR	58	4	U	Unknown			2-Marking
92	BKTR	150	31	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
93	BKTR	114	17	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
94	BKTR	131	31	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
95	BNTR	190	80	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
96	BKTR	125	19	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
97	BKTR	149	32	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
98	BKTR	122	14	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
99	BKTR	68	2	U	Unknown			2-Marking
100	BKTR	63	4	U	Unknown			2-Marking
101	BNTR	160	48	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
102	BKTR	104	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
103	BKTR	167	50	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
104	BKTR	145	33	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
105	BKTR	100	13	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
106	BKTR	155	37	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
107	BKTR	175	57	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
108	BKTR	119	18	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
109	BKTR	180	82	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
110	BKTR	196	104	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
111	BKTR	197	12	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
112	BKTR	130	22	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
113	BKTR	168	56	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
114	BKTR	104	10	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
115	BKTR	207	108	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
116	BKTR	134	24	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
117	BKTR	111	60	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
118	BKTR	119	9	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
119	BKTR	120	17	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
120	BKTR	107	13	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
121	BKTR	128	24	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
122	BKTR	183	65	M	Ripe	Fin Clip-Upper Lobe Caudal		2-Marking
123	BKTR	123	19	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
124	BKTR	104	12	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
125	BNTR	148	41	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
126	BKTR	184	77	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
127	BKTR	62	2	U	Unknown			2-Marking
128	BKTR	106	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
129	BKTR	153	42	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
130	BKTR	138	28	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
131	BNTR	134	32	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
132	BKTR	69	4	U	Unknown			2-Marking
133	BKTR	64	2	U	Unknown			2-Marking
134	BKTR	156	45	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
135	BKTR	135	25	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
136	BKTR	119	12	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
137	BKTR	155	42	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
138	BKTR	133	25	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
139	BNTR	143	34	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
140	BKTR	54	2	U	Unknown			2-Marking
141	BKTR	64	2	U	Unknown			2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
142	BKTR	68	3	U	Unknown			2-Marking
143	BKTR	122	19	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
144	BKTR	176	56	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
145	BKTR	151	31	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
146	BKTR	134	18	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
147	BKTR	94	8	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
148	BKTR	109	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
149	BKTR	104	11	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
150	BKTR	73	3	U	Unknown			2-Marking
151	BKTR	54	2	U	Unknown			2-Marking
152	BKTR	58	3	U	Unknown			2-Marking
153	BKTR	68	3	U	Unknown			2-Marking
154	BKTR	52	1	U	Unknown			2-Marking
155	BKTR	45	1	U	Unknown			2-Marking
156	BKTR	83	4	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
157	BKTR	56	2	U	Unknown			2-Marking
158	BKTR	125	14	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
159	BKTR	116	19	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
160	BNTR	160	55	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
161	BKTR	156	50	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
162	BKTR	158	45	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
163	BKTR	148	40	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
164	BKTR	102	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
165	BKTR	66	3	U	Unknown			2-Marking
166	BKTR	57	2	U	Unknown			2-Marking
167	BKTR	54	2	U	Unknown			2-Marking
168	BKTR	63	2	U	Unknown			2-Marking
169	BKTR	118	18	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
170	BKTR	57	2	U	Unknown			2-Marking
171	BKTR	63	3	U	Unknown			2-Marking
172	BKTR	55	2	U	Unknown			2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
173	BKTR	54	1	U	Unknown			2-Marking
174	BKTR	64	2	U	Unknown			2-Marking
175	BKTR	59	2	U	Unknown			2-Marking
176	BKTR	60	2	U	Unknown			2-Marking
177	BKTR	55	2	U	Unknown			2-Marking
178	BKTR	54	2	U	Unknown			2-Marking
179	BKTR	58	2	U	Unknown			2-Marking
180	BKTR	60	3	U	Unknown			2-Marking
181	BKTR	54	2	U	Unknown			2-Marking
182	BKTR	63	3	U	Unknown			2-Marking
183	BKTR	57	3	U	Unknown			2-Marking
184	BKTR	68	6	U	Unknown			2-Marking
185	BKTR	64	6	U	Unknown			2-Marking
186	BKTR	70	5	U	Unknown			2-Marking
187	BKTR	66	6	U	Unknown			2-Marking
188	BKTR	103	8	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
189	BKTR	55	1	U	Unknown			2-Marking
190	BKTR	92	4	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
191	BKTR	113	9	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
192	BKTR	102	9	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
193	BKTR	116	15	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
194	BNTR	150	35	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
195	BKTR	157	44	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
196	BKTR	156	27	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
197	BKTR	143	37	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
198	BKTR	139	29	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
199	BKTR	167	51	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
200	BKTR	173	20	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
201	BKTR	127	23	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
202	BKTR	155	39	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
203	BKTR	138	35	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
204	BNTR	156	45	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
205	BKTR	137	28	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
206	BNTR	155	39	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
207	BKTR	104	9	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
208	BKTR	102	9	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
209	BKTR	108	10	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
210	BKTR	139	27	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
211	BKTR	144	32	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
212	BKTR	160	17	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
213	BKTR	121	24	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
214	BNTR	151	32	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
215	BKTR	98	4	U	Unknown	Fin Clip-Upper Lobe Caudal		2-Marking
1	BKTR	106	32	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
2	BKTR	166	76	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
3	BKTR	104	15	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
4	BKTR	119	22	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
5	BKTR	137	26	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
6	BKTR	104	13	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
7	BKTR	148	42	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
8	BKTR	164	63	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
9	BKTR	95	9	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
10	BKTR	144	36	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
11	BKTR	113	19	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
12	BKTR	89	14	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
13	BKTR	166	64	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
14	BKTR	103	24	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
15	BKTR	103	16	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
16	BKTR	142	34	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
17	BKTR	102	12	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
18	BKTR	109	18	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
19	BKTR	207	111	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
20	BKTR	177	66	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking
21	BKTR	103	12	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
22	BKTR	138	28	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
23	BKTR	168	64	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
24	BKTR	143	39	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking
25	BKTR	103	14	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
26	BKTR	173	72	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
27	BKTR	77	4	U	Unknown			3-Marking
28	BKTR	140	35	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
29	BKTR	152	42	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking
30	BKTR	94	12	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
31	BKTR	108	15	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
32	BKTR	128	21	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
33	BKTR	80	5	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
34	BKTR	129	27	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
35	BKTR	135	27	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking
36	BKTR	154	37	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking
37	BKTR	162	46	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
38	BKTR	159	52	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
39	BKTR	161	49	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
40	BKTR	125	17	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
41	BKTR	142	28	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
42	BKTR	128	23	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
43	BKTR	112	13	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
44	BKTR	42	1	U	Unknown			3-Marking
45	BKTR	110	16	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
46	BKTR	42	1	U	Unknown			3-Marking
47	BKTR	77	6	U	Unknown			3-Marking
48	BKTR	109	14	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
49	BKTR	165	53	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
50	BKTR	153	40	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
51	BKTR	138	38	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
52	BKTR	109	14	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
53	BKTR	116	21	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
54	BKTR	117	20	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
55	BKTR	103	15	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
56	BKTR	96	13	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
57	BKTR	99	14	U	Unknown	Fin Clip-Upper Lobe Caudal		3-Marking
58	BKTR	256	221	M	Ripe	Fin Clip-Upper Lobe Caudal		3-Marking
1	BKTR	140	35	U	Unknown		recapture	1-Recapture
2	BKTR	160	56	U	Unknown			1-Recapture
3	BKTR	187	83	U	Unknown			1-Recapture
4	BKTR	155	45	U	Unknown			1-Recapture
5	BKTR	152	37	U	Unknown			1-Recapture
6	BKTR	133	25	U	Unknown		recapture	1-Recapture
7	BKTR	152	41	U	Unknown			1-Recapture
8	BKTR	129	28	U	Unknown		recapture	1-Recapture
9	BKTR	125	21	U	Unknown			1-Recapture
10	BKTR	120	19	U	Unknown		recapture	1-Recapture
11	BKTR	123	24	U	Unknown		recapture	1-Recapture
12	BKTR	122	23	U	Unknown			1-Recapture
13	BNTR	99	12	U	Unknown			1-Recapture
14	BKTR	156	49	U	Unknown			1-Recapture
15	BKTR	120	22	U	Unknown			1-Recapture
16	BKTR	115	16	U	Unknown		recapture	1-Recapture
17	BKTR	111	14	U	Unknown			1-Recapture
18	BKTR	111	14	U	Unknown		recapture	1-Recapture
19	BKTR	148	35	U	Unknown		recapture	1-Recapture
20	BKTR	109	12	U	Unknown			1-Recapture
21	BKTR	125	20	U	Unknown			1-Recapture
22	BKTR	83	7	U	Unknown			1-Recapture
23	BKTR	101	13	U	Unknown			1-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
24	BKTR	225	134	U	Unknown			1-Recapture
25	BKTR	112	15	U	Unknown			1-Recapture
26	BKTR	110	14	U	Unknown			1-Recapture
27	BKTR	115	13	U	Unknown			1-Recapture
28	BKTR	104	10	U	Unknown			1-Recapture
29	BKTR	163	44	U	Unknown			1-Recapture
30	BKTR	112	12	U	Unknown			1-Recapture
31	BKTR	71	3	U	Unknown			1-Recapture
32	BKTR	103	7	U	Unknown			1-Recapture
33	BKTR	107	11	U	Unknown			1-Recapture
34	BKTR	75	3	U	Unknown			1-Recapture
35	BKTR	72	2	U	Unknown			1-Recapture
36	BKTR	97	6	U	Unknown			1-Recapture
37	BKTR	90	3	U	Unknown			1-Recapture
38	BKTR	64	4	U	Unknown			1-Recapture
39	BKTR	68	4	U	Unknown			1-Recapture
40	BKTR	59	5	U	Unknown			1-Recapture
41	BKTR	124	23	U	Unknown		recapture	1-Recapture
42	BKTR	103	19	U	Unknown			1-Recapture
43	BKTR	106	15	U	Unknown			1-Recapture
44	BKTR	59	3	U	Unknown			1-Recapture
45	BKTR	72	5	U	Unknown			1-Recapture
46	BKTR	109	15	U	Unknown			1-Recapture
47	BKTR	71	5	U	Unknown			1-Recapture
48	BKTR	63	3	U	Unknown			1-Recapture
49	BNTR	49	2	U	Unknown			1-Recapture
50	BKTR	103	13	U	Unknown			1-Recapture
51	BKTR	57	3	U	Unknown			1-Recapture
52	BNTR	49	2	U	Unknown			1-Recapture
53	BNTR	163	45	U	Unknown			1-Recapture
54	BNTR	166	61	U	Unknown		recapture	1-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
55	BNTR	142	35	U	Unknown			1-Recapture
56	BKTR	101	13	U	Unknown		recapture	1-Recapture
57	BKTR	96	13	U	Unknown			1-Recapture
58	BKTR	60	3	U	Unknown			1-Recapture
59	BKTR	122	21	U	Unknown			1-Recapture
60	BNTR	90	10	U	Unknown			1-Recapture
61	BKTR	100	13	U	Unknown			1-Recapture
62	BKTR	98	11	U	Unknown			1-Recapture
63	BKTR	120	19	U	Unknown		recapture	1-Recapture
64	BKTR	90	12	U	Unknown			1-Recapture
65	BKTR	152	36	U	Unknown		recapture	1-Recapture
66	BNTR	208	93	U	Unknown			1-Recapture
67	BKTR	186	78	U	Unknown		recapture	1-Recapture
68	BKTR	104	14	U	Unknown			1-Recapture
69	BKTR	114	11	U	Unknown			1-Recapture
70	BKTR	106	13	U	Unknown			1-Recapture
71	BKTR	90	8	U	Unknown			1-Recapture
72	BKTR	111	13	U	Unknown			1-Recapture
73	BKTR	104	11	U	Unknown			1-Recapture
74	BKTR	90	7	U	Unknown			1-Recapture
75	BKTR	113	16	U	Unknown			1-Recapture
76	BKTR	97	9	U	Unknown			1-Recapture
77	BKTR	47	1	U	Unknown			1-Recapture
78	BKTR	72	2	U	Unknown			1-Recapture
79	BNTR	236	153	U	Unknown			1-Recapture
80	BKTR	97		U	Unknown			1-Recapture
81	BKTR	189	72	U	Unknown		recapture	1-Recapture
82	BKTR	161	50	U	Unknown			1-Recapture
83	BNTR	168	52	U	Unknown		recapture	1-Recapture
84	BKTR	100	7	U	Unknown			1-Recapture
85	BKTR	178	67	U	Unknown			1-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
86	BKTR	146	30	U	Unknown			1-Recapture
87	BKTR	117	20	U	Unknown			1-Recapture
88	BKTR	131	23	U	Unknown			1-Recapture
89	BKTR	139	30	U	Unknown		recapture	1-Recapture
90	BKTR	113	17	U	Unknown		recapture	1-Recapture
91	BKTR	147	31	U	Unknown			1-Recapture
92	BKTR	159	49	U	Unknown		recapture	1-Recapture
93	BNTR	225	125	U	Unknown		recapture	1-Recapture
94	BNTR	146	36	U	Unknown			1-Recapture
95	BKTR	112	13	U	Unknown			1-Recapture
96	BKTR	212	123	U	Unknown			1-Recapture
97	BKTR	172	63	U	Unknown		recapture	1-Recapture
98	BKTR	107	11	U	Unknown			1-Recapture
99	BKTR	137	26	U	Unknown			1-Recapture
100	BKTR	113	14	U	Unknown			1-Recapture
101	BKTR	121	17	U	Unknown		recapture	1-Recapture
102	BKTR	101	8	U	Unknown			1-Recapture
103	BKTR	158	46	U	Unknown		recapture	1-Recapture
104	BKTR	101	7	U	Unknown		recapture	1-Recapture
105	BKTR	118	15	U	Unknown		recapture	1-Recapture
106	BNTR	170	57	U	Unknown			1-Recapture
107	BKTR	109	10	U	Unknown			1-Recapture
108	BKTR	143	29	U	Unknown			1-Recapture
109	MNWH	73	1	U	Unknown			1-Recapture
110	BKTR	169	61	U	Unknown			1-Recapture
111	MNWH	127	17	U	Unknown			1-Recapture
112	BKTR	179	66	U	Unknown		recapture	1-Recapture
113	BKTR	142	24	U	Unknown			1-Recapture
114	BKTR	132	19	U	Unknown		recapture	1-Recapture
115	BKTR	142	27	U	Unknown		recapture	1-Recapture
116	BKTR	106	14	U	Unknown		recapture	1-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
117	BKTR	137	26	U	Unknown		recapture	1-Recapture
118	BKTR	89	3	U	Unknown		recapture	1-Recapture
119	BKTR	123	19	U	Unknown			1-Recapture
120	BKTR	98	8	U	Unknown			1-Recapture
121	BKTR	114	15	U	Unknown			1-Recapture
122	BKTR	86	3	U	Unknown		recapture	1-Recapture
123	BKTR	121	15	U	Unknown		recapture	1-Recapture
124	BKTR	90	6	U	Unknown		recapture	1-Recapture
125	BKTR	97	7	U	Unknown		recapture	1-Recapture
126	BKTR	147	25	U	Unknown			1-Recapture
127	BKTR	147	36	U	Unknown			1-Recapture
128	BKTR	117	13	U	Unknown			1-Recapture
129	BKTR	105		U	Unknown			1-Recapture
130	BKTR	153	37	U	Unknown			1-Recapture
131	BKTR	138	30	U	Unknown			1-Recapture
132	BKTR	105	8	U	Unknown			1-Recapture
133	BKTR	86	3	U	Unknown			1-Recapture
134	BKTR	121	14	U	Unknown		recapture	1-Recapture
135	BKTR	103	5	U	Unknown			1-Recapture
136	BKTR	122	13	U	Unknown			1-Recapture
137	BKTR	116	9	U	Unknown			1-Recapture
138	BKTR	88	2	U	Unknown		recapture	1-Recapture
139	BKTR	150	32	U	Unknown			1-Recapture
140	BKTR	108	9	U	Unknown		recapture	1-Recapture
141	BKTR	108	8	U	Unknown		recapture	1-Recapture
142	BKTR	83	3	U	Unknown			1-Recapture
143	BKTR	86	5	U	Unknown			1-Recapture
144	BKTR	87	6	U	Unknown			1-Recapture
145	BKTR	107	13	U	Unknown			1-Recapture
146	BNTR	154	38	U	Unknown			2-Recapture
147	BNTR	145	34	U	Unknown		recapture	2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
148	BNTR	155	42	U	Unknown			2-Recapture
149	BKTR	62	3	U	Unknown			2-Recapture
150	BNTR	132	24	U	Unknown		recapture	2-Recapture
151	BKTR	168	53	U	Unknown		recapture	2-Recapture
152	BKTR	64	2	U	Unknown			2-Recapture
153	BNTR	163	56	U	Unknown			2-Recapture
154	BNTR	150	39	U	Unknown			2-Recapture
155	BKTR	65	2	U	Unknown			2-Recapture
156	BKTR	107	8	U	Unknown			2-Recapture
157	BNTR	155	35	U	Unknown		recapture	2-Recapture
158	BKTR	162	44	U	Unknown		recapture	2-Recapture
159	BKTR	112	13	U	Unknown			2-Recapture
160	BKTR	56	2	U	Unknown			2-Recapture
161	BKTR	114	15	U	Unknown			2-Recapture
162	BKTR	104	13	U	Unknown			2-Recapture
163	BKTR	102	11	U	Unknown		recapture	2-Recapture
164	BKTR	66	2	U	Unknown			2-Recapture
165	BKTR	59	4	U	Unknown			2-Recapture
166	BKTR	50	1	U	Unknown			2-Recapture
167	BKTR	62	2	U	Unknown			2-Recapture
168	BKTR	101	11	U	Unknown		recapture	2-Recapture
169	BKTR	48	1	U	Unknown			2-Recapture
170	BKTR	103	10	U	Unknown		recapture	2-Recapture
171	BKTR	102	10	U	Unknown			2-Recapture
172	BKTR	65	2	U	Unknown			2-Recapture
173	BKTR	55	1	U	Unknown			2-Recapture
174	BKTR	63	2	U	Unknown			2-Recapture
175	BKTR	54	2	U	Unknown			2-Recapture
176	BKTR	65	3	U	Unknown			2-Recapture
177	BKTR	49	1	U	Unknown			2-Recapture
178	BKTR	65	3	U	Unknown			2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
179	BKTR	68	3	U	Unknown			2-Recapture
180	BKTR	54	2	U	Unknown			2-Recapture
181	BKTR	50	1	U	Unknown			2-Recapture
182	BKTR	148	37	U	Unknown		recapture	2-Recapture
183	BKTR	63	2	U	Unknown			2-Recapture
184	BKTR	59	2	U	Unknown			2-Recapture
185	BKTR	65	2	U	Unknown			2-Recapture
186	BKTR	62	1	U	Unknown			2-Recapture
187	BKTR	68	2	U	Unknown			2-Recapture
188	BKTR	62	1	U	Unknown			2-Recapture
189	BKTR	61	2	U	Unknown			2-Recapture
190	BKTR	89	7	U	Unknown			2-Recapture
191	BKTR	61	1	U	Unknown			2-Recapture
192	BKTR	49	1	U	Unknown			2-Recapture
193	BKTR	64	1	U	Unknown			2-Recapture
194	BKTR	59	3	U	Unknown			2-Recapture
195	BKTR	55	2	U	Unknown			2-Recapture
196	BKTR	59	2	U	Unknown			2-Recapture
197	BKTR	71	4	U	Unknown			2-Recapture
198	BKTR	58	1	U	Unknown			2-Recapture
199	BKTR	55	2	U	Unknown			2-Recapture
200	BKTR	57	2	U	Unknown			2-Recapture
201	BKTR	65	2	U	Unknown			2-Recapture
202	BKTR	64	1	U	Unknown			2-Recapture
203	BKTR	68	3	U	Unknown			2-Recapture
204	BKTR	57	1	U	Unknown			2-Recapture
205	BKTR	56	1	U	Unknown			2-Recapture
206	BKTR	123	17	U	Unknown		recapture	2-Recapture
207	BKTR	98	7	U	Unknown			2-Recapture
208	BKTR	94	9	U	Unknown			2-Recapture
209	BKTR	145	30	U	Unknown			2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
210	BKTR	137	21	U	Unknown			2-Recapture
211	BKTR	115	12	U	Unknown		recapture	2-Recapture
212	BNTR	142	29	U	Unknown			2-Recapture
213	BKTR	153	27	U	Unknown		recapture	2-Recapture
214	BNTR	144	26	U	Unknown		recapture	2-Recapture
215	BKTR	123	12	U	Unknown			2-Recapture
216	BKTR	148	32	U	Unknown			2-Recapture
217	BNTR	154	49	U	Unknown			2-Recapture
218	BKTR	286	244	F	Ripe			2-Recapture
219	BKTR	150	32	U	Unknown			2-Recapture
220	BKTR	112	15	U	Unknown			2-Recapture
221	BKTR	203	85	U	Unknown			2-Recapture
222	BKTR	60	2	U	Unknown		recapture	2-Recapture
223	BKTR	54	2	U	Unknown			2-Recapture
224	BKTR	62	2	U	Unknown			2-Recapture
225	BKTR	54	1	U	Unknown			2-Recapture
226	BKTR	142	37	U	Unknown			2-Recapture
227	BKTR	191	75	U	Unknown			2-Recapture
228	BKTR	153	42	M	Ripe			2-Recapture
229	BNTR	150	37	U	Unknown			2-Recapture
230	BKTR	175	69	M	Ripe			2-Recapture
231	BKTR	144	35	U	Unknown			2-Recapture
232	BKTR	115	18	U	Unknown			2-Recapture
233	BKTR	124	21	U	Unknown			2-Recapture
234	BKTR	115	14	U	Unknown			2-Recapture
235	BKTR	56	2	U	Unknown			2-Recapture
236	BKTR	123	21	U	Unknown			2-Recapture
237	BKTR	56	2	U	Unknown			2-Recapture
238	BKTR	58	2	U	Unknown			2-Recapture
239	BKTR	63	2	U	Unknown			2-Recapture
240	BKTR	61	2	U	Unknown			2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
241	BKTR	217	114	U	Unknown			2-Recapture
242	BKTR	97	9	U	Unknown			2-Recapture
243	BKTR	53	1	U	Unknown			2-Recapture
244	BKTR	106	9	U	Unknown			2-Recapture
245	BNTR	137	27	U	Unknown			2-Recapture
246	BKTR	132	24	U	Unknown			2-Recapture
247	BKTR	91	5	U	Unknown		recapture	2-Recapture
248	BKTR	165	47	U	Unknown			2-Recapture
249	BKTR	160	44	U	Unknown			2-Recapture
250	BKTR	110	15	U	Unknown			2-Recapture
251	BKTR	171	65	U	Unknown			2-Recapture
252	BKTR	150	40	U	Unknown		recapture	2-Recapture
253	BKTR	108	16	U	Unknown			2-Recapture
254	BNTR	152	45	U	Unknown		recapture	2-Recapture
255	BKTR	150	37	U	Unknown			2-Recapture
256	BKTR	173	62	U	Unknown		recapture	2-Recapture
257	BKTR	121	17	U	Unknown			2-Recapture
258	BKTR	137	29	U	Unknown		recapture	2-Recapture
259	BKTR	122	20	U	Unknown		recapture	2-Recapture
260	BKTR	107	13	U	Unknown		recapture	2-Recapture
261	BKTR	117	19	U	Unknown			2-Recapture
262	BKTR	153	42	U	Unknown			2-Recapture
263	BKTR	99	10	U	Unknown			2-Recapture
264	BKTR	144	36	U	Unknown			2-Recapture
265	BKTR	157	52	U	Unknown		recapture	2-Recapture
266	BKTR	89	8	U	Unknown		recapture	2-Recapture
267	BKTR	65	2	U	Unknown			2-Recapture
268	BKTR	108	12	U	Unknown			2-Recapture
269	BKTR	112	14	U	Unknown		recapture	2-Recapture
270	BKTR	103	11	U	Unknown			2-Recapture
271	BKTR	54	1	U	Unknown			2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
272	BKTR	67	2	U	Unknown			2-Recapture
273	BKTR	54	1	U	Unknown			2-Recapture
274	BKTR	179	76	U	Unknown		recapture	2-Recapture
275	BNTR	151	43	U	Unknown		recapture	2-Recapture
276	BNTR	146	36	U	Unknown		recapture	2-Recapture
277	BNTR	127	24	U	Unknown			2-Recapture
278	BKTR	105	9	U	Unknown			2-Recapture
279	BNTR	151	37	U	Unknown			2-Recapture
280	BNTR	133	29	U	Unknown		recapture	2-Recapture
281	BKTR	102	54	U	Unknown		recapture	2-Recapture
282	BKTR	114	13	U	Unknown			2-Recapture
283	BKTR	105	11	U	Unknown		recapture	2-Recapture
284	BNTR	133	25	U	Unknown		recapture	2-Recapture
285	BKTR	168	51	U	Unknown		recapture	2-Recapture
286	BNTR	141	37	U	Unknown		recapture	2-Recapture
287	BKTR	146	38	U	Unknown			2-Recapture
288	BKTR	156	44	U	Unknown		recapture	2-Recapture
289	BKTR	134	26	U	Unknown			2-Recapture
290	BKTR	117	15	U	Unknown			2-Recapture
291	BKTR	109	9	U	Unknown			2-Recapture
292	BKTR	95	5	U	Unknown			2-Recapture
293	BKTR	141	33	U	Unknown		recapture	2-Recapture
294	BKTR	91	9	U	Unknown		recapture	2-Recapture
295	BKTR	122	21	U	Unknown		recapture	2-Recapture
296	BKTR	117	20	U	Unknown		recapture	2-Recapture
297	BKTR	120	20	U	Unknown			2-Recapture
298	BKTR	152	43	U	Unknown		recapture	2-Recapture
299	BKTR	99	11	U	Unknown			2-Recapture
300	BKTR	112	18	U	Unknown		recapture	2-Recapture
301	BKTR	116	17	U	Unknown		recapture	2-Recapture
302	BKTR	64	3	U	Unknown			2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
303	BKTR	97	9	U	Unknown		recapture	2-Recapture
304	BKTR	99	9	U	Unknown			2-Recapture
305	BKTR	107	9	U	Unknown			2-Recapture
306	BKTR	57	1	U	Unknown			2-Recapture
307	BKTR	93	7	U	Unknown		recapture	2-Recapture
308	BKTR	61	1	U	Unknown			2-Recapture
309	BKTR	103	10	U	Unknown		recapture	2-Recapture
310	BKTR	97	7	U	Unknown			2-Recapture
311	BKTR	64	1	U	Unknown			2-Recapture
312	BKTR	69	2	U	Unknown			2-Recapture
313	BKTR	103	8	U	Unknown			2-Recapture
314	BKTR	63	1	U	Unknown			2-Recapture
315	BKTR	63	2	U	Unknown			2-Recapture
316	BKTR	54	1	U	Unknown			2-Recapture
317	BKTR	73	2	U	Unknown			2-Recapture
318	BKTR	59	1	U	Unknown			2-Recapture
319	BKTR	66	2	U	Unknown			2-Recapture
320	BKTR	122	15	U	Unknown		recapture	2-Recapture
321	BNTR	149	38	U	Unknown		recapture	2-Recapture
322	BKTR	155	40	U	Unknown			2-Recapture
323	BKTR	70	2	U	Unknown			2-Recapture
324	BKTR	59	1	U	Unknown			2-Recapture
325	BKTR	127	19	U	Unknown		recapture	2-Recapture
326	BKTR	128	18	U	Unknown		recapture	2-Recapture
327	BKTR	62	2	U	Unknown			2-Recapture
328	BKTR	53	1	U	Unknown			2-Recapture
329	BKTR	60	1	U	Unknown			2-Recapture
330	BKTR	95	6	U	Unknown		recapture	2-Recapture
331	BKTR	70	2	U	Unknown			2-Recapture
332	BKTR	68	2	U	Unknown			2-Recapture
333	BKTR	67	2	U	Unknown			2-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
334	BKTR	57	2	U	Unknown			2-Recapture
335	BKTR	55	2	U	Unknown			2-Recapture
336	BKTR	66	4	U	Unknown			2-Recapture
337	BKTR	54	2	U	Unknown			2-Recapture
338	BKTR	52	2	U	Unknown			2-Recapture
1	BKTR	115	16	U	Unknown			3-Recapture
2	BKTR	175	65	M	Ripe		recapture	3-Recapture
3	BKTR	114	21	U	Unknown			3-Recapture
4	BKTR	127	26	M	Ripe		recapture	3-Recapture
5	BKTR	177	60	U	Unknown			3-Recapture
6	BKTR	204	104	M	Ripe		recapture	3-Recapture
7	BKTR	156	52	U	Unknown		recapture	3-Recapture
8	BKTR	106	13	U	Unknown			3-Recapture
9	BKTR	128	27	M	Ripe		recapture	3-Recapture
10	BKTR	140	28	U	Unknown		recapture	3-Recapture
11	BKTR	102	12	U	Unknown			3-Recapture
12	BKTR	114	17	U	Unknown			3-Recapture
13	BKTR	165	53	M	Ripe			3-Recapture
14	BKTR	132	27	U	Unknown			3-Recapture
15	BKTR	138	29	U	Unknown			3-Recapture
16	BKTR	108	11	U	Unknown			3-Recapture
17	BKTR	115	14	U	Unknown		recapture	3-Recapture
18	BKTR	112	14	U	Unknown		recapture	3-Recapture
19	BKTR	104	12	U	Unknown			3-Recapture
20	BKTR	113	18	U	Unknown			3-Recapture
21	BKTR	81	5	U	Unknown			3-Recapture
22	BKTR	104	12	U	Unknown			3-Recapture
23	BKTR	113	14	U	Unknown			3-Recapture
24	BKTR	104	11	U	Unknown			3-Recapture
25	BKTR	107	15	U	Unknown			3-Recapture
26	BKTR	103	10	U	Unknown		recapture	3-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
27	BKTR	114	19	U	Unknown			3-Recapture
28	BKTR	106	12	U	Unknown			3-Recapture
29	BKTR	92	9	U	Unknown			3-Recapture
30	BKTR	86	7	U	Unknown			3-Recapture
31	BKTR	94	10	U	Unknown		recapture	3-Recapture
32	BKTR	121	19	U	Unknown			3-Recapture
33	BKTR	172	68	U	Unknown		recapture	3-Recapture
34	BKTR	98	12	U	Unknown		recapture	3-Recapture
35	BKTR	167	64	U	Unknown		recapture	3-Recapture
36	BKTR	111	17	U	Unknown		recapture	3-Recapture
37	BKTR	137	37	U	Unknown			3-Recapture
38	BKTR	163	54	U	Unknown		recapture	3-Recapture
39	BKTR	123	23	U	Unknown			3-Recapture
40	BKTR	203	92	M	Ripe			3-Recapture
41	BKTR	165	50	M	Ripe		recapture	3-Recapture
42	BKTR	104	12	U	Unknown			3-Recapture
43	BKTR	134	30	U	Unknown			3-Recapture
44	BKTR	96	11	U	Unknown		recapture	3-Recapture
45	BKTR	103	19	U	Unknown			3-Recapture
46	BKTR	153	43	M	Ripe		recapture	3-Recapture
47	BKTR	113	22	U	Unknown			3-Recapture
48	BKTR	80	8	U	Unknown			3-Recapture
49	BKTR	118	18	U	Unknown			3-Recapture
50	BKTR	116	20	U	Unknown		recapture	3-Recapture
51	BKTR	103	14	U	Unknown		recapture	3-Recapture
52	BKTR	97	14	U	Unknown			3-Recapture
53	BKTR	167	70	U	Unknown		recapture	3-Recapture
54	BKTR	245	216	M	Ripe		recapture	3-Recapture
55	BKTR	185	89	M	Ripe			3-Recapture
56	BKTR	127	27	U	Unknown			3-Recapture
57	BKTR	154	43	M	Ripe			3-Recapture

Sample #	Species	Fork Length (mm)	Weight (g)	Sex	Maturity	Fin Clip Type	Recapture	Reach/Run
58	BKTR	112	12	U	Unknown			3-Recapture
59	BKTR	96	5	U	Unknown			3-Recapture
60	BKTR	95	8	U	Unknown			3-Recapture
61	BKTR	109	10	U	Unknown		recapture	3-Recapture
62	BKTR	140	25	U	Unknown			3-Recapture
63	BKTR	101	9	U	Unknown		recapture	3-Recapture
64	BKTR	103	10	U	Unknown		recapture	3-Recapture
65	BKTR	137	27	U	Unknown			3-Recapture
66	BKTR	119	15	U	Unknown			3-Recapture
67	BKTR	43	1	U	Unknown			3-Recapture
68	BKTR	37	1	U	Unknown			3-Recapture
69	BKTR	41	1	U	Unknown			3-Recapture
70	BKTR	43	1	U	Unknown			3-Recapture