

Monitor and Protect Wigwam River Bull Trout for Koocanusa Reservoir

Skookumchuck Creek Bull Trout Enumeration Project - Fence Summary

Final Report
2000 - 2002



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Summary of the Skookumchuck Creek Bull Trout Enumeration Project (2000 - 2002)

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ABSTRACT

This report summarizes the third and final year of a bull trout (*Salvelinus confluentus*) enumeration project on Skookumchuck Creek in southeastern British Columbia. The fence and traps were operated from September 6th to October 11th 2002 in order to enumerate post-spawning bull trout. During the study period a total of 309 bull trout were captured at the fence. In total, 16 fish of undetermined sex, 114 males and 179 females were processed at the fence. Length and weight data, as well as recapture information, were collected for these fish. An additional 41 bull trout were enumerated upstream of the fence by snorkeling prior to fence removal. Coupled with the fence count, the total bull trout enumerated during the project was 350 individuals. Several fish that were tagged in the lower Bull River were recaptured in 2002, as were repeat and alternate year spawners previously enumerated in past years at the fence. A total of 149 bull trout redds were enumerated on the ground in 2002, of which 143 were in the 3.0 km index section (river km 27.5-30.5) that has been surveyed over the past six years. The results of the three year project are summarized, and population characteristics are discussed.

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INTRODUCTION

This project marks the third and final year that a fish counting fence has been operated on Skookumchuck Creek in the East Kootenay region of British Columbia (Figure 1). The main objective of this study has been to enumerate bull trout (*Salvelinus confluentus*) that use the watershed for spawning, and also to collect data on the biological characteristics of the population. Skookumchuck Creek has been identified as a major spawning tributary for bull trout that live in the Kootenay River and/or Lake Kootanusa (Baxter and Baxter 2002), and as such is an important watershed for the maintenance of healthy populations of bull trout in the upper Kootenay River watershed. As bull trout populations have declined throughout the Pacific Northwest there is a growing interest by U.S. and Canadian agencies in the enumeration and protection of remaining populations, and the Skookumchuck Creek population is one that has transboundary concerns due to documented post-spawning migration movements to Lake Kootanusa.

In response to these concerns, the British Columbia Ministry of Water, Land and Air Protection (BC MWLAP) applied for and received funding from the Bonneville Power Administration (BPA) to assess and monitor the status of wild, native stocks of bull trout in tributaries to Lake Kootanusa and the upper Kootenay River. This project was one of many that was initiated under the BPA Project “Monitor and Protect Bull Trout for Kootanusa Reservoir” BPA Project Number 2000-04-00. To effectively manage and protect bull trout population(s) of the Kootenay River and/or Lake Kootanusa, BC WLAP has initiated several studies on bull trout in the East Kootenay region. These include adult enumeration projects on the Wigwam River (see Baxter and Westover 2000) and Skookumchuck Creek (see Baxter and Baxter 2001), juvenile and habitat studies in the Wigwam River (see Cope et al. 2002) and Skookumchuck Creek, and a Kootenay River basin-wide radio telemetry project that is currently in its final stages.

Initial bull trout redd surveys conducted in 1997 within the Skookumchuck Creek watershed documented major spawning areas, however there were limited data on the relative abundance and biological characteristics of the population that utilized the system for spawning. This resulted in the initiation of this project in the fall of 2000 in order to collect this data. Results in 2000 and 2001 demonstrated that a significant number of bull trout used the system for spawning, and that there was a continued increasing trend in redd abundance (see Baxter and Baxter 2001 and 2002). This project was carried out for its final year in 2002, and specifically the project objectives of this final year of study were to:

1. capture and tag post-spawning bull trout at an enumeration fence in order to estimate run size and enumerate recaptured individuals;
2. capture other fish species at the enumeration fence;
3. collect biological data from all sampled fish;
4. continue redd counts to identify bull trout spawning areas in the watershed; and
5. continue to monitor water temperatures at locations in the Skookumchuck Creek drainage.

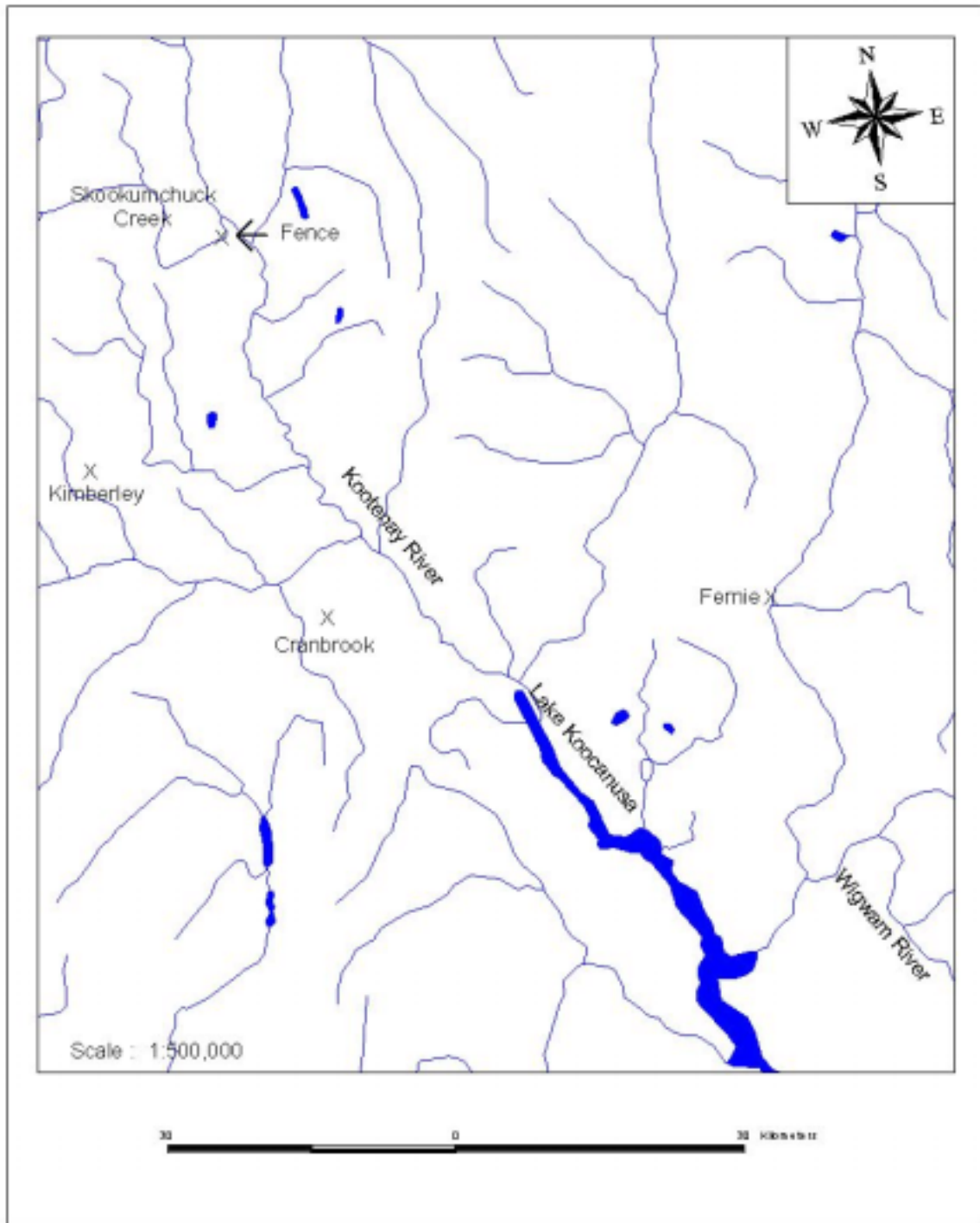


Figure 1. Fence and trap location on Skookumchuck Creek.

STUDY AREA

A description of the study area has been previously reported (Cope and Oliver 1997), and this summary is adapted from this work. Skookumchuck Creek originates in the Purcell Mountains and the watershed is within a large portion of the Purcell Wilderness Conservancy (Figure 2). The system flows in a general northeasterly direction for 42 km into the upper Kootenay River draining an area of approximately 64,236 ha. Skookumchuck Creek has three major tributaries (Buhl Creek, Bradford Creek, Sandown Creek) that contribute a significant amount of flow to the mainstem. Mean annual discharge (1949-1976) was $11.3 \text{ m}^3 \cdot \text{sec}^{-1}$ with mean monthly minimum and maximum values of 2.0 and $49.0 \text{ m}^3 \cdot \text{sec}^{-1}$ respectively (Anonymous 1977). There is a waterfall barrier at river km 32.

Fisheries resources of the Skookumchuck Creek watershed are well documented, and include bull trout, westslope cutthroat trout (*Oncorhynchus clarki lewisi*), Eastern brook trout (*Salvelinus fontinalis*), Rocky Mountain whitefish (*Prosopium williamsoni*), and rainbow trout (*O. mykiss*) (Cope and Oliver 1997). The Skookumchuck Creek watershed was also sampled as part of a broad scale bull trout metapopulation genetics study, and bull trout were confirmed in the mainstem of Skookumchuck Creek, Bradford Creek, and Sandown Creek (Baxter and Oliver 1997).

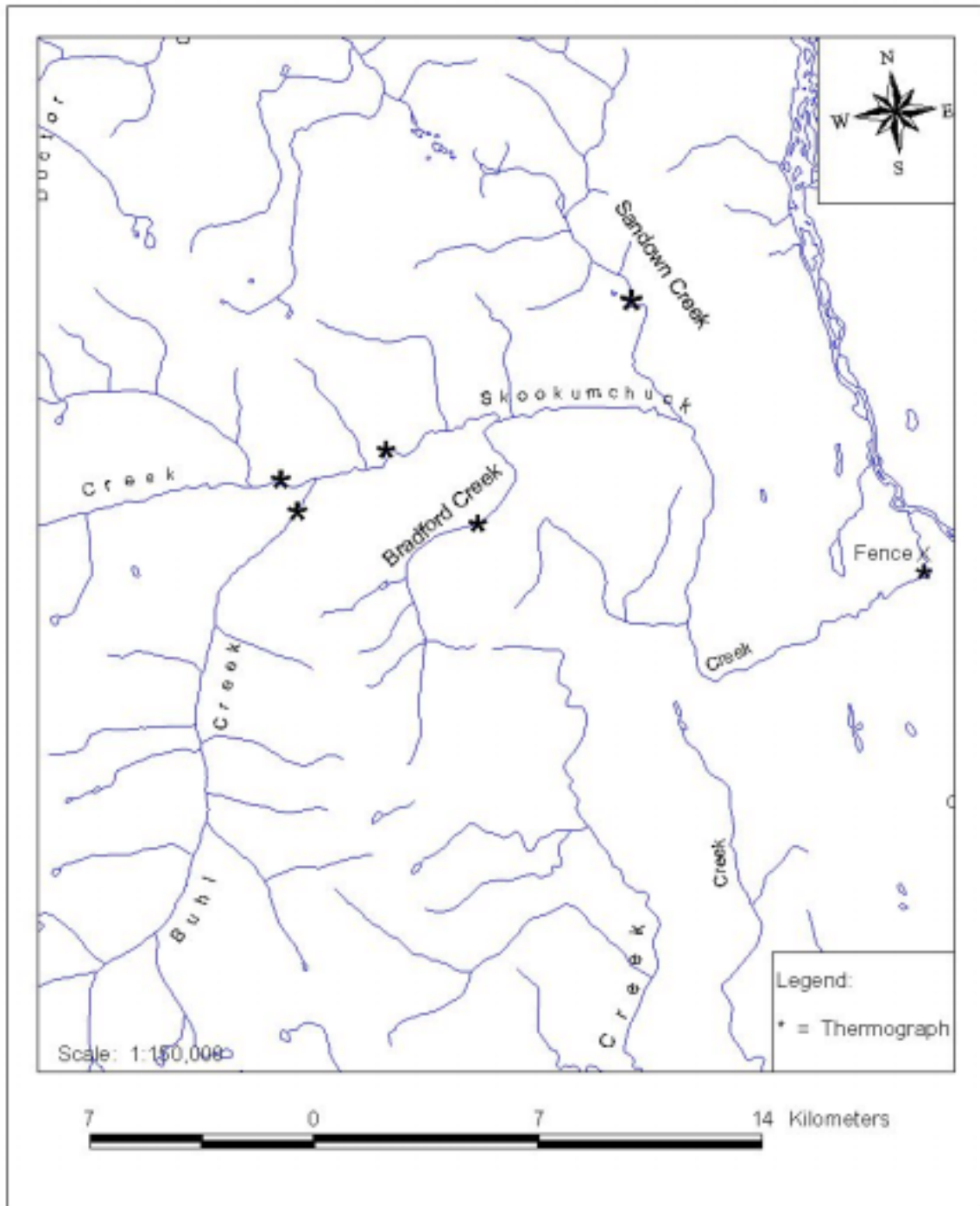


Figure 2. Map of the Skookumchuck Creek watershed.

METHODS

Trapping

A 5.0 cm square coated wire mesh fish enumeration fence was installed across Skookumchuck Creek on September 6th, approximately one km upstream of the Skookumchuck Creek/Kootenay River confluence. A suitable location for the fence was determined based on water levels, water flows, and access. Once the fence was set up, moveable 2.5 cm mesh wire panels were hinged to the upstream side of the fence in order to allow debris to be removed. River rocks and wire skirting were used to seal the bottom of the structure where the fence came into contact with the streambed. Upstream and downstream traps constructed of 2.5 cm wire mesh were used in conjunction with the fence to capture and hold fish prior to processing. The fence was operated during the fall in order to capture downstream migrating bull trout kelts, and to minimize the effect the fence might have on the upstream migration of spawning bull trout.

Each trap was checked a minimum of three times daily by a two person crew from September 6th to October 11th. Morning checks occurred between 0600 and 0800 hours and evening checks between 2000 and 2400 hours. Trap checks also occurred mid-day when the fence was cleaned of debris. All of the bull trout that passed through the fence did so during either the early morning or late night checks. No bull trout were captured during mid-day checks, however the debris on the fence was removed during each visit to the fence.

Enumeration, Measurement, and Tagging

All captured fish were anaesthetized using clove at a concentration of 100 PPM (2 mL in 20 L) in a 100 L cooler. Fish were examined for the presence of previous tags and spawning condition. The fish were then subsequently measured for weight (g) and fork length (cm), sexed, and finally tagged with a Floy tag placed at the base of the dorsal fin. Floy tags used for this study were Floy FD-94 T-Bar anchor tags, with 1 inch bare monofilament below the tubing, and were inserted with a Mark II super heavy duty tagging gun having a one inch insertion using Mark II long, regular needles (outside diameter = 0.22 cm). During the first two years of the study tags were green in color, while in the final year orange tags were used.

Prior to the fence being removed, Skookumchuck Creek (from the Torrent Road bridge crossing to the fence site) was surveyed by snorkeling to determine the number of bull trout upstream of the fence prior to removal.

Radio Telemetry

In addition to Floy tagging, 18 radio tagged bull trout were either initially tagged or were tracked into Skookumchuck Creek between April 2000 and September 2002. The radio telemetry component was part of a larger bull trout project on the upper Kootenay River where 71 bull trout were radio tagged and tracked for 2.5 years. General movements of radio tagged bull trout that utilized Skookumchuck Creek have been summarized in this report.

Other Species

Other fish that were sampled at the enumeration fence were also anaesthetized and then identified to species, enumerated, sexed (where possible), and measured for fork length (cm). After recovery the fish were released in the direction they were migrating.

Redd Counts

On October 3rd, bull trout redds were enumerated by two 2-person crews that surveyed the mainstem of Skookumchuck Creek. One crew surveyed a 3.0 km section of the stream from river km 27.5 to 30.5. This same section has been surveyed in each of the last 6 years. The other crew surveyed a 1.5 km section of Skookumchuck Creek from river km 24.0 to 25.5. This was the third year that this section of stream has been sampled.

Water Temperature Monitoring

A water temperature monitoring program was originally established as part of this project in summer of 2000. At this time six Optic StowAway™ Temp thermographs were deployed throughout the Skookumchuck watershed. Thermographs were deployed in the mainstem of Skookumchuck Creek at three locations (fence site, upper Skookumchuck Creek above Buhl Creek, and at km 39.5 on the Skookumchuck Creek Forest Service Road) and in Buhl Creek, Bradford Creek, and Sandown Creek (Figure 2). In 2002, the thermographs were retrieved and removed on September 5th.

RESULTS

Trapping

The fence was set up and fishing after approximately four hours of installation time on September 6th. Site conditions experienced during the study period were extremely favorable for fish migration, and the fence remained operational throughout the entire study period. The fence was removed on October 11th.

Enumeration, Measurement, and Tagging

Summary data for all bull trout sampled during this three project are presented in Appendices I, II, and III. During the study period in 2002, a total of 309 bull trout were sampled through the enumeration fence (Appendix III). Of the 309 bull trout sampled, 59 had a green Floy tag present from previous sampling in Skookumchuck Creek in 2000 and 2001, and 7 had a Floy tag present from sampling in the lower Bull River between 1997 and 2001 (see Appendix III). Of the remaining fish, 243 were tagged with an orange Floy tag (Appendix III). All 309 fish that were processed at the fence were caught migrating downstream (Figure 3).

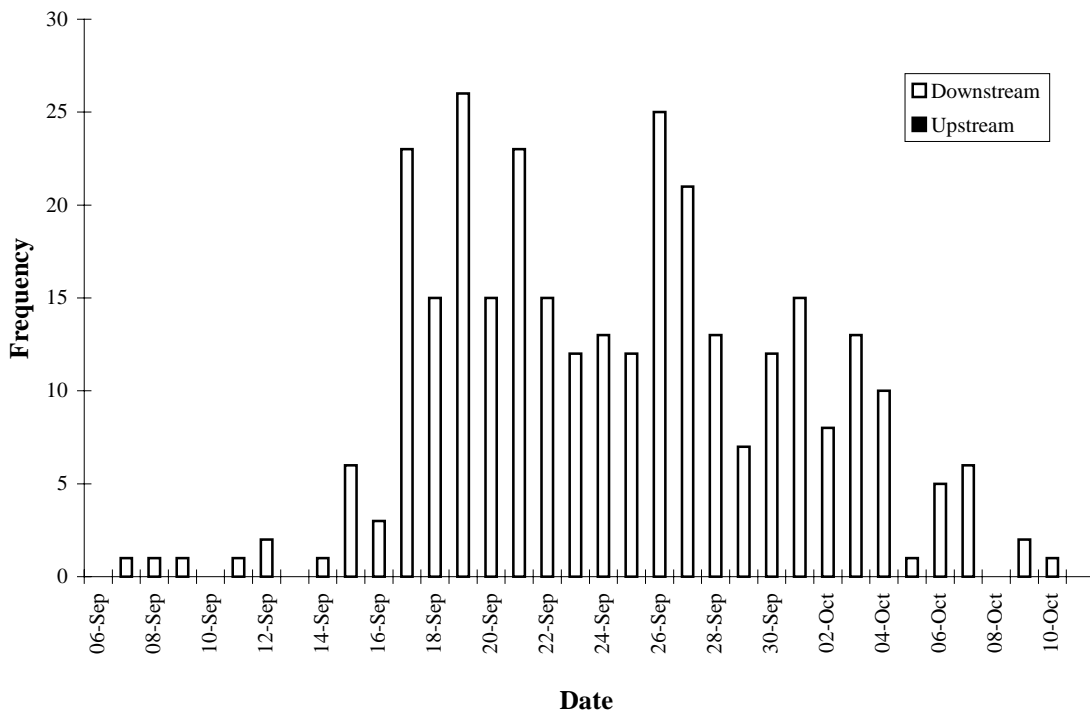


Figure 3. Frequency and timing of bull trout migration through the Skookumchuck Creek enumeration fence between September 6th and October 11th 2002. The total number of fish captured was 309 individuals.

Length and weight were determined for all of the 309 bull trout captured. In total, 16 fish of undetermined sex, 114 males and 179 females were processed. The average length and weight of bull trout of undetermined sex, males, females, and both sexes combined are presented in Table 1. Length frequency distributions of bull trout of undetermined sex and male and female bull trout are presented in Figure 4.

Table 1. Range, mean fork length, and mean weight of bull trout captured at the Skookumchuck Creek enumeration fence between September 6th and October 11th 2002.

	n	Fork Length (cm)		Weight (g)	
		Range	Mean	Range	Mean
Undetermined	16	42-62	50	600-2700	1594
Males	114	60-90	75	2200-7300	4519
Females	179	42-86	65	1000-7000	2979
Combined	309	42-90	68	600-7300	3475

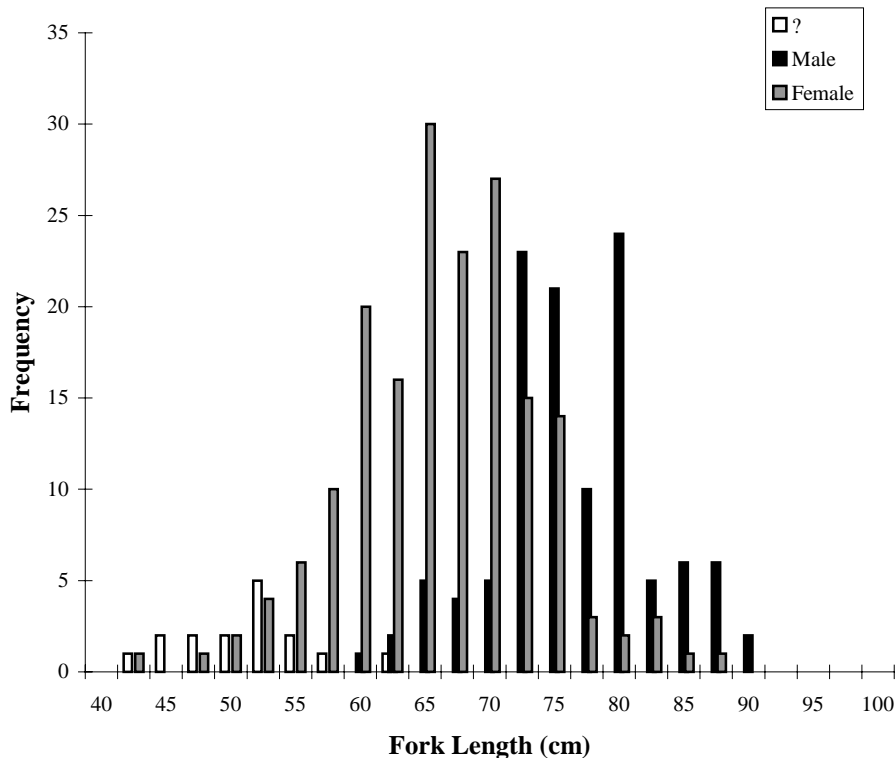


Figure 4. Length frequency distribution of bull trout captured at the Skookumchuck Creek enumeration fence in 2002.

A total of 41 bull trout were observed on the snorkel survey prior to the fence being removed on October 11th. Coupled with the fence count, the total bull trout count during this project was 350 fish. Of the 293 fish that sex could be determined for, a total of 179 were females and 114 were males (a sex ratio of 1.57:1 females to males).

Of the 66 bull trout recaptures that were enumerated at the fence, 59 were recaptures from the previous two years of this project. Of these, 28 (9.1%) were repeat spawners from 2001, 25 (8.1%) were alternate year spawners from 2000, and 6 (1.9%) were double repeat spawners from 2000 and 2001.

The mean fork length of alternate year spawners that were recaptured in 2002 increased by 4 cm and 6 cm for male and female bull trout, respectively (Table 2). The mean fork length of alternate year spawners that were recaptured in 2002 increased by 10 cm and 9 cm for male and female bull trout, respectively (Table 3). All double repeat spawners were females, and their average fork length increased 3 cm in 2001 and 2 cm in 2002.

Table 2. Comparison of fork lengths of bull trout recaptured at the Skookumchuck Creek enumeration fence in 2002 that were initially tagged in 2001. These fish were repeat year spawners.

	n	Fork Length 2001 (cm)		Fork Length 2002 (cm)		Average Mean Growth (cm)
		Range	Mean	Range	Mean	
Males	3	68-75	71	73-79	75	4
Females	25	43-83	57	51-86	63	6
Total	28	43-83	58	51-86	64	6

Table 3. Comparison of fork lengths of bull trout recaptured at the Skookumchuck Creek enumeration fence in 2002 that were initially tagged in 2000. These fish were alternate year spawners.

	n	Fork Length 2000 (cm)		Fork Length 2002 (cm)		Average Mean Growth (cm)
		Range	Mean	Range	Mean	
Males	9	51-81	66	61-88	76	10
Females	16	47-76	63	59-82	72	9
Total	25	47-81	64	59-88	73	9

Several of the previously tagged bull trout (in 2000 and 2001) were recaptured by anglers. One tag return (Green 0088) had previously been reported in the 2000 report (see Baxter and Baxter 2001) and was found shortly after it was tagged in a tributary to Lake Kootenay. Other recapture locations are summarized in Table 4. Of note is one fish (Green 0179) that was recaptured three times in three different locations within the Kootenay River. Only one of these recaptured fish (Green 0128) was enumerated at the fence in 2002.

Table 4. Recapture locations of Skookumchuck Creek bull trout tagged in 2000 and 2001 (KR=Kootenay River, SC=Skookumchuck Creek).

Tag	Recap. Date #1	Recap. Location #1	Recap. Date #2	Recap. Location #2	Recap. Date #3	Recap. Location #3
G-0033	04/07/01	KR-40 km d/s of SC				
G-0042	04/07/01	KR-40 km d/s of SC				
G-0128	04/14/01	KR-35 km d/s of SC				
G-0179	03/28/01	KR-10 km d/s of SC	04/7/01	KR-40 km d/s of SC	05/13/01	KR-40 km d/s of SC
G-0180	03/24/01	KR-12 km d/s of SC				
G-0490	07/07/02	KR-0 km d/s of SC				

Radio Telemetry

Between April 2000 and September 2002, a total of 18 radio tagged bull trout utilized Skookumchuck Creek during part of their life-history. Seven bull trout were radio tagged in Skookumchuck Creek during the summer of 2000, six post spawning bull trout were radio tagged at the Skookumchuck fence (three in September of 2000 and three in September of 2001) and another five bull trout that were radio tagged elsewhere in the upper Kootenay drainage entered Skookumchuck Creek at some point during the study.

Thirteen of the 18 radio tagged bull trout were thought to have spawned in Skookumchuck Creek, and the remaining five were thought to have entered Skookumchuck Creek to feed. Of the 18 radio tagged bull trout, ten over-wintered in the Kootenay River and six over-wintered below the high water mark of Lake Koocanusa. The remaining two bull trout were not located during the winter months. They may have over-wintered in Lake Koocanusa and were too deep in the water column to be located as the radio signal is not detectable in water deeper than 23 feet.

Generally, spawning bull trout enter Skookumchuck Creek during late June and throughout July, spawning peaks in the middle of September and most bull trout are back in the Kootenay River and/or Lake Koocanusa by the end of September.

Other Species

In 2002 only two other species of fish were captured at the enumeration fence (westslope cutthroat trout and Rocky Mountain whitefish), although spawning kokanee were observed passing through the fence and were not captured. No sucker (*Catostomus* spp.) or Eastern brook trout were sampled at the fence in 2001.

In total three westslope cutthroat trout were captured migrating downstream, and one was found dead on the fence (data for all westslope cutthroat trout sampled during this three year project are summarized in Appendix IV). One of the live fish, and the mortality were recaptures from the previous year. These two fish had grown 1 cm each. The two

remaining fish were measured for fork length, weight, were Floy tagged and released (mean length = 38 cm, mean weight = 1000 g). Large numbers of Rocky Mountain whitefish (n=504) were also sampled at the fence, with all of the fish migrating downstream (mean length = 27 cm; Figure 5). One previously tagged westslope cutthroat trout (Yellow 00627) was recaptured by an angler in Skookumchuck Creek on August 4th 2002.

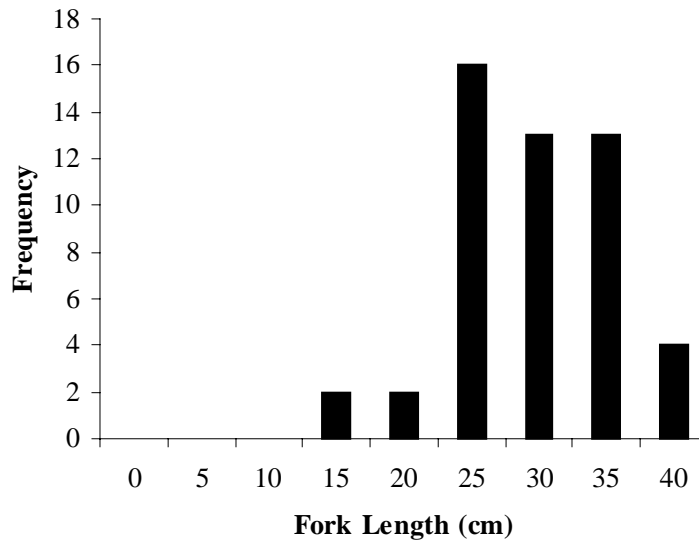


Figure 5. Length frequency distribution of Rocky Mountain whitefish sampled at the Skookumchuck Creek enumeration fence in 2002.

Redd Counts

A total of 149 bull trout redds were enumerated on the ground on October 3rd. The majority of redds (n=143) were observed in the 3.0 km index section (river km 27.5-30.5) that has been surveyed over the past six years. The additional 6 redds were observed in a 1.5 km section (river km 24.0-25.5). It appears that the number of bull trout redds present in the study area may be stabilizing over the past four years (Figure 6).

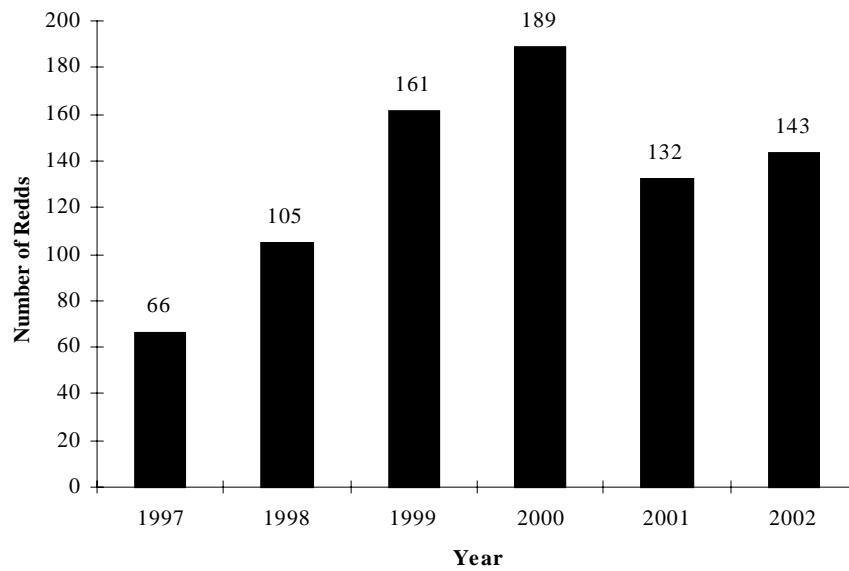


Figure 6. Total number of bull trout redds counted in the index section of Skookumchuck Creek in 2002 compared to previous counts in other years.

Water Temperature Monitoring

We attempted to retrieve all thermographs for downloading on September 5th. Four of the thermographs were missing from the sites and the other two thermographs had been moved out of the creek and the data were largely air temperatures. As such no thermograph data from September 2001 to September 2002 is included in this report. The water temperature data from the first two years of study identify that this habitat variable is within the range preferred by bull trout, and this baseline data provides a way to track future changes in water temperature should they occur.

DISCUSSION

The operation of the Skookumchuck enumeration fence over the past three years has provided an extensive data set on the biological characteristics of the population (see Table 5), and has served as a valuable index of population size within that time frame. During this period the number of bull trout spawners enumerated and the number of redds have remained relatively constant (see Table 5), which is a direct contrast to the data set that exists on the Wigwam River where redd construction and spawner escapement have been increasing steadily over the past 7 years. It is possible that these relatively constant numbers of spawners and redds suggest that spawning habitat may be limited within the system, and in a qualitative assessment spawning habitat is more patchily distributed in Skookumchuck Creek than in the Wigwam River. It is also evident over the three years of the program that there has been a slight reduction in the average size of bull trout handled at the fence, and an increase in the number of fish that could not be sexed (see Table 5). This likely represents a recruitment pulse of smaller fish into the population, and similar increases of small bull trout have been observed in other systems (B. Westover, Fisheries Biologist, BC MWLAP, Cranbrook, B.C.; personal communication).

Table 5. Characteristics of the bull trout population in the Skookumchuck Creek as summarized from data collected at an enumeration fence.

Variable	2000	2001	2002
Total Bull Trout Through Fence	252	273	309
Number of Bull Trout Observed	67	19	41
Sex Ratio (Females:Males)	3.0:1	2.8:1	1.6:1
Total Length (cm)			
<i>Mean</i>	69	64	68
<i>Range</i>	40-92	40-92	42-90
Male Length (cm)			
<i>Mean</i>	79	74	75
<i>Range</i>	51-92	52-92	60-90
Female Length (cm)			
<i>Mean</i>	66	65	65
<i>Range</i>	40-86	50-88	42-86
Total Redds Enumerated	197	143	149
Estimated Number of Bull Trout per Redd (n)	1.6	2.0	2.1

In total the number of bull trout enumerated in each year are above conservation minimums (see McElhaney et al. 2000; Rieman and Allendorf 2001; USFWS 2002 for discussion), but annual redd monitoring should be continued in systems where these programs have been established in order to track these trends. Redd counts represent the best opportunity to track annual abundance in a cost effective manner (Bonar et al. 1997; Rieman and Myers 1997; Dunham et al. 2001). Assuming that bull trout population monitoring will continue in the upper Kootenay River watershed, and that established plan of moving the fence location to another watershed will occur in the fall of 2003, it is important to discuss the utility of fence counts and redd counts relative to the goals of continued project.

With the U.S. Fish and Wildlife listing of the Columbia River population of bull trout as a threatened species, the upper Kootenay River watershed (above Libby Dam) became a primary focus of research for bull trout in both Canada and the United States. Under the U.S. Recovery Plan for bull trout, Lake Koochanusa (and Kootenay River watershed above Libby Dam) is considered a core area (USFWS 2002). Using this core area approach, recovery criteria require that at least 5 local populations with 100 or more individuals exist, and that the area should contain 1,000 or more adult bull trout. To achieve this requirement population monitoring is required in watersheds within this core area, and the responsibility for this in British Columbia falls largely on the BC MWLAP.

To achieve this objective enumeration of bull trout populations (using fence and redd counts) in B.C. has occurred over the past seven years, and to date several populations have been identified with sizes greater than 100 individuals (Wigwam River, Skookumchuck Creek, White River). To continue this program of population monitoring in B.C. is both a Canadian and U.S. priority, and both enumeration fences and redd counts have been identified as suitable techniques for basin-wide abundance surveys or calculating escapement to address this priority (see Bonar et al. 1997). There are however advantages and disadvantages for each methodology that should be considered for future work (Table 6). If the goal of the work is simply an index of population abundance, redd counts likely offer the most cost-effective method to collect this data. Conversely, if the collection of biological data is important, then the use of an enumeration fence is required. Managers in charge of these programs will have to make these decisions as to what methods to employ.

Table 6. Advantages and disadvantages of redd counts and enumeration fences as abundance methodologies for bull trout.

Method	Advantage	Disadvantage
Enumeration Fence	Ability to collect fish data Ability to tag fish All fish can be enumerated	High cost High maintenance Long sampling period
Redd Counts	Lower cost No maintenance Short sampling period	No fish capture Requires extrapolation for pop. est.

One piece of data from the Skookumchuck Creek study that is supportive of the use of enumeration of fences, and addresses other fisheries management issues, is that a large number of bull trout were tagged at the fence, and recapture information provided data on overwintering areas. From this data, and the radio telemetry study, it is becoming apparent that both the Kootenay River and Lake Koocanusa provide overwintering and feeding habitat for Skookumchuck Creek bull trout. It could be considered then that although bull trout in the upper Kootenay River watershed show some genetic uniqueness between individual watersheds (see Taylor et al. 1999; Taylor et al. 2001), the populations should be managed as one based on movement (i.e., considering the upper Kootenay watershed as a core area is the correct stance). Additional Floy tagging in the lower Bull River has also identified that Skookumchuck Creek bull trout may use this system as a feeding and staging area (i.e, there is at least a minimal degree of straying between different river systems). This type of data would not have been available if an enumeration fence had not been used.

In conclusion this program has provided useful data on a bull trout population that has transboundary implications, and this will allow both fisheries management decisions to be made in British Columbia and the recovery initiatives in the U.S. to be met for the Kootenai River Recovery Unit.

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Appendix I. Length, weight, sex and tag number of bull trout captured at the Skookumchuck Creek fence in 2000.

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
9-Sep	72	3500	F	↓	0001	GREEN	PELVIC FIN CLIP
9-Sep	45	700	?	↓	0002	GREEN	UNABLE TO SEX, PELVIC FIN CLIP
9-Sep	43	650	F	↓	0003	GREEN	PELVIC FIN CLIP
9-Sep	73	3300	F	↓	0004	GREEN	PELVIC FIN CLIP
9-Sep	76	4500	F	↓	0005	GREEN	
9-Sep	54	1100	F	↓	0006	GREEN	PELVIC FIN CLIP
10-Sep	67	3000	F	↓	0007	GREEN	PELVIC FIN CLIP
10-Sep	59	2100	F	↓	0008	GREEN	PELVIC FIN CLIP
10-Sep	72	3100	F	↓	0009	GREEN	PELVIC FIN CLIP
10-Sep	83	5000	F	↓	0010	GREEN	PELVIC FIN CLIP
10-Sep	78	4600	F	↓	0011	GREEN	PELVIC FIN CLIP
10-Sep	62	1600	F	↓	0012	GREEN	PELVIC FIN CLIP
10-Sep	75	3700	F	↓	0013	GREEN	PELVIC FIN CLIP
11-Sep	77	3800	F	↓	0014	GREEN	PELVIC FIN CLIP
11-Sep	63	1900	F	↓	0015	GREEN	PELVIC FIN CLIP
11-Sep	62.5	2600	F	↑	0016	GREEN	PELVIC FIN CLIP
12-Sep	49.5	1100	F	↓	0017	GREEN	PELVIC FIN CLIP
12-Sep	78	3900	F	↓	0018	GREEN	
12-Sep	75.5	3800	F	↓	0019	GREEN	
13-Sep	54.5	1500	F	↓	0020	GREEN	PELVIC FIN CLIP
13-Sep	64	2000	F	↓	0021	GREEN	
13-Sep	73	3100	F	↓	0022	GREEN	
13-Sep	74.5	3700	F	↓	0023	GREEN	
13-Sep	60.5	2100	F	↓	0024	GREEN	
13-Sep	56	1600	F	↓	0025	GREEN	PELVIC FIN CLIP
13-Sep	78	4400	F	↓	0026	GREEN	
13-Sep	84.5	5700	F	↓	0027	GREEN	
13-Sep	83	5200	F	↓	0028	GREEN	
14-Sep	72.5	3500	F	↓	0029	GREEN	
14-Sep	80	4600	F	↓	0030	GREEN	
14-Sep	56	1500	F	↓	0032	GREEN	
14-Sep	57	1700	F	↓	0033	GREEN	
14-Sep	84	5300	F	↓	0034	GREEN	
14-Sep	58.5	1900	F	↓	0035	GREEN	
14-Sep	75	4200	F	↓	0036	GREEN	
14-Sep	70	3000	F	↓	0037	GREEN	
14-Sep	69	3000	F	↓	0038	GREEN	
14-Sep	81	4700	F	↓	0039	GREEN	
14-Sep	75	4000	F	↓	0040	GREEN	
14-Sep	59	1800	F	↓	0041	GREEN	
14-Sep	68	2600	F	↓	0042	GREEN	
14-Sep	74.5	3900	F	↓	0043	GREEN	
14-Sep	71	3000	F	↓	0044	GREEN	
14-Sep	70	3000	F	↓	0045	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
14-Sep	47	900	F	↓	0046	GREEN	
15-Sep	53	1500	F	↓	0047	GREEN	
15-Sep	84	4900	F	↓	0048	GREEN	
15-Sep	76	3900	F	↓	0049	GREEN	
15-Sep	76	4400	F	↓	0050	GREEN	
15-Sep	85.5	5500	F	↓	0051	GREEN	
15-Sep	82	5000	F	↓	0052	GREEN	
15-Sep	77	4000	F	↓	0053	GREEN	
15-Sep	57	1700	F	↓	0054	GREEN	
15-Sep	47	900	F	↓	0055	GREEN	
16-Sep	58	1700	F	↓	0056	GREEN	
16-Sep	80	5500	F	↓	0057	GREEN	
16-Sep	50	1200	F	↓	0058	GREEN	
16-Sep	75	4200	F	↓	0059	GREEN	
16-Sep	71	3700	F	↓	0060	GREEN	
16-Sep	48.5	1000	F	↓	0061	GREEN	
16-Sep	68.5	2800	F	↓	0062	GREEN	
16-Sep	47	1000	F	↓	0063	GREEN	
16-Sep	70	3100	F	↓	0064	GREEN	
16-Sep	75.5	4100	F	↓	0065	GREEN	
16-Sep	69	3000	F	↓	0066	GREEN	
16-Sep	74.5	3900	F	↓	0067	GREEN	
16-Sep	77.5	4400	F	↓	0068	GREEN	
16-Sep	61.5	1900	F	↓	0069	GREEN	
17-Sep	73	3900	F	↓	0070	GREEN	
17-Sep	82	4600	F	↓	0071	GREEN	
17-Sep	61.5	2200	F	↓	0072	GREEN	
17-Sep	70	3300	F	↓	0073	GREEN	
17-Sep	80.5	4800	F	↓	0074	GREEN	
17-Sep	89	6500	M	↓	0075	GREEN	PELVIC FIN CLIP
17-Sep	76	4500	F	↓	0076	GREEN	
17-Sep	75.5	4000	M	↓	0078	GREEN	
17-Sep	71	3700	F	↓	0080	GREEN	
18-Sep	64	2300	F	↓	0081	GREEN	
18-Sep	57	1700	F	↓	0082	GREEN	
18-Sep	76	3800	F	↓	0083	GREEN	
18-Sep	48.5	1100	F	↓	0084	GREEN	
18-Sep	88	5700	M	↓	0085	GREEN	PELVIC FIN CLIP
18-Sep	70	2700	F	↓	0086	GREEN	
18-Sep	61.5	1900	F	↓	0087	GREEN	
18-Sep	71	3200	F	↓	0088	GREEN	
18-Sep	68	3000	F	↓	0089	GREEN	
18-Sep	74.5	4100	F	↓	0090	GREEN	
18-Sep	58.5	1800	F	↓	0091	GREEN	
18-Sep	67.5	2900	F	↓	0092	GREEN	
18-Sep	60.5	1800	F	↓	00227	YELLOW	RADIO TAGGED
18-Sep	49	1300	F	↓	0093	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
18-Sep	72.5	4500	M	↑	0094	GREEN	PELVIC FIN CLIP
18-Sep	65	3000	F	↓	0095	GREEN	
19-Sep	81	5100	M	↓	0096	GREEN	PELVIC FIN CLIP
19-Sep	70.5	3100	F	↓	0097	GREEN	
19-Sep	63.5	2200	F	↓	0098	GREEN	
19-Sep	75	3500	F	↓	0099	GREEN	
19-Sep	76	3900	F	↓	0100	GREEN	
19-Sep	40	700	F	↓	0101	GREEN	
19-Sep	54.5	1500	F	↓	0102	GREEN	
19-Sep	91.5	8800	M	↓	0103	GREEN	PELVIC FIN CLIP
19-Sep	80	5700	F	↓	0104	GREEN	POSSIBLE SPINAL DEFORMITY
19-Sep	55	1800	F	↓	0105	GREEN	
19-Sep	58	1500	F	↓	0106	GREEN	
19-Sep	61	2000	F	↓	0107	GREEN	
19-Sep	78	3900	F	↓	0108	GREEN	
19-Sep	62	2200	F	↓	0109	GREEN	
19-Sep	62	2200	F	↓	0110	GREEN	
19-Sep	72.5	3400	F	↓	0111	GREEN	
19-Sep	70.5	3300	F	↓	0112	GREEN	
19-Sep	66.5	2700	M	↓	0113	GREEN	PELVIC FIN CLIP
19-Sep	55	1500	F	↓	0114	GREEN	
19-Sep	76.5	4200	F	↓	0115	GREEN	
20-Sep	65.5	2600	F	↓	00236	YELLOW	RADIO TAGGED
20-Sep	75	3900	F	↓	00237	YELLOW	RADIO TAGGED
20-Sep	80	4200	F	↓	00238	YELLOW	RADIO TAGGED
20-Sep	54	1300	M	↓	0116	GREEN	
20-Sep	78	4300	F	↓	0117	GREEN	
20-Sep	82	5100	F	↓	0118	GREEN	
20-Sep	83	5000	F	↓	0119	GREEN	
20-Sep	63	2400	F	↓	0120	GREEN	
20-Sep	68	3200	F	↓	0121	GREEN	
20-Sep	74	3500	M	↓	0122	GREEN	PELVIC FIN CLIP
20-Sep	48.5	1000	F	↓	0124	GREEN	
20-Sep	58.5	1600	F	↓	0125	GREEN	
20-Sep	57.5	1600	F	↓	0126	GREEN	
20-Sep	68.5	2600	F	↓	0127	GREEN	
20-Sep	76.5	4000	M	↓	0128	GREEN	PELVIC FIN CLIP
20-Sep	72	3400	F	↓	0129	GREEN	
20-Sep	64	2200	M	↓	0130	GREEN	PELVIC FIN CLIP
20-Sep	68	2700	F	↓	0132	GREEN	
20-Sep	74	3500	F	↓	0133	GREEN	
20-Sep	66	2600	F	↓	0134	GREEN	
20-Sep	55.5	1600	F	↓	0135	GREEN	
20-Sep	62	2100	F	↓	0136	GREEN	
21-Sep	76	3800	M	↓	0137	GREEN	PELVIC FIN CLIP
21-Sep	73.5	3500	M	↓	0138	GREEN	PELVIC FIN CLIP
21-Sep	80	4400	M	↓	0139	GREEN	PELVIC FIN CLIP

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
21-Sep	82.5	4600	F	↓	0140	GREEN	
21-Sep	77.5	4000	F	↓	0141	GREEN	
21-Sep	72	3400	F	↓	0142	GREEN	
21-Sep	85	6100	F	↓	0143	GREEN	
21-Sep	75	3900	F	↓	0144	GREEN	
21-Sep	73	3600	F	↓	0145	GREEN	
21-Sep	84	6200	M	↓	0146	GREEN	PELVIC FIN CLIP
21-Sep	90	7000	M	↓	0147	GREEN	PELVIC FIN CLIP
21-Sep	73	3300	F	↓	0148	GREEN	
21-Sep	60.5	1900	F	↓	0149	GREEN	
21-Sep	69.5	2900	F	↓	0150	GREEN	
21-Sep	81	4900	M	↓	0151	GREEN	PELVIC FIN CLIP
21-Sep	56	1400	F	↓	0152	GREEN	
21-Sep	53.5	1300	F	↓	0153	GREEN	
21-Sep	65	2400	M	↓	0154	GREEN	PELVIC FIN CLIP
22-Sep	65	2100	F	↓	0155	GREEN	
22-Sep	57	1600	F	↓	0156	GREEN	
22-Sep	82	4900	F	↓	0157	GREEN	
22-Sep	50	1000	F	↓	0158	GREEN	
22-Sep	87	6700	M	↓	0159	GREEN	PELVIC FIN CLIP
22-Sep	67.5	2700	F	↓	0160	GREEN	
22-Sep	69	2800	F	↓	0161	GREEN	
22-Sep	48	1000	F	↓	N/A	N/A	FOUND DEAD ON FENCE, KELT
22-Sep	73	3200	F	↓	0162	GREEN	
22-Sep	65	2500	F	↓	0163	GREEN	
22-Sep	80	4400	F	↓	0164	GREEN	
22-Sep	80	5100	F	↓	0165	GREEN	
22-Sep	91.5	7400	M	↓	0166	GREEN	PELVIC FIN CLIP
22-Sep	74.5	3500	F	↓	0167	GREEN	
22-Sep	71	2900	F	↓	0168	GREEN	
22-Sep	78	4500	M	↓	0169	GREEN	PELVIC FIN CLIP
22-Sep	82	4600	F	↓	0170	GREEN	
22-Sep	64	2600	F	↓	0171	GREEN	
22-Sep	60.5	1700	F	↓	0172	GREEN	
23-Sep	87.5	5900	M	↓	0173	GREEN	PELVIC FIN CLIP
23-Sep	58.5	1500	F	↓	0174	GREEN	
23-Sep	81	4900	M	↓	0175	GREEN	PELVIC FIN CLIP
23-Sep	64.5	2200	F	↓	0176	GREEN	
23-Sep	71.5	3800	F	↓	0177	GREEN	
23-Sep	52.5	1400	F	↓	0178	GREEN	
23-Sep	71	3000	F	↓	00226	YELLOW	RADIO TAGGED, SUTURES PRESENT
23-Sep	49.5	1100	F	↓	0179	GREEN	
23-Sep	68.5	2700	M	↓	0180	GREEN	PELVIC FIN CLIP
23-Sep	60	2000	F	↓	0181	GREEN	
23-Sep	85	5200	M	↓	0182	GREEN	PELVIC FIN CLIP
23-Sep	59.5	1600	F	↓	0183	GREEN	
24-Sep	92	7700	M	↓	0184	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
24-Sep	60.5	1800	F	↓	0185	GREEN	
24-Sep	60	2400	F	↓	0186	GREEN	
24-Sep	81	4700	M	↓	0187	GREEN	
24-Sep	80	4200	M	↓	0188	GREEN	
24-Sep	88	6500	M	↓	00225	YELLOW	RADIO TAGGED, SUTURES PRESENT
24-Sep	71	3300	F	↓	0189	GREEN	
24-Sep	47	800	F	↓	0190	GREEN	
24-Sep	51	1000	M	↓	0191	GREEN	
24-Sep	57	1600	F	↓	0192	GREEN	
25-Sep	82	4900	M	↓	0193	GREEN	
25-Sep	47	900	F	↓	0194	GREEN	
25-Sep	79.5	4700	M	↓	0195	GREEN	
25-Sep	45.5	900	F	↓	0196	GREEN	
25-Sep	82.5	5200	M	↓	0197	GREEN	
25-Sep	70	2800	F	↓	0198	GREEN	
25-Sep	51.5	1100	F	↓	0199	GREEN	
25-Sep	83.5	5300	M	↓	0200	GREEN	
25-Sep	60	2100	M	↓	0201	GREEN	
26-Sep	92	8500	M	↓	0202	GREEN	
26-Sep	61	1800	F	↓	0203	GREEN	
26-Sep	57.5	1600	M	↓	0204	GREEN	
26-Sep	58	1800	M	↓	0205	GREEN	
27-Sep	82	5100	M	↓	0206	GREEN	
27-Sep	91	7900	M	↓	0207	GREEN	
27-Sep	63	2400	M	↓	0208	GREEN	
27-Sep	61	1700	F	↓	0209	GREEN	
28-Sep	90	7700	M	↓	0210	GREEN	
28-Sep	84	5500	M	↓	N/A	N/A	FOUND DEAD ON FENCE
28-Sep	67	2700	F	↓	0211	GREEN	
28-Sep	77	4100	M	↓	0212	GREEN	
28-Sep	77	4100	M	↓	0213	GREEN	
28-Sep	50	1200	F	↓	0214	GREEN	
29-Sep	81.5	4500	M	↓	0215	GREEN	
29-Sep	88.5	6100	M	↓	0216	GREEN	
29-Sep	57	1700	M	↓	0217	GREEN	
29-Sep	52	1200	F	↓	0218	GREEN	
29-Sep	80	4500	M	↓	0219	GREEN	
29-Sep	50	1000	F	↓	0220	GREEN	
30-Sep	86	5600	F	↓	0221	GREEN	
30-Sep	89	6000	M	↓	0222	GREEN	
30-Sep	82	4900	M	↓	0223	GREEN	
30-Sep	52	1000	F	↓	0224	GREEN	
30-Sep	58	1400	F	↓	0225	GREEN	
30-Sep	64	2000	F	↓	0226	GREEN	
30-Sep	80	4600	F	↓	0227	GREEN	
30-Sep	81	4700	M	↓	0228	GREEN	
30-Sep	48	1000	F	↓	0229	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
30-Sep	58	1600	F	↓	0230	GREEN	
30-Sep	64	2100	F	↓	0231	GREEN	
30-Sep	62	2100	F	↓	0232	GREEN	
1-Oct	87	6800	M	↓	0233	GREEN	
2-Oct	70	3100	M	↓	0234	GREEN	
3-Oct	86	6600	M	↓	0235	GREEN	
4-Oct	87	6400	M	↓	0236	GREEN	
4-Oct	43.5	700	F	↓	0237	GREEN	FENCE BLOWN OUT FOR 4-6 HRS
5-Oct	92	8200	M	↓	0239	GREEN	
7-Oct	78	4100	F	↓	0240	GREEN	
7-Oct	66	2600	M	↓	00206	YELLOW	RADIO TAGGED, COMPLETELY HEALED
9-Oct	91	8200	M	↓	0241	GREEN	
9-Oct	75	4400	M	↓	0242	GREEN	
9-Oct	84	5000	F	↓	0243	GREEN	
9-Oct	85.5	5500	M	↓	0244	GREEN	
9-Oct	77	3900	M	↓	0245	GREEN	
11-Oct	85.5	7400	M	↓	0246	GREEN	
11-Oct	61	2300	F	↑	0247	GREEN	
11-Oct	55	1200	F	↓	0248	GREEN	
14-Oct	47.5	700	F	↓	0249	GREEN	

Appendix II. Length, weight, sex and tag number of bull trout captured at the Skookumchuck Creek fence in 2001.

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
07-Sep	510	1000	F	↓	251	GREEN	KELT
07-Sep	490	1000	?	↓	252	GREEN	
07-Sep	490	1000	?	↓	253	GREEN	
08-Sep	470	900	?	↓	254	GREEN	
08-Sep	470	800	?	↓	255	GREEN	
09-Sep	560	1500	F	↓	256	GREEN	PHOTO #1&2, ROLL #1
09-Sep	470	800	?	↓	257	GREEN	
10-Sep	520	900	F	↓	259	GREEN	FLOY G-258 NOT USED
10-Sep	510	1000	F	↓	260	GREEN	
11-Sep	600	1600	F	↓	156	GREEN	RECAPTURE
12-Sep	610	1900	F	↓	261	GREEN	PHOTO #3&4,ROLL #1
13-Sep	440	800	?	↓	262	GREEN	
13-Sep	690	2600	F	↓	263	GREEN	PHOTO #5&6, ROLL #1
13-Sep	570	1500	F	↓	264	GREEN	
13-Sep	510	1000	F	↓	265	GREEN	
13-Sep	490	900	?	↓	266	GREEN	
13-Sep	610	1800	F	↓	267	GREEN	
13-Sep	510	1100	F	↓	268	GREEN	
13-Sep	420	600	?	↓	269	GREEN	
13-Sep	570	1500	F	↓	270	GREEN	
13-Sep	535	1200	F	↓	271	GREEN	
13-Sep	470	900	?	↓	272	GREEN	
14-Sep	550	1300	F	↓	273	GREEN	
14-Sep	740	3100	F	↓	274	GREEN	
14-Sep	790	3900	F	↓	050	GREEN	RECAPTURE
14-Sep	530	1300	F	↓	275	GREEN	
14-Sep	730	3800	F	↓	276	GREEN	
14-Sep	710	3000	F	↓	277	GREEN	
14-Sep	660	2200	F	↓	015	GREEN	RECAPTURE
14-Sep	570	1600	F	↓	278	GREEN	
14-Sep	510	1100	F	↓	279	GREEN	
14-Sep	570	1500	F	↓	280	GREEN	
14-Sep	880	>5000	F	↓	281	GREEN	PHOTO #9&10,ROLL #1, GIRTH 41cm
14-Sep	680	2300	F	↓	021	GREEN	RECAPTURE
14-Sep	780	3800	F	↓	282	GREEN	
14-Sep	690	2500	F	↓	012	GREEN	RECAPTURE
14-Sep	730	4200	F	↓	283	GREEN	
14-Sep	520	1100	F	↓	284	GREEN	
14-Sep	420	600	?	↓	285	GREEN	
14-Sep	630	1800	F	↓	286	GREEN	
14-Sep	615	1800	F	↓	287	GREEN	
14-Sep	850	>5000	F	↓	011	GREEN	RECAPTURE, GIRTH 35.5cm
15-Sep	510	1000	F	↓	288/289	GREEN	DOUBLE TAGGED
15-Sep	500	1000	F	↓	290	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
15-Sep	430	700	?	↓	291	GREEN	
15-Sep	730	3100	F	↓	037	GREEN	RECAPTURE
15-Sep	760	3500	F	↓	292	GREEN	
15-Sep	605	1600	F	↓	033	GREEN	RECAPTURE
15-Sep	480	800	?	↓	293	GREEN	
15-Sep	600	1600	F	↓	294	GREEN	
16-Sep	600	1700	F	↓	295	GREEN	
16-Sep	860	5000	F	↓	034	GREEN	RECAPTURE
16-Sep	690	2800	F	↓	296	GREEN	
16-Sep	730	3000	F	↓	297	GREEN	
16-Sep	730	3000	F	↓	045	GREEN	RECAPTURE
16-Sep	700	2900	F	↓	298	GREEN	
16-Sep	515	1100	F	↓	299	GREEN	
16-Sep	670	2500	F	↓	300	GREEN	
16-Sep	625	1900	F	↓	301	GREEN	
16-Sep	540	1200	F	↓	302	GREEN	
16-Sep	530	1200	F	↓	303	GREEN	
16-Sep	620	2000	F	↓	041	GREEN	RECAPTURE
16-Sep	430	700	?	↓	304	GREEN	
16-Sep	480	900	?	↓	305	GREEN	
16-Sep	640	2300	F	↓	306	GREEN	
16-Sep	445	800	?	↓	307	GREEN	
16-Sep	620	2000	F	↓	308	GREEN	
16-Sep	650	2500	F	↓	309	GREEN	
16-Sep	690	3100	F	↓	310	GREEN	
16-Sep	590	1700	F	↓	311	GREEN	
17-Sep	525	1100	M	↓	312/313	GREEN	DOUBLE TAGGED
17-Sep	775	4500	F	↓	314	GREEN	
17-Sep	570	1600	F	↓	315	GREEN	
17-Sep	760	3600	F	↓	029	GREEN	RECAPTURE
17-Sep	670	2300	F	↓	316	GREEN	
17-Sep	780	4300	F	↓	040	GREEN	RECAPTURE
17-Sep	685	2800	F	↓	317	GREEN	
17-Sep	760	4500	F	↓	318	GREEN	PHOTO #11&12, ROLL #1
17-Sep	720	3000	F	↓	189	GREEN	RECAPTURE
17-Sep	510	1200	F	↓	319	GREEN	
17-Sep	715	2900	F	↓	320	GREEN	
17-Sep	660	2400	F	↓	321	GREEN	
17-Sep	755	3500	F	↓	038	GREEN	RECAPTURE
17-Sep	700	2400	F	↓	322	GREEN	
17-Sep	810	4500	F	↓	053	GREEN	RECAPTURE
17-Sep	760	3800	F	↓	111	GREEN	RECAPTURE
17-Sep	620	1900	F	↓	323	GREEN	
17-Sep	810	4400	F	↓	141	GREEN	RECAPTURE
17-Sep	680	2500	F	↓	324	GREEN	
17-Sep	620	1800	F	↓	325	GREEN	
17-Sep	690	2400	F	↓	326	GREEN	
18-Sep	520	1200	F	↓	327	GREEN	
18-Sep	690	2700	F	↓	098	GREEN	RECAPTURE

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
18-Sep	680	2800	F	↓	328	GREEN	
18-Sep	640	2300	F	↓	329	GREEN	
18-Sep	670	2700	F	↓	330	GREEN	
18-Sep	490	1100	?	↓	331	GREEN	
18-Sep	550	1400	F	↓	332	GREEN	
18-Sep	660	2500	F	↓	333	GREEN	
18-Sep	760	4200	F	↓	334	GREEN	
18-Sep	720	3500	F	↓	335	GREEN	
18-Sep	415	700	?	↓	336	GREEN	
18-Sep	780	5100	M	↓	337	GREEN	
18-Sep	810	5000	F	↓	338	GREEN	
18-Sep	690	2900	F	↓	160	GREEN	RECAPTURE
18-Sep	660	2600	F	↓	339	GREEN	
18-Sep	715	3300	F	↓	064	GREEN	RECAPTURE
18-Sep	515	1300	F	↓	340	GREEN	
18-Sep	540	1500	F	↓	218	GREEN	RECAPTURE
18-Sep	670	2700	F	↓	341	GREEN	
18-Sep	465	1000	?	↓	342	GREEN	
18-Sep	450	900	?	↓	343	GREEN	
18-Sep	700	3000	F	↓	066	GREEN	RECAPTURE
18-Sep	590	2000	F	↓	135	GREEN	RECAPTURE
18-Sep	440	1000	?	↓	344	GREEN	
19-Sep	830	5600	F	↓	345	GREEN	PHOTO #14, ROLL #1
19-Sep	440	900	?	↓	346	GREEN	
19-Sep	630	2200	F	↓	347	GREEN	
19-Sep	660	2400	M	↓	348	GREEN	
19-Sep	610	2000	F	↓	349	GREEN	
19-Sep	610	2100	F	↓	350	GREEN	
19-Sep	450	900	?	↓	351	GREEN	
19-Sep	420	700	?	↓	352	GREEN	
19-Sep	640	2300	F	↓	353	GREEN	
19-Sep	665	2600	F	↓	354	GREEN	
19-Sep	570	1500	F	↓	355	GREEN	
19-Sep	420	700	?	↓	356	GREEN	
19-Sep	750	3600	F	↓	357	GREEN	
19-Sep	665	2400	F	↓	358	GREEN	
19-Sep	710	3100	M	↓	359	GREEN	
19-Sep	720	3400	F	↓	360	GREEN	
19-Sep	735	3700	M	↓	361	GREEN	
19-Sep	615	2000	F	↓	362	GREEN	
19-Sep	745	4300	M	↑	363	GREEN	PHOTO #15, ROLL #1 UPSTREAM
19-Sep	745	3600	F	↓	364	GREEN	
19-Sep	775	4400	M	↓	365	GREEN	
19-Sep	465	1000	?	↓	366	GREEN	
19-Sep	540	1600	F	↓	367	GREEN	
19-Sep	490	1200	?	↓	368	GREEN	
19-Sep	650	2300	F	↓	369	GREEN	
19-Sep	705	3100	F	↓	370	GREEN	
19-Sep	645	2500	F	↓	371	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
19-Sep	665	2900	M	↓	372	GREEN	
19-Sep	580	2000	F	↓	373	GREEN	
19-Sep	740	3800	F	↓	132	GREEN	RECAPTURE
19-Sep	720	3500	F	↓	374/375	GREEN	DOUBLE TAGGED
20-Sep	830	6000	M	↓	376	GREEN	PHOTO #16&17, ROLL #1
20-Sep	725	3600	M	↓	377	GREEN	
20-Sep	760	4100	F	↓	226	YELLOW	RECAPTURE,RADIO TAG, PHOTO#18,19
20-Sep	750	4400	M	↓	378	GREEN	
20-Sep	610	2000	F	↓	379	GREEN	
20-Sep	445	900	?	↓	380	GREEN	
20-Sep	670	2800	F	↓	171	GREEN	RECAPTURE
20-Sep	770	3700	F	↓	381	GREEN	
20-Sep	600	2000	F	↓	382	GREEN	
20-Sep	820	5400	M	↓	383	GREEN	
20-Sep	650	2600	F	↓	384	GREEN	
20-Sep	610	2000	F	↓	192	GREEN	RECAPTURE
20-Sep	730	3600	F	↓	161	GREEN	RECAPTURE
20-Sep	670	2600	F	↓	385	GREEN	
20-Sep	670	2600	F	↓	386	GREEN	
20-Sep	710	3600	M	↓	387	GREEN	
20-Sep	635	2500	M	↓	388	GREEN	
20-Sep	810	6300	F	↓	389	GREEN	PHOTO #21,ROLL #1 LAST PHOTO
20-Sep	550	1600	F	↓	390	GREEN	
20-Sep	430	900	?	↓	391	GREEN	
20-Sep	435	1000	?	↓	393	GREEN	FLOY TAG G-392 NOT USED
21-Sep	620	2100	F	↓	394	GREEN	
21-Sep	690	3300	M	↓	395	GREEN	
21-Sep	660	2500	F	↓	396/397	GREEN	DOUBLE TAGGED
21-Sep	880	6100	M	↓	398	GREEN	
21-Sep	840	6100	F	↓	399	GREEN	
21-Sep	745	3900	M	↓	400	GREEN	
21-Sep	820	5400	M	↓	401	GREEN	
21-Sep	540	1600	M	↓	402/403	GREEN	DOUBLE TAGGED
21-Sep	885	6500	M	↓	404	GREEN	
21-Sep	540	1600	F	↓	405	GREEN	
21-Sep	460	1200	?	↓	406	GREEN	
22-Sep	840	5800	M	↓	407	GREEN	
22-Sep	590	2100	F	↓	408	GREEN	FLOY TAG G-409 NOT USED
22-Sep	770	4500	F	↓	145	GREEN	RECAPTURE
22-Sep	865	6600	M	↓	410	GREEN	PHOTO #1, ROLL#2
22-Sep	615	2200	F	↓	411	GREEN	
22-Sep	760	4500	M	↓	412	GREEN	
22-Sep	760	4100	F	↓	004	GREEN	RECAPTURE
22-Sep	640	2400	F	↓	413	GREEN	
22-Sep	550	1600	F	↓	414	GREEN	
22-Sep	860	6700	M	↓	415/416	GREEN	DOUBLE TAGGED
22-Sep	850	5900	M	↓	417	GREEN	
22-Sep	620	2100	F	↓	418	GREEN	
22-Sep	600	2000	F	↓	419	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
22-Sep	400	800	?	↓	420	GREEN	PHOTO #2&3,ROLL #2
23-Sep	900	7500	M	↓	421	GREEN	
23-Sep	680	3100	F	↓	422	GREEN	
23-Sep	685	3000	M	↓	423	GREEN	
23-Sep	470	1100	?	↓	424	GREEN	PHOTO #4,ROLL #2
23-Sep	890	7000	M	↓	425	GREEN	PHOTO #5, ROLL #2
23-Sep	820	4800	F	↓	068	GREEN	RECAPTURE
23-Sep	665	3000	F	↓	126	GREEN	RECAPTURE
23-Sep	670	3000	F	↓	426	GREEN	
23-Sep	590	1900	M	↓	427	GREEN	
23-Sep	700	3000	M	↓	428	GREEN	
23-Sep	860	6000	M	↓	429	GREEN	
23-Sep	770	4500	M	↓	059	PINK	RECAPTURE
23-Sep	660	3000	F	↓	430	GREEN	
23-Sep	740	3900	M	↓	431	GREEN	
23-Sep	585	2200	F	↓	432	GREEN	
23-Sep	540	1600	F	↓	433	GREEN	
24-Sep	840	6200	M	↓	434	GREEN	PHOTO #6,ROLL #2
24-Sep	810	5200	F	↓	039	GREEN	RECAPTURE
24-Sep	700	3500	M	↓	435	GREEN	
24-Sep	660	2500	F	↓	436	GREEN	
24-Sep	740	4000	M	↓	437/438	GREEN	DOUBLE TAGGED
24-Sep	630	2400	F	↓	439	GREEN	
24-Sep	740	3800	M	↓	440	GREEN	PHOTO #7, ROLL #2
24-Sep	560	1900	F	↓	441	GREEN	
24-Sep	590	2000	M	↓	442	GREEN	
25-Sep	790	4500	M	↓	147	YELLOW	RADIO TAGGED
25-Sep	670	2900	F	↓	146	YELLOW	RADIO TAGGED,PHOTO#8,9,ROLL#2
25-Sep	810	5100	M	↓	145	YELLOW	RADIO TAGGED,PHOTO#10,11,ROLL#2
25-Sep	640	2400	F	↓	144	YELLOW	RADIO TAGGED,PHOTO#12,13,14,ROLL2
25-Sep	440	1000	?	↓	443	GREEN	
25-Sep	620	2400	M	↓	444	GREEN	
25-Sep	630	2300	M	↓	445	GREEN	
25-Sep	700	3700	F	↓	446	GREEN	
25-Sep	630	2300	F	↓	447	GREEN	
26-Sep	580	1900	F	↓	448	GREEN	
26-Sep	810	5800	F	↓	144	GREEN	RECAPTURE
26-Sep	840	5000	F	↓	170	GREEN	RECAPTURE
26-Sep	700	3400	F	↓	449	GREEN	
26-Sep	840	5600	M	↓	450	GREEN	
26-Sep	690	3200	M	↓	451	GREEN	
26-Sep	620	2300	F	↓	452	GREEN	
26-Sep	640	2500	F	↓	453	GREEN	
27-Sep	420	1000	?	↓	454	GREEN	PHOTO #15,ROLL #2
27-Sep	610	2200	F	↓	455	GREEN	
27-Sep	430	1000	?	↓	456	GREEN	
27-Sep	845	6500	M	↓	457	GREEN	
27-Sep	690	3000	M	↓	458	GREEN	
27-Sep	830	5500	M	↓	459	GREEN	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
27-Sep	870	6600	M	↓	460	GREEN	PHOTO #16,ROLL #2
27-Sep	640	2500	M	↓	461	GREEN	
27-Sep	700	2500	F	↓	462	GREEN	
28-Sep	550	1800	F	↓	463	GREEN	
28-Sep	650	2500	F	↓	464	GREEN	
28-Sep	540	1500	F	↓	465	GREEN	
28-Sep	535	1400	M	↓	466	GREEN	
28-Sep	400	800	?	↓	467	GREEN	PHOTO #17,ROLL #2
29-Sep	680	2600	F	↓	468	GREEN	
30-Sep	920	7100	M	↓	469	GREEN	
30-Sep	485	1200	?	↓	470	GREEN	
01-Oct	780	4600	M	↓	471	GREEN	
01-Oct	630	2400	F	↓	472/473	GREEN	DOUBLE TAGGED
01-Oct	630	2300	F	↓	474	GREEN	
01-Oct	620	2200	M	↓	475	GREEN	
01-Oct	590	2000	F	↓	55	GREEN	RECAPTURE
01-Oct	580	1800	F	↓	476	GREEN	
02-Oct	640	2100	F	↓	477	GREEN	
02-Oct	730	3300	M	↓	478	GREEN	FLOY TAG G-479 NOT USED
02-Oct	610	2000	M	↓	480	GREEN	
03-Oct	580	1700	M	↓	481	GREEN	
04-Oct	620	2100	F	↓	482	GREEN	
04-Oct	630	2200	F	↓	483	GREEN	
05-Oct	740	3500	M	↓	484	GREEN	
05-Oct	520	1300	F	↓	485	GREEN	
06-Oct	600	1700	F	↓	486	GREEN	
06-Oct	545	1300	M	↓	487	GREEN	
06-Oct	450	800	?	↓	488	GREEN	
06-Oct	445	600	?	↓	489	GREEN	
06-Oct	770	3900	M	↓	490	GREEN	
08-Oct	780	4800	M	↓	491	GREEN	LAST PHOTOS ON ROLL #2
09-Oct	520	1000	M	↓	492	GREEN	
11-Oct	580	1500	F	↓	493	GREEN	

Appendix III. Length, weight, sex and tag number of bull trout captured at the Skookumchuck Creek fence in 2002.

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
11-Sep	73.0	3900	F	↓	185	GREEN	RECAPTURE
14-Sep	65.0	2600	F	↓	156	GREEN	RECAPTURE
15-Sep	69.0	3000	F	↓	333	GREEN	RECAPTURE
17-Sep	79.0	5500	F	↓	142	GREEN	RECAPTURE
17-Sep	57.0	2000	F	↓	271	GREEN	RECAPTURE
17-Sep	64.0	2500	F	↓	287	GREEN	RECAPTURE
17-Sep	82.0	5400	F	↓	019	GREEN	RECAPTURE
17-Sep	72.0	3500	F	↓	021	GREEN	RECAPTURE
18-Sep	70.0	3100	F	↓	172	GREEN	RECAPTURE
18-Sep	81.0	5400	F	↓	043	GREEN	RECAPTURE
19-Sep	67.0	3000	F	↓	192	GREEN	RECAPTURE
19-Sep	70.5	3300	F	↓	354	GREEN	RECAPTURE
19-Sep	74.0	3800	F	↓	127	GREEN	RECAPTURE
19-Sep	60.5	2500	F	↓	220	GREEN	RECAPTURE
19-Sep	68.0	3200	F	↓	045	GREEN	RECAPTURE
19-Sep	66.0	2800	F	↓	379	GREEN	RECAPTURE
19-Sep	64.0	2500	F	↓	135	GREEN	RECAPTURE
19-Sep	51.5	1600	F	↓	305	GREEN	RECAPTURE
19-Sep	64.0	2600	M	↓	199	GREEN	RECAPTURE
20-Sep	64.0	2700	F	↓	315	GREEN	RECAPTURE
20-Sep	80.5	5500	F	↓	070	GREEN	RECAPTURE
20-Sep	59.5	2000	F	↓	260	GREEN	RECAPTURE
20-Sep	58.5	2300	F	↓	351	GREEN	RECAPTURE
21-Sep	59.0	2200	F	↓	275	GREEN	RECAPTURE
21-Sep	67.0	3300	F	↓	394	GREEN	RECAPTURE
21-Sep	65.0	3000	F	↓	125	GREEN	RECAPTURE
21-Sep	63.5	2400	F	↓	256	GREEN	RECAPTURE
21-Sep	67.5	2800	F	↓	347	GREEN	RECAPTURE
21-Sep	69.0	3300	M	↓	248	GREEN	RECAPTURE
21-Sep	76.5	4400	M	↓	130	GREEN	RECAPTURE
22-Sep	70.0	3300	F	↓	464	GREEN	RECAPTURE
22-Sep	62.0	2600	F	↓	373	GREEN	RECAPTURE
23-Sep	66.5	3200	F	↓	006	GREEN	RECAPTURE
23-Sep	66.0	2800	F	↓	323	GREEN	RECAPTURE
23-Sep	69.0	3500	M	↓	217	GREEN	RECAPTURE
23-Sep	79.0	5000	M	↓	400	GREEN	RECAPTURE

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
23-Sep	87.5	6700	M	↓	128	GREEN	RECAPTURE
24-Sep	61.0	2200	M	↓	191	GREEN	RECAPTURE
24-Sep	71.5	4300	M	↓	0479	GREEN	light green/not a skookumchuck tagged fish
25-Sep	56.0	1900	F	↓	255	GREEN	RECAPTURE
25-Sep	74.0	3800	M	↓	324	GREEN	RECAPTURE
26-Sep	56.0	2300	F	↓	393	GREEN	RECAPTURE
26-Sep	74.0	3900	F	↓	189	GREEN	RECAPTURE
26-Sep	86.0	6600	M	↓	187	GREEN	RECAPTURE
27-Sep	74.0	4600	F	↓	149	GREEN	RECAPTURE
27-Sep	72.0	4000	F	↓	211	GREEN	RECAPTURE
27-Sep	65.0	2900	F	↓	267	GREEN	RECAPTURE
28-Sep	51.0	1500	F	↓	366	GREEN	RECAPTURE
30-Sep	77.0	4800	F	↓	060	GREEN	SPINAL DEFORMITY / RECAPTURE
30-Sep	85.0	6400	M	↓	212	GREEN	RECAPTURE
01-Oct	64.0	2500	F	↓	273	GREEN	RECAPTURE
02-Oct	67.5	3200	F	↓	482	GREEN	RECAPTURE
02-Oct	59.0	2200	F	↓	485	GREEN	RECAPTURE
03-Oct	59.0	2200	F	↓	46	GREEN	RECAPTURE
03-Oct	57.0	2100	F	↓	391	GREEN	RECAPTURE
03-Oct	70.5	3800	F	↓	20	GREEN	RECAPTURE
03-Oct	86.0	6400	M	↓	195	GREEN	RECAPTURE
05-Oct	65.0	3100	F	↓	47	GREEN	RECAPTURE
06-Oct	73.0	4000	M	↓	458	GREEN	RECAPTURE
07-Oct	86.0	7000	F	↓	459	GREEN	RECAPTURE
07-Sep	66.0	2500	F	↓	2450	ORANGE	
08-Sep	51.0	1000	?	↓	2449	ORANGE	IMMATURE
09-Sep	80.5	5500	M	↓	2448	ORANGE	SPINAL DEFORMITY
12-Sep	84.0	5400	F	↓	2447	ORANGE	
12-Sep	64.0	2500	F	↓	2446	ORANGE	
15-Sep	61.5	2700	?	↓	2442	ORANGE	UNABLE TO DETERMINE SEX
15-Sep	42.0	600	?	↓	2444	ORANGE	IMMATURE
15-Sep	63.0	2600	F	↓	2445	ORANGE	
15-Sep	69.0	2900	F	↓	2443	ORANGE	
15-Sep	57.0	1900	F	↓	2441	ORANGE	
16-Sep	71.0	3700	F	↓	2440	ORANGE	
16-Sep	64.0	2600	F	↓	2439	ORANGE	
16-Sep	63.0	2500	F	↓	2438	ORANGE	
17-Sep	74.5	4300	F	↓	2437/2436	ORANGE	DOUBLE TAGGED
17-Sep	64.5	2800	F	↓	2435	ORANGE	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
17-Sep	64.0	2600	F	↓	2434	ORANGE	
17-Sep	66.5	3500	F	↓	2433	ORANGE	
17-Sep	74.5	4000	F	↓	2432	ORANGE	
17-Sep	68.0	3200	F	↓	2431	ORANGE	
17-Sep	68.5	3300	F	↓	2430	ORANGE	
17-Sep	61.5	2400	F	↓	2429	ORANGE	
17-Sep	54.0	1500	F	↓	2428	ORANGE	
17-Sep	61.0	2300	F	↓	2427	ORANGE	
17-Sep	61.0	2200	F	↓	2426	ORANGE	
17-Sep	76.0	4500	F	↓	2476	ORANGE	
17-Sep	71.0	3800	F	↓	2477	ORANGE	
17-Sep	72.0	3900	F	↓	2478	ORANGE	
17-Sep	75.0	4200	F	↓	2479	ORANGE	
17-Sep	70.0	3300	F	↓	2480	ORANGE	
17-Sep	69.0	3400	F	↓	2481	ORANGE	
17-Sep	56.0	1900	F	↓	2482	ORANGE	
18-Sep	70.0	4000	F	↓	2483	ORANGE	
18-Sep	62.0	2300	F	↓	2484	ORANGE	
18-Sep	64.0	2600	F	↓	2485	ORANGE	
18-Sep	63.0	2600	F	↓	2486	ORANGE	FLOY 2487 NOT USED
18-Sep	61.0	2100	F	↓	2488	ORANGE	
18-Sep	64.0	2700	F	↓	2489	ORANGE	
18-Sep	64.0	2600	F	↓	2490	ORANGE	
18-Sep	60.0	1900	F	↓	2491	ORANGE	
18-Sep	64.0	2800	F	↓	2492	ORANGE	
18-Sep	52.0	1500	F	↓	2493	ORANGE	
18-Sep	67.0	3300	F	↓	2494	ORANGE	
18-Sep	66.0	3000	F	↓	2495	ORANGE	
18-Sep	61.0	2400	F	↓	2496	ORANGE	
19-Sep	57.0	2100	?	↓	2506	ORANGE	UNABLE TO DETERMINE SEX
19-Sep	44.0	1000	?	↓	2513	ORANGE	IMMATURE
19-Sep	65.0	3100	F	↓	2497	ORANGE	
19-Sep	56.0	1900	F	↓	2498	ORANGE	
19-Sep	69.0	3400	F	↓	2499	ORANGE	
19-Sep	57.0	1900	F	↓	2500	ORANGE	
19-Sep	75.0	4000	F	↓	2501	ORANGE	
19-Sep	68.5	3300	F	↓	2502	ORANGE	
19-Sep	69.0	3700	F	↓	2503	ORANGE	
19-Sep	61.5	2400	F	↓	2504	ORANGE	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
19-Sep	59.0	2300	F	↓	2505	ORANGE	
19-Sep	58.5	2100	F	↓	2507	ORANGE	
19-Sep	63.0	1700	F	↓	2508	ORANGE	
19-Sep	75.0	4600	F	↓	2509	ORANGE	
19-Sep	66.0	2900	F	↓	2510	ORANGE	
19-Sep	70.0	4100	F	↓	2511	ORANGE	
19-Sep	65.0	2800	M	↓	2512	ORANGE	
20-Sep	52.0	1600	?	↓	2516	ORANGE	
20-Sep	44.0	1100	?	↓	2522	ORANGE	IMMATURE
20-Sep	71.5	4000	F	↓	2514	ORANGE	
20-Sep	65.0	2900	F	↓	2517	ORANGE	
20-Sep	78.5	4600	F	↓	2518	ORANGE	
20-Sep	68.0	3100	F	↓	2523	ORANGE	
20-Sep	75.0	4200	M	↓	2515	ORANGE	
20-Sep	71.0	3600	M	↓	2519	ORANGE	
20-Sep	71.5	3700	M	↓	2520	ORANGE	
20-Sep	64.5	3000	M	↓	2521	ORANGE	
21-Sep	68.0	3500	F	↓	2527	ORANGE	
21-Sep	76.0	4300	F	↓	2528	ORANGE	
21-Sep	70.5	3500	F	↓	2529	ORANGE	
21-Sep	67.0	3100	F	↓	2530	ORANGE	
21-Sep	70.0	3600	F	↓	2531	ORANGE	
21-Sep	67.0	3100	F	↓	2533	ORANGE	
21-Sep	64.0	2600	F	↓	2543	ORANGE	
21-Sep	60.0	2300	F	↓	2535	ORANGE	
21-Sep	59.0	2200	F	↓	2536	ORANGE	
21-Sep	64.5	2900	M	↓	2524	ORANGE	
21-Sep	71.0	3700	M	↓	2525	ORANGE	
21-Sep	81.0	5500	M	↓	2526	ORANGE	
21-Sep	77.0	4800	M	↓	2532	ORANGE	
21-Sep	73.0	4100	M	↓	2537	ORANGE	
21-Sep	74.5	4200	M	↓	2538	ORANGE	
22-Sep	68.0	3400	F	↓	2540	ORANGE	
22-Sep	53.0	1600	F	↓	2544	ORANGE	
22-Sep	67.5	3200	F	↓	2550	ORANGE	
22-Sep	73.0	3900	F	↓	2651/2652	ORANGE	DOUBLE TAGGED
22-Sep	71.5	3800	M	↓	2539	ORANGE	
22-Sep	79.0	5000	M	↓	2541	ORANGE	
22-Sep	74.5	3800	M	↓	2542	ORANGE	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
22-Sep	80.0	5200	M	↓	2543	ORANGE	
22-Sep	89.5	7300	M	↓	2545	ORANGE	
22-Sep	72.0	4500	M	↓	2546	ORANGE	
22-Sep	66.0	3400	M	↓	2547	ORANGE	
22-Sep	76.0	5000	M	↓	2548	ORANGE	
22-Sep	61.0	2500	M	↓	2549	ORANGE	
23-Sep	61.0	2300	F	↓	2653	ORANGE	
23-Sep	66.0	2900	F	↓	2655	ORANGE	
23-Sep	54.0	1600	F	↓	2656	ORANGE	
23-Sep	52.0	1600	F	↓	2658	ORANGE	
23-Sep	68.0	3100	M	↓	2654	ORANGE	
23-Sep	66.0	3300	M	↓	2657	ORANGE	
23-Sep	85.0	6100	M	↓	2659	ORANGE	
24-Sep	61.0	2400	F	↓	2661	ORANGE	
24-Sep	56.0	1700	F	↓	2663	ORANGE	
24-Sep	67.0	3000	F	↓	2664	ORANGE	
24-Sep	60.0	2200	F	↓	2666	ORANGE	
24-Sep	60.0	2100	F	↓	2667	ORANGE	
24-Sep	58.5	1900	F	↓	2668	ORANGE	
24-Sep	68.0	3100	F	↓	2670	ORANGE	
24-Sep	71.0	3600	M	↓	2660	ORANGE	
24-Sep	71.0	3700	M	↓	2662	ORANGE	
24-Sep	78.0	4900	M	↓	2665	ORANGE	
24-Sep	78.0	5200	M	↓	2669	ORANGE	
25-Sep	69.0	3000	F	↓	2671	ORANGE	
25-Sep	67.0	3000	F	↓	2682	ORANGE	
25-Sep	60.0	2300	F	↓	2684	ORANGE	
25-Sep	67.0	3100	F	↓	2685	ORANGE	
25-Sep	54.0	1700	F	↓	2687	ORANGE	
25-Sep	73.5	3700	M	↓	2679	ORANGE	
25-Sep	74.0	4300	M	↓	2680	ORANGE	
25-Sep	81.0	5200	M	↓	2681	ORANGE	
25-Sep	71.0	3400	M	↓	2683	ORANGE	
25-Sep	67.0	3000	M	↓	2686	ORANGE	
26-Sep	71.0	3900	F	↓	2691	ORANGE	
26-Sep	68.0	3200	F	↓	2692	ORANGE	
26-Sep	69.0	3600	F	↓	2693	ORANGE	
26-Sep	71.5	3300	F	↓	2695	ORANGE	
26-Sep	48.0	1300	F	↓	2696	ORANGE	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
26-Sep	55.0	1800	F	↓	2697	ORANGE	
26-Sep	69.0	3300	F	↓	2698	ORANGE	
26-Sep	63.0	3600	F	↓	2700	ORANGE	
26-Sep	69.0	3200	F	↓	2704	ORANGE	
26-Sep	68.0	3400	F	↓	2707	ORANGE	
26-Sep	72.0	3700	F	↓	2710	ORANGE	
26-Sep	79.0	5200	M	↓	2688	ORANGE	
26-Sep	76.0	4300	M	↓	2689	ORANGE	
26-Sep	67.0	3100	M	↓	2690	ORANGE	
26-Sep	71.0	3700	M	↓	2694	ORANGE	
26-Sep	80.0	4900	M	↓	2699	ORANGE	
26-Sep	77.0	4700	M	↓	2705/2706	ORANGE	DOUBLE TAGGED
26-Sep	82.0	5500	M	↓	2708	ORANGE	
26-Sep	73.5	4400	M	↓	2709	ORANGE	
26-Sep	63.5	3000	M	↓	2711	ORANGE	
27-Sep	55.0	2200	?	↓	2725	ORANGE	PROBABLY IMMATURE
27-Sep	46.0	1400	?	↓	2722/2723	ORANGE	DOUBLE TAGGED/IMMATURE
27-Sep	71.0	4000	F	↓	2713	ORANGE	
27-Sep	61.0	2400	F	↓	2714	ORANGE	
27-Sep	67.0	3100	F	↓	2716	ORANGE	
27-Sep	65.0	3000	F	↓	2718	ORANGE	
27-Sep	63.0	2600	F	↓	2721	ORANGE	
27-Sep	46.0	1100	F	↓	2807	ORANGE	KELT
27-Sep	66.0	3000	F	↓	2808	ORANGE	
27-Sep	70.5	3800	M	↓	2712	ORANGE	
27-Sep	71.5	3800	M	↓	2715	ORANGE	
27-Sep	89.0	7000	M	↓	2717	ORANGE	
27-Sep	78.0	4700	M	↓	2719	ORANGE	
27-Sep	73.0	4000	M	↓	2720	ORANGE	
27-Sep	73.0	4000	M	↓	2804/2805	ORANGE	DOUBLE TAGGED
27-Sep	78.0	5100	M	↓	2806	ORANGE	
27-Sep	60.0	2400	M	↓	2809	ORANGE	
28-Sep	60.0	2000	F	↓	2810	ORANGE	
28-Sep	63.0	2500	F	↓	2812	ORANGE	
28-Sep	74.0	4200	F	↓	2816	ORANGE	
28-Sep	60.0	2400	F	↓	2818	ORANGE	
28-Sep	59.0	2500	F	↓	2820	ORANGE	
28-Sep	72.0	3500	F	↓	2821	ORANGE	
28-Sep	75.0	4000	M	↓	2811	ORANGE	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
28-Sep	71.5	3900	M	↓	2813	ORANGE	
28-Sep	82.0	6800	M	↓	2814	ORANGE	
28-Sep	71.0	3700	M	↓	2815	ORANGE	
28-Sep	71.5	3700	M	↓	2817	ORANGE	
28-Sep	71.0	3600	M	↓	2819	ORANGE	
29-Sep	52.0	1600	?	↓	2903	ORANGE	IMMATURE
29-Sep	66.0	3100	F	↓	2823	ORANGE	
29-Sep	62.0	2800	F	↓	2825	ORANGE	
29-Sep	80.0	5000	M	↓	2822	ORANGE	
29-Sep	86.0	5700	M	↓	2824	ORANGE	SPINAL DEFORMITY
29-Sep	69.0	3600	M	↓	2901	ORANGE	
29-Sep	77.5	5000	M	↓	2902	ORANGE	
30-Sep	53.0	2000	?	↓	2908	ORANGE	
30-Sep	59.5	2300	F	↓	2905	ORANGE	
30-Sep	69.0	3700	F	↓	2907	ORANGE	
30-Sep	72.5	4200	M	↓	2904	ORANGE	
30-Sep	79.5	5200	M	↓	2906	ORANGE	
30-Sep	76.0	5000	M	↓	2909	ORANGE	
30-Sep	74.5	4100	M	↓	2910	ORANGE	
30-Sep	86.0	6900	M	↓	2911	ORANGE	
30-Sep	72.0	4000	M	↓	2912	ORANGE	
01-Oct	51.0	1700	?	↓	2915	ORANGE	
01-Oct	57.0	1900	F	↓	2913	ORANGE	
01-Oct	65.0	5000	F	↓	2920	ORANGE	
01-Oct	59.0	2300	F	↓	2923	ORANGE	
01-Oct	58.5	2000	F	↓	2925	ORANGE	
01-Oct	87.5	6500	M	↓	2914	ORANGE	
01-Oct	78.0	5300	M	↓	2916	ORANGE	
01-Oct	72.0	3800	M	↓	2917	ORANGE	
01-Oct	84.0	6000	M	↓	2918	ORANGE	
01-Oct	75.0	4500	M	↓	2919	ORANGE	
01-Oct	77.0	5000	M	↓	2921	ORANGE	
01-Oct	79.0	5500	M	↓	2922	ORANGE	
01-Oct	71.0	4000	M	↓	2924	ORANGE	
01-Oct	70.5	3700	M	↓	2926	ORANGE	
02-Oct	75.0	4200	F	↓	2927	ORANGE	
02-Oct	65.5	3000	F	↓	2929	ORANGE	
02-Oct	71.0	3500	F	↓	2931	ORANGE	
02-Oct	80.0	6000	M	↓	2928	ORANGE	

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
02-Oct	72.0	4200	M	↓	2930	ORANGE	
02-Oct	74.5	3700	M	↓	2932	ORANGE	
03-Oct	52.0	2000	?	↓	2941	ORANGE	
03-Oct	48.0	1200	F	↓	2933	ORANGE	KELT
03-Oct	62.0	2700	F	↓	2938	ORANGE	
03-Oct	79.0	4900	M	↓	2934	ORANGE	
03-Oct	78.0	6600	M	↓	2935	ORANGE	
03-Oct	79.0	4700	M	↓	2936	ORANGE	
03-Oct	74.5	4500	M	↓	2937	ORANGE	
03-Oct	73.5	3700	M	↓	2939	ORANGE	
03-Oct	76.0	4400	M	↓	2940	ORANGE	
04-Oct	70.0	3500	F	↓	2942	ORANGE	
04-Oct	61.5	2600	F	↓	2943	ORANGE	
04-Oct	65.0	2800	F	↓	2945	ORANGE	
04-Oct	75.0	4900	F	↓	2948	ORANGE	
04-Oct	74.0	4200	F	↓	4645	ORANGE	
04-Oct	85.0	6500	M	↓	2944	ORANGE	
04-Oct	79.0	5300	M	↓	2946	ORANGE	
04-Oct	71.0	4000	M	↓	2949	ORANGE	
04-Oct	75.0	4500	M	↓	4644	ORANGE	
04-Oct	79.0	5000	M	↓	4643	ORANGE	
06-Oct	47.0	1400	?	↓	4642	ORANGE	IMMATURE
06-Oct	54.0	1900	F	↓	4768	ORANGE	
06-Oct	61.5	2600	F	↓	4641	ORANGE	
06-Oct	80.0	5000	M	↓	4769	ORANGE	
07-Oct	48.0	1400	?	↓	4766	ORANGE	IMMATURE
07-Oct	74.0	4200	M	↓	1078	ORANGE	
07-Oct	73.0	4300	M	↓	4765	ORANGE	
07-Oct	75.0	4100	M	↓	4764	ORANGE	
07-Oct	78.5	5200	M	↓	4763	ORANGE	
09-Oct	50.0	1700	?	↓	4761	ORANGE	IMMATURE
09-Oct	77.0	4200	M	↓	4762	ORANGE	
10-Oct	42.0	1000	F	↓	4760	ORANGE	KELT
20-Sep	83.0	6000	M	↓	3526	PINK	pink tag on right/pit tag in left cheek 42034A4159383
21-Sep	79.5	5500	M	↓	2550/2549	PINK	two floy tags one on each side of the dorsal fin
26-Sep	78.0	5100	M	↓	3924	PINK	RECAPTURE
26-Sep	70.0	3600	M	↓	2542	PINK	RECAPTURE
27-Sep	83.0	5400	M	↓	0059	PINK	RECAPTURE
30-Sep	80.0	5100	M	↓	2509	PINK	RECAPTURE

Appendix IV. Length, weight, sex and tag number of westslope cutthroat trout captured at the Skookumchuck Creek fence in 2000, 2001, and 2002.

Date	Length (cm)	Weight (g)	Sex	Direction	Spag #	Tag Color	Comment
22-Sep-2000	34.0	500	?	↓	0601	YELLOW	
23-Sep-2000	41.0	800	?	↓	0602	YELLOW	
25-Sep-2000	43.0	900	?	↓	0603	YELLOW	
08-Sep-2001	35.0	500	?	↓	0626	YELLOW	
20-Sep-2001	47.0	1600	?	↓	0603	YELLOW	RECAPTURE
26-Sep-2001	37.0	1000	?	↓	0627	YELLOW	
28-Sep-2001	40.5	900	?	↓	0628	YELLOW	
30-Sep-2001	39.0	900	?	↓	0629	YELLOW	
02-Oct-2001	40.0	800	?	↓	0630	YELLOW	
06-Oct-2001	37.0	400	?	↓	0631	YELLOW	
08-Sep-2002	39.0	500	?	↓	0630	YELLOW	RECAPTURE
12-Sep-2002	40.0	N/A	?	↓	0629	YELLOW	RECAPTURE
27-Sep-2002	39.0	1000	M	↓	0632	YELLOW	
01-Oct-2002	36.5	1000	?	↓	0633	YELLOW	