



# Whitehorse Rapids Fishway Report Year End Report 2018



Photo from the top of upper deck of the Fish Ladder- taken May 2018

Ashley Brown  
Emilie Major-Parent  
Brittany Key



## STAFF

The Whitehorse Rapids Fishway had some returning staff this summer (Emilie Major-Parent, Brittany Key, Preet Dhillon and Karine Smith) and some new staff (Ashley Brown, Shae Thomas, Loik Langlois-Leclerc, Jayden Sydney, Sapphire Kinney and Kaleb Pritchett). The summer went by quite quickly and with only a few hiccups with our staffing situation.

Emilie had worked two previous years at the ladder, one as a Supervisor. She previously graduated from Tourism and provided excellent advice on how to give tours. Brittany was also a returning staff member and was promoted into the Supervisor position. Brittany handled the Supervisor position with ease and is studying to become a Shark Biologist. Preet was also a returning staff member and is now going back to school to complete her last year of high school, she did a wonderful job this year and is planning on coming back next year. Karine returned this year and has a great deal of knowledge about the fish ladder and was great at working with the public.

Despite being new to the fish ladder, Ashley quickly figured out how it operated and managed the staff well. She relied on Emilie and Brittany a lot for guidance as they have previous experience. I am really grateful for Emilie and Brittany, they helped me a lot throughout season and made it go relatively smoothly. Shae and Loik were new staff members; they started mid-June and were very engaging with tourists and they were a great addition to the fish ladder.

Some new staff members joined us later in the season. Jayden Sydney was hired by Yukon Fish and Game Association (YFGA) earlier in July but due to a non-work related injury, could not continue at the fish ladder. Sapphire Kinney was hired to fill in for Jayden for two weeks, but ended up staying with us longer than expected due to Jayden's inability to return to work. Sapphire was very shy at first, but she opened up after a few weeks and gave great tours. It was really great to see Sapphire thrive in her first work environment and our team was very glad she could be there with us. She left us in the beginning of August due to a family emergency. Around mid-August, Kaleb joined us to fill in for staff leaving for school. He was very outgoing and a reliable person to our team. We wished he could have started earlier with us! I highly recommend Kaleb, Karine and Preet to come back next year. Brittany would be a good choice for the Supervisor position next year, as she did a good job this year and has even more experience now.



## SCHEDULE

The Fish ladder was officially open on June 1<sup>st</sup>. We were open for 5 hours a day from June 1<sup>st</sup> to June 23<sup>rd</sup>. We then switched to the 10 hours days from June 24<sup>th</sup> to July 21<sup>st</sup> to accommodate the flow of visitors. We extended our hours to 12 hours days from July 22<sup>nd</sup> to August 24<sup>th</sup> to be on site for more people and the Chinook salmon. Our staff had either an AM shift (8:30-17:30) or a PM shift (12:30-11:30) during those days so the salmon would never be left in the ladder for more than 12 hours. On August 25<sup>th</sup>, we changed our hours back to 8:30 to 17:30 since the salmon run had slowed down and most of our staff had left. Lawrence and Warren (Hatchery staff) checked for Chinook around 10:00 to release them and to collect brood stock.

The schedule worked smoothly for most of the season, other than the few hiccups we had with staff scheduling and with having multiple people who joined us later in the season. I tried my best to make sure everyone got the time off they wanted and everyone got the occasional weekend off as well and made accommodations to individual staff as needed.

## SAFETY AND MAINTENANCE

Once the Chinook arrived two staff members did an upper ladder walk, checking for any Chinook that might be holding in the fish ladder. We did a tailboard every morning to ensure everyone was comfortable with all the safety procedures and risks associated with the day. We introduced a new staff member near the end of the season, Kaleb. On his first day Ashley went through all safety protocols with him.

The third aluminum baffle from the top of the ladder this year got plugged with debris from the river and we had Yukon Energy come down and clear it out for us. We discovered this baffle before the salmon arrived, so it was a quick and easy fix.



## WILDLIFE

There was a fox hanging around the fish ladder for most of the summer. He dug up all our flower beds early in the season and made quite a mess. That was the only incident we had with the fox other than seeing him around the fish ladder. A squirrel family made a house in the roof of the building. Hopefully they will move out soon! On September 3, we found a muskrat on the mammal platform. Ashley called the Conservation Officers, Dave Bakica and Ashley then worked together to net the muskrat out of the ladder. They released it back into Schwatka Lake. We had quite a few bears around the facility throughout the summer, so we continually reminded tourists about bear safety, hung up bear safety posters and had information brochures available.



## FISH AQUARIUMS

Every two weeks the Hatchery brought us water for the three aquariums. We used a siphon and cleaned out the fish feces. We also did a filter change, turning off the filter and cleaning out the tank and filter completely. We also regularly used a net to scope up the feces. We have had no casualties in the Kokanee tank (18 fish). In the Chinook tank, there were no casualties either, but one sick fish swimming to the side (10 fish). And 3 rainbow trout, which grew perfectly. All the fry were released on August 30. The rainbow trout and kokanee were released into Long Lake and the Chinook salmon fry were released into Wolf Creek.

## SPECIAL EVENTS

### *YOUTH SALMON ART PROJECT FOR WOLF CREEK*

On August 15, we had an event at the fish ladder, YFGA brought 50 fish cut outs and let children of all ages paint them. The salmon were than installed on the fence at Wolf Creek fishway. This event was funded through the Pacific Salmon Foundation, YFGA and Yukon Energy. This turned out really well, all the fish were gone in an hour! It was a big hit and we saw a large increase in children and visitors to the fish ladder!



### *MEETING AT THE FISH LADDER*

On August 31, a meeting was held at the fish ladder to discuss the rebuild of the facility and fish ladder. The fish ladder is internationally recognized with a lot of tour companies and a new facility would better for providing tours. A few staff members from the attended and provided valuable input.

### *CANADA DAY*

YFGA decided to close the ladder this year on Canada Day due to low numbers of visitors in previous years and increased staff costs due to the statutory holiday.

### *ELDER VISIT*

Every Wednesday during the summer we had an elder, Julie Broeren, visit in the First Nations tent from 1-3 pm. She regularly brought bannock and made soap berry ice cream for the visitors. Visitors really enjoy speaking with Julia. It would be great to have more frequent elder visits next year. The staff also benefited from her visits, by gaining knowledge on the history of the Chinook salmon run and what things were like in the past.



### *VISITOR APPRECIATION NIGHT*

#### *Preparation*

We started requesting donations for our door prizes in mid-July, to give businesses a lot of time to prepare a donation. This made it easier closer to appreciation night, because we weren't in a rush. We picked up donations as they became available for us. The day before appreciation night, we gathered all the supplies we thought we might need. We did a good clean of the outhouses and the facility. On Appreciation Night, balloons and any last minute items were picked up. We decorated the fish ladder a few hours before the event started. Janet from Yukon Energy provided finger foods and helped with set up. She stayed all night

and helped with that- couldn't have done it without her! We ordered two big cakes from Save-On-Foods a few days prior and picked them up an hour before the event begun.

### Event

Appreciation Night was held on Friday August 10<sup>th</sup>. A fire truck, hotdog stand, Jazzy Street Eats and Alligator Gourmet Grilled Cheese joined us that evening. We also had balloons hung up inside and outside of the building. We had fire trucks from the Whitehorse Firefighters outside, food in the building. Donated prizes were won by draw. We had an approximate total of 250 adults and 100 children that night.



Despite the pouring rain throughout the night, visitors seemed to enjoy themselves! The food trucks were a great addition to appreciation night, and received good comments about them.



### CHINOOK SALMON

We expected the salmon run to be below average this year. While we were getting regular updates on the salmon numbers along the run, us and the hatchery staff noted low numbers and a bit of a late run. Our season's total was 691 Chinook salmon (Appendix 1 and Appendix 2). We have had 328 wild males, 135 hatchery males, 177 wild females and 51 hatchery females with a total of 463 males and 228 females





(Figure 1). The wild total is 505 and the hatchery total is 186. Last year (2017) there was 1,226 Chinook that came through the ladder, it was a much larger run. The first Chinook arrived on July 30 and the last Chinook was September 5 (Figure 2). The peak occurred on August 20 with a total of 70 Chinook that day.

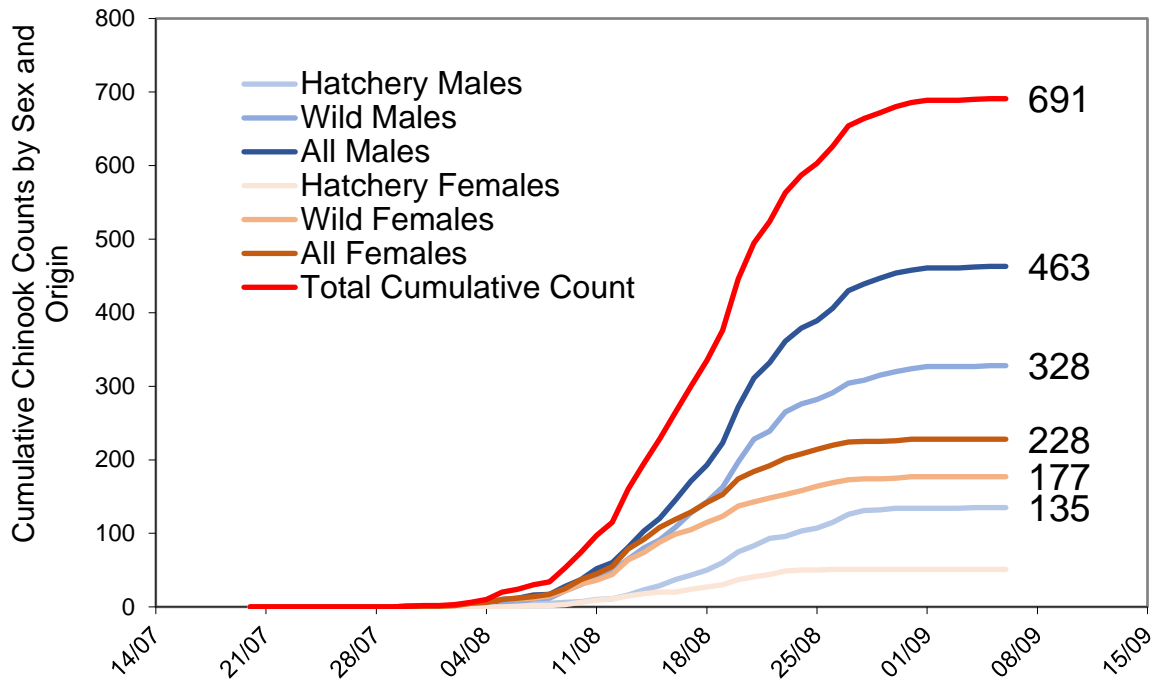


Figure 1. Whitehorse Rapids Fishway Chinook salmon cumulative counts 2018.

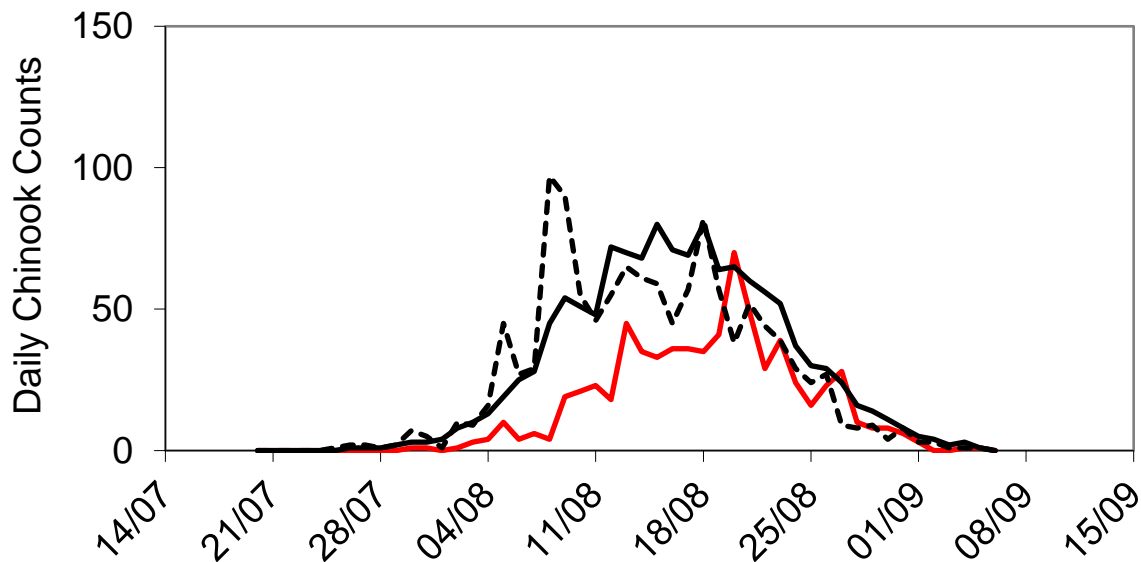


Figure 2. Whitehorse Rapids Fishway daily Chinook salmon counts in 2018. Daily counts in red, mean daily counts in black and 2017 daily counts are represented by dashed line.

### ACOUSTIC TAGGING PROGRAM

Over the summer we had students (William and Connor) from Carleton University. The students left Lawrence and Warren in charge of collecting data and tagging the Chinook at the fish ladder this this year. William and Connor would stop by at random times and do acoustic tagging and checked with a receiver to see if any fish or tags were somehow dropped in the fish ladder. They also tagged Chinook downstream and a total of five out of ten of these Chinook came through the fish ladder

### FRESHWATER FISH



We had arctic grayling, Chinook salmon fry, lake trout, long nose suckers, rainbow trout, northern pike, slimy sculpins and whitefish prior to the salmon run and shortly after the peak. The most abundant fish we had using the fish ladder was arctic grayling, followed by whitefish.



## VISITORS TOTAL

A total of 18,813 visitors came to the fish ladder. That is slightly lower than last year's total that was 22,290 visitors for the season. Monthly visitor totals were 2,989, 6015, 8,693, and 513 for June to September, respectively. We had 120 people visiting with Holland America Tours. The most common visitor language was English followed by German and French.



## COMMUNICATIONS

We made 39 Facebook posts this summer. One post that reached 4,434! The second highest reaching post reached 2,454 people. We also posted a few Instagram photos but Facebook seemed to be much more popular. As such, Facebook was our main form of communication with the public, and it seemed to be quite effective.



For Appreciation Night, Janet from Yukon Energy made posters that were hung up around town, and a lot of people said that they found out about appreciation night due to the posters.

Staff also participated in a few interviews with local radios and newspapers. Karine did a filmed interview with CBC Yukon in late July. Emilie did an interview with CBC radio and a filmed interview. She also did a phone interview with the French CBC (Radio-Canada). Ashley was on the front page of the Daily Star newspaper and did a quick interview with them discussing what the Chinook numbers were looking like this year.



## RECOMMENDATIONS

- Make deposits inclusive to every month to help financials at YFGA (do not overlap months).
- Complete the building walk-through earlier so we can address issues immediately
- Look into new life jackets for the hatchery staff next year as they are starting to look worn
- Purchase a new throw bag as one is starting to rip-Work with Yukon Energy's health and safety to figure out a plan regarding inappropriate visitors at the ladder



## Appendices

### Appendix 1. Daily counts of Chinook salmon at the Whitehorse Rapids Fishway in 2018.

Date	Hatchery Females	Hatchery Males	Wild Females	Wild Males	All Females	All Males	Daily 2018
30-Jul-18	0	0	0	1	0	1	1
31-Jul-18	0	0	1	0	1	0	1
01-Aug-18	0	0	0	0	0	0	
02-Aug-18	0	0	1	0	1	0	1
03-Aug-18	0	0	3	0	3	0	3
04-Aug-18	0	0	1	3	1	3	4
05-Aug-18	0	4	4	2	4	6	10
06-Aug-18	1	1	1	1	2	2	4
07-Aug-18	1	0	1	4	2	4	6
08-Aug-18	0	0	3	1	3	1	4
09-Aug-18	1	1	7	10	8	11	19
10-Aug-18	3	1	9	8	12	9	21
11-Aug-18	3	3	5	12	8	15	23
12-Aug-18	2	1	8	7	10	8	18
13-Aug-18	4	5	20	16	24	21	45
14-Aug-18	3	7	10	15	13	22	35
15-Aug-18	2	6	14	11	16	17	33
16-Aug-18	0	8	11	17	11	25	36
17-Aug-18	4	6	6	20	10	26	36
18-Aug-18	3	7	10	15	13	22	35
19-Aug-18	3	10	8	20	11	30	41
20-Aug-18	7	15	14	34	21	49	70
21-Aug-18	4	8	6	31	10	39	49
22-Aug-18	3	10	5	11	8	21	29
23-Aug-18	5	3	5	26	10	29	39
24-Aug-18	1	7	5	11	6	18	24
25-Aug-18	0	4	6	6	6	10	16
26-Aug-18	1	8	5	9	6	17	23
27-Aug-18	0	11	4	13	4	24	28
28-Aug-18	0	5	1	4	1	9	10
29-Aug-18	0	1	0	7	0	8	8
30-Aug-18	0	2	1	5	1	7	8
31-Aug-18	0	0	2	4	2	4	6
01-Sep-18	0	0	0	3	0	3	3
02-Sep-18	0	0	0	0	0	0	
03-Sep-18	0	0	0	0	0	0	
04-Sep-18	0	1	0	0	0	1	1
05-Sep-18	0	0	0	1	0	1	1
06-Sep-18	0	0	0	0	0	0	



Appendix 2. Cumulative count of Chinook salmon at the Whitehorse Rapids Fishway 2018.

Date	Hatchery Females	Hatchery Males	Wild Females	Wild Males	All Females	All Males	Total Cumulative Count
20-Jul-18	0	0	0	0	0	0	0
21-Jul-18	0	0	0	0	0	0	0
22-Jul-18	0	0	0	0	0	0	0
23-Jul-18	0	0	0	0	0	0	0
24-Jul-18	0	0	0	0	0	0	0
25-Jul-18	0	0	0	0	0	0	0
26-Jul-18	0	0	0	0	0	0	0
27-Jul-18	0	0	0	0	0	0	0
28-Jul-18	0	0	0	0	0	0	0
29-Jul-18	0	0	0	0	0	0	0
30-Jul-18	0	0	0	1	0	1	1
31-Jul-18	0	0	1	1	1	1	2
01-Aug-18	0	0	1	1	1	1	2
02-Aug-18	0	0	2	1	2	1	3
03-Aug-18	0	0	5	1	5	1	6
04-Aug-18	0	0	6	4	6	4	10
05-Aug-18	0	4	10	6	10	10	20
06-Aug-18	1	5	11	7	12	12	24
07-Aug-18	2	5	12	11	14	16	30
08-Aug-18	2	5	15	12	17	17	34
09-Aug-18	3	6	22	22	25	28	53
10-Aug-18	6	7	31	30	37	37	74
11-Aug-18	9	10	36	42	45	52	97
12-Aug-18	11	11	44	49	55	60	115
13-Aug-18	15	16	64	65	79	81	160
14-Aug-18	18	23	74	80	92	103	195
15-Aug-18	20	29	88	91	108	120	228
16-Aug-18	20	37	99	108	119	145	264
17-Aug-18	24	43	105	128	129	171	300
18-Aug-18	27	50	115	143	142	193	335
19-Aug-18	30	60	123	163	153	223	376
20-Aug-18	37	75	137	197	174	272	446
21-Aug-18	41	83	143	228	184	311	495
22-Aug-18	44	93	148	239	192	332	524
23-Aug-18	49	96	153	265	202	361	563
24-Aug-18	50	103	158	276	208	379	587
25-Aug-18	50	107	164	282	214	389	603
26-Aug-18	51	115	169	291	220	406	626
27-Aug-18	51	126	173	304	224	430	654
28-Aug-18	51	131	174	308	225	439	664
29-Aug-18	51	132	174	315	225	447	672
30-Aug-18	51	134	175	320	226	454	680



<b>Date</b>	<b>Hatchery Females</b>	<b>Hatchery Males</b>	<b>Wild Females</b>	<b>Wild Males</b>	<b>All Females</b>	<b>All Males</b>	<b>Total Cumulative Count</b>
<b>31-Aug-18</b>	51	134	177	324	228	458	686
<b>01-Sep-18</b>	51	134	177	327	228	461	689
<b>02-Sep-18</b>	51	134	177	327	228	461	689
<b>03-Sep-18</b>	51	134	177	327	228	461	689
<b>04-Sep-18</b>	51	135	177	327	228	462	690
<b>05-Sep-18</b>	51	135	177	328	228	463	691
<b>06-Sep-18</b>	51	135	177	328	228	463	691