Check out the Yukon River Salmon and Whitefish Runs by reading:

Rapids Daily Email Updates 2011

A Daily Log of the Fishing activity around Mile 731, Yukon River

In season pictures and short comments on activity in the Tanana, Rapids and Rampart area, obtained through word of mouth and observation, are sent out daily with data worksheet updates. Combined these give an idea of the season at ground zero through the eyes of a non objective observer. Often with some sarcasm, always with an agenda, sometimes trying to be professional - - - - - - - Inside are the 2011 season's daily updates.



6/5/11

- First update of the season. Rapids camp mostly set up - now to get fishwheel in water and turning.

 News from ADF&G today was 2 kings caught at Pilot Sonar test nets on June 5th.
 That puts kings at Rapids in 10 to 14 days.
 Water is very high (makes for slower king migration) but going down fast.

- All last years info below and will be deleted for next update.

- Everyone on last years list is on this years. If you want off list or know of anyone to be added please send an email to me. Again as last year all email updates are sent Bcc so no one sees your email address.

Picture: Extremely heavy drift that ran because of high water on Porcupine River this year has cleared upper river but brought down many interesting things like this fishwheel. I got this one to shore and will cut up for firewood later



6/6/11

 King salmon numbers just starting to increase in test nets at mouth. Way to early to tell anything but slightly earlier and slightly more than 2009 and 2010 (see ChinLY graphs).

- Water still dropping fast - no drift (see WaterHeight graph)

- No Pilot Sonar king estimates yet but they have been catching some at that site.

- Camps are starting to open up at Rapids.

- Some fishermen here and in Tanana are busy sewing on smaller mesh on their nets so they will have legal gear to fish soon (must be 7 1/2" or less).

Picture: 1. Dogs being set up at their new home for the summer. A week ago their spots were all in the water. 2. Esra cutting the webbing off a new 200' net. There are 14 king nets in this camp alone that are now illegal to use.



6/8/11

- Pilot Sonar putting out King numbers now (see ChinPilot11)

- Looking at Lower Yukon Test net and Pilot Sonar counts, puts first king at Rapids about 18 -19th. There were credible reports of subsistence king caught in Alakanuk on May 27th. That would put first King at Rapids just before June 15th. I'd go with the 15th.

- Water dropping and now below average for this date. Kings may if anything have a faster swim upriver by a couple of days.

Picture: 1. Starting to pull the wheel out of the woods. 2. A muddy mess to clean up at end of day - but wheel in water. Now to get it running.



6/11/11

- Small numbers of king continue at mouth. In 2009 and 2010 first pulse did not start to show at mouth until about June 15th, so it's just a wait now. The first pulse is expected to be protected by closures all the way to the Canadian border to help make escapement. The trick is recognizing the pulse at the mouth in time to restrict it there and then following it accurately enough to close upper river districts when it passes. In 2009 our district fished half the pulse before it was decided it was here. Sneaky fish those kings.

 Rapids test wheel and another may turn tomorrow. See what fish are running whitefish etc. No nets in yet.

Picture: 1. Another wheel in water at Rapids. This one just came 40 miles from Tanana - 11 hours and a drum of gas of pushing all day. You run as close to shore as you dare trying to make more headway but not hit a hidden rock. Go about the speed of walking fast.



6/13/11

- Rapids video fishwheel started turning today and only migrating bering cisco being caught. These fish will continue up to areas around the Yukon Flats and spawn there and die just like the salmon. Other species of whitefish like sheefish, broads and humpies will return to river mouth to spawn again every few years. Ages such as 30 years in sheefish have been seen.

- Fishwheel project should start counting using video technology tomorrow.

- King at mouth still low numbers.

 Water going down fast again. Well below average for this date. King will make good time in this current.

 Heard Galena got King a few days ago so anytime here.

Picture: 1. Grandson Mal holding up some of the days catch of bering cisco whitefish. 2. (top down) Big and little sheefish, broad whitefish, humpback whitefish and bering cisco. This is what's being caught in the area now as we all wait for the first King.



6/14/11

- Update will include raw catch data from Video fishwheel project from now on (see **ShortSum** tab).

- After a day of 1st fishwheel running all that is being caught is migrating bering cisco - little over 1 an hour which is not a large amount yet. These cisco will get up to hundreds a day at their peak in the test wheel.

- Some nets going in today also and camps filling up more with people.

- Water temp is very low for date (see WaterTemp graph)

- Someone sent a message from mouth that 1st pulse is starting there today. We'll see when the test net data comes out tomorrow???

Picture: Bet there were thousands on the beach here at one time. They like spots where the dogs were tied etc.



6/15/11

- First pulse thought to be hitting Lower Yukon test nets (**ChinLY11**) so yesterdays subsistence report were right. This pulse should arrive at Rapids in a maximum of 16 days due to the lower than average water height (for this date) and slower current from here to mouth.

 1st King caught at 4 am this morning (picture) the 15th of June (where did I hear that date before).

Picture: 1. BillyAnn is one of the two older techs hired for the Rapids data collection project this summer. Same program as usual - take King measures, Ichthyophonus disease info and samples for lab workup and genetic samples for ADF&G. Today they did their 1st king weighing in at 16 lbs. Then I cut it up and they spread it around to the 4 camps open in the immediate area. The project will also be bringing 6 groups of younger students to be trained by and work with these techs starting this Friday. 2. Ari cooks the 1st King with full treatment tonight.



6/16/11

- 1st pulse is clearly in the river now (ChinLY11) and when it hits Pilot Sonar (ChinPilot11) 100 more miles upriver that project will give it an official estimate of size that will help in managing the run and possible further restrictions this summer.

- Numbers of nets and wheels in now at Rapids with about half the camps open. Most have gotten a king or more so far.

Picture: Linda and Ambrit just set a new 7 1/2" mesh net last night and had this one King this morning. A fishwheel and net fisher, Linda has fished Rapids since the late 1960's and Ambrit comes to help many summers. Fishermen here are interested to see if these smaller mesh nets will increase their numbers and overall lbs of King salmon. Over the past 20 years the larger mesh nets (like the common 8 1/4" mesh) seem to have fallen far behind in their ability to catch kings. With the decline of the average size of King salmon many seem to go right through the larger nets. Everyone is hoping not so with these new smaller nets.



6/17/11

 Few more King being caught at Rapids. A couple a day per fisher about.
 Water is very cold this year due to cold weather but it is rising. Kids don't swim long in it (see WaterTemp)
 And water height real low for date.
 Also due probably to cold nights and no melt in hills.

- Another day of good numbers at mouth test nets. Need alot more however before anything can be said about run (ChinLY11).

Picture: 1. Mal likes to be called Mario (I called him Maryo and he corrected me). Anyway he's practicing his measuring for the upcoming data collection season. These are good size king - the beginning of the run, before the 1st pulse, is always the best for size in this part of the river.

2. Succession of computer captured frames (counterclockwise) used by the fishwheel video project to identify fish caught. Each fish gets it's picture taken 14 times as it slides down the video chute.



6/18/11

- Still just a few king a day. Testwheel got 2 in 24hrs. But nice size. Average size from the few that data has been collected on shows almost an 18 lb average - normal for this part of run but very high for the seasons average (usually 11 1/2 lbs in fishwheels) - Pulse 1 showing signs of decrease at mouth of river (ChinLY11). Another could start right up or there could be a wait.

Picture: Scenic view of Rapids and 2 wheels above the testwheel today. These are some of the only wheels going during king season in the entire drainage. In the last 20 years most fishers have gone to nets. Later during chum season is another thing altogether, with many wheels still operating. Note the old pants tied to the baskets to give extra push in the lower water and slow current. I told my grandkids today that that was how the fishwheel owner washed his clothes.



6/19/11

- King fishing reported as spotty by many. Video wheel only got a couple again. If run timing is as I think we should be getting into increasing king numbers some time in next 24 hrs. - you can see this in the ChinLY11 and ChinPilot11 graphs.

 One fisher got a 38 lb. king today.
 Out of 6,900 king sampled by the Rapids data collection project over the last 7 years that is the 4th largest.
 Water temperature has been climbing

steady but low for this date.

 Added KingData worksheet and first few king. Have more done and will get them posted as soon as possible. Got 1st lchthyophonus visible positive today.

Picture: Mother and daughter and granddaughter. 1. Kathleen cuts the strips up the bank near the smokehouse. 2. Katlyn heading and gutting down the bank by the river.



6/20/11

- The pulse mentioned in last update that should be here today, just hit at 3 pm. Many think these pulses spread way out after 730 miles of river travel to Rapids but that is not the case. Often the majority of King in a two day pulse at mouth will arrive here during the same two days about 16 days later (some variables). - This pulse is not large enough to be the "official 1st pulse" that will be protected as it passes here, but will provide fishers with some decent numbers to start putting up their fish for the winter. Small pics show today's "pulse" - Starting to add more data to KingData worksheet below. Should have alot of net data this year also (be posted soon). Average weight of king so far is 17.4 in wheels. That's very high but normal for early part of run that does not get fished on heavy.

Picture: Selina, Teneisha and Billyann passing a king heart around to visually exam it for lchthyophonus disease. Two of these girls trained under Dr. Richard Kocan back in 2001 so this is old hat to them. Chuck Hugny a science teacher from Nenana is camp supervisor this year as we are running new and younger students through the camp this year.



6/21/11

- Little slower on King today but enough people can be cutting some fish. Alot of camps still to open and some going to wait till 1st pulse closure over with. I think people should get some while they can as if it's a bad run things could just shut down tighter.

- Added AllChinCum graph which shows overall run to date next to all other years at Rapids. Way to early here to say any more than fish arrived earlier than normal. Some years slow starting runs have ended very strong and strong starters ended poor. Just have to wait and see.

Picture: Charlie Boulding stops for a break during his long wheel push from Tanana 40 miles down. He has a camp 7 miles upriver. Talking here with Dave Daum and Ray Handler of the USFWS about dog mushing, sheefish and the cisco whitefish sonar migration research they have planned for this season. They just showed up today also.



6/22/11

- Still a little slow here but enough fish for fishermen to work with. probably be like this or just a little better until 1st pulse arrives about June 30th (ChinLY11). That pulse will be closed to fishing however if managers are able to track it and close things without the King pulse sneaking by.

- Test nets at mouth just had a second very good day. Need more of those days before the run is out of trouble so lets hope for them.

- I believe this section of the river goes from 7 day fishing to "1st level restrictions" (2 - 48 hour openings a week) on June 28th.

Picture: Tanana Tribal Council (John Erhart and Faith Peters - left and right) brought all the kids from Spirit Camp to Rapids. Here some are watching the data collection techs (Selina and Ezra) do their work. Many of these kids will be here learning data collection later this season.



6/23/11

- Best day so far for king with 18 in 24 hours through the Rapids testwheel. Total for season so far is about 65% of the projects average (AllChinCum).

- Added lots of data in **KingData**. Average weight for wheel caught king for 202 sampled is 15.9 lbs. By seasons end this average is usually much less at around 12 lbs.

- Water temp and height are both below average for date but seems like we are in for a good rise in water level and that may mean drift and other bad things for fishers.

Picture: I'll have a report soon on any interesting findings by the USFWS trying out the DIDSON Sonar here at Rapids. They are analyzing the first nights data here. While we have an idea of the relationship of Chum and King salmon numbers in the population to what I catch in the testwheel that is not true of whitefish species. These guys are concentrating on bering cisco whitefish - small fish but an important subsistence resource.



6/24/11

- King fishing been slow for most fishermen. About four more days of low numbers and the 1st pulse will be here but that will not be able to be fished due to emergency closures to try to get enough fish to Canada to provide for proper spawning.

- Cisco counts rising - they can get to hundreds a day.

- Late yesterday and today all wheel fishermen are reporting smaller king showing up. This is normal and happens each year. In 2009 when the 1st pulse was protected the average weight shot back up during that period and that may happen again this year. Data techs will be collecingt weights from king salmon out of the video testwheel during these closed periods. These king spend less than 10 seconds out of water and then are released to the river.

Picture: View of dead box from one of the areas subsistence wheels today. Notice the 1st chum of the season (green head and shoulder), 7 king of mostly small size, a sampling of Bering cisco and 1 broad and 1 humpback whitefish.



6/25/11

- Huge lightning and rain storm hit Rapids about 11 PM tonight. Will be pulling wheel in to shore right after I send this out and hoping the local creeks don't empty out to much drift . This kind of drift is especially bad as it doesn't have the chance to get out into the middle of the river like drift from way up river and will run along the shore right at the wheels and nets. Nobody is taking chances tonight. Nets and wheels all shutting down.

- King continuing to stay at a smaller average size.

Picture: Mom and two daughters happily cutting some of their first king of the season. Camps are still setting up around Rapids. Many wait each year for the weekends around the fourth of July. Tonight these strips were almost flying off the racks from the wind as everyone rushed them into the smokehouse..



6/26/11

- So hows the run? - so far slow but in 2001 which people around here still remember as being spectacular (and the testwheel caught almost twice as much as the next highest year) the run at this date was twice as bad and ran below average up to July 1st. So point is it is very hard to say anything with certainty.

- Water rising fast and water temp at average for date.

 Not much happening at mouth test projects lately and king run below average so far there also. They are 16 days ahead of us so that is not good (ChinLY11).

Picture: Last nights Rapids birthday party for one of the young men here working as a data tech. It was real nice until a huge lightning/rain storm started moving in from downriver and everyone ran for home. it was good they did as nobody would have been able to travel for hours after it arrived. Never saw anything like it before in my life lightning striking all around and dark. My radio which isn't even connected to an antennae is dead.



6/27/11

- Everyone wondering when we'll get shut down. Will we fish the first pulse or not. Every fisherman I've talked to wants to do their part and do not want to be looked at as someone who got to fish the pulse when everyone else couldn't. Also people want to get shut down and get it over with so they can go about their lives and fish.

Water is up real high and will go up about
 2' more by tomorrow evening (see
 WaterHeight).

- Pulse 1 should show on June 29th at Rapids - The best of the pulse will be the first. Least injuries, less lchthyophonus disease, best flesh color, etc. (ChinLY11)

Picture: 4 wheels at Rapids and a barge making their way past them. Only one running is the lower which is the video test wheel. Drift has been bad so many fishermen have shut down. Test wheel has to run to get the daily counts but is also the most protected as logs tend to move out into river more by the time they get to it although it gets hit at times.



6/28/11

 More data in KingData. With extra techs this year we are able to travel farther and sample almost the entire local area.

 Managers announced 1st pulse closure in this area will start Wednesday, June 29th at 6 pm. No fishing till July 4th at 6 pm (except small whitefish nets). This hopefully puts the closure directly on the biggest fisheries in the district.
 Rapids testwheel king counts up a little and largest for season so far. 1st pulse starting ? tune in tomorrow.

Picture: The U.S. Fish and Wildlife Service is conducting an exploratory study of the nearshore distribution of Bering cisco during their spawning run upstream into the Yukon Flats. Here's a picture of the DIDSON imaging sonar being deployed below the video test wheel. Preliminary results suggest that the cisco are swimming very close to shore (mostly within 12 feet) in the fast river currents at Rapids. Dave Daum and Ray Hander are the research biologists on site. Dip nets were used to confirm the presence of Bering cisco passing in front of the sonar transducer. Any questions can be sent to david_daum@fws.gov.



6/29/11

 Most fishers reported brighter, fresher looking king today plus higher numbers.
 Video testwheel had almost all larger king but no number increase. Consensus from fishermen is that pulse 1 is arriving now.
 Imagine tomorrow should confirm it but who knows in this business.

- Little better day at mouth with possible signs of 3rd pulse there I heard. Total estimated numbers for season (called *cumulative*) however is below average not good.

 Water finally crested but lots of bad drift - wheels and some nets here all took the chance and fished today because of the closure starting tonight at 6 pm.

Picture: Rapids Research Center is a friendly place for fish to visit and also a friendly place for people. Here we have a picture today of a local fisherman, USFWS biologist and 3 ADF&G personnel all back from enjoying a day of fishing together. (to all with no sense of humoronly kidding)



6/30/11

- Fishing closed today but video wheel counts went up dramatically as pulse 1 hits like tornado (okay I'm being to dramatic now myself). Counts doubled anyway and very few jacks again (ChinLY11). Fishermen here are okay with being closed - they want to see this pulse protected. They are looking forward to fishing again when it opens however.

- Water cresting and drift stopped but another rise coming from upper Yukon looks like.

Picture: 1. Everyone went up the hills behind Rapids to get away from data collection for awhile.

 Some of the larger king from Pulse 1 that came through the video camera of Rapids testwheel today. Student have started getting weights only off these protected fish, so will have some interesting data for everyone soon.



7/1/11

- Kings hit harder today and cumulative is doing some serious rising (see AllChinCum). Should increase more tomorrow.

- Mouth of river seeing some increase also.
- Water level dropping fast.

Picture: King just caught in wheel and Carl raises it above water - Chuck steadies net then let's go while the two of them decide weight which is then yelled to Danielle - Max makes sure the scale is facing correctly and will then grab net and let fish go into river. It's sometimes one smooth motion and can take as little as 5 seconds.

What kind of effect does protecting a pulse all the way up river have on preserving it's quality (size and age of the fish, % of females vs. males). Here Rapids techs try to answer part of it by taking weights during pulse 1 closure. These will be compared with those parts of the run not protected. In 2009 during similar closures the difference was significant when compared to 2008, the year before when unprotected: 2009 Pulse 1 (protected) - Average weight -

14.5 lbs., Percent female - 29% 2008 Pulse 1 (open) - Average weight - 9.7 lbs., Percent female - 7%



7/2/11

- After a few days of heavy king numbers through the Rapids and <u>214 king salmon in 24</u> <u>hrs. today</u> alone, the testwheel total seasons count is now above average (see AllChinCum). Tomorrow may slow slightly but cumulative should continue to climb away from average.

- Had a career fisherman ask me to say on the update that he felt strange liking to see fish go by and not being able to fish them. He said he wants to help the problem and it felt good to see fish heading to Canada.

- Average weight last year during pulse 1 was 11.5 lbs. This year pulse 1 weight so far is 14.8 lbs. This data seems a repeat of what happened in 2009 when fish were protected also.

Picture: Out of over 7000 king sampled since 2004 at Rapids the largest one weighed 49.5 lbs. and second largest at 40.3 lbs. Today the techs weighed and released a 54.1 lb. male king seen at the right. It made news all over Rapids and fishermen kept coming by all day to watch the video wheel catch and release big king after big king. A fisher 20 miles downriver caught, weighed and took a picture of a 52 lb. king just before closure on Wednesday.



7/3/11

- Have updated Pulse 1 weight data entered in KingData tab below.

- King salmon numbers about same. Lots of larger ones still but seems to be smaller jacks coming in now also.

- Looking at graphs (ChinLY11 and ChinPilot11) Pulse 1 will be fading and Pulse 2 starting up. There wasn't a big drop at mouth between pulses so good king numbers should continue. The next pulse coming was larger when it came in the river but did not have as much protection so fishing pressure may reduce it's size. King fishing should be okay to the middle of July it looks like.

Picture: How about a break from fish pictures for a day: Heading back to Tanana after days at Fish Lake goose hunting this spring - Dogs waiting for the okay command. The sloughs, like Hay Slough here, have long since lost their snow and are bare ice and getting thinner each day. 10 miles further and the dogs were up to their chests in water in some sections. Nice warm weather - beautiful day - it didn't matter.



7/4/11

- King numbers down slightly as pulse 1 ends and pulse 2 starts to show up. Cumulative counts (AllChinCum) are high right now and should remain that way unless these next pulses to come don't materialize. Anyway looks hopeful for border escapement to maybe be met. Ways off however and we'll see. - Not many summer chum showing up yet, which is appreciated by fishermen, as they shut down the wheels or fishermen have to man the wheels to release them. Net fishers can also be shut down by them. Unlike the richer, fished for fall chum the summers are mostly devoid of fat and dry to something resembling cardboard. Dog mushers even dislike to feed them to the dogs in winter

Picture: It use to be traditional at commercial openings in the years past to turn on the wheels and then all meet at one to watch the catch rate and discuss fish. Occasionally someone would talk about something else. With no more commercial fishing anymore, fishermen at Rapids get together in a similar way at tonights subsistence opening after the recent whole pulse closure.



7/5/11

- All area fishers report reduced catches and size. The fishwheel video project's small king male rate has gone from 7% to 40% since the height of pulse 1. The first full day of pulse 2 at Pilot Sonar was not a big king one and seems to be same here. Hopefully tomorrow sees number up again or we may be looking at a pulse that may not show up as strong as expected. - Some fishermen are spending time

on their wheels now to throw the increasing summer chum back, and all are complaining them. The smaller 7 1/2" nets seem to catch them pretty good also which was expected.

Picture: 1. Getting the last of the weights on July 4th closure. 2. Sitting watching king get caught today at fishwheel. Weather has been good to us last two days. Generally it has been cloudy and gardens, etc show the lack of sun this year.



7/6/11

- Last night and today before closure King run continued to show more signs of a pulse not doing good. King continue to get smaller (57% small males today). Getting comments that the pulse is just late and is in Kaltag but that is over 7 days away from Rapids and is not possible. My guess is that we are looking at another disappearing pulse. Seems to be a number of those in the last ten years. Hope for the best tomorrow.

- Summer chum and cisco whitefish numbers up a little.

 Test fishwheel here at Rapids is at it's best efficiency in this high water now. Water is not extremely high overall but for this date is close to a record (1977 to present) (WaterHeight).

Picture: Haley and Cassandra getting the last of the king cut up from the past opening. They are making smoked filets which will spend one night in the smokehouse. Then wrapped up, sent in a boat going down to Tanana tomorrow, and then frozen. It was a little dangerous getting get this picture - also didn't want to make any wisecracks while doing so.



7/7/11

- Added Pilot Sonar / Rapids chum graphs(ChumPilot11) - and last years one for comparison. Techs for the Rapids Data Project are starting to sample flesh color in the chum in anticipation of the arrival of the fall chum. The object being to develop a small database with which to determine an accurate date to start counting the fall chum run. Fall Chum are still weeks away.

- Changed run timing on ChinPilot11 and ChinLY11 graphs to reflect a possible slower king migration upriver by 1 day - still shows pulse 2 going by Rapids and weaker than it should be. Give it a couple of more days and picture will be clear. King at 41% small males in video testwheel today. Have more accurate data from the actual weights entered soon as I can.

- Water height is now at record high for date. Not really that high - it's just late in season to be this high.

Picture: Prior to this king season this fish (held by Joe and Tsood) was the largest king weighed by the Data Collection Project (data from 2004 to present). It was 49.5 lbs. and caught in the 2006 subsistence fishery. This years 54.1 lb. king was only recorded by the video fishwheel and picture is of poor quality.



7/8/11

- Well so much for the slow start on pulse 2. Today video testwheel (fishing is closed) had a 24 hr. count of 249 king. Best day of season by a few. Pulse 2 was over twice as large as pulse 1 as estimated by Pilot Sonar but was not protected as much. Lets see how it compares when all is said and done in a couple of days.

- Lots more in KingData worksheet below. Interesting trend between protected pulses and unprotected ones but will need more years to be statistically sound:

2008 Pulse 1 average weight - 9.7 lbs. (no protection) 2009 Pulse 1 average weight - 14.5 lbs. (full closure) 2010 Pulse 1 average weight - 11.2 lbs. (no protection) 2011 Pulse 1 average weight - 15.4 lbs. (full closure) - ADF&G announced today fishing will not open until Monday, July 11 at 6 pm (2 day opening). Plan is to eventually get back on the more regular restricted schedule of two 48 hr. open periods a week (Subdistricts 5 A, B, and C).

Picture: Kim, her daughter and nephew have a camp 18 miles downriver. They stopped by the testwheel today to watch fish being weighed and find out if there was any word on an opening. It's been a hard year on people, especially if they have other jobs and limited time to spend fishing like Kim.



7/9/11

- All the camps not set up yet are doing so now in anticipation of the end of the major restrictions and the opening on Monday. We had 2 more families arrive here today and now have 17 family members in 7 tents/shacks.

 Biggest king day again (see ChinPilot11)
 one hour 20 king went through Rapids testwheel (fishing closed so they got their picture taken and right back to river).

- Water temp average and height is very high for this date (WaterTemp and WaterHeight).

Picture: This is what happens when the fishing closures last to long and camp people run out of fish to cut. I broke it up and gave everyone a little piece of the cisco.

While they staged the picture the idea to do so was born of the stress of everyone hanging around and not being able to fish it's hard, but as we all are having to admit there is not the fish anymore to have it any other way if we want anything left for the future.



7/10/11

- And another huge day for king here. Should drop off tomorrow as that is what it did at Pilot Sonar after the 3 big peak days of pulse 2.

 Fishing opens Monday at 6 pm for 2 days and I would imagine every available eddy will have a net in it and all wheels will turn right at 6. People are ready to fish.

- Water is dropping now and is suppose to continue doing so.

Picture: Early winter breaking trail with dogs (looking back on trail) - over hills on horizon is Tanana and the Yukon River. Three traveling days (35 miles) out at this point. Later on when trail gets good it can be a nice 5 hour run - or another 3 day trip after a heavy snow fall.



7/11/11

- Big king day again (ChinPilot11) . When will pulse 2 stop. Tonight all the gear in Rapids turned on and everyone's catches confirmed that testwheel is not by itself with the high numbers. Testwheel hourly catch rates throughout day do show the pulse thinking of slowing down. Most all gear was off by end of evening cause of enough fish but will go in or turn on tomorrow again.

- Have to get Eagle data graph going. That project is starting to get king and everyone will be watching how the king numbers hit there. Cumulative at Rapids (AllChinCum) looks good for Eagle but with all the high water and the way Rapids testwheel does best in that condition some tempering of high hopes may be called for.

Picture: Kids will be kids wherever they are. Here grandma supervises a Rapids movie night on one of those miniature devises they always are looking at. Any kid problems just consult the Parents magazine, or wrap it into a tight roll. (kidding)



7/12/11

- Just as the past days where dramatically high for king counts today they were just the opposite (ChinPilot11). Went from 10 good sized per hour to 1 per hour (and 65% small males) just like that. People who ran gear last night at the opening got some fish but those who waited to this morning to set got almost nothing. Some are giving up and heading home. One camp swears they'll not set up next year. The strain of costs and time for little fish is taking a toll.

- A third and final pulse, equal about to the 1st pulse in numbers, will be starting up in a couple of days. It will be the last chance for many to get fish.

Picture: Fishermen congregate to watch a fishwheel today. This is when a wheel fisher hopes his main cable is strong. Everyone was amazed to see the quick drop in catches. This was however, exactly what happened at Pilot Sonar 16 days ago.



7/13/11

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Picture: Katlyn is all ready to head to Miss World Eskimo-Indian Olympics Pageant in Fairbanks this month. The last couple of weeks at Rapids the family has been all helping with those last minute details. She said today she'll be representing Tanana and the lifestyle she was raised with. In the picture on the right her and her brother Joe are getting their pictures taken with their new fish pews they just got for their birthday years back. Each participant will be showing off a particular talent - Kate's will be cutting King salmon.



7/13/11

- King seen in video yesterday small and old looking so no sign of pulse 3 yet but soon should be.

- King should be done coming in mouth. Pilot estimated about 103,000 this year and average is 154,000. Last years bad run of king was 114,300. In 2009 the run was terrible at mouth also but because of the protected pulses ended up meeting escapement to Canada and reported by many Upper river, Koyukuk and Canadian fishers as the best in many years. So we will see soon how this year turns out as we watch Eagle Sonar (promise graph tomorrow)

Picture: Sent in by the guys over at Interior Alaska Fish Processors (they got great smoked fish and meats on sale daily). Okay enough advertising for my friends. So the fish was caught on Turtle Lake in Northern Saskatchewan and a new record northern Pike in Canada. The man was fishing and caught a 36" Pike. As he was reeling it in, a 56" - 55 lb Pike tried to eat it. He landed them both in the same net.



7/15/11

- While total king numbers today in Rapids testwheel were as low as yesterday it is clear to fishermen that pulse 3 is starting. Size and quality of fish are distinctly better as the front of the pulse arrives. Also almost all of the fish counted went through the wheel in the last part of the day. Rampart fishermen (one more travel day upriver) will not see these fish until late tomorrow.

 Summer chum have been trending down which will help net and wheel fishers as they are mostly to poor in quality to use but cannot be wasted so can shut down a net fisher or require a wheel fisher to stay at a wheel to return the chum to the river.

- Added Eagle Sonar graphs for 2011 and 2010 for comparison. Looks like run timing may be about same as 2010.

Picture: Gopher pulled his wheel today and is on his way to Tanana where it will be pulled out by bulldozer for winter storage. He lives in Nenana (Tanana River) and comes over to Rapids each year for king season. Traditionally some Tanana River fishers would often come to the Yukon as their king are to close to spawning and of poor quality.



7/16/11

 Today again numbers are low but king are good sized and in nice shape. We should be solidly into pulse 3 now (ChinPilot11).
 Water is high for date but dropping slowly. Testwheel is normally very efficient at this level.

Picture: 1. A days catch of king fresh out of the livebox. These all got shipped upriver to camps that Pulse 3 is only just starting to reach. While numbers are low these good looking fish are the start of Pulse 3. Being the last pulse the red blush (sign of advancing spawning condition) is a little more noticeable. We should also start to see an increase in the next picture. 2. Ichthyophonus (ICH) disease. ICH is found more at the end of the run and usually more in the larger and female. The white spots on the heart are typical signs of disease. Numbers can vary from a few on a healthy firm heart to thousands on a severely swollen soft one. A few spots to say 50 and the fish can maybe be used for people food. A hundred (like this one) or more and it gets less likely you can use it. We mark the ICH king and then filet the fish leaving the tail to connect the halves. It hangs overnight and if it smells "ICHY" in morning it goes on dog rack - if not it gets cut for people food.



7/17/11

- Fishermen all wondering where pulse 3 is. Maybe it's late but if anything it should have made better time because of lower water conditions. Should be at peak of pulse now looking at run timing graph (ChinPilot11). This pulse was recorded as being considerably larger than pulse 1 but not as large as pulse 2. During the peak of pulse 1 Rapids testwheel was recording over 200 king a day with a 15% small king rate. Today catch of 5 king had a "jack" (small kings) rate of 60%. In 2008 we had the peak of pulse 1 never show up and actually be one of the lowest parts of the run - hope that don't happen here.

Picture: 1. Dinner at Linda's camp right across the river from our camp. People starting to think about leaving camps and good time to take a break and see others. Even had some people from England and Germany canoeing the Yukon stop by. While I appreciated being second in line to get food I didn't like the reason - "Elders First". 2. Grayling sized King



7/18/11

- Still no pulse 3 at Rapids but a few 20 pounders today.

- Each year the focus shifts to Eagle Sonar about now and most of the questions in my email are about that project. Most want to know if what happened at Rapids might happen there and chances on escapement being met. First all the pulses fished by the Rapids testwheel did so in almost record high water (for date) and high current, which most likely increased that projects counts somewhat as the king are driven more towards the bank and the fishwheel. For fall chum we have a very effective formula to negate that influence but not for king salmon yet. So I would expect Eagle counts on the ChinEag11 graph to not rise as high as Rapids. The Eagle counts have leveled off for one day on pulse 1 and if that is as high as it goes we maybe are looking at say 40,000 king figuring pulse 2 as twice as strong and 3 as MIA. It's wonderful being able to quesstimate and not worry about being fired if I'm wrong. But then I don't get paid for it either.

Picture: All the techs (just minutes ago) are active tonight and it's almost midnight. No fish to sample in morning so it's sleep in a little. We kind of have a curfew but not tonight.



7/19/11

- Eagle Sonar counts down again. Almost looks like pulse 1 has mostly passed especially if run timing is adjusted one day for faster migration to Border. Meeting Canadian border passage may be a tight one this year.

- Total count to date is under 12,000 king. Needed is a minimum of about 55,000 or Canadians start restricting their fisheries and they eat less king. Basic minimum escapement needs, to produce a decent future run, are officially at 42,500 which is probably to low considering the smaller fish (less eggs) we have been putting on the spawning grounds the last decade or two (my opinion).

 Much less small fish today. Run is starting to look old in that king are grayer and more spawn colors. Still nice enough to cut however and fishers trying to make up little fishing time this season.

Picture: All this fishing makes me miss the sunny days of spring and goose hunting. Mark, Mario and Joe in back at Fish Lake. Talk about nice weather!



7/20/11

- Last pulse (or what there was of it) of the season may be ending as counts down today and graph seems to confirm the story (ChinPilot11).

- Despite lower king numbers fishers all thought size was good and quality acceptable for this late in the run.

 Eagle Sonar News: ChinEagle11 graph shows an increase today that is hard to believe is pulse 2 but could be. Pulse 2 at Eagle should have more than 2 times as many king in it.

- One way to do the math: Early prepulse fish at Eagle = 3000. Plus pulse 1 gave Eagle Sonar about 8,700 king (if it's over). Then pulse 2 might give it 20,000 and that's still only 31,700. Then I can't see a pulse 3 that didn't hardly show up at Rapids making up the rest to add up to 42,500 king for escapement never mind the 55,000 needed for Canadians to have a minimal fishery. I say lets hope I'm way off.

Picture: Steve and Ann here, and Charlie in wheel above getting some last king today. They stay at the wheel to throw the bum quality summer chum back or they'll spend their days cutting chum instead of king. Steve doesn't have dogs so can't use any of them. Fishers don't like summer chum in this part of the river.



7/21/11

- King fishery winding down more. Only a few still fishing at end of opening. While size is okay the number of red outside (advanced spawn color) and white flesh inside (lack of oil) is increasing. We will still see king pass in small numbers up to Aug 1st or so however and fishers staying for the fall chum run will make use of these late run king.

- Can't believe the water is going up more. Above record high for date again. What an incredible year for high water.

Picture: Work and fun - 1. BillyAnn and Ashley going over all the past raw Chinook data so we can get it out to everyone. Each paper copy is being rechecked with the electronic a second time. After the season we sort the data electronically and look for inconsistencies. 2. Esra watching Gieva trying to pull Allen into the water at Bear Creek, a local summer chum salmon spawning creek. The water was cold but all 5 young people here went in - even Allen thanks to Geiva.



7/22/11

 Fishing opens but little fishing taking place. Video wheel pictures show mostly king with stronger spawning colors but a good increase in numbers over yesterday.

- Summer chum are increasing and is added reason to not fish. Up to 166 in 24 hrs. Data collection project has been doing flesh sampling of the chum, with red flesh varying between 5% and yesterday's high of 15%. Time to start watching closely but it could be a week or more into August before they show up.

- Water suppose to crest soon. Some drift - enough to shut down many nets or wheels. Video wheel okay so far.

Picture: 1. Just got this picture minutes ago. Miss WEIO 2011 was chosen tonight in Fairbanks. My daughter Katlyn at right was second runner up. Just talked to her and she's very happy. 2. Her playing on Rock Island in the middle of the Rapids with the puppies.



7/23/11

- All sorts of news - First is Rapids chum flesh study which watches for the beginning of the fall chum run by observing the increasing % of red fleshed fish in the catches has seen two consecutive increases above the normal summer chum rate of 5 to 10% red flesh. July 20 was 17.2% and today July 23 was 29.6%. This is significant and we will be sampling steady now when fishing is open. It's early but seen it before - July 25, 2000 over 50% were red fleshed.

- Eagle Sonar has run enough days now you can see the complete 1st pulse and second is starting with counts climbing (ChinEag11).

- Cisco whitefish with their highest day of the season. Numbers been low this season but maybe they're building for a run now.

- 3 families just moved into area camps to fish the unexpected pulse of king we've seen in video fishwheel project last two days (ChinPilot11) - nice fish.

Picture: Max, Charlie and Christian are Ezra's last group of seasons techs. Here they're doing king for a fisherman who wanted his catch checked for ICH disease and to help out the techs with samples. This particular small king had it's adipose fin clipped when a juvenile - it's probably from the Whitehorse hatchery. We froze it.



7/24/11

 Final seasons Rapids testwheel counts (called cumulative - see AllChinCum) look like they'll be very similar to 2009. That year US/Canada spawning escapement for king was within the agreed upon range. Hopefully Rapids project counts were okay this year and not affected to much by all the record high water and it's good numbers hit Canada.

- Eagle Sonar at 23,000 so far and needs 55,000 for Canada to have a subsistence harvest and 42,500 just to meet minimum spawning escapement needs. Pretty much depends on this pulse 2 that's hitting Eagle now I'd say.

- I must say there is not a lot of optimism on the river these days as to whether we'll ever see our good king run again.

 Picture: Todays catch from livebox. Surprised alot of fishers this last nice bunch of king (red stars) - pulse 4 ?? (ChinPilot11).

Red fleshed chum (14.3% today) were increasing (sign of approaching fall chum run) but poor quality summer chum still dominate the river. Fishers are aware of it and will start fishing them when they are more numerous. I've put a blue star on the chum that stand out to me as maybe having the nice red flesh inside.



7/25/11

 Some more nice chum that look like fall chum but % of red flesh still low.

 Eagle into middle of 2nd pulse now and estimating more than 3000 a day (ChinEag11).
 Water temp very high after a summer of low to average temperatures (WaterTemp).

Picture: The Yukon River Intertribal Watershed Summit is in Ruby this year and 7 persons are canoeing to it from the Yukon Bridge on their "sacred journey" trip where they share different things with people along the way. Saw some incredible old drawings from the Yukon and other things. Some went up to the video testwheel and got a tour - then back to camp and everyone had a king salmon feed finishing the night off with a Rapids Research hot tub.



7/26/11

- Water height, while dropping slightly at moment, has been steadily high since beginning of July.

- I can't figure if that's what is causing the pulse of fish we are experiencing now (ChinPilot11) as in they are really the pulse 3 king that didn't ever show up but are here now because they are late from swimming up in all that high water. Thing is in the past high water or low water usually only makes a day difference either way from the lower river, not almost a week like this out of nowhere pulse.

- Pulse 2 is cresting at Eagle Sonar from looking at the counts there. Almost 30,000 king estimated to date - (again, need 55,000). These surprise, later run king that are passing Rapids now are not being fished on hardly, so could help add to numbers.

Picture: Yukon River Intertribal Watershed "sacred journey" heads on the way downriver today. Big feed waiting for them in Tanana I heard. They had a good travel day today and a fisherman came by this evening and said they saw them happy and waving half way to Tanana.



7/27/11

- King down in quality and numbers

Picture: Normally fishermen are not purposely cutting chum salmon now as they wait till the summer chum thin out and the fall chum dominate the river. As you can see from the fish rack in back that's not so here. I will have to feed more of these poor quality summer chum to feed the same number of dogs this winter, but they are providing a pre fall chum run baseline of data that each year we use to determine an accurate arrival date for the fall chum counting done by the Rapids testwheel and our arrival time estimates for fall chum hitting the Canadian border.

How accurate is the method of using this color chart and looking at chum flesh color, while cutting dog food, to determine fall chum arrival? - I always use the example of "when you see the elephants walk down main street in some small mid west town, it's probably safe to say the circus showed up that day". It's not rocket science it's common sense TEK.



7/28/11

- Last year I noted that (since the late 1980's) 2010 was the first year fishermen did not voice stopping fishing king salmon, in large part, because of the heavy lchthyophonus disease at the end of the run. Same now goes for this year. Most quit because of the normal poor quality issues that are a natural part of the end of king (and chum) runs.

- The last two years ICH disease has been low in the data monitoring project here at Rapids also. Maybe the disease is in it's last years in the Yukon???. Monitoring of it started in 1999 and rates for females with the disease ran as high as 50% some years. Fishers who were aware of the disease prior to 1999 say it was much worse in those early years. In the last decade it relatively has not been near the issue. However with it still running at about 7%, biologically it may be.

- New active link (above right) called <u>All 2011 Rapids</u> <u>Updates - Facebook</u>. This album on Facebook has all the update pictures and comments for the whole season and is up to date each night. Click and you're there like magic.

Picture: I know some of you aren't thrilled by pure fish pictures but look at these silver, bright, new chums in tonight's catch. Official Fall Chum day here? We'll see when sampled tomorrow (need 50% good red flesh).



7/29/11

- 35% of yesterdays chum had good quality red flesh. This is the highest of the season and usually keeps rising to around 60 to 80%. We have seen a small run of fall chum come and then die down soon after however in past years. With fishing open again tonight we'll have another sampling for tomorrow nights update.

- With fall chum getting this numerous and King down to nothing Rapids testwheel will go to 24 hr. counts tonight at midnight instead of the 12 hr. counts during king season.

 Water still very high for date - what's going to happen if we get a wet fall with all this water already.

Picture: 1. Don and the boys stopped by tonight. They were proud of the grayling and pike they caught while the boss was looking for gold up a number of creeks in the area. Don's a retired lineman and enjoys his summers at a camp downriver each year with his family. 2. Top down: Main species migrating up Yukon now - Bering cisco whitefish, Most likely a fall chum then a summer chum and one of the last of the king and only one today through wheel.



7/30/11

- Added ChinEagAll graph which has all the Eagle Sonar estimates since project start in 2005. At only 37,000 Eagle king so far, we need this present 3rd pulse and/or end of run to be strong or Canadian escapement and/or fishing needs will not be realized again this year.

- Red fleshed chum at 46% of the catch today. While not the 50% needed to start counting fall chum by the Rapids fishwheel project, fishermen are starting to cut chum.

Picture: Fishermen don't need a project to tell them the fall chum are here. These aren't spawning around the corner like the white fleshed summer chum. Many years, camps around here are well into cutting chum like these and we're told the fall chum are hundreds of miles downriver. Don't wait no longer. As you can see from the 2005 study (graph %red05) below, the more you wait the less the fall chum have red flesh, to the point where late in season the fall chum are as worthless for people food as summer chum.



7/31/11

 52% red flesh today. So fall chum types are the dominant chum migrating past here now.
 Seem to have happened this year because of a dying off of the summer chum run instead of a more normal increasing amount of fall chum.
 Overall chum are declining - only 88 ran past video cameras of Rapids testwheel today.
 So Official Fall Chum Day here and all the

worksheets will reflect this and start counting all as fall chum.

- Also instead of using fishwheel catch rates called CPUE (as in king season) to assess the chum run, Rapids project uses a formula (ZRMC2) that takes into account the changing water height and current at fishwheel and then adjusts that CPUE number. All the chum graphs in this update are made with this like ChumPilot11.

Picture: 1. Kathleen is executive director of Tanana Tribal Council and fishes at Rapids during king season and weekends like now during the fall to cut fall chum edibles (and be at peace with her flowers). 2. Edibles are smoked, dried like strips and not salted. They were often preferred by trappers and travelers as they were more suited to eating all day long (no salt).



8/1/11

 As fast as it started the fish cutting stops as the rain settles in and makes it almost impossible to dry fish. As one elder who has cut all his life says if they don't see sun they will sour. Some people put extra drying stoves in the smokehouses to help but nothing is like good weather which it's not now.

- Eagle sonar up to 41,355 counted another 10,000 + to go.

- Water temp very high for date and water height finally in a high but less than record high state for date.

Picture: Picture from a past year of edible chum cured in smokehouse for a couple of weeks. These and strips were the two most common items used in the customary trade fishery that once flourished in this area. The federal government defines customary trade as only the sale of whole fresh fish. That is something people around here give away not sell. Thanks for protecting subsistence.



8/2/11

 Meeting official border passage looking more hopeful as Eagle Sonar continues to pick up okay numbers from the last pulse/end of run (ChinEag11).
 Bering cisco numbers up considerably to 116 in 24 hrs. Good timing as USFWS biologists from Fairbanks just arrived to continue their study on the possibility of estimating abundance on this important subsistence species. More on this in coming days.

- Rain continues to put all fall chum cutting to a standstill around here.

 Almost 60,000 fall chum pass Pilot Sonar yesterday (ChumPilot11). Also, sounds like a second larger group of fall chum should be hitting Rapids soon.

Picture: Tanana Dancers took first place for Indian dancing, second year in a row at World Eskimo Indian Olympics in Fairbanks.



8/3/11

- Another 78,000 fall chum pass Pilot Sonar (ChumPilot11). That makes 165,000 in the last 4 days which is about equal to the entire run in the chum disaster years of 1998 and 2000. So good start to a run that we like to see get to 600,000 or above (at 240,000 now). - Looking at AllChinCum graph the seasons total for king will be similar to 3 other high Rapids testwheel project years. Project has run for 12 years now. 2009, the other year king pulses received significant protection. was also one of these higher years. - 2009 and 2011 also share the distinction of significantly higher average weight and size of king for the whole run since size sampling began in 2004 (see KingData).

Picture: Dave and Stan checking the bioelectrical impedance (BIA) differences in summer and fall chum salmon flesh. After testing, these fish were released unharmed back into the river - *Just joking*!! Actually, BIA techniques have been reported to give fat and water content values in fish, along with the advantage of non-lethal sampling. More work needs to be done before this technique becomes an effective tool in fisheries research.



8/4/11

- Entered more data in KingData and will have the last few entered soon and be able to do final seasons king averages, etc. then. So far looks like average size for season here will be higher relative to all years since data collection started (2004) except for 2009. These two years pulse protection probably pushed the average size up. This year despite more closed fishing time, size (weight and length) was close but not as high as 2009. - Another big day at Pilot Sonar for chum - 50,000 more (ChumPilot11).

Picture: Each April since 1934 the Tanana Dog Mushers have put on the Yukon River Championship 16 mile sprint race. Teams come from all over come to compete. 2011 - 1st, 2nd and 3rd place finishers were Arleigh Reynolds, John Erhart and Greg Taylor. All started long ago when the local trapline teams would get together in spring and see who had the fastest dogs. Nowadays some of these dogs don't even eat fish never mind trap.



8/5/11

Limited amount of fall chum being cut into people food as weather is slowing people down. Fishers are afraid to cut alot as it might spoil. The way a smokehouse works also is the more moist new fish you put in it the damper it gets. If weather is bad lots of fish recently put in it can add dramatically to the drying problem.
Because the fall chum run seems to be doing okay commercials have been opened on it as the fish move up river. This section of river is currently open.

Picture: Rapids Research Center main office is pretty active lately. Randy and Dave, who work for USFWS Fairbanks, are working with DIDSON sonar to see what it would be like to count bering cisco whitefish with it. Here they are going over data collected at their sonar site. - BillyAnn and Ezra who are lead

technicians for the project that collects all the king size and disease data are comparing the original paper data to the electronic, one more time, so it can be released soon.



8/6/11

- Fall chum numbers been low and steady at about 80 per day in Rapids testwheel. The quality is very good however with nice bright outsides and good color inside on manyt of them. Fishermen wanting to get some of these good fish should wait no longer. The next pulse of falls may be good quality also but after that they will decline in the % of good fish. Year after year people wait to long and the best fish of the run pass. Now is the time to start thinking fall chum - they are here.

- More chum numbers are needed and hopefully that will happen in a few days I think.

Picture: Shelbie, Virgil and Aiden from Interior Alaska Fish Processors over on Davis Road in Fairbanks just came over and got a couple of hundred beautiful red fleshed fall chum for their fish plant. It's a long truck drive to the Yukon River Bridge and then a 10 hour round trip by boat to Rapids. All that time doesn't include all the reloading and unloading of the fish. Lot of work for a small amount of fish but that's what it's like getting commercial fish out of this remote locations. Aiden got his 1 burbot and that's all he needed today.



8/7/11

- About noon today fall chum started to increase. This is the first sign of a second and probably larger pulse here at Rapids that peaked at Pilot Sonar on July 16th. Genetics done downriver on pulse show it still high in summer chum but most of those will not come by here. What we will see is nice fall chum heading to the upper river and Canada (ChumPilot11) - The first fall chum that started arriving here back around July 20th should have started arriving at Eagle Sonar a couple days ago given the normal 16 day travel for the 460 miles. - Total king count to date at Eagle is little over 48,000. We will meet official obligations with Canada but let us rejoice quietly. It was done by shutting down king commercial fishing entirely and subsistence for most of the run, on the US

Picture: Checking out the summer chum at Bear Creek 6 miles above Rapids Canyon. There's about 30 new ones that just moved into the creek from the Yukon in front of us. They haven't paired up yet and will move up the creek soon, although some are spawning all around us.

side, and the fishers in Canada may only get

5000 fish to harvest on theirs.





8/8/11

- Fall chum are on a big rise. Running through video wheel at up to 20 some hours with the hourly rate still rising as of midnight. Closed fishing now but will get a look at them tomorrow night when fishin opens.

- DDSON sonar guys (Randy and Dave, USFWS Fairbanks) are wrapping up the investigation into counting upstream migrating Bering cisco past Rapids. With this imaging sonar, fish are semi realistically displayed on the computer screen which leads to some interesting observations of fish behavior. One is that chum salmon can run into large rocks as they travel rapidly upstream. Some appear to hit rocks really hard. Since the Yukon's water is silty, they swim in almost total darkness. Another interesting observation is that burbot like to hang out around the sonar pod (relief from river current) and pick off fish as they pass by. The DIDSON really opens up the underwater world to allow observations of fish behavior along with estimating fish passage.

Picture: About the biggest load I've seen go through Rapids. It maybe wasn't the heaviest as it went right through. One year, about 25 years ago, a heavily loaded barge couldn't make it through Rapids as the water was high. They hired every boat in Rapids (not kidding) to hook along side them and try to help get them through. They still couldn't and had to get a second tug. Often a tug pushes two barges so they can drop one off just below Rapids and go through with one at a time.

8/9/11

- Chum salmon slightly up but Bering cisco whitefish way up at 276 in 24 hrs. in video test fishwheel.

- The chum salmon catch numbers in the testwheel were actually lower today but because the project uses a water height adjustment formula to adjust those numbers the final estimate of migrating chum past Rapids is higher today. Looking at the ChumPilot11 graph and the expected increase on this date it is what you would think should happen. The water is dropping now and current each day is less at the wheel. The fish are moving further out into the river away from the wheel and wheel efficiency decreasing. The formula adjust for this. To see how much more accurate this makes things see the ZRMC2 graph below.

Picture: Been so rainy around here I don't want to put on a picture of anything wet or dreary so here one of the family making one of my favorites this king season - jarred jalapeno flavored fish strips. This is very labor intensive as they are first smoked as strips and then cut up and then canned. They are so good it's possible to eat almost two of these super rich, oily jars yourself in one sitting, but then it's possible you may wish you didn't.



8/10/11

- Fall chum slightly weaker today which is what (ChumPilot11) happened at Pilot Sonar 24 days ago. Less than 2 weeks away however is a very large pulse with a high percent of fall chum in it. It will be interesting just to watch them move through Rapids.

- Commercial is happening in this area now but there is only one buyer and so fishers take turns each opening selling and many are able. Many prefer to cut the chum themselves anyway but weather is not that good at moment.

Picture: Sun came out a little today. Mike and Andy work for Fish and Game and have been coming here for years. Fishermen get to know the people who come out here and it puts a face on the Department. In this case in a good way. They just finished up some sampling on a catch of fall chum and are gathering all the king season's genetic etc. samples to take back with them as this may be their last trip. All that and some coffee and talk about new sampling projects next year.



8/11/11

 As expected chum numbers dropping but should increase in a few days again.
 Water temp is high for date and record high water is dropping now but still above average for date.

- King run into Canada is winding down with low passage numbers at Eagle Sonar now (ChinEag11)

- Commercial continuing here (district 5). There are 6 district in the US portion of the drainage and so far 385,000 chum have been sold riverwide. So far about 750 chum have been sold by all fishers in this district which puts a perspective on things. It's remote and costs are sky high to transport fish and most of our processors have gone out of business.

Picture: 1. Ezra and Alvin passing fall chum to Virgil who ices them down. Many of these fish just came out of the livebox and some were actually alive when they hit the ice. Now that's fresh. Today was my turn to sell fish. 2. One of Virgil's products made from these fish over at Interior Alaska Processors in Fairbanks.



8/12/11

- When the DIDSON sonar was being used by USFWS in the Rapids earlier some very interesting things were seen such as chum salmon seemingly running into rocks so hard they - - - well you take a look for yourself and be the judge. All I know is everyone I know that's seen these video clips didn't have a clue this was going on to this extent. See them on the web at: http://www.zuray.com/html/didson_sonar_videos .html

 Chum and cisco numbers down more.
 Changed run timing on ChumPilot11 graph. Be able to pin timing down when big pulse hits in about 10 days.

Picture: Someone sent in a picture of an area of the Yukon Flats where much of the whitefish spawning takes place in the main channel. Or main channels is more like it. Incredibly braided the whitefish like the small gravel here to spread there eggs on. Then some like the sheefish head back to the mouth to resume eating and wait another 2-3 years for another 2000 mile spawning run and others like the Bering cisco die on the spot like the king and chum salmon.



8/13/11

- Added Chandalar River graph as the fall chum are arriving there now. 1/3 to almost half the upper river fall chum salmon spawn there so it's a place to watch (RapChan11).

Picture: Katlyn will be off to college soon. Here she is putting up some of her supply of chum salmon in what she calls "single girl at college size packages", for the coming winter. Hopefully the Federal Subsistence Board will not push for banning eating Yukon Salmon in urban areas so Kate can continue doing this in the future.

- Also don't forget that the deadline for comments on the Federal Subsistence Board's customary trade recommendations (made by anti customary trade individuals) is due in two days (Aug 15). If passed these proposals will be the end of a lifestyle that has raised families at fishcamps for generations, yet do nothing to stop the practices that ruined our king run. Go to below site for info and place to send comments:

http://alaska.fws.gov/asm/deadline.cfml (look under Deadlines section)



8/14/11

- Chum numbers may stay for another few days then a slow rise to the big pulse around the 24th (ChumPilot11). - Sheefish numbers up to 27 today. They can get close to 100 a day some times.

Picture: About 1800 miles upriver from the mouth is the Whitehorse Dam. Described as more of a huge spillway when compared to the big dams in the country, it provides electricity for the city of Whitehorse in the background. Salmon hatcheries are not allowed in the Yukon due to the negative effect they can have on genetic diversity of fish stocks but a small amount of king salmon are released from a hatchery at Whitehorse to make up for the negative effect of the dam. These fish have their adipose fin clipped after hatching to mark them and fishermen sometimes catch them when they come back to the Yukon from their life in the ocean. The small inserted picture is one of them caught at Rapids (no adipose fin).



8/15/11

- Sheefish up again to 39. Chum salmon up slightly and may keep going up as first big pulse approaches (ChumPilot11).

- Water temp and height coming down from being high most of the season. Looks like water is rising at both Eagle on main stem and at border on Porcupine River so may be in for some more high water soon.

- Commercial in this area is over with for now. Not much over 1000 chum taken in all I think. As I said in an earlier update that compares to just under 400,000 taken in the other 5 districts. In this district we have a good sized subsistence take however due to the continued use of dog teams.

Picture: After days of rain, when we finally do get some sun on these fall mornings, tremendous fog often gets created. Sometimes they'll be spots in the river that seem to make it out of otherwise clear air. On this morning the fog continued to get worse till it finally burnt off in late morning.



8/16/11

- 2011 data in KingData below is complete. A comparison of the last 8 years data can be found in the chart that opens when that tab is clicked. Some things that stand out (comments are appreciated):

1. Visible signs of Ichthyophonus disease was low for 2nd year, with the females being significantly lower than the general population (3.9% in fem. compared to 6.9% in all). This is very much different than what has been for the last 13 monitored years and the 10 unmonitored years before that. I wonder if we're not seeing the first signs of resistance showing up first in the most affected of the king salmon - the females. But that's for better minds than me to study.

2. Average weight this year (13.4 lbs) was high for last 8 years and almost like 2009 (14.4 lbs), the other year pulses were protected. However the % of females (20.9%) and % of king over 25 and 30 lbs was disappointing in view of the greater amount of the run that was shut down this year over 2009. This problem is not over.

Picture: Warm day last spring heading back into Tanana. Like to pick up wood at end of runs when they are tired so they don't go to fast and crash me. Here's a statistic: 47 dog yards were counted in the village of Tanana in 1977. Today there are around 10.



8/17/11

 Fall chum are increasing. Looking at Pilot Sonar numbers 23 days ago we should have a moderate rise for about 4 days then a tsunami of chum will hit (ChumPilot11).
 Added ChumCum graph which has the cumulative passage of chum for all test fishwheel project years past Rapids. This project is funded by the Yukon River Panel each year. As you can see (in this cluttered graph) total counts to date are very low this will change dramatically once this pulse and the next hit Rapids.

Picture: Joggers on the Yukon today. At 60.3 degrees the river is not to cold for a swim after for Joe and Max (Max got thrown in). Ezra with a chum in full spawning colors and probably ready to rock and roll (the fish not Ezra). Pretty quiet at Rapids now and two more families moving out soon. Joe and Ezra, the two remaining techs with the data collection project are taking things down and getting things set for next year - they'll be leaving here soon too. Then I stay till the snow moves down the mountains and count fish.



8/18/11

 Rapids testwheel estimating about a minimum of 3000 chum migrating through today - number is rising each day now.
 RapChan11 shows Chandalar Sonar numbers up a little also.

- Water height still dropping and getting close to average for date. It's been above average since June 26 and ran around record high (for date) for almost a month and a half.

Picture: Ezra and Joe took off camp work today and went up the hill to hunt caribou. These are part of the Ray Mountain herd and kind of isolated to themselves most of the time. It's a healthy herd and has run between 500 and 1500 over the years I hear. This access to meat in summer time was another reason Rapids was a good place to have a fishcamp long time ago. Right above camp straight up for 2 miles puts you where these young men are. They did a good job, packed it all down in one trip and we ate heart and rice tonight. As I cooked I looked at them and said, "instant supper" - they almost beat me up.



8/19/11

- Chum doing some serious increasing (ChumPilot11).

- ChumCum shows total numbers still low but we got 3 good sized pulses to count coming up and that should get cumulative looking much better.

 Water getting almost average for date strange to have this much beach again after our high water summer.

Picture: 501 king through the Rapids testwheel plus these three real late traveling king in the video pictures. The first small king came about two hours before but then the next two got caught in the same basket dip as you can see from the video stamp time. This was the first time in 13 days that more than one king was caught and these today are all the same in size and condition - interesting. Wheel is getting heavy this time of year and growing lots of green algae etc. It never stops running so never gets a chance to dry out. One month left of turning and many chum and whitefish from now.



8/20/11

- Chum continue up here and at Chandalar. Eagle has low chum numbers so far

History Picture: Dried strips and edibles. For a very long time families who lived on the Yukon River have supported living at fishcamps, feeding their dogs and putting up their fish for the winter, by trading and selling some of their catch. To do otherwise could make the practice actually cost families money. Many people who have jobs nowadays can afford this negative economy but this was not the traditional practice of customary trade and barter that helped raise a significant amount of the present adults on the Yukon today. It was one of selling dried smoked products. This is why ANILCA addressed this practice - because it was an ethical, family orientated activity that kept the majority of the resource right on the river. When the fish runs were healthy there was enough for large commercial harvests also. Now the king runs can barely support opening fishing at all for any reason, and some want to blame and restrict customary trade. Under the Ideas tab, below and far right, are the USFWS proposals to restrict customary trade and letters. I will include any letter, for or against, sent in (up to 2 pages). There are 3 now including one of mine.



8/21/11

- Looks like chum counts are tracking Pilot estimate with this slow rise each day (ChumPilot11). If so we should get this dramatic rise in a couple of days also we'll see.

- Good sheefish numbers last two days at 50 per 24 hrs.

 Éagle chum numbers still low - will get a graph going soon as things should pick up there soon.

Picture: One of my favorite pictures (used it back a few years ago). Checking and rebaiting traps as I head out to a trap cabin 40 miles north of Tanana in early winter. A #1 trap and crib fish (rotten) steak on a marten pole set and a hope for a catch when I pass by again. The dogs sit and wait knowing we got a ways to go. I got the snow hook on a tree though as this is open country and they could go for miles without me. One time in the old days I lost a 7 dog team and they came back for me out here, but not this crazy crew. These would leave me and not look back.



8/22/11

- Water is coming up steady and a couple more feet in next few days to go too.

- Chum didn't increase today but would guess it will keep going up ?? (ChumPilot11). Fish look real nice In video but will find out for real as tomorrow 2 wheels will be catching some for people food.

- Had another camp close for season at Rapids and now mine is the only one populated on a daily basis (3 still here). Some camps are still not boarded for winter as they plan on coming back for dog food. This is the most empty live ever seen the Rapids this early.

Picture: This year the new 7 1/2" mesh, net regulation went into effect. No more using nets over 7 1/2". The idea is that using smaller openings in the nets will catch smaller fish and let more of the larger fish make it to spawn. A NOAA grant has provided new netting for fishermen who turn in their old larger mesh. I handled the exchange for Tanana and am bagging up all the nets today in Tanana for shipping out on the barge.



8/23/11

- Over 1000 fall chum through video wheel today. We should see more tomorrow - ??. Most ever was in the record 2005 run when 4328 chum were caught, video recorded and released in one day. It was not fun to count fish that day.

 Cumulative is looking better (ChumCum). As I said before we have a number of good sized pulses coming and more from the present one.

- Water up again - discharge (water in river) formula takes this into account and adjusts fishwheel counts so that high water efficiency does not bias the passage estimate that project puts out (ZRMC2).

Picture: We all went up to Charlie's wheel to watch him turn on at 6 pm today. He got all the fish he needed for days in a half hour. Here he is getting ready to throw the rope on the basket and stop the wheel. This wheel will probably not fish much till early September now. Then it will be run for a couple of days to catch a winters supply of crib fish dog food for his household and be through for the season.



8/24/11

- High chum numbers in testwheel again (1001). Pulse may be peaking which should give us a good run timing to Rapids soon and idea of that to Canada. Looks like chum may be traveling faster than last couple of years. Chum salmon travel speeds have varied by almost a week over the years. Water height and current speed being the main factors but water temp is said to influence it also.

- Eagle chum numbers still low.

- Picture: 1. Old sail boats used in the sockeye fishery in Bristol Bay. Deena Jallen from ADF&G sent these in - she used to live in Tanana and always takes some beautiful pictures when she goes to her Dad's camp down there.

2. With catch rates in the 40 - 50 per hour range there are a number of times multiple fish end up in one basket. Getting them all in the video chute at the same time is a bigger trick. This picture is three of 4 that got caught in a single basket.



8/25/11

- With chum numbers going down more the run timing looks pretty clear on **ChumPilot11** graph. Chum look faster by about 4 days than last year. Last year water height was fairly high with some extreme record highs during the fall run.

- Chandalar timing adjusted also - looks like faster time to there also (RapChan11).

- Sheefish hit high for season so far at 63 through testwheel today.

- DIDSON Sonar videos of chum bumping into rocks as they make their way up river are now on YouTube at:

http://www.youtube.com/watch?v=fajng_Wu7MU Still not found anyone who ever knew this behavior existed to this extent ???.

Picture: Due to a few comments liking last night's Bristol Bay boat picture here's more of same taken by Deena Jallen: Bristol bay Sockeye salmon fillets drip draining in the smokehouse. Look at that rich red color. Almost as good as Yukon River fish III - And Mr. Brown Bear coming by.



8/26/11

- Chandalar River seems to be getting the rising numbers of chum from the 1st pulse (RapChan11). That's if we got the run timing right now. Chum steady at Rapids - 763 in testwheel.

 Water rise is stabilizing now. Still some drift and the danger of a big one taking out the wheels so wish it would just stop with the rains upriver

- Some sunny days and now river temp is up at high level. Always say it's the sun that drives the river temp - maybe not in the long run like on a climate change level but in season it is.

Picture: Kathleen, Faith and I stopped by Don's camp half way to Rapids. The woman are going up to cut and smoke chum salmon for people food for a few days before the quality decreases any more. Don just got back from diving around in the creeks in his new dry suit looking for gold. He's got the gold bug bad. It's getting on towards evening and boat rides as the sun goes down are getting cold.

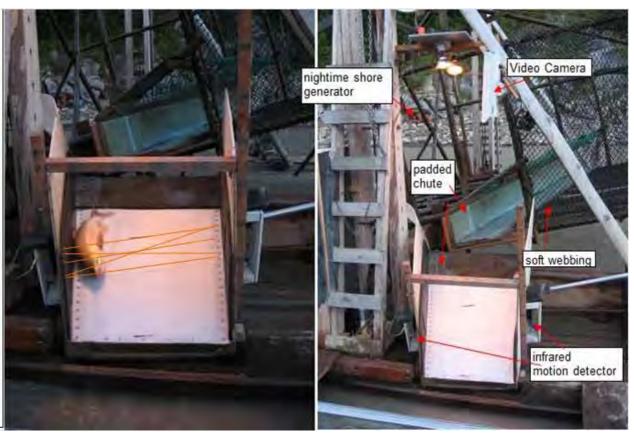


8/27/11

- Chum drop a good bit - may start rising again tomorrow (ChumPilot11).

- Nice weather and some fish being cut here at Rapids. Quality declining but still nice and healthy fish.

Picture: Each year I like to explain how the Rapids fishwheel video project counts fish for persons new to the updates - 1st picture is of a chum just breaking the infrared light beams (gold colored) which then sends a signal by microwave transmitter on the fish wheel to a receiver at camp. "Signal" then goes to a computer there which is receiving a constant video stream from the fishwheel all the time. The computer is also running a software program (Salmonsoft) set up to extract picture frames from the streaming video upon signal and add those fish pictures to a "movie" it is making. At the end of the day the operator is simply viewing this "movie" of one fish after another and doing a keyboard count using another counting program. This system was developed in partnership with Dave Daum, USFWS Fairbanks. Need a video counting system call Dave at 907 456 0290 or email me.



8/28/11

- Starting to pick up second major chum pulse here. Will be less than first and short lived from looking at Pilot Sonar's data. - Chandalar numbers rising - 1st pulse starting there (RapChan11)

- Added RapEag11 which is the chum passage at Eagle Sonar project. Still a bunch of days before 1st main pulse hits there. Run timing there will be probably less than last year like it was to Rapids and the Chandalar. Maybe 14 instead of 16 days

Picture: A common sight each summer is wood rafts going down river. People head upriver with supplies and tools and can spend a week out - working their way down along the banks. Alot of the wood on the raft is under water as they keep piling it on. Tanana has a number of wood fired boilers heating the larger village buildings and some of the wood may be sold there or just go to individual homes. Looks like a nice float now but there's days of backbreaking work here.



8/29/11

- Camps have pretty much closed up or are at least emptied out all through the Rapids now. It's the time of year that people pictures are hard to come by. Should be hunters coming by however and even some serious chum fishing shortly for winter dog food by some Rapids fishermen. - Chum numbers should be rising more today but didn't - see what happens tomorrow (ChumPilot11). Wheel running fine ??.

- Chandalar counts rising and graphing similar to Rapids so far.

Picture: Wonder how many thousands of years it took to smooth those rocks. Always wanted to have the time to spring out at Rapids and watch the ice squeeze through there. People who have, say the ice can make the ground shake for hours as it comes through at the height of the breakup. Some years it goes out easy however as logs left on the beach are still there next year when we come back.



8/30/11

 Looks like second main chum pulse has past (ChumPilot11). Not as high a counts as I expected. Cumulative will not rise much at this rate (ChumCum). Tomorrow a second wheel will turn off and on for a couple of days so I will get a feel for things when I compare catch rates.
 The leaves are falling now at Rapids with a good coating on the ground already.

Picture: Pulled these out of the smokehouse today. Chum filets smoked for 3 days. Skinned and wrapped in small meal sized packages using pallet wrap plastic. Much better than wax paper wrap this fish will not freezer burn all through winter. Skins go to dogs. I do all my moose meat like this also. We found that if meat and fish isn't butchered and packaged up it doesn't last as long and we often don't eat as much as it's too much work to prepare when in a hurry - can't have that.



8/31/11

Chum numbers going down as expected. Be low for 4-5 days now until the 3rd of the 4 main pulses hit.
A second wheel ran in Rapids today and will do so for a few more days. Counts were relatively low also which made me feel okay about testwheel counts.
High day of the season for sheefish at 68 today. Many big ones.

Picture: Charlie's wheel hasn't run in a while but he's starting it up now for his winters dog food. Will take a few days of running wheel off and on as he will barge them to Tanana (40 miles) by boat. It will take a few trips. I use a log raft and haul them all at once. Either way it has been tricky over the years. Charlie has almost sunk his boat before in rough water and big wakes from other boats and last year my raft almost came apart in rough water yet couldn't pull into shore as that would have pounded the raft on the shore worse. Yahoo.



9/1/11

- Sheefish increase to 76 in 24 hrs. Again lots of large ones fat with eggs.

- Dog food fishing still going on here. Charlie almost sunk his boat again (last nights update). Swears he'll never overload again. Large wakes from hunter boats almost swamped him.

Picture: 1. The black thing in the middle is a water turbine (bought at ABS Battery in Fairbanks) that was installed last summer mid season. This year it has provided 100% of the power needs at camp here. The pipe and hoses that run the water into it are large to reduce friction but the 2 nozzles that are aimed at a 7" cupped wheel inside it are about the size of a garden hose.

At this moment that's enough power to run (without any drain on the battery bank) a large desktop computer, 1 laptop, printer, modem, router, satellite dish, large invertor, light bulb, assorted small chargers and a small freezer. Unbelievably care free - needs no gas and oil or starting. Water runs into box below and then into a pipe to beach where it's used to keep the fish in the fish totes cold. 4 bolts and 2 clamps hold it to the box so it easily comes off for winter storage. 2. Female Sheefish heading to spawning grounds in Yukon flats area.



9/2/11

 Quality of chum now is down. It will soon be easy to understand why they call chum, dog salmon some times. Not like the beautiful ones that we had earlier (see %red05).

- Another highest season's day for sheefish at 83. Commonly seen at peak of the shee season with the project's record at 105 in 2009

- Eagle Sonar numbers at Border should start climbing now as first main pulse just hinting at showing up there (**RapEag11**)

Picture: Only two fishermen working in Rapids lately. 1. Loading my boat full of dry chum today for winter traveling food for the dogs. Got maybe 800 this year. I got fish racks in Tanana by my house (one bear that was tearing them down went to the potlatch going on in Tanana now and just heard another is doing same).

2. Charlie's dead box on the wheel filling up. These will go in his whole fish crib in Tanana. and used for in town dog food. The difference between the two dog foods is weight. Both are able to be eaten by dogs without cooking which is essential for traveling dogs - no time to cook - but the soured crib fish are way to heavy to travel with for multiple days.





9/3/11

- Counts at Chandalar and Eagle rising. Couple more days and 3rd main pulse should hit Tanana/ Rapids area - then last one should then hit around Sept 12 (see ChumPilot11 below).

Picture: 3 day Memorial potlatch in Tanana finished up last night. Moose soup, fish, ducks and bear etc. at dinner. Then the give away with first the guns to the hunters and then the dancing to song after song while holding your gifts. Then about 2 am the local rock and roll band started.





9/4/11

- Total or cumulative fall chum counts for season not looking as good as originally expected but do have two more pulses to go which should raise it up some (ChumPilot11). Reports from Galena and wheels in Tanana on north bank (fish that come by here) are of smaller numbers also. Pulse 3 should be showing signs of starting tomorrow.

- Water temp still above record for date and water height just above average.

Picture. Soon video testwheel will be only wheel in Rapids with Charlie pulling his apart this morning. Has all his dog food now and using a chainsaw winch to pull the lead up the hill for winter. Got to get it high enough so ice doesn't get it. The lead is very heavy after being mostly submerged all summer. Without a lead a fishwheel catches only a tiny fraction of what it normally does. Only exception are places with vertical cliffs or rocks with deep water next to them - then the wheel can be put right up against them.



9/5/11

 Chum numbers up here slightly.
 Pat Moore, one of the north side wheel fishermen (catches upper Yukon bound fish) in Tanana, reported catches up to 32 an hour today. Pat also runs the south side test wheel monitoring chum going up the Tanana River. Larger percentages of the late pulses (such as pulse 4) of chum are typically going up the Tanana River instead of here.

- Eagle counts jumped almost 2x to over 3000 a day (RapEag11).

Picture. This wheel is heading to Tanana today to eventually get pulled out by heavy equipment. City of Tanana supports fishermen by doing it for free. Rapids test fishwheel is turning all alone now. It will get pulled out at the camp you see in the background soon after the 4th main pulse passes by here - typically around Sept 18th - 22nd. That gives me a week to get wheel and lead out of the water before things start icing up, which they do at Rapids early.



9/6/11

- Chum numbers up a bit as pulse 3 starts up (ChumPilot11).

- Eagle counts jumped again to 4400 a day (RapEag11).

- Grizzly bear and cub on beach last few nights borrowing my fish. (see pictures)

Picture. Dogs out wolf trapping on the Tozitna River flats. Small amount of fresh snow on trail - cloudy day so relatively warm and not to bad on wind as this country can howl. Heading south to Tanana which is over the hills on horizon - about 30 miles from here. Will often take 2 days to get to Tanana from here when trails are bad. Dogs sleep on snow with maybe spruce boughs under them. The racier ones with the light fur coats are a pain to take care of on the trail - they are cold but know no other life so are happy. They get fed a dry chum salmon and a half gallon of soup each night made of flavored water using commercial feed or more dry fish. When the trail is real rough in the fall I give them a half gallon of soup in the morning also to fill them up and slow them down so they don't crash me taking off.

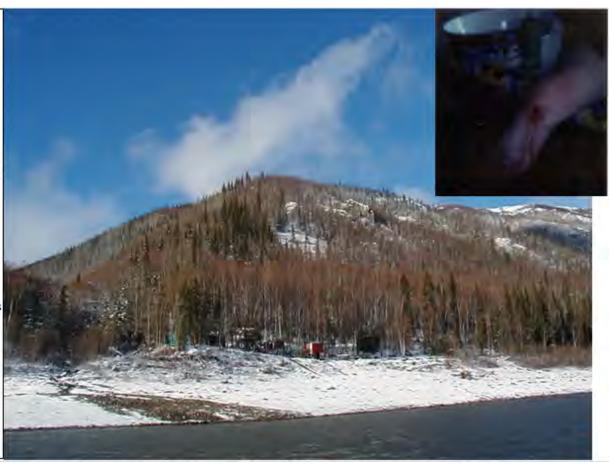


9/7/11

 Last two days sheefish at season's high.
 (96). Broad and humpback whitefish also starting their first serious migrating by here. Their numbers don't get real high but can reach like 50 per day.

- Eagle counts still climbing and Chandalar coming down from 1st pulse. - Grizzly bear back again last night. Came right up into camp and got fish out of dog yard. They have eaten the dogs before and that's what I'm afraid of now. It comes only around the dead of night after I finish this update and shut my lights off. So can't see it good enough to get a shot. Got a light taped on my gun tonight. Oh well fun and games.

Picture: 1. Few years back this is what camp looked like here in late September as I pulled away for the last time that season. Nice and scenic and nice and cold. 2. Sometimes they bite. Found this old picture my neighbors took of the time a mama grizzly bear hauled me out of a tree. I found out bears can climb faster than me. She put her fang in and whooped me - I passed out - woke up she was gone.



9/8/11

- 3rd pulse heading up river - couple of days before 4th and last starts arriving.
This will not be the last of the chum however. Smaller amounts will continue to be caught in wheels in Tanana even into October. Then ice shuts everything down.
- Eagle Sonar seems to be picking up a larger amount of the upriver migrating chum. Each year different. The Sheenjek project above Chandalar looks weaker this year for instance. Rapids testwheel (on main Yukon) should be counting all fish however and seems lower than should be for some reason.

- Bear still coming - it got only 1 fish last night and ran off. Need some moon light.

Picture: Rapids camp looks pretty much like any other in the area on the outside. Smokehouse, plywood shacks and dog yard etc. I always get a kick out of when people who never came here before walk into this place. Especially elders who grew up on river and all. I usually say something like "you mean you don't have a computer and wireless at your camp" - (tonight at 1 am).



9/9/11

 Chum passage up today and not sure if it's 4th pulse coming or a high day at the end of the 3rd. Put some arrows on the graph to show one possibility that takes the dropping water and faster fish travel into account (ChumPilot11). Well know in a couple of days.

- Water height close to average for date and water temp still a record for date.

Picture: 1. Today at Rapids. The trees bare of leaves are moving down the hill almost to the river. Then the snow will arrive on the high hills and moves down. Rapids has a high country type climate and can be weeks ahead of other places - must be from the close high hills and being in a canyon.

2. Sat up at wheel for a couple of hours and kept just the sheefish to give the dogs a special supper. They have tremendous fat globs built up in their gut for energy as they must not only make it to the Yukon Flats spawning grounds but they have to make it back to the mouth of the Yukon before they resume eating - a 2000 mile journey.



9/10/11

- Chum cumulative or season's total count to date continues very low relative to upriver escapement projects all added together. Some of the problem has been with us since 2005 when more efficient counting methods were installed in some of those projects and there's now no way to tell how much more of a % of chum they are counting. Rapids has not changed and we've been relatively low most years since then. This year however it seems more extreme than usual. Makes for estimating true run strength hard. This is suppose to be a good year and the other wheel that ran here earlier didn't show that either. ??? - Rained all day - leaves are almost gone and haven't seen a person since I went to Tanana on Tuesday. One thing it's nice and peaceful in Rapids. Doesn't seem like many hunters either which given the price of gas, etc I can understand.

Picture: Seems like just yesterday the wheels were getting pushed into Rapids as in this spring picture. Summer was just getting going.



9/11/11

 Wonder if the last pulse is going by now (see ChumPilot11) and just came early with the lower current we have had. Warm water is suppose to increase travel speed and it certainly has been that. I may be fishing on some poor days coming up as I don't want to start putting up my crib fish for a few more days. Heard north wheels in Tanana are picking up however so maybe still coming.

Picture: Video testwheel counting about 500 fish a day. 15 pictures get taken of each fish so about 7,500 frames in the movie the video system made today. Much easier on the fish than holding them in a livebox banging into each other for hours and then netting them for a count before release. That was the old way it was done for years.

So some low energy LED lights go on at dusk automatically and then I start a generator on shore (in the green box) at dark like tonight here. One light system fails the other can carry through the night. Moving fish require a high camera speed so that requires more light than normally you would think. Right now there's two LED flood lights and a 90 watt halogen pointing at the video chute. The post on the back of the wheel has the microwave transmitter box on it sending constant video back to camp and the data signals produced by the infrared beams getting broken every time a fish goes down the chute.



9/12/11

- Mystery solved - 4th pulse is now here as chum counts up pretty good (ChumPilot11). - I'll start fishing for winters dog food in a couple of days. I can't haul them to Tanana in the raft till the video fishwheel project ends so don't want them sitting around stored too long in the creek water. Doesn't matter for the fish as they will only go to Tanana and be put in a pile for a month to sour. It's a matter of moving softening fish into my truck and then into the crib - the fresher the nicer. I always thought of contacting that reality TV guy on "Dirty Jobs" to check out this whole dog food crib fish experience some time. I bet he couldn't take it in November when the crib gets taken apart. - Still quiet here - no one stopped at camp for almost a week now. Not many hunters traveling also.

Picture: Nice day today to dig potatoes before the ground frosts. Just a few plants for fun, It actually might be the best they ever did which is unusual as everything else did poor from the lack of sun this year. Rapids is not the best place for gardens. Our tomatoes were not something I'd take a picture of - 14 plants worth fit in a medium sized bowl.



9/13/11

 Testwheel had 733 chum through it today.
 That makes for the project's highest estimated chum passage day of season. Probably 10 -15,000 chum went through Rapids today really.

- Both Chandalar and Eagle projects picking up high numbers of chum still.

- Imagine Tanana fishermen going at it pretty hard getting their dog food now - another day for me and I'll start.

 Water temp still at record but dropping each day steady now - even a sunny day doesn't stall it's drop anymore. Water height just above normal for date.

- After a summer of very consistent water clarity readings (10-16cm secchi disk) clarity has doubled in last 2 weeks.

Picture: Still nobody by camp in a week now so I'll put a picture on of the only guy here. Doing my regular king season job this July head and gut and rough filet. Then up the bank and the boss takes over for making into strips, etc.. Seems like most of this king season however we waited for it to open. Can't complain to much - it's what has to be now cause of the bad king runs.



9/14/11

 Fourth pulse cresting. Seem to be getting a good amount of chum from this one.

- Also there are reports of some smaller amounts of chum still coming in mouth so that is good news for late fishing dog mushers in this area. Often fishing will run into October if weather permit. Catches then are high in whitefish species and Coho.

 I'll close door on livebox and start fishing for winters crib fish dog food tomorrow. Shouldn't take to long although we do have a dead period coming right up for a week (see ChumPilot11)

Picture: Sky, Jeff, and Mike from Fish and Game came by today traveling from the Yukon River Bridge. They'll continue to Tanana to check out the 5A testwheel project there. This is Jeff's first trip out this way since appointed as the State's fall chum manager of the Yukon. We ate fish strips and had some coffee. Beautiful day again. They'll be back tomorrow.



9/15/11

- Highest chum day again with 754 chum on video and a estimated passage of probably well over 10,000 through Rapids. Should drop tomorrow I'd think.

- Seeing many hunters as they head back up to Yukon Bridge. A fair number of boats going downriver also to catch the last 5 days of hunting. Most outside hunter activity by far in last few days. Not much local Tanana hunter traffic here as the good areas are not up this way. This is caribou and grizzly bear country in these hills not moose.

Picture: 1. Starting to collect the first of the crib fish for the dogs. Usually I run someone else's wheel as it's a little easier than using the livebox on my testwheel. Doesn't matter and there's no other wheels in Rapids this year, this late anyway. With the livebox you got a couple of hundred fish bouncing all around at once and it's a rain gear operation.

1. Mike, Sky and Jeff from ADF&G heading back to Yukon Bridge and Fairbanks. That's a long day of traveling.



9/16/11

- Another big chum day but counts were dropping as the day wore on. Graph shows it cresting (ChumPilot11) and with a week of almost dead days at Pilot Sonar 21 days ago we'll probably see it get pretty low numbers here also. Good news is there are a few smaller pulses coming up over the next couple of weeks for late fishing dog mushers. Quality of the fish is poor as always is at end of run.

Picture: Called "Rock Island" for some reason, this spot is the center of Rapids (flow is right to left). Hardly white water but there are some pretty heavy currents in places that will make a floating tree disappear for a short period (or a person). This bedrock is why the dam was proposed for here long ago. This summer it was underwater most of the time. This is the narrowest part of the river with a channel on each side of the island. Water is not deep (26' now) - it just speeds up a little. Fish have no trouble going by it's just they move closer to the banks here as they do in many of the faster current places up and down the Yukon. There's a 100' deep swirl hole on the other side of the island that is kind of a mystery though. Said to be full of gold at the bottom.





9/17/11

- Chum numbers drop like a rock as expected, to 313 today. Should get a small pulse starting about the 23rd but I'll be starting to dismantle the wheel by then. Normally takes about 10 days to get the wheel and lead winched out of the water and get about 4 boat loads of equipment and dogs to Tanana. And almost forgot my 1200 crib fish on the raft. - Water temp is still at record warm for date (9 years monitored), and getting clearer every day. Water height just above normal

Picture: A camp downriver from here. One of the many kids that were raised here is now older and working on the North Slope. He says he misses the place he spent every summer at and asked if I'd take a picture for him. He get this update. Sorry it's not earlier when it was full of people and fish racks.

9/18/11

- Chum counts steady at 365 today.

- Nice to see cumulative total rising a bit (ChumCum). As mentioned before chum part of project seems to be assessing run strength low relative to Chandalar and Eagle projects this year. This happened back in 2003 also (ZRMC2), and we have never been able to see a reason. This year may give some clues. Project is picking up this later part of run better however.

- Bottom line is fall chum run this year was good and possibly 1,000,000 came in mouth. Commercial openings, winter dog food, small amount of customary trade and a smaller amount of people food made up the bulk of the harvest I'd guess.

Picture: Livebox today - A fine way to catch fish for subsistence if none are released, the livebox has been the center of numerous studies showing significant impact to chum salmon migrating long distances, when held for even small amounts of time. This was the standard way to count salmon in the Yukon drainage for 30 years prior to these studies. Studies prompted the development and implementation of the first video fishwheel project here at Rapids - a cooperative project between the USFWS Fairbanks and myself. Studies and info at:

http://rapidsresearch.com/html/capture_mortality__.html and

http://rapidsresearch.com/html/fish_friendly.html



9/19/11

- Caught first Coho salmon of season (picture). Only the second seen by anyone at Rapids this fall. That's pretty amazing as hundreds are going up Tanana River 40 miles downriver from here. Usually see a couple a day this time of year. A small real run does head by here in late October just before ice forms in river.

- And chum dropping more.
- Water temp at record for date still.

Picture: 1. A friend of mine sent this in of his daughter Flora this summer in Fairbanks with a female lynx. They don't call them wildcats for nothing but somehow she's got the right touch. This is one side of them I never see as a trapper - pretty cool. 2. All the main fall fish species: Female and male chum salmon, broad whitefish, female sheefish, small humpback whitefish and small male coho salmon



9/20/11

 Chum counts may not drop anymore as we approach a small pulse coming up soon. Rapids project continues to pick up good numbers at this end of season relative to rest. It usually is opposite as later pulses have more Tanana River chum in them.

 Chandalar and Eagle tracking Rapids just way higher.

Picture: 1. 1200 chum and whitefish all set to head to Tanana on a calm day (not like last year). Haul them up the bank by truck and then put them in a crude fenced in area to sour for a month. At that point they are spread out and frozen. They can be feed without cooking - whole or chopped in two depending on needs of dogs that day. As long as dogs have a good spuce bough or hay bed under them they can eat it even at 40 below and maintain their weight.

2. At beginning of season I found this wrecked fishwheel floating downriver when the drift was running. This is what the crib is made of minus the baskets which I tossed. It'll all be winter firewood when the crib is emptied.



9/21/11

- Chum numbers should hold like this (290 today) through the small pulse coming up (ChumPilot11). After that there are very small pulses that will keep some chum coming in much decreased amounts for late fishermen.

- Fishwheel project will shut down tomorrow afternoon and then begins the pulling of the wheel/lead and trips to town with dogs and gear. Since 1996 the project has averaged shutting down on half way through the 20th day. Weather been great so far. Hate those years crawling on hands and knees on the icy logs to dismantle wheel.

- Updates will continue with gaps till into October. Still some good pictures to come - not of people though - nobody by camp since 16th.

Picture: Just upstream of the narrows of Rapids and the rock island in the middle. Nice and calm today. While todays powered riverboats have no trouble driving all over Rapids this spot was the calm before the storm for many in the old days of using rafts and big scows to move possessions downriver past here. From what I understand the name Rampart Rapids came from those who didn't make it through just below, to good. Hitting the island or the rock cliffs on each side could tear rafts up fast.



9/22/11

- Whitefish numbers been pretty low except we had an okay sheefish run earlier. Sometimes the broad and humpback whitefish will run pretty good in the late fishing wheels in Tanana around beginning of October. Wheels there can often run right up to the beginning of small pans of ice forming in river as they just get floated right down to the pull out area and yanked out by heavy equipment. Sometimes someone pushes it a little to much and they lose a wheel to the ice.

Picture: Tyson and Joe stopped by camp today and helped me take the livebox off the fishwheel. It's a real pain by myself cause it's so water soaked and slimy and has to be raised high out of the water to get it into the boat. Nice to have the help. In the next few days I'll be winching the wheel up onto the land at a camp directly across the river from this one.



10/2/11

- Just made my last trip from Rapids Saturday. Seemed like it took a while to break camp but dogs, equipment and all in Tanana now.

 Most mainstem fall chum projects have shut down with most exceeding their upper end escapment goals. Estimate is about 1 million fall chum to have entered Yukon. Good run by most accounts especially Eagle and Chandalar Sonar.
 Fishing in Tanana is almost over with

 Fishing in Tanana is almost over with only a few more days of running for the wheels here. Good amounts of chum have removed the need to fish any later although a lack of broad and humpback whitefish has been noted by all. They often run later however.

Picture: 1. Wheel came out okay except for when the uprights got spread apart and the baskets dropped to the ground. Just cresting bank here in picture. 2. Waited for a calm day to bring crib fish raft to Tanana so that went good. 1200 fish all put away for winter. 3. Snowed for 2 days around when lead got chainsaw winched up bank but all melted now.



11/16/11

- As promised a month ago (been busy) here's the final update with all the seasons graphs put back in and finalized King Data. This final update is my main source of quick access project data during the winter.

- Update photo album is also finished and available on the home page of RapidsResearch.com website.

 Some time in January I will send a report we were able to get published on years of our Ichthyophonus disease data. Thanks again for being apart of Rapids Updates and see you next spring.

Picture: 1 Fall wood cutting before ice comes (old fishwheel). 2. Getting the dogs tough for winter by pulling a Volkswagen frame around.



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