

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

Rapids Daily Email Updates 2010

A Daily Log of the Projects and Fishing activity at Mile 731, Yukon River

In season pictures and comments on activity in the Tanana, Rapids and Rampart area, obtained through word of mouth and observation, are sent out daily with data from many Yukon River Projects. Combined these give an idea of the season through the eyes of a local fisherman. Often with some sarcasm, always with an agenda, sometimes trying to be professional - - - Inside are the 2010 season's daily updates.



6/12/10

- First three days of king counted at Lower Set net project with the normal low numbers you'd expect at the beginning (**ChinLY10**).
- Only whitefish nets in around here but video wheel should spin in a few days.
- Seems like a fair amount of fishing enthusiasm this year, maybe due to less reports of restrictions etc. A number of camps are being set up now.

Picture: 1. Unusually low water right after breakup - only a little higher right now. 2. New fishwheel lead being made for video wheel today.

3. Erharts camp at beginning of Rapids getting set up and wheel and smokehouse poles cut (today).



6/15/10

- Set nets at mouth had a catch yesterday (CPUE) of .74 (see **ChinLY10**). Last year the best day was a .72 (**ChinLY09**). Other years we've seen things like in 2008 a 2.14. Oh well doesn't mean much, just interesting - if you like numbers.

- Video wheel turned yesterday for short time and plan on starting tomorrow if I can get things done - been busy fixing and making new lead on this year when the fish are late.

- More fishers showing up to camps and fishwheels getting pushed up from Tanana - lots of activity now.

Picture: 1. Spring carnival dog races 2010. These ladies are headed across the river and back in the traditional snowshoe race. 2. Three teams coming across finish line in the main event, the Open Championship Dog Race.



6/16/10

- Rapids fishwheel project started mid day. Seems like a small number of cisco whitefish migrating.

- Numbers of king still entering mouth. Long long way from saying anything about run.

(ChinLY10)

- Got water temp and height graphs going. Check out **WaterHeight10** - been running at record low (1977- 2009 data) for about 2 weeks now. Temperature about normal.

Picture: Boulding Family on their way to get their wheel yesterday and today pushing it the final miles through Rapids. They store it 40 miles downriver in Tanana.



6/17/10

- First full day and little over 1 cisco an hour which is a slow but normal amount for this time of year.

- This year Rapids Research will be doing genetic king clips for ADF&G (Borba), cisco clips and data for USFWS (Brown), ICH cultures and data (Kocan and others), king size etc. data with an emphasis on net data (for publication), and running testwheel and of course taking pictures.

Picture: 1. Three of the 5 wheels that I figure will turn during king season in this area (Tanana to Bridge). This was yesterday, just before the video wheel on right started for season. None of the king nets or wheels are running yet as they're waiting for around time of projected king arrival or I get one in testwheel. 2. one of 18 cisco whitefish today. 3. Got first broad whitefish also. I keep some of the whitefish to feed dogs and local techs started doing data collection on the cisco today.



6/18/10

- Water up a bit and now right at record low (since 1977) (**WaterHeight10**).
- Set net project (**ChinLY10**) at river mouth is 9 days into King salmon and the cumulative CPUE is 3.52 (it's just a number). Cumulative CPUE looking back to 1980 show years after 9 days of king as high as 15.02 and as low as 1.10. Some high years ended poor and some low ended high. So to try and answer the most popular question of the day - there's no telling what this run will be like by what has come in so far.
- Cisco whitefish run may be increasing, caught 48 in 24hrs today.
- Yukon 800 boat race starts tomorrow.

Picture: 1. The Denakkanaaga Elder/ Youth Conference is the annual meeting of Elder and Youth Delegates from throughout the TCC region. It was just held in Tanana.



6/19/10

- Pilot Sonar at mouth had significant summer chum passage today of 35,000 (**ChumPilot10**). Set nets continue okay king numbers also (**ChinLY10**).

- At Rapids seeing some broad whitefish and sheefish and continued climb in cisco numbers. But no king - they'll be here in 5 days or less. And I'll eat my Brussels sprouts if I'm wrong.

Picture: Yukon 800 - from Fairbanks to Galena and back, went through Tanana today. They went 400 miles today in little over 6 hours and will overnight in Galena. I go to Tanana tomorrow again as #24 is my son Joe and two past Rapids data techs Ralph and Bob. 9 teams started, 6 made it so far and #24 is in position 4. Go boys. You can see how close they get to the bank as they do the traditional "fly by" at 70 miles an hour. #7, Harold Attla is in 1st position. Most of the times are within 45 minutes of each other.



Joey Zuray



Bill Page



Harold Attla



Tom Huntington



6/20/10

- Water level still right at record low and with water going down again there is little relief in sight (**WaterHeight10**).

- Most net spots here do better in low water but exceptions exist (some net eddies just disappear). Wheel spots generally do poorer in low water because of the lack of current to drive the fish towards shore (and wheels) but one spot here does better so will be watching that one closely as the video project numbers come in.

Picture: Well Harold Attla finishing #1 deserves the picture space to himself today. 800 miles in 12 1/2 hours in "My Pleasure". 6 of the 9 crews had major breakdowns (normal each year) and didn't finish. Our boys were doing good out of Galena when they blew a piston today coming back below Ruby. Able to put another in and get running it was not good enough to continue to Fairbanks. They said they had a great race. That's the spirit.



6/21/10

- King salmon should be here in 2 - 3 days. Teleconference tomorrow so we'll see what villages downstream have gotten them. Although if it's anything like here very few have any king gear in. Some king fishing will start in a couple of days sounds like though.

- River clear of drift now as water drops.

Picture: 1. Small moose that swam the river today. Those ears say I don't like you. Just starting to touch bottom and then it was into the brush and I couldn't get another picture. 2. Until I start catching king I just put this net on top of the livebox the collect whitefish for daily dog food. Here you see mostly cisco and a couple of broads. The livebox has the entire back end open so project fish get immediately released unless subsistence is open and I want to keep them.



6/22/10

- YRDFA teleconference today reported king caught 230 miles below Tanana in Koyukuk. Not much king gear in the river in some places however. Many times we'll get a king at the same time Galena sees it's first for instance.

- Cisco whitefish really increased today to almost 100 in 24 hrs. They make super dog food as they are full of oil. When you cook a dog pot of them and let it cool the top is inches thick with this yellow fat. Good for dogs after a spring of eating just last years dry fish each night.

Picture: Dog team and sled traveling north of Tanana in high country this spring. There's a driver also but I'm taking the pictures.



6/23/10

- Xtra Xtra read all about it - - -

First king caught in video wheel tonight at 8:18 pm. Well it starts now and everyone will have gear in tomorrow if they haven't already.

- Cisco numbers staying good.
- Water temp at average for date and water level still right at record low.

Picture: 1. 1st king going down video chute. New video chute this year as last years larger than average size kings destroyed the old relatively new chute. Video pictures are low resolution, so when blown up like this they aren't real clear.
2. Video wheel



6/24/10

- Well you can't always believe what you read on Zuray's update. Turns out someone in Rapids caught the first king on late Tuesday in a whitefish net. The second was in a wheel just above Rapids Canyon on Wednesday and then yesterday's video wheel one was the third. Since then nets and wheels are getting a couple of king a day which is what the video wheel did today.

- Cisco shot up to 164 in 24 hrs. which is a good number at any time of the season

Picture: Tug pushing two barges through Rapids. Normally the tug will park just below the swiftest part and disconnect one of the barges and push them through one at a time. This year because of the record low water this tug pushed both through and did it with ease. This is why I figured the king would be here about two days earlier than expected. Less current to swim through for the 700 miles from mouth to Rapids.



6/25/10

- Lots of fishermen on the river now. Enough gear in with just a couple of king at most per day. Video wheel got 0 today. Nets and wheels the same. Just a matter of time and they'll be lots more - hopefully.

- 5 wheels and a dozen nets in immediate area of Rapids

Picture: USFWS biologist, Dave Daum, and volunteer, Lisa, make electrical adjustments to optimize output from the new water turbine installed at Rapids for 100% green power generation (no more gasoline generators!). Today we froze cisco samples to send to Fairbanks in our freezer run with the turbine. All from about the amount of water you would use in a couple of garden hoses.

Dave is not only here for the annual video assessments but is setting up for juvenile Chinook investigations starting in August between Rampart and Tanana.



6/26/10

- Fishers still only getting a couple of king a day in nets and wheels. Seems like size is continuing to be generally small. Usually this part of run we often don't see jacks (small king less than 70 cm). Still to early to say anything about run however - don't mean I can't try.

- Techs are starting to take data on the few king there are. I figure these first few are as important as 20 - 30 when they're running heavy. Have some 2010 data soon to replace the 2009 stuff in tab **KingData09**.

Picture: I can go months without seeing a moose on the river anywhere most years, but in the last week I have seen 3 moose swimming the Yukon while traveling. This picture is a unique one because of the two calves. Taken just below Rapids canyon.



6/27/10

- Chinook showing increase in video wheel and all gear. If mouth set nets (**ChinLY10**) and Pilot Sonar (**ChinPilot10**) graph timing is accurate we are getting the first tiny bump that came through those projects right now. Size is looking better with some 20 - 25 lb. In the next 2 - 3 days should be seeing some bigger numbers and camps can get cutting some dry fish, etc.

- Getting a fair number of the larger varieties of whitefish such as broads, humpback and sheefish. Often this part of the run can have few of these.

- Water still low for this date - would be average for September 1 about.

Picture: 20 miles below Rapids they were seeing the king increase 1/2 a day before Rapids. Here's some happy women getting ready to cut king fresh out of their nets this evening. This is one of a number of camps that didn't open last year because of the poor run . People are really hoping this year will be okay.



6/28/10

- Nice king and fishers starting to do real fishing and cutting. More activity than last year here. Should see more fish each day as we approach July 1st - then fishing should level off and remain good and kinda steady for 2 weeks. At least that's what the best indicators say (**ChinLY10, ChinPilot10**). We'll see - no bets on this one though.

- I made a prediction on when 1st king are coming a while back and said I'd eat Brussels sprouts if I was wrong. Today my friend Russ showed up here with a big bag of them (even though I was right). I ate them all (cause I like them).

Picture: Nice mix of fish. King to cut, larger whitefish for my buddy Anna, cisco for dogs and surprisingly 4 more immature sheefish with food in belly and not in spawning mode. Usually only see these a few times a year but it's been daily lately. Probably a good sign for future maybe. Randy Brown - whitefish expert at USFWS - will be interested in this one.



6/29/10

- **KingData10** is started with first 58 kings sampled. Size is normal for date (smaller than 2009). Size should drop as first pulse hits - fishers indicate that that is happening tonight.

- Average weight in for first week of king:
2008 - 14 lbs
2009 - 18.4 lbs
2010 - 13.8 lbs

Picture: 1. These are the 4 main whitefish species - two on top are sheefish with the smaller being an immature that is not going to spawn this year. Next is a broad, then humpback and finally a bering cisco. All these except for the cisco will turn around after spawning and go back to the river mouth area and live in the brackish water till they go into another spawning mode in two or three years. The cisco is a one time spawner like pacific salmon and will die after laying it's eggs. 2. Cold box with water piped in from a mountain creek. After catching, fish go into this to keep till cutting or shipping to town freezers. They use to be used to hold fish till sold in the old days when we had commercials.



6/30/10

- So the question now, as the numbers of king per day increase, is what will be the % of Pilot Sonar's estimate that we will catch up here. In 2008 it was a low % (**ChinLY08**). In 2009 it was a high % (**ChinLY09**). This is the big unknown at this point but will show itself soon.

- Added **AllChinCum** graph which compares the total seasons king catch, day to day, each year. Run was late (others were as late) and slow starting, so it doesn't look good but it's to early and it all could change in a heartbeat if the % of Pilot we get is good.

Picture: 1. Four experts trying to sink a boat and/or lose their fingers. This is the lead fence of the fishwheel that blocks an area and directs the fish towards the turning baskets. Some use multiple small ones but here at Rapids everyone uses large, one piece leads about 25' long and as deep as the river at their site. There is enormous pressure on them when they get set and adjusting them can be fun, or not, like here when they break loose on you. 2. Lead attached to wheel.



7/1/10

- All fishers talked to reported reduced catches today and smaller fish (**ChinLY10**). Unusual as the first pulse should be right on us. Give it a day or so but wondering if were going to have another disappearing pulse 1 as in 2008 (**ChinLY08**).

- With the water relatively low, travel shouldn't be delayed and there's to much different gear in water, with some being best in low water, to say they are sneaking past us. There was a 9.9 lb ave weight today and only 3 % were females which are signs of the present weak numbers. Keep fingers crossed.

- New data in **KingData10**

- Water raising lately.

Picture: 1. Low on pictures so - me with net king. Putting in a water line - spots are black flies - hard to walk through them at times. (2010)



7/2/10

- Nets and wheels catching slow this evening so far but video wheel did have it's best king day so far (see **ChinPilot10**).

- All over river here it's prime time fishing now and you can tell by all the active camps and boats running up and down and gear in the water. While amount of gear and camps are a far cry from 20 - 30 years ago more fishers are out than the last two years. King numbers never materialized in 2008 and in 2009 restrictions were so heavy to protect the run many fishers never got out those years. This year because of the reports of good numbers at the lower river projects fishers are hoping for the best.

Picture: Fishing opened at 6 pm tonight and by 10 pm people are checking out each others gear by gathering at a fishwheel. This particular wheel has a history of very good catches at this water level. My test wheel on the other hand does best in high water and the fast current that exists then. I watch how much better or worse all these sites - nets also - do than me in different water levels so I have an idea of how accurate my catches are at assessing the run strength. Being a concentrated fishing area I'm lucky to be able to do that.



7/3/10

- Some fishers did better last night but slower today. Many of the good net eddies doing poorly. Some of the known good low water sites are not doing that well considering were suppose to be at the peak of the first pulse. One way to gauge things is all the gear of every fisher is still running 24 hours a day. Usually fishers only run for a matter of hours on good years at the height of the pulses and the wheels would rarely run at night unless it was commercial.

- Most of the fishers around here are all summer fishers and will get there fish even if a very poor run. Those unable to put that much time in may not.

Picture: Gill net set at the rock island in the middle of river at Rapids. This is normally a good spot but doing poorly this season so far. Nice picture though.



7/4/10

- Some of the better king sites getting some numbers - most gear is still slow for this being main part of run and all gear still running 24 hrs a day which is not a sign of a decent run. Video wheel is not one of the better sites but I consider it more consistent than most.

- Water temp is a little above average (**WaterTemp10**) and water height is almost normal for date as it's been creeping up over the last 10 days (**WaterHeight10**). Suppose to go higher.

- Whitefish of all types slowed down but will increase again in fall lots.

- Video wheel got first 3 chum but some fishers have gotten one as much as 4 days ago I heard.

Picture: Helen, Faith and Kathleen Peters. This is what goes on at this camp each year on Fourth of July weekend. Wouldn't have it any other way. Just as long as there's enough fish to cut all will be okay. If not I'll get fired. Small picture is what they can cut in half a day. Cookout tonight at 7 pm and should have a half dozen camps come by.



7/5/10

- Pilot Sonar shows 4 distinct pulses of king so far (**ChinPilot10**) and we seem to be getting the 2nd pulse today. If it's like many years we will get better catches or a higher % of Pilots estimate as the run gets away from the early part that gets fished on the most.

- Summer chum are slowly increasing - fishers will not be happy as they are so fatigued and lacking in oil that they even make poor dog food. To many and fishers have had to stop running gear as they can't do anything with them.

Picture: Steve and the monster broad whitefish he caught just before closure Sunday. Weighs 12.4 lbs. and is 75.5 cm or about 30 inches. Biggest one anyone here has ever seen, but wondering what others have seen. It had some food in stomach and was not spawning. A big "tumor" was in there also. Got the Otolith (ear bone) and some scales and will send to world renowned whitefish expert, Randy Brown at USFWS in Fairbanks. With the ear bone he can tell whether it has spent it's life in fresh or salt water and if and when it has gone back and forth between the two.



7/6/10

- First king hitting Canada so added Eagle Sonar 2010 graph (**ChinEag10**) and also 2009 (**ChinEag09**) and all years (**ChinEagAll**) for comparisons.
- Drift getting bad - some gear shut down on drift side of river (north).
- Pulse 2 hitting pretty good - enough most of the wheels and some nets ran for a few hours tonight and shut down as they had to many fish. Even sites that do poorly in higher water are doing way better than the first pulse.
- Added tons of new data to **KingData10**.

Picture: 1. Southside Rapids test wheel is somewhat out of main drift, which runs on north bank, but that doesn't stop some logs from sneaking in. The wrong wind can also move logs to either side easily so when lots of drift whole river can shut down. Here's one that stopped test wheel by going through basket and jamming under wheel raft. Very lucky this one didn't bust any poles. It's one of the worst sounds you can hear when pole after pole snaps like matchsticks. 2. Another shot of the huge broad whitefish next to a normal one.



7/7/10

- King pulse 2 fading away with pulse 3 coming in 1 - 2 days about (**ChinPilot10**).
- Chum counts up to 70 / day and cisco bounced up also to almost 100 / day.
- Water height steady, average for date and less drift but enough to shut down some nets still.

Picture: 1. Nataawnee, Ezra (in college), Gladys, and Cy (senior) doing data on king salmon today. We do size, sex, genetic fin clip, visible ICH disease, and start cultures for all positive ICH for lab workup each week. 2. Started the chum salmon flesh study today. Techs separate flesh color into categories to consistently determine a date each year when the fall chum, with their high percent of red flesh, arrive. This year in cooperation with ADF&G we are taking individual fin clips and data so we can see how this traditional knowledge based method compares to a genetic science based method. Techs also do cisco whitefish fin clips for USFWS. All done on subsistence caught fish by driving around all day to camps. Part of the job is to help the fishermen enough to make up for the trouble of their data collection.



7/8/10

- Summer chums really starting to be a problem for fishers as numbers are increasing now. They are relatively close to their spawning grounds here and are not the same good quality they were at the lower river, where they are sold commercially. King salmon, on the other hand, are mostly going into Canada and put on way more fat in their flesh for the long journey so when they go by here they are still rich and good quality. Some fish wheel operators are trying to line up people to stay on the wheels and throw chum back.

- King numbers drop for all fishers as 2nd pulse is all past now. While people may eventually get needs met the Video project numbers (**AllChinCum**) and Data Collection project info on sex and size (**KingData10**) don't look well for meeting needed quality or escapment numbers into Canada this year.

Picture: King salmon strips starting to drip oil from drying. With the sunny days we've had lately everyone's fish is drying well. Smoke is heavy as these are going to be canned.



7/9/10

- Third pulse should be building - most gear reported slower catches than 2nd pulse but tomorrow should be better (**ChinPilot10**). It's pretty obvious now that the Video project is tracking Pilot Sonar better than the Lower Yukon Set Net project (**ChinLY10**).

- Still getting a low % of Pilots estimate. Test wheel could be counting low, Pilot counting high, a very poor run and so subsistence catches have more effect on escapement into upper river or a combination of these. Eagle sonar at Border will **start** to tell the story in about a week (**ChinEag10**).

- Drift still bad but thins each evening. Large trees that would take a wheel or net downriver are common every so often. Water height kinda steady and should be cresting soon. Level at above average so video wheel should be catching good as it's more efficient at higher levels (**WaterHeight10**).

Picture: King salmon salad for lunch and garden lettuce. Now how much would that cost in a restaurant - and this food was swimming only hours ago. My family can't do anything without me taking a picture of it.



7/10/10

- Chum down some in all nets and wheels here. King catches mostly reported not as much as pulse 2 - Video wheel also - at least so far.
- Water temp about normal and water height well above normal now for date. Video wheel should be very efficient right now.

Picture: 1. Sky and Andy with ADF&G and Linda and Ezra from Rapids Research working up some subsistence caught king today.

2. Visible Ichthyophonus disease in king salmon has been running low so far but will increase as it always does as season moves on. What **seems** unusual this year is a fair amount is being found in the smaller king. This ICH heart was found today by these techs in a 3.2 lb king. Normally the rate for visible ICH disease will be many times higher in the larger king while published studies show no significant difference in infection rates of the different size classes. Something (more stress in larger fish???) makes the disease develop more in the larger size classes.

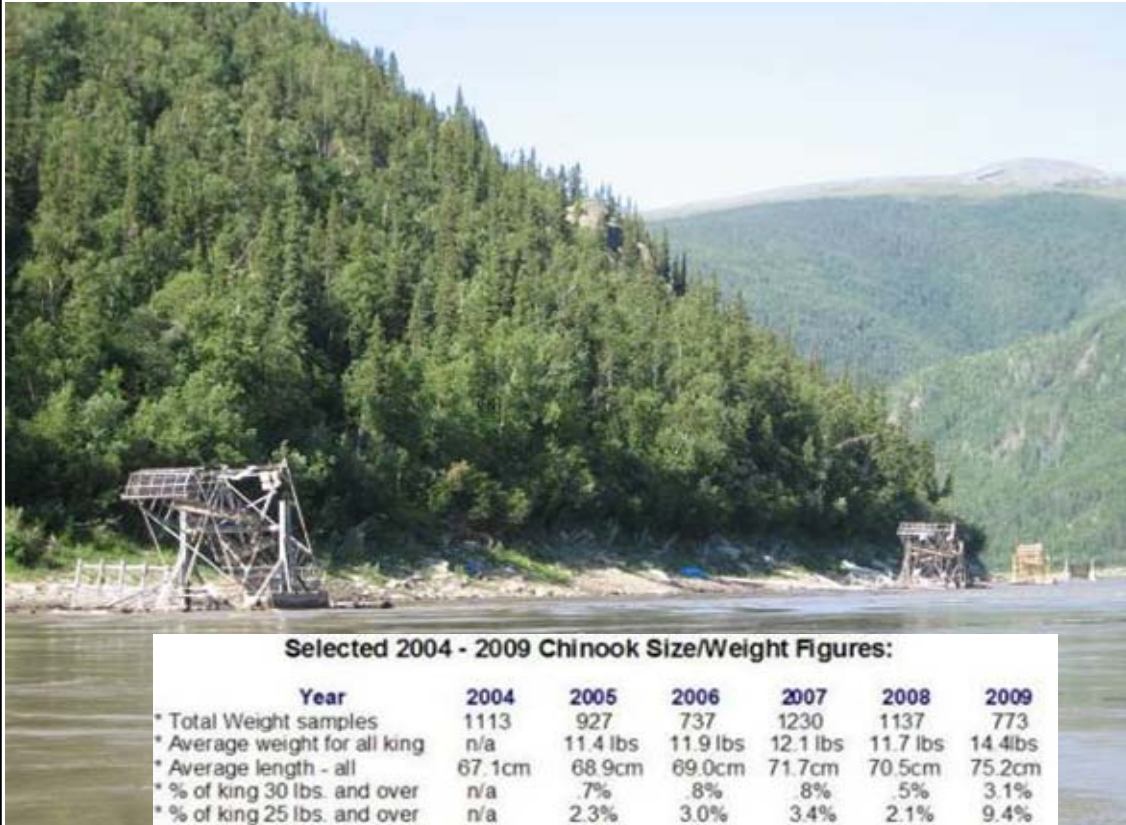


7/11/10

- Over 400 more king sampled in **KingData10**.

Good news is Ich disease is low so far at 4.6% for all size king. Bad news is this is the worst year since weight sampling started in 2005, for size and % of females at this point in the run. Average king is 11.1 lbs. and only 12.8% are females. In 2008 when DFO reported those low size and female rates in their 8" mesh nets (and border escapement was not reached), we had a seasons average weight of 11.7 lbs and a female rate of 19.6 % at Rapids. This is all consistent with most fishermen's impressions that size is smaller and there are less females in their catches in 2010.

Picture: 4 of the 6 fishwheels fishing Rapids this year. During king seasons there may be only twice this many on the entire River from mouth to Border. Read an old history book which told of over 150 wheels from Fairbanks to the mouth in the old days. That doesn't include this area or the equally large amount that use to run on the Upper Yukon. They are a lot of work and really only fit well in someone's life if they spend a large part of the summer on the river. Nowadays not many are doing that.



7/12/10

- While still too early to compare much - it does not look good to see Eagle sonar tracking Rapids testwheel so closely. Hopefully it will rise away or escapement is in trouble (**ChinEag10**).

- Had a correction sent in by a reader - My comment yesterday about 4.6% ICH in all king being good news should be tempered by the fact that, "there are still twice as many disease-positive females (8.1%) than males (4.0%)".

- Presently we are on a restricted schedule of 4 days a week fishing. I heard (rumor) that king fishing may be further restricted from Tanana to the border. Listen to YRDFA teleconference Tuesday at 1pm. telephone 1 800 315 6338 use code 98566#

Picture: 1. Okay, one picture for those who like cute things that eat bugs. Swallow nest in our front yard at fish camp. They have been stuck like this for a week.

2. Three larger king that came in tonight. Seems like pulse 4 may be starting. Note blush red color on two of them - seen normally on king during the later part of the run each year.



7/13/10

- Pulse 4 not showing up as expected so far. Only talked to 2 wheel operators plus video project counts though, so have more tomorrow. Got one more day of pulse 4 to go and then king are suppose to taper off to lower numbers (**ChinPilot10**).

- During teleconference today fishers were asked to conserve salmon to help escapement be met into Canada.

- Do have a good bit of king net data which will be posted soon.

- Eagle Sonar was down for one day as a pulse of very high water went past that project - so no data from there tomorrow (**ChinEag10**).

Picture: 1. First off, to those that expressed concern about the sparrows being stuck, and any others - I was joking, they are fine. 2. Gopher and Karen (facing) just built a new wheel. They are old hands at it and the craftsmanship shows. From Nenana, they come each summer to fish at Rapids.



7/14/10

- More data in **KingData10** (up to 7/14/10):

Average weight - 11 lbs

Percent of females - 12.9 %

Percent of males - 87.1 %

25 lbs or greater - 1.7 %

30 lbs or greater - .7 %

65.5 cm or less ("Jacks") 37 %

- Yesterday you may have heard on the teleconference about the number of king the upper river catches. In our area fishwheel catches make up a lot of the fish taken in subsistence. As you can see the average weight of fishwheel king is about half that of all the fish taken in the lower river (as all use nets there). In fishwheels this year 37 % don't even contribute significantly to the spawning population. I believe the huge shift riverwide away from fishwheel harvesting of king to large mesh gill nets (and not managing for it) has been a contributing factor in the loss of our older age classes and eggs put in the gravel. If fishwheels are made illegal we will simply go to nets and get 100% fish that contribute to spawning, lots more females and twice the size fish. That helps no one.

Picture: My wonderful wife Kathleen netting fish from the livebox. Born in Tanana and she grew up at a number of camps in Rapids and downriver of here.



7/15/10

- King dropped down very low which is a continuation of the small percent of Pilot Sonar we have been catching this season (see **ChinPilot10**). For about 10 more days I'd expect to see small groups of king pulse through with dead periods between.

- Water temp running below average some and water height right at average.

- If Eagle sonar continues to track Rapids as it does escapement could be in severe trouble (**ChinEag10**).

- Drift expected to start again. Some fisher are quitting due to end of king run.

Picture: The Ketzler family fishes at Rapids each year for king but fish for chum in the Tanana River. They spend a lot of time away from there home village and fixed up a nice cab on their boat this year. Danny showing me how big the king are that he's planning on catching. With the last pulse over now at Rapids they headed home tonight.



7/16/10

- Small increase in king today.

Positive ideas to help the king runs

1. The quality of the fish **we** put on the spawning grounds is absolutely essential. It doesn't matter how many other king problems we have if we don't deal with that were sunk. We need to manage escapement not by an overall number, that each year includes more and more tiny and small male king that contribute almost nothing to the next generation, but by the number of king that are capable of spawning. We have already damaged the run genetically. We need to make up for the extinction of 8 yr old king and almost all the 7 yr olds by figuring that in and also monitor escapement for females. We cannot continue each year to put into Canada a bunch of tiny male king and say we met escapement. As I heard someone say yesterday it defies logic to continue that policy any more.

Picture: Katlyn, Fayleen, and Linda at the video wheel tonight watching nets and wheels start fishing after a 24 hr closure. They did data at the local camps all day and just wanted to get out for a non work ride.



7/17/10

- Finally got the net data (135 samples) entered in **KingData10**. Only weights, lengths and sex were taken so far - Sampling as always is from complete catches only.

- **Ideas** tab below has all the "Ideas to help the king run" that will be posted here. Had overwhelming support for the idea from many of you (plus a couple of persons who don't like it) so we will be continuing it when I can.

- Eagle Sonar numbers starting to climb (see **ChinEag10**)

- Water temp dropping sharply in response to the colder days (**WaterTemp10**) - temperature trends in season are directly related to the sun that does or does not shine that day. Water height at about normal for date.

Picture: Fish camp at the end of the day. The best net eddy in the Rapids is directly under the end of the Rainbow. The pot of gold is the King salmon there I guess.



7/18/10

- The majority of fishers are finished with king salmon fishing. Most did not run nets or wheels this last opening. Quality is poor in that flesh is white on enough of them and numbers are so low the effort is not worth it. This is all perfectly normal for runs each year except this year it happened a good week or more earlier.

- However today the chum flesh study in Rapids, where students sample chum for visible signs of the arrival of fall chum, reported an increase from the normal 10% red fleshed fish to 25%. It may be a one day sampling fluke but if it keeps increasing there may be some fall chum arriving. With fishing closed they will not be able to sample again till Tuesday.

- Mistake in **KingData10** - new net length data was in inches and should have been converted to centimeters - will fix tomorrow.

Picture: Don't mess with this girl. Chopping wood at fish camp in front of a typical plywood shack most people have around here.



7/19/10

- 2 day closure going on. Opens tomorrow.
- Hardly any drift from the big wash out at the 40 mile river. Water crested and around average.
- Great news back from first few loads of positive Ichthyophonus disease cultures sent to lab in Wash State. 100% of the hearts that the students identified as positive for ICH disease were confirmed positive after culturing. Students are working on getting their disease data published in near future.
- Ich still down this year and noticed by all fishers talked to. This is the first year since late 80's that ICH has not been a major factor in fishers decisions to stop king fishing (end of run is particularly bad for catching ICH diseased fish). Lets hope this trends into next year ??.

Ideas to help the king runs #2

King salmon need some sort of [window of opportunity](#) to get to the spawning grounds (rest of idea found under gold tab - **Ideas** - below) - (cause it's a golden idea).

History Picture: 2001 picture of Dr Kocan and Paul Hershberger teaching students visual ICH ID techniques.



7/20/10

- Eagle getting peak of pulse 2 and still tracking Rapids Video closely. In 2008 Eagles estimate was 24 times Rapids total catch, 2009 was 24 times again, and so far this year it's 27 times Rapids. That's close times factors for two projects over 3 years. To this date Rapids Video has 650 king total and run is pretty much over - but lets say 800 king by end. So do the math: $800 \text{ king} \times 27 = \text{a border passage of } 21,600 \text{ king}$. To me this is our best science until something changes, as Rapids Video is the only project that Eagle is tracking this close. It's early and things can change in a heartbeat as I've said before, but it keeps not changing. If we don't put 50,000 at least past the border, Canadian First Nations fishers don't eat king this year. Couple that with the record low size and female rates and what are we going to get back in 5 and 6 years. Oops.

- Note: None of the many riverwide projects I use for data are connected to this personal, unfunded update effort - including ones here at Rapids.

Picture: 1. Happy fish camp kids.

2. End of run king - nice size today but lots of injuries or sunken bellies, etc. - note time - all traveled close to each other. How's that for interesting.



7/21/10

- Bering cisco whitefish are increasing - over 200 in 24 hr today. Somewhere around 300 is the record for project.

- Couple of wheels turned and a few nets in for those last king for mostly canning and summer chum and whitefish for dog food. Pretty quite on river these days - most waiting for fall chum run.

- Rise in the percent of red flesh chum on Sunday to 25% has held at about 20% after 60 more samples in the last two days. While it's debatable what's going on as far as "are they fall chum", this project needs to go past 50% red flesh chum before we declare the fall chum run officially here and start counting chum as fall instead of summer chum.

Picture: In the upper right hand corner it says **Daily Email Updates 2010**. This is a click on link to an online album of all the update pictures and comments up to July 19th. I'll be updating as the season rolls along. All the past years albums are in another link right above the picture called **All Years of Email Updates**. These albums each year are the most downloaded of all the reports and files on the Rapids website.

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

Rapids Daily Email Updates 2010

A Daily Log of the Projects and Fishing activity at Mile 731, Yukon River

In season pictures and comments on activity in the Tanana, Rapids and Rampart area, obtained through word of mouth and observation, are sent out daily with data from many Yukon River Projects. Combined these give an idea of the season through the eyes of a local fisherman. Often with some sarcasm, always with an agenda, sometimes trying to be professional - - - Inside are the 2010 season's daily updates. (Incomplete - Up to 7/18/10 only)



7/22/10

- Bering cisco increase more to 233 per day.
- King travel time between Rapids and Eagle Sonar looks more like 15 days or 33 miles/day (**ChinEag10**). Couple more days will tell alot more about timing. Timing is important because projections are based on it and a few days one way or another can change things a good bit.
- Visible Ichthyophonous disease increasing in these end of run king as it does each year. Last two days it was 20% and 40%. Because of the normal lack of fishing on these last low quality king, the Data Collection Project here is unable to get many samples but the limited data is considered very important as it describes a unique part of the run.
- Correction: Eagle is getting 2nd, not 1st Pilot Sonar king pulse as stated in update 7/20.

Picture: One on top is a typical bering cisco and one on bottom has everyone who saw it out here baffled as they never saw anything like it before. I froze it to send to whitefish expert Randy Brown at USFWS Fairbanks. Looks like a cisco that swallowed a balloon.



7/23/10

- Eagle is doing a little better than it was looking a few days ago. Looking at latest run timing of 15 days (**ChinEag10**) and slightly higher % of Rapids Video counts than a few days ago, our border projection based just on Rapids project is about 25,600. Still time for things to change in either direction.??

- Prior to about July 6 water was low enough that fishwheel efficiency was possibly low. That would take in the king that passed Eagle up to say yesterday. After that water went right up to very high and that should have made Rapids Video have counted, if anything, high for the rest of the season (**WaterHeight10**)

- All the drift and trees from the high water have no effect on a wheel counting fish at all unless they physically stop them from putting in counting hours and that didn't happen to Rapids project.

Picture: A family touring Alaska from Japan came to Rapids. Lucked out and it was a nice day as it's been rainy lately. They were watching Linda and Sandy cut up a sheefish and king salmon.



7/24/10

- Summer chum numbers low now and cisco whitefish decreasing. So not much fish in river at present. All will change when fall run arrives and builds to hundreds a day.

- Heard in Tanana that managers are opening up the fall run to 7 day a week fishing this will help fishers make up for some of what they didn't get because of the poor king run. This camp will come alive again with lots of family and friends cutting the fall chum.

Picture: 1. Tanana Power Co. is experimenting with their own version of water power. Based on fishwheel design it's got tremendous torque. Actually hooked up to the power grid in Tanana. Most of their problems lately have been snapping arm sized shafts and huge chains. They'll get it figured out. Actually does pretty good in heavy drift as it dips very shallow unlike a fishwheel. 2. Harold Attla is one of the main racers to beat lately. Here's he's by his boat after driving 220 miles from Fairbanks to Tanana. Tomorrow morning they race back.



7/25/10

- Entered pretty much the last of the king data (see **KingData10**). The few that get done in the remaining days will not change the averages at this point. Out of 989 king sampled from 6 wheels.

Average weight all king - 10.8 lbs

Average length all king - 68.7 cm

Percent of females all king - 13.9 %

Visible ICH disease all - 5.0 %

- No real signs of fall chum increasing here yet.

- Some large sheefish moving through.

Picture: Robin and Charlie are letting their wheel and dogs float by as they visit camps and say goodbye here to Ramey and Lester. Wheel will go to Tanana to be pulled out by bulldozer and stored for winter. A number of fishers will just fish the king season here and then move to another area for fall chum. Robin and Charlie will go to the Tanana River near Manley Hot Springs for chum. Lester and Ramey will stay on the Yukon but go to Tanana. Some like me fish chum in Rapids.



7/26/10

- Almost no fish migrating through. It's okay as fishers doing chores much neglected from king season.

- Suppose to be a big rise in water. Height and temp at average for this date now.

Picture: Fall chum will be here soon. The techs have been sampling for flesh color during the open fish periods. Clockwise:

1. rare #1 red chum - this is as good as they get - flesh better than many king. Example of what the best of the fall chum are like when they first arrive.

2. Typical #4 pale fleshed, summer chum (although need lab work on it to say for sure whether summer or fall). This is mostly what we are seeing now.

3. When the fall chum arrive I like to say it's like noticing the elephants when the circus comes to town. It's not rocket science to determine a good fall chum arrival date here.

4. #4 and #2 chum dried for 1 month - the summer chum dries to lean cardboard and the fall chum seems to not dry because it's full of oil.



7/27/10

- Eagle Sonar continues to count slightly higher than average relative to the Rapids Video project. Rapids could have counted slightly low this year, which is not unusual for an CPUE fishwheel project. Eagle could be counting slightly high because of the higher ratio of summer chum to king salmon in the river this season. All sonar blips are counted as king salmon at Eagle. Unlike Pilot Sonar, nets aren't used to check the daily ratio of king to other fish.

- When Rapids was passing the king that are arriving at Eagle sonar now the run at Rapids was over 60% done. Eagle has counted 15,400 king so far. Add 40% to that and you have a projected border passage of 21,560 king which is under the 51,000 needed to allow for an unrestricted First Nations fishery in Canada. And that has nothing to do with any project undercounting or overcounting - it's if everything keeps going as it has been.

Picture: 1. Switching a bad water generator. This powers the video camera, microwave transmitter and infrared fish sensors in the fishwheel chute in picture 2. 3. King in chute today



7/28/10

- Water rose 3' and drift is starting with some big trees.
- Bruce McIntosh, AYK Regional Sonar Biologist

sent in an explanation of how Eagle Sonar monitors the ratio of different species through an number of efforts: "While it is true that Eagle does not rely on a species apportionment model like Pilot Station does, this is due to all evidence pointing to it being primarily a single species run. The project monitors the catch of their own nets daily, and also other nets and wheels in the area. These things are all taken into account daily in producing the Eagle estimates. If an unusual number of chums were passing, there should be an indication from either the test fishing or sonar and, so far this year, we haven't seen any of evidence of this", (I reduced Bruce's thorough and longer explanation to fit here). Want more info - go online at address below for the Eagle Sonar report:
<http://www.sf.adfg.state.ak.us/FedAidPDFs/FDS09-30.pdf>

- Correction: My end of season projection # of 21,560 king at Eagle should be 25,667. My math was wrong.

Picture: Today's catch of what seems to be mostly summer chum (darker markings and developed teeth) although a few look typical of the fall run chum. Some cisco also. Not much happening in the river lately. Just enough to feed my dogs and some to give to other mushers.



7/29/10

- Increase in king in video wheel today is the last bump of them that went through Pilot 14 days ago - kings are really over now (**ChinPilot10**).
- Bering cisco shot up from 30 yesterday to 188 today.
- Water continues to rise but not as much drift as expected, especially the bigger stuff.

Picture: 1. My son Joe and I looking at a TV camera during a fish protest almost 20 years ago. He saw the picture today and was asking about the sign **HE** was holding. I explained I'd never use a child to further my fisheries agenda, never mind my own son.

2. Joe (now 20) works 2 on 2 off at Doyon oil drilling on the North Slope - He made up a sign for me today .



7/30/10

- Last small pulse of king has large fish in it. While fishing closed last 24 hrs. I can see in the video many are 18 - 25 lbs. Not the best of shape as far as for eating etc. but full of eggs and ready to spawn (**ChinPilot10**).

- No fall chum run yet. A small chum pulse arrived at Pilot Sonar on July 13 and if there are fall chum in it they will be at Rapids in a couple of days. If not the next chum pulse through Pilot (July 19) will be here on Aug 7 and maybe that will. Since the fall chum arrival project started in 2000 the dates have been from July 25 to Aug 8. See all the dates and above run timing at tab **ChumPilot10** below.

- Water rising and suppose to go up 5 more feet by Monday. Imagine the drift will be bad. May have to shut down wheel. Since 1996 I've had one down day since running wheels for USFWS or present video project. Not bad if I may say so.

Picture: I got to go to a Yukon River Panel meeting this spring in Anchorage.



The Yukon River Panel was established under the Yukon River Salmon Agreement. This International advisory body is comprised of 6 representatives of the Canadian Section and 6 representatives of the United States. (YRP) makes recommendations to management entities on both sides of the border concerning the conservation and management of salmon originating in Canada.

7/31/10

- Eagle Sonar is continuing to count a relatively higher % of Rapids Video catch as the days go on. This is unusual especially in view of the higher water during the 2nd half of the king season at Rapids. That has always made the fishwheel catch more efficiently not less as the relationship to Eagle would now suggest. No clue what's up. Both projects indicating a poor run still (**ChinEag10**).

- Drift is the worse this year, today - as mentioned before this has no effect on fishwheel video project counting unless the wheel is physically stopped by the drift.

- Water will be near record for date in next two days before it crests. (**WaterHeight10**)

- Chum #'s rising and will check % of red fleshed fish tomorrow to see if related to more fall chum.

Picture: Marten (winter) - often the bread and butter of trappers catch/income. Built like a mink but with fluffy fur that is locally made into hats or sold to buyers for expensive Sable coats. Those claws are as sharp as they look.



8/1/10

- Between the drift being dangerously thick for the wheel and the need to set up to run 24 hrs a day for the next two months I did not run wheel today. Need to get night lights and gas generator set up on wheel and repair baskets and broken parts etc.

- Water temp normal and height near record (**WaterHeight10**).

- About 25% of the chum from yesterday are red fleshed similar to the fall chum. That is still low but higher than it should be if just summer chum were in river alone ??.

Picture: 1. A moment in time of the drift that has gone by for days now. Expect one more day of it and should be worse tomorrow before water crests late in day. There's no gear running anywhere because of it that I know of. Some of the dog mushers are out of dog food now. 2. This is what happened today to the fish cutters, when the drift kept them from fishing. Slumber wonderland.



8/2/10

- Video testwheel ran today but first drift had to be cleaned out the two wheels above (neither running) so it wouldn't get knocked loose and come into test wheel. Basically babysat wheel most of the day till drift slowed towards evening.

- With water cresting today will wait one more day before testwheel goes into 24 hour counts and runs at night with lights. To dangerous to do tonight.

- Chums not increasing much in response to the pulse at Pilot 19 days ago. All that means is it was not full of fall chum bound for upper river but predominantly summer chum that do not travel up this way. (**ChumPilot10**).

Picture: Some of my main picture connoisseurs mentioned to me about the drift picture yesterday that it didn't look like much drift or can't see it good. So I went and took some more today from the river level. Just one log after another after another. Heard in Tanana the river was full of boats getting lots of firewood last few days.



8/3/10

- Starting tonight Rapids Video project will go to 24 hr counts using spotlights on the video chute. All chum are still counted as summer chum until the ratio of fall (red fleshed) to summer chum passes the 50% mark then project counts all as fall chum.

- Drift is mostly all gone so all gear could fish again. Mostly only dog mushers getting enough for a dog pot are fishing now as no good numbers of quality fish in river till falls show up.

- A best guess date for a fall chum pulse arriving here is about Aug 7th. USFWS Genetics Lab has about 40% of the chum around the time of that pulse (at river mouth) testing out as fall chum.

Picture: I know there are places where Eagles are as numerous as ravens but around here they are pretty unique. My daughter was leaving a small whitefish on this rock near camp each day for it. Each year it nests around here somewhere.



8/4/10

- Well wait no more it's **Official Fall Chum Day**. Last 5 samplings since 7/29 the % of red fleshed chum has risen as follows: 25% - 27% - 31% - 47% and today at 75%. That's over the 50% necessary to start counting all chum as fall from this day on.

- The reason we start counting fall chum when the fall chum show up instead of using a set date is because if you don't, depending on the year, you can end up calling large amounts of summers as fall or falls as summers. When one considers that our subsistence and commercial openings or closures are often decided by 50 - 100,000 chum one way or another you see how important having the best number possible can be.

- Counts are for the full 24 hr from today on.

Picture: A fishwheel deadbox tonight just before dark. News will spread fast and some fishers already cutting their first chum "dry fish" today.



8/5/10

- Deleted some King salmon graphs to make room for fall chum season projects.
- Eagle Sonar numbers starting their normal downward trend as king run winds down there (**ChinEag10**). Latest projection out by US/Canada (34,000) and also latest one using Rapids Video numbers (33,900) both anticipate being well short of needed border passage goals.
- Red fleshed chum made up 72% of catch sampled today by techs.
- Should be coming up on another chum pulse in a day or so and it is suppose to have good numbers of fall chum in it. We should be seeing a serious increase in numbers possibly (**ChumPilot10**).

Picture: 1. Picture of a dog team as they get ready to pull out of a trapline cabin in the morning. Got to love those ears and expressions. 2. Two king that came through video wheel today. One 20 lb red male that's ready to spawn any minute and a tiny 2 lb jack.



8/6/10

- Attention now building on the fall chum run at the rivers mouth. Graph **LYNet10** (shows the driftnet project right at mouth compared to Mt Village driftnet project 87 miles upriver). Graph **ChumPilot10** shows passage estimates at Pilot Sonar project 123 miles from mouth. While managements run assessment takes a number of factors into consideration the estimated passage produced by Pilot Sonar is the most used and generally considered the most accurate.

- Fall chum pulses are highly variable as to how and when they enter the river and I believe the word is that it's to early to assess the fall run strength.

- Rapids video just got the pulse that peaked at Pilot on 7/15 and should see the first of the pulse that peaked at Pilot on 7/20 some time tomorrow. So counts here should rise then (**ChumPilot10**).

Picture: Son and father floating down river today. Got a comfortable setup inside tent and cutting wood as they go to pay the bills. Have a boat and wood raft not in picture. I met him years ago also - floating by with a bunch of people on a huge 100' raft with 3 big wall tents.



8/7/10

- Chum passage numbers almost doubled today as 2nd and larger fall chum pulse hits Rapids (**ChumPilot10**).
- Very large fall chum pulse hits drift nets at rivers mouth (**LYNet10**). Now to have Pilot Sonar count it.
- Last of Chinook data entered in **KingData10** and some small mistakes found (they did not change averages etc.) - still preliminary till gone over post season. Some final main data (1002 samples):
 - Average weight for all - 10.8 lbs
 - Average length for all - 68.2 cm
 - Largest king - 37.8 lbs
 - Percent of females - 14.1%
 - Visible ICH all - 5.0 %
- Data indicates a very poor "quality of fish" (**Ideas**) sent to the spawning grounds except for the relatively low amount of clinical Ichthyophonous disease.

Picture: Fish camp today at Rapids



8/8/10

- Chum increase again. Up to 30 per hour at one point. The record is over 100 per hour maintained for a whole 24 hours (in 2005).
- All area fishermen have been cutting the better chum for edibles and strips for close to a week now. Most are sitting on the wheels and letting the poorer quality fish go so they don't have to spend a lot of time cutting it into dog food when they should be making people food.
- Water temp running at record high and water height almost at record for date.
- Water dropping but another rise from Border area coming.

Picture: My wife Kathleen plants a flower garden at camp each year. It's her one spot that remains beautiful despite all my essential junk I have spread around fish camp.



8/9/10

- Fall chum pulse leaving and we'll go into a period of lower chum numbers for about 2 weeks according to lower river projects. Should be okay:
- Large quantities of chum do not get taken at this time of year in this area. Fishers put up people food which is very labor intensive and work at cutting each day but gear mostly sits idle. Allowing fishing to be open all week simply makes it so people don't have to store fish for closures and cut soft 2 and 3 day old fish. In September it is an entirely different story. Then because of dog food being put up, large quantities of chum are caught, hung dry or cribbed with much less care and time. At that time of year however the run is usually at it's peak and I usually put up my entire winters crib (frozen whole) fish in one or two days.

Picture: One of the camps at Rapids. Lots of different fish on rack - fresh chum strips and edibles drying on the outside rack before they go into smokehouse. Some king backbones left from earlier in season and some paler chum cut for dog food. Great day for drying fish.



8/10/10

- Okay fall chum day here. Rapids Video estimated about 3300 migrated through today.

Picture: Cy and Ezra were the main techs for the Rapids Data Collection project this year. They grew up spending summers in Rapids. Their last night before they head back to school (Cy senior and Ez 2nd year college) they had a bonfire on the rock island in Rapids. They ran the sampling (size and disease data) on 1000 subsistence king for the AYK SSI project in this area.

- Plus 200 bering cisco fin clips and data (in individual vials) for USFWS.
- 1000 bulk king genetic fin clips for ADF&G.
- 450 summer to fall chum genetic fin clips and data (in individual vials) for ADF&G.
- And 120 king heart tissue cultures for independent lab work in Wash. State to test their visible identification of ICH disease. Final results just received showed an accuracy of 98%. This is their last year here they say. They want to work for ADF&G next summer and make big money.



8/11/10

- Rapids Video project chum passage starting to track Pilot Sonar finally. Just indicates the fish entering the mouth at that time were largely fall chum and headed for the upper Yukon past here (**ChumPilot10**).

- Bering cisco whitefish up to 203 today, double that of yesterday - been a good year for cisco. They are largely used for great dog food because of the high oil content. The broad and humpback whitefish on the other hand are preferred for people food and especially their eggs are boiled and eaten with great desire.

- Water height which is back at record high for date is suppose to rise 8' in next 4 days. This will be 4' higher than the high water we just had that brought all the drift and shut down fishing so much. This could cause the Rapids testwheel some real troubles.

- Rainy weather has stopped all the fish cutting in this area for last few days now. Between that and the coming high water people are going to get way behind on making up for a bad king season.

Picture: Rapids fisherwomen, Linda and Ruth, lifting their fishwheel spare pole up the beach so wheel can be brought close to shore and out of current tonight. Testwheel only gear running here anymore.



8/12/10

- Bering cisco whitefish doubled again to a record 466 in 24 hours. Prior record was 435 in 2007 (data from 2001 to 2010). Will numbers keep climbing? - tune in tomorrow.
- Other big news is the rising water. All wheels except video testwheel have been pulled into river bank in anticipation of lots of drift, etc. Some thin drift starting to run today with some big trees.
- Water height just past record for date. As best I can figure we may get 5' - 6' more rise (**WaterHeight10**).
- Chum passage down today even though actual video counts up (**ChumPilot10**). This is due to daily adjustments made that take changing water levels and related fishwheel efficiency into account.

Picture: 1. Rapids fisherwoman Rosa cutting cisco whitefish into dog food with great precision while her mom Nina looks on. Rosa told us hundreds of interesting stories today. 2. Three worn out slow king, still hoping to spawn, seen in video today.



8/13/10

- Correction on bering cisco whitefish. Prior record was 503 in 2007. Anyway today just smashed it - had 686 today in 24 hours.

What a year for cisco.

- Video project chum passage rising as a small chum pulse that past Pilot on 7/26 now hits Rapids (**ChumPilot10**).

- Fall chum numbers at mouth are getting behind where managers would like. Last year numbers were a problem also and then we ended getting lots of chum at Rapids. As with king season, things can change in a heartbeat, but not looking good now.

Picture: Pups on an island below Rapids. Can't have them at camp at this age as they'll ruin everything they can reach and so it's either pen them or at camp, mushers usually find an island. Not entirely safe from bears and wolves but better than the mainland. The mother chained on the right keeps them from wandering and once a day someone comes by and feeds them fish. These guys were looking at us wondering if we were bringing food.



8/14/10

- Another cisco whitefish record at 691 today - incredible.

- Fall chums down slightly and are showing the normal signs of slightly decreased quality that is normal as season moves along. This will continue to happen and eventually the fall chum we catch in late September will be mostly pale fleshed and not really that good for dogs never mind people food.

- The first high quality fall chum that went through Rapids around July 28th should be hitting Border last couple of days.

- Check out **WaterHeight10**.

Picture: 1. Everyone went from wheel to wheel helping get the logs and small drift out of leads and cables and in the case of the testwheel, the baskets - as it was running until stopped by a large tree at noon today. 2. Testwheel water generator all twisted up in logs.



8/15/10

- Video wheel down all day. Water suppose to crest Tuesday morning so will start putting wheel back together then and hopefully get a partial count for Tuesday.

- Will get upper river chum project and Rapids cumulative graphs going as soon as possible. Chandalar and Sheenjek sonar projects have been down alot of days from high water also.

- Still not seeing the needed chum numbers at the mouth - 185,000 so far at Pilot Sonar. In 2009 at this date there were 171,000.

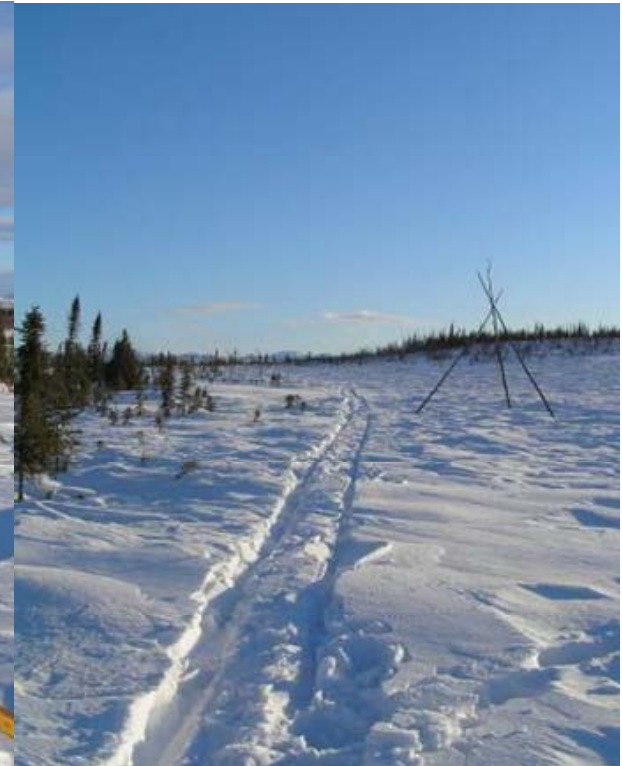
Picture: Started at the upper wheel and now we're on the middle. Then down to the video testwheel (took 5 people 6 hours). This drift here happened overnight with the wheel pulled into shore. The winds were just right and pushed alot of the drift to this south shore. Normally we can sneak through some of these high waters and still run but not this time. It was coming faster than you could pick it out. As I write drift has slowed and bad winds stopped but tomorrow morning could be same all over or worse as water is still rising.



8/16/10

- Last couple of days high winds have shut down river mouth drift net projects so no new data on fall chum entering river for now (**LYNet10**).
- Heavy drift shuts down Rapids Video again today but project should be able to get running tomorrow and get a partial count in.
- Water cresting at Rapids (**WaterHeight10**)
- Added fall chum passage numbers and averages to **ShortSum** as requested each year.
- Also added **ChumCum** which compares all fall chum years at Rapids project and how 2010 compares to date. And **ZRMC** which illustrates why fishwheel catch numbers (CPUE) should not be used to assess run when a much more accurate method is available.

Picture: 1. Breaking trail 40 miles north of Tanana
- band of trees off in distance is the Tozitna River where I have a cabin. 100 more trail miles and you end up in Allakaket. No worry of these dogs running off on me this day. This is what I call a drive them till they drop day. At this point I'm resting them every 5 minutes and lots of "good dog" comments to keep them going.
2. Looking back south towards Tanana hills.



8/17/10

- Video testwheel project gets going mid day and chum and cisco counts seem to be about the same as when it shut down 2 days ago (**ChumPilot10**).

- Debris stopped finally and water going down.

- Large chum catch at mouth drift test nets on Monday - now to watch as it gets to Pilot for size estimate. Overall run size still needs more fish to make a good run. However in 2007 and even weaker run start ended up producing a fair run strength (**ChumCum**)

- Subsistence restrictions in place at mouth ("windows schedule" - 3 days /week) and will move up river with fish if run projection does not improve

Picture: The river was busy today as the water crested and drift cleared out. People coming and going and working on getting nets cleaned of debris and wheels cleaned of trees. Like a sunny day in spring when all the geese are flying.



8/18/10

- Chandalar Sonar is operational after a week of high water so added that graph (**RapChan10**) and the 2008 graph to compare to (project did not operate in 2009).

- Eagle Sonar finishes season off at 34,603 king which is lowest passage estimate in the 6 years it's operated. New minimum spawning escapement number (42,500) at Border was not met (lowered from 45,000 this past spring). Could just keep lowering it I guess!!!

- Sheefish count was best this year at 22 today. Best counts are later in fall.

- Cisco still very strong and chum are as good as can expect given low numbers 20 days ago at mouth. Chum run remains a problem as big pulses have yet to materialize (**ChumPilot10**).

Picture: Rapids is starting to show signs of fall. Some missing leaves and others yellowing. Video wheel out in current again today after some heavy drift days shut it down.



8/19/10

- After all the water has dropped in last few days it is now at record high for this date

(**WaterHeight**). Temp. running slightly high.

- Chum numbers continue to drop as we go more into a weak section of the run

(**ChumPilot10**). Run timing on graph at 19 days travel from Pilot Sonar or 32 miles/day. This could be off a bit as fish could have traveled slower in all this high water and will adjust when more data comes in.

- Cisco finally slowing also.

- Pilot counts it's best day (8/18) at 29,000 chum. Need more but bet we'll get it - ???

Picture: Old Picture from in the late 90"s. Mike worked for the USFWS Tagging project at Rapids and was determined to make a miniature working fishwheel in his off time. One day he found some fish scales on the fishwheel chute and got all excited. So we put a few whitefish in the box the next day and all watched as he checked his wheel. He eventually caught a couple of whitefish for real.



8/20/10

- Another good count from Pilot Sonar - 53,193 chum estimated past there today. With yesterdays okay count that's over 80,000 from this last pulse - so far. Now need some more pulses like that (**ChumPilot10**).

- In 15 years of running Rapids test fishwheel for fall chum three years were lower at this point in the run (1998, 2007 and 2009). Both 2007 and 2009 ended up being fair runs with passage estimates past Rapids of about 300,000 fall chum. There's hope. 1998 finished poor however (**ChumCum**).

Picture: Memorial and funeral potlatch in village of Tanana tonight. It's a 3 day long memorial event for loved ones gone in past but a respected elders recent passing and burial is being taken care of today also. Moose head soup is served and everyone sits and has their plates filled to overflowing with all sorts of food. People tell stories and try to show the families their support. It's a time when people put aside their own needs and become a community in a real way. Indian songs and dancing goes on till late.



8/21/10

- 290,000 fall chum past Pilot Sonar now. Last pulse is over now and was over 100,000 fish. A run large enough to have an unrestricted subsistence and some commercial harvest should project out to have about 600,000 plus fish (need 500,000 to start a commercial harvest by regulation).
- Sheefish increase to 28.
- Water continues to drop fast - lots of work moving fishwheels out 2 times a day.

Picture: Final evening of a 3 day memorial potlatch in Tanana. Big moose soup dinner again outside and then to the community hall here for the giveaway where years of making moccasins and saving money for guns and blankets and everything you could think of is passed out to the hunters of the moose and those that helped the family and everyone present. Songs are written and sung for those honored by the memorial. Finally everyone, young and old, puts on or holds their gifts and dances to song after song. It was getting light when I left the hall to head back to Rapids.



8/22/10

- Water level high but below record by a good bit (**WaterHeight**).
- At Rapids most camps have closed and fishers have moved to sites closer to villages or have stopped fishing having met their needs or not. Four camps are open still with these being mostly maintained to get dog food when the time comes later in September. Some cutting and hanging for dry dog food may start soon.

Picture: Dave Daum, USFWS, finishing up on a 3-year study documenting the use of small tributary streams by juvenile Chinook salmon. The project started at the border near Eagle and is working it's way through Rapids now, to finish in Tanana in about a week. Over 100 streams were looked at and over 40 streams were documented to contain juveniles. These fish are probably from far away spawning streams in Canada and decided to take up residency in the U.S. (without going through customs). A small fin clip was taken from all fish for genetic determination of stream origin. If anyone has any questions, Dave can be contacted at david_daum@fws.gov.



8/23/10

- Water steady as next rise starts to show.

Hope there's no drift - enough is enough.

- Chum and cisco continue to drop in numbers - getting easy for manager of Rapids video project to count. Whoever he is he's got nothing to do with these updates.

- Could see signs of increasing chum numbers in couple of days now.

- Little bit of people food and dog food started again just before restrictions kicked in. We are on 4 days a week subsistence until fall chum run projection improves.

Picture: 1. Early morning fog starting to happen as fall approaches Rapids. Once the sun starts coming up more to the right that will be the last this part of the canyon sees of the warm morning sun. 2. As I've been mentioning, chum are getting more spawning marks and flesh is paler in some. If someone is selective, good cutting fish for people food is still there though.



8/24/10

- Chum increased a little - maybe pulse 1 coming.
- Water up slightly - no drift yet.
- Sheefish up to 36 in 24 hr. They can get to 100 on a big day in September.

Picture: Had a picture of this water turbine earlier this summer when we set it up. Since then it has become the sole source of power for the whole camp. I haven't run a generator in months (except at fishwheel) and very noticeably do not use near the gasoline as in other years. Intake pipe layed in stream (right) has a thousand 3/16 holes in it and yet to get clogged up (but wait till fall leaves). Plastic pipe drops 40' to turbine and produces around 9.7 amps at 30 volts to charge a 24 volt battery bank. That's 290 watts continuous, which most of the time is turned down cause camp doesn't use all that. Runs a small freezer and all the computers and routers and modems, lights, etc. After the water is narrowed through two nozzles (each the same size as a 5/8" garden hose) it's directed at a 7" turbine wheel then dumps into the box below. It then drains into the same hose that I used in years past to cool the fish on the beach. No gas - hardly any water. Costs about \$3000 without pipe.



8/25/10

- Chum up slightly but quality up lots. In general, whenever a new pulse starts to show, the first fish to make it are the strongest and fattest - then as the pulse crests things change till finally by the end of the pulse the ones with injuries, more white flesh and spawning colors show. It's the same for Chinook.

- Water up more and some drift starting. Calling for higher water still for at least two more days.

Pictures taken from a hill near village of Tanana today: Bottom - The mouth of the Tanana River as it comes into the Yukon from the south. In front is the Yukon waters flowing from left to right. Top - View upriver towards Rapids and beyond (Canada). The Tanana River has a huge silt load and changing channels - if you hit bottom with your boat prop it's just mud. The Yukon is gravel and rock with stable banks - you don't want to hit bottom. The fall chum go both ways although the last pulses are heavy on the Tanana bound fish.



8/26/10

- Chum up to 25 per hr. in video wheel and looks like numbers are rising still as we head to peak of pulse 1 (**ChumPilot10**).

- Eagle starting to get some fall chum numbers past their sonar so added **RapEag10** and last years **RapEag09**.

- And water again at almost record height for this date (**WaterHeight**).

- Another wheel gets pulled at Rapids leaving 2.

There's very little fishing to be done here now. A few days of dry dog food, a dog pot and some eating fish every now and then. My winters dog food will be caught in 1 or 2 days some time in mid September.

- The present restrictions riverwide, while necessary politically, will have no effect on passing more fish upriver. There's not enough fishing for restrictions to restrict anything. People who were not around 30 years ago and beyond have no idea how much the level of harvest has decreased.

Picture: My wife's sister took this with an expensive camera. Took lots of tries.



8/27/10

- Chum up some more but video project has estimated only 23% of average has passed through Rapids for this date (**ChumCum**). Got 2 more good pulses of chum coming up but with no more coming in mouth lately things are not looking good. Still time though for some late pulses as we've seen it before (**ChumPilot10**).

- Water cresting - never got bad drift this time.

History Picture: From 1996 to 2005 I ran two tagging fishwheels in Rapids for the Rampart Rapids Fall Chum Tagging Project run by the USFWS Fairbanks (ended in 2005). Another local guy ran two wheels in the Rampart area (40 miles upriver) for the recapture effort. Those 4 wheels and all these crew members here provided a population estimate of chum through Rapids each year. Lots of people till late in fall in those years - it was good times.

- Because that project collected the fishwheel's CPUE at the same time it was creating a population estimate, the present Rapids video project was able to analyze fishwheel efficiency versus different water levels and create a formula to produce a similar population estimate just by applying it to the days catch or CPUE (**ZRMC**). That's some history.



8/28/10

- Another day or so and we should have run timing down between Pilot and here for 1st pulse (**ChumPilot10**). Also soon see if we'll be experiencing the same high passage rates relative to Pilot that was seen in 2009. It was right after the first pulse last year it started to happen (**ChumPilot09**).

- Put together a large chart on fish size and disease from the Rapids Data Collection Project - just open **KingData10** below and it'll pop up.

- Rain all day, Water cresting, Sheefish increasing, 302 cisco today and saw 3rd coho of the year (don't get many up here until October)

Picture: On this rainy, foggy day how about a sunny picture from this king season. The women from a camp downriver stopped by to see if we had any extra king. When I handed this one to Gladys I got the feeling it was the biggest she ever lifted.



8/29/10

- Adjusted **ChumPilot10** graph run timing by 3 days (now 28 miles/day). With all the high water it looks like it may be taking them that much longer to get here from lower river. Other possibility is we're getting a high % of Pilot estimate. Give it a few days. Added

ChumPilot08 to show a more normal year.

- Chum increased today again and as of midnight looked like tomorrow will be more again. Plus 5A testwheel at mouth of Tanana River increased today and that project is one day downriver from here.

- Water temp is doing it's normal fall decline. Sun isn't the driving factor in daily temp as much anymore. The cold fall nights are **(WaterTemp)**.

Picture: Another trip to Tanana today and a mile above village we ran into a family moving a wheel down from upriver (was at Rapids). Kids were having fun. This wheel is built for south side of river so cannot be fished in Tanana this fall as the fishwheel sites are usually on north side. It'll sit in water till wheel pull time in October.



8/30/10

- 1008 chum passed under camera of video wheel today. That's an gestimated passage of 5900 through Rapids. Finally starting to see some rise in 2010 cumulative line in **ChumCum**.

- Again numbers are heavy towards end of day meaning numbers still on rise - so tomorrow may be higher (**ChumPilot10**).

- 5A testwheel (40 miles down and testing fish entering mouth of Tanana River) had higher numbers today and that's another sign of higher tomorrow for us here.

- Water dropping but still high for date. Water temp is slightly high.

Picture: Early season picture of mom and pups at feeding time. Sometimes the mom gets mad at them cause they hog the food and she wants some. They blow up like little balloons and can hardly walk - then go lay somewhere.



8/31/10

- Cisco whitefish down to a fraction of what it was - 52/day now.
- Chum continue up and again good numbers going into tomorrow so far.
- Chandalar and Eagle sonar tracking okay with Rapids so far (**RapChan10** and **RapEag10**). These upper river chum projects will get different ratios of the total passage past Rapids each year. The Chandalar River just below Ft Yukon is the destination for the largest amount of the fall chum.

Picture: Top - Front street Tanana on a nice spring day 2010. Roads are kept packed with snow, so sno go, cars and dog teams can run on them. Frozen Yukon to right of road looking upriver.

Bottom - This is the center of town with the post office in the high rise about in center of picture.



9/1/10

- Getting a little increase in chum numbers at river mouth test nets. Lets hope it keeps up - check tomorrow (**LYNet10**).
- Tomorrow we (district 5B) go on almost a week long fishing closure to allow a window of complete passage of fish past us. Every fisher I talked to has no problem with that management decision as all districts are participating. So today I just caught enough for a couple of dog pots to get me through it.
- Today chum number at Rapids leveled off - probably in between pulse 1 and pulse 2. Pulse 2 fish should arrive late tomorrow or next day looks like? - and it should be a bigger pulse (**ChumPilot10**). Pulse 2 should pass here completely unfished due to closure.

Picture: Two hunter boats floating through Rapids canyon on their way from Yukon Bridge to downriver areas of good moose hunting. Today was the first of many boats to come in the next weeks of moose season. Often boats float through here as it's scenic and there's camps to look at. Leaves really falling on the north side (left) and getting real yellow on the south.



9/2/10

- Chum pulse at mouth does not materialize much. (LYNet10). Chum up some here (ChumPilot10).
- Well I definitely heard from my fellow fishermen on my comment that I and no one I talked to had a problem with the management decision to close chum fishing for a week due to the poor run. Got some strong comments on why should it close when managers will probably open commercial on the same poor run (it'll be called a coho fishery but there will be chum harvested like with the king salmon this summer). Also some don't have as good a fishing site (use small nets) as I and are just getting enough for dogs on a daily basis. So hope that expresses the other side of my statement last night.

Picture: Tonight at video wheel. Lights come on early as camera requires alot of light because of high speed necessary to film fast moving fish. Here a blurry chum (regular camera) passes the infrared beams and triggers the capture of pictures like on right at a computer back at main camp. I'm a half mile from wheel now but can watch fish going through this chute right now. On right are single frames of a sheefish and chum and below a humpback whitefish going down video chute.



9/3/10

- Chum numbers steady (**ChumPilot10**) and cumulative is rising (**ChumCum**).
- With only one more pulse left to go after this one, around Sept 10th, and none coming in mouth the run may end as one of the poorer years since passage estimates started in 1996.
- The last pulses are often characterized as Tanana River bound fish and they are to a larger extent than earlier ones but as you can see from past years lots of those head up here also.

Picture: Here's another picture of the Tanana Power Co. water generator but recent. Update on it is, all is well and been producing power steady now after some bugs got worked out since my earlier report. Next year they'll be some stronger jackshafts as the torque is to much when it starts producing lots so they keep it toned down. I have heard this is the best producer of all the water generator experiments on the river even still. One thing I like about this design is the slow moving paddles don't have much potential to hurt migrating fish.



9/4/10

- Should be getting pulse 2 chum now.

Getting a good percent of Pilot daily estimate so far. A higher % would be better for fish but bad for projects wanting to count accurately (**ChumPilot10**).

- Broad whitefish showed increase to 10.

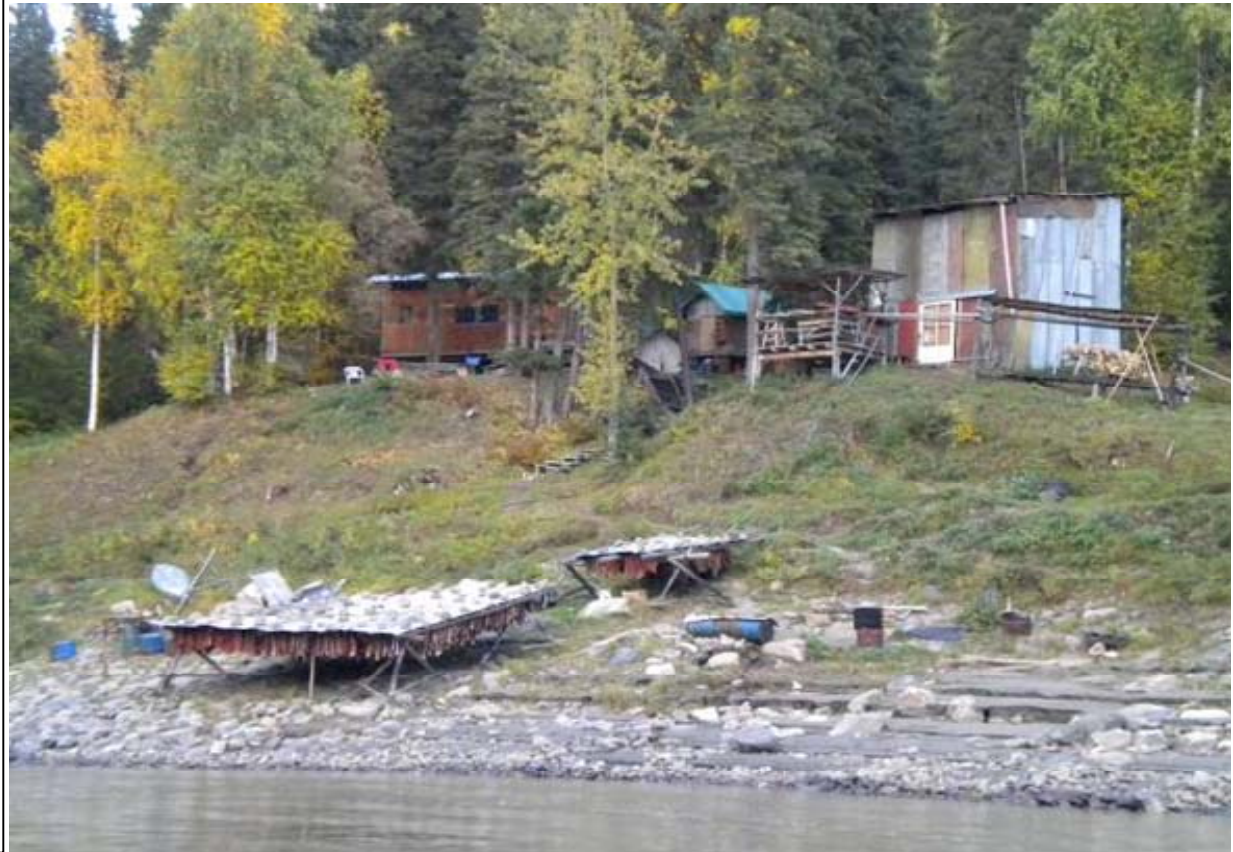
They never come in big numbers but get to 40 or so most falls.

- Added another **Idea to Help the King**

Run under the **Ideas** tab below (#3).

Trying to think these out and get input also, so they have been slow in coming. This one is on "doing something about things that matter". Enjoy or hate.

Picture: Typical fish camp in the Tanana - Rampart area taken yesterday. Plywood shack for living in, cache, roofed cutting area, smokehouse and fish racks on beach. The beach racks are a sign of a dog musher around somewhere. This year saw a number of camps open that hadn't been in years in anticipation of a more normal king run.



9/5/10

- Fall Chum passage up another 8,600 through Rapids today. Total at almost 100,000 (**ChumCum**).

- Looks like it may keep rising right up to 3rd pulse (**ChumPilot10**). Seen it before - it's common. The only sign sometimes of the period between a smaller and then a larger pulse is a hesitation in the numbers rising. Caused by some chum being fast and some slower and long distance traveled. Not as common with king salmon.

Picture: Fish Creek coming out of Fish Lake near Tanana. How's that for a beaver dam. It's about 5' high. Some of guys that use to work up here as techs sent me this picture today of them out moose hunting. People like to keep water flowing at these dams cause fish do migrate back and forth to the lake. Some times many from the village will come out and remove the dam. Here the boys just made a small overflow and went full speed and hopped the dam with only two in boat. You have to lift your motor at just the right time. I use to do it.



9/6/10

- Chum up slightly here and downriver at 5A testwheel they got big increase in chums going into Tanana River Drainage. That should hit here tomorrow. It's the faster fish from pulse 3 maybe - starting to show .

- Testnets at mouth not reporting any good numbers and it's really getting late for a big chum pulse now. In 2007 we had a huge, late pulse come into river on Sept 1st but it's the 7th now.

- Water temp high and water height slightly above normal for this date.

Picture: 1. Little excitement at the wheel today. A rock slide came down, probably from the rain. I didn't see it but almost got my generator and landed on jack and iron pry bar. Note the new bend in both. 2. Grizzly bear must have come by to check it out as there were some tracks in the mud nearby also. That would have been a good time to be at the wheel - Bear could have mauled me and then a boulder would have finished me off.



9/7/10

- Still trying to figure run timing from Pilot for the chum. Added **ChumPilot10(2)** for one day to show difference between 22 days and 24 days from Pilot to Rapids. This one will really thrill my readers only interested in pictures.

- Very few broods and humpback whitefish so far. Have a researcher wanting to come out and sample them and he's just waiting and waiting.

- Chum passage of 115,000 so far and average to this date of 311,000. Average is forced high by some record runs (like 2005). Be nice to get passage up to say 240,000 by seasons end, but that's going to take some higher numbers here than Pilot is indicating is coming.

Picture: My wife Kathleen and I spent the weekend starting to break some stuff apart at camp. Pretty hard place to grow things here at Rapids but we have fun with some small gardens. My tomatoes plants hardly grew this year - someone said it was because I had them out on all those spring nights at 33 degrees making them tough. Oh well guess that only works with your kids.

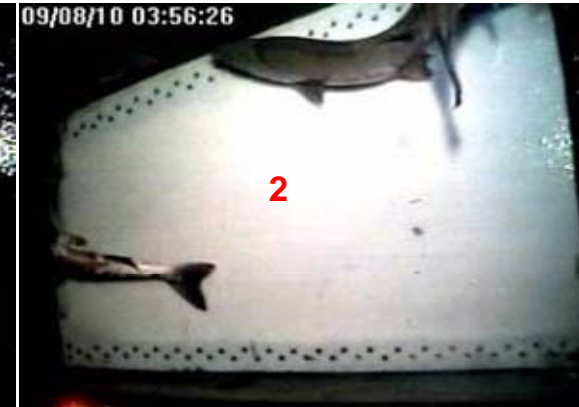


9/8/10

- Rapids is suppose to be through with the 3rd and largest pulse I hear, but seems like it hasn't really got here yet and that the second just past instead. If counts increase in a day or so that will solve the mystery and be good as the total number count will end up being alot higher for the season. So we will keep the 25 mile a day graph for now and remove the other (**ChumPilot10**).

- Chandalar Sonar is just starting to see the 1st chum pulse with sonar counts there rising (**RapChan10**)

Picture: A sequence of video frames captured show 3 chum in the chute at the same time. Rare enough to get 3 in a basket never mind all in video chute. During the record 2005 chum run one wheel fisherman here saw 10 in a basket one time and a fisher putting a net in and could hardly get it out immediately after setting due to fish filling it up so fast. On that year there were single days at the height of the run where this project's estimated passage through Rapids equaled the total passage all this season so far. Passage in 2005 was about 1,500,000 chum.



9/9/10

- Chum numbers steady here. Chandalar Sonar keeps rising (**RapChan10**) as 1st pulse hits there. Eagle Sonar should get first of 1st pulse rise in a few days also (**RapEag10**).

- Small and late commercial openings are starting in the lower districts. Not a good year for commercial and subsistence fishers anywhere. In late 2007 my son and nephew bought a commercial net license together and have been unable to fish it one day yet.

Picture: Two uses of dogs - both lots of work but it's a healthy lifestyle. Dogs aren't really that different as far as bloodlines go, but traveling teams are often selected for more fur and long range endurance. Some lack of speed can be put up with. In the race teams they have to have the speed and lungs or it's a no go. Some traveling teams are fed almost 99% fish whereas the competitive race teams hardly use it preferring meat, chicken and high quality commercial. 1. Heading south towards Tanana (over the hills) with fur from the trapline. 2. Greg Taylor racing in Tanana's Yukon River Championship held each spring about April 1st.



9/10/10

- Slight rise in chum last two days so looks like maybe another pulse to go. It must have been all that high water that slowed the fish down this year. You can never use the same run timing year to year - something is always going to throw it off.

- Getting a single coho 3 days in a row. They all head up the Tanana River and we see hardly any each year. Small run of them does go by here in October however.

- Seeing the first of the least cisco also - 2 today. Can't hardly tell them apart from bering cisco in the video camera but in person it's easy.

- The two camps open here are fishing today after weeks of not. It'll be over in another day or two and that will be it for the season. Just getting the final winters dog food (crib fish) which gets put up late so it will sour properly.

Picture: Barge was the big excitement today. I've heard it's tricky getting through the narrows near the fishwheel spots. It would be a disaster if they went sideways and one almost did one year. They are single hull and I don't think Rock Island would be to kind to it. Front barge is full of fuel.



9/11/10

- Myself and other fishers here are still putting up whole crib fish. Have some pictures tomorrow as it'll be over then. It doesn't take long - not like dry fish which has to be cut and hung and all the work that goes with doing that.

- Water height right at average but check out water temp - it's way above average for this time. Some warm days lately.

Picture: Had some people ask about Rock Island in middle of Rapids (looking upriver). It is why Rapids has it's name. There's no real whitewater but in past some poor miners and travelers coming around the bend with unmotored scows and rafts did end up on the rocks. There's some real strong swirling currents but to a fish it's nothing. We radio tracked lots and followed them up by the island and they just moved right along. Some even crossed the channel right in the swiftest place, moving upstream as they did. If you stay along the edges you can even paddle a canoe upriver through "Rapids". In the old history books it was called Rampart Rapids after the village of Rampart 35 miles upriver. Top - today pic, bottom - old pic.



9/12/10

- Chum dropping like a rock - well kinda - so pulse 3 is bye bye (**ChumPilot10**).
- From end of pulse 3 (Aug 22) to last day Pilot counted (Sept 7) only 53,000 chum came into river. That's only equal to a single good day on some years - so not expecting to see alot from now on. Not going to be good for fishers down in Tanana as most all put up their dog food during that time - not early like Rapids.

Picture: My first crib was 37 years ago and here's this years. While dry fish is what is needed for traveling with dogs these whole fish are what is best for feeding close to home. They are complete and nothing discarded as in dry fish. They will be stored here at Rapids for the next week in cold water from the creek. Then floated to town (saves on gas over back and forth trips with boat) and stored in a pile to sour (dogs can't properly digest fresh fish). The raft is half my winters firewood also. When the real cold comes about Nov 1st the pile is spread apart and fish allowed to freeze solid and that is how they are feed while in town. Even at 40 below they get a frozen block of fish each night (warm soup in morning) and do good on it - their toughness never stops amazing me.



9/13/10

- Broad and humpback whitefish been increasing last two days which is good as the USFWS researchers are here sampling them. Good timing.
- Chum increased a good bit today. Wheels down in Tanana reported increase and then a drop today so were getting same I guess.
- Beautiful weather continues - sure making work nice. Sometimes we've had ice on wheel raft this time of year.

Picture: Ruth and Charlie getting the last of their chum dog food to haul to Tanana. They will load up their boat and haul directly to Tanana where they crib them. Note how sunk the wheel raft is. This time of year the logs are pretty soaked with water and a few hundred fish in dead box and under goes the raft. It's normal.

So this will be about it for this wheel and that leaves just the video testwheel to run alone with fish being counting and right back into the river they go. Real fishing over at Rapids but in Tanana it will go on until the ice stops the nets and wheels.



9/14/10

- All the wondering were the 3rd pulse was or if it past and guess that was what just happened yesterday and today - see **ChumPilot10**. Numbers should go down now - but who knows in this business. The 25 days from Pilot to here is a very slow time for chum (usually about 20) but then there was higher water for some of their journey.
- Check out what all these sunny days are doing to the water temp on the tab **WaterTemp**.
- Humpback and broad whitefish keep increasing, which is great for Wendy and Bill in picture.

Picture: Wendy and Bill from USFWS Fairbanks Field Office came out to do sampling on bering, humpback and broad whitefish. They're doing a number of collections for a number of researchers. Samples for genetic work, otolith aging and life cycle, egg weight and fish length. All things needed to help close up data shortfalls in certain areas. Wendy's first trip here but Bill has been coming since the mid 90's and last year came and helped with a USFWS contaminates in salmon study. Beautiful weather continues.



9/15/10

- Chum passage has surpassed the 2 worse years since monitoring started in 1996 (1998, 2000). May pass one more but it's going to end up very poor - be lucky if passage estimate gets over 200,000 at Rapids (**ChumCum**).

- After 7 years of size, sex, and disease data collection and testing, Rapids Research has put together a report for peer review and invites anyone to critically comment. Subject and title is:

Ichthyophoniasis in Yukon River Chinook

Salmon at Rampart Rapids 2004-2010. I took the liberty of attaching it with the update. It can be found also on the web at:

http://www.zuray.com/ICH_prelim_report_for_review_91510.pdf

History Picture: 2001 was the first year of the student data collection project at Rapids. Here Dr Richard Kocan (Univ. of Wash), Kathleen Peters Zuray (Tanana Tribal Council) and Dr Paul Hershberger (USGS-BRD Marrowstone Island Research Laboratory) work with some of the 50 students run through the program that year. In 2004 the projects database was started, collecting random and full season data each year to present.



9/16/10

- Been an incredible stretch of sunny days lately. Sometimes there's snow moving down the hills around here at this time of year and I'm crawling on hands and knees to get from one side of the iced up fishwheel to the other. Water temp continues very high (**WaterTemp**) because of nice days.

- Two little bumps left to the chum season. One will hit about 19th and other will hit at end of month when this project will be stopped (**ChumPilot10**).

- Both Chandalar River and Eagle Sonar are getting the high numbers of the chum now. So far Rapids and they are tracking good. I use them as a check on this project as both are considered accurate projects. Different percents do go to each, each year however (**RapChan10** and **RapEag10**)

Picture: Nice day during king season this summer - coming from a check on the fishwheel. My wife Kathleen - it's our anniversary today. Thought it would be nice to put her picture on the update - cause that's the kind of guy I am.



9/17/10

- Chum continue down here as expected but are just starting to peak at the border where it should remain high for 2 weeks yet (**RapEag10**).

- Plan is to shut down here on the 20th. Try to run till the declining days of the last main pulse which in past years is anywhere from the 16th to the 23rd. Once I shut down it takes till about October 1st to get wheel and lead pulled out of river, camp shut down and boatloads of gear to Tanana. Hopefully the weather holds out as it's nice now.

Picture: 1. Picture from the 70's of a guy I knew. Always wore these grizzly bear moccasins and dog fur earmuffs. Went out on his trapline with him one day and got this picture of him taking a marten out of a trap. We only had small 6 dog teams that day and ran them single file so only one dog was breaking trail. 2. Biggest day for the rare coho - got 6 today



9/18/10

- Well that's it for good numbers of Rapids chum for this year - don't expect any more major pulses to surprise us. Numbers may get a little lower and then often stay like that into October. In Tanana the fishers there will catch these smaller numbers of chum till the ice flows or wheels ice up to bad. Then they scramble to get wheels pulled by bulldozer before they lose them.

- All happening up river now as chum hit Canada. Eagle getting a good percent of them now (**RapEag10**)

Picture: Many mornings this time of year the fog starts up at the Rapids narrows and it's a fight between it and the rising sun to see which takes over the morning. If the fog wins it'll fill the whole Rapids till almost noon when the sun finally burns it off. Lately, and today again here, the sun and dry weather won and fog died. And the sun shone brilliantly on all of God's creation.



9/19/10

- Water temp continues high at 55.2 degrees. That is really unusual but will probably drop fast when this crazy beautiful weather stops (see

WaterTemp)

- Chum decrease slows probably due to an expected small bump of chum that's going by now (**ChumPilot10**).

- Ran wheel for enough fish for dog pot (about 25 fish) and because of the high ratio of whitefish noticed how much richer the food was. Sheefish, broads and humpies have to put on more fat as they will continue living and migrating down to lower river in early winter. That takes extra energy.

- Eagle Sonar showing high counts next to Chandalar and Rapids. That's good news for meeting Border escapement if it continues (**RapEag10**).

Picture: Micah and Bill with USFWS still here sampling whitefish today. Long hours at the wheel waiting for the broads and humpbacks that come in. They are doing pretty good though and were able to sample a number of fish from fishermen which helped them get their numbers.



9/20/10

- Shut down wheel today at noon. Suppose to get unseasonably cold by Friday so glad to get the warm day to break things apart.
- Project fall chum numbers ended (193,107) about 45% of average with the ADF&G lower river run reconstruction estimate at 50% and Pilot Sonar estimate at 55% of average.
- Upriver Chandalar Sonar still tracking Rapids and Eagle is relatively **very** high and so be interesting to watch - no guess why but the numbers are not unusual just high for a supposedly below average year (**RapEag10**).
- Water temp is dropping (nights getting cold) and water height is about average.
- Will send out updates on upriver projects and subsistence activity in Tanana when I start making trips there. After tomorrow night this office will be in boxes so updates be shut down some days and I'll be traveling lots.

Picture: Hunter heading back up river to Yukon Bridge. Huge boat and at least 3 sets of antlers on cab. I think it would be comfortable on the ocean as well.



9/21/10

- Starting camp breakdown tomorrow so no updates for a few days but have some good pictures of going to Tanana with crib fish raft etc. after - See you in a few days.

- Eagle Sonar continues to climb - have to adjust graph each night just to fit new high on. Check out **RapEag10**.
- Frost on ground here today - colder weather coming.

Picture: 1. Got video wheel out of water today - good to let it dry for a couple of days and then pull. Takes about a day to take all the electronics off and pull it. 2. Older winch picture - Only has a 12 horse engine but multiplies power many times. Pulls at a slow creep taking maybe 3 hours to go 300'



9/28/10

- Been awhile since last update but cold weather made for a big rush to get completely moved out of Rapids camp. Fishers in Tanana shutting down also with ice building up on wheels. Fishing can go on into October but not the way things are going this year.

- Tanana fishers reported good late fall whitefish fishing and chum numbers that stayed relatively high. Some years they drop down much more. So that with the higher than expected border passage and chum run was passable I guess.

- Chandalar counting has ended (**RapChan10**) but Eagle Sonar continues and numbers very high relative to Rapids (**RapEag10**).

Picture: Downriver wind blew for day after day. When I left Rapids with this crib fish raft there was ice on top and all over logs. Now 20 miles down towards Tanana I'm about to go around a bar where the waves are the largest. Right after this I put the camera away and almost lost the whole raft. In the end only one log broke lose and lost a few fish - worse raft ride in all my years. This is probably small waves for downriver folks.



10/11/10

- This will be the final update so all of the graphs used this season are put back in this last update.

- Border passage counting at Eagle sonar has ended. The lower end of the fall chum border passage escapement has been achieved.

- Most area subsistence fishers did alright on fall chum - they ran good late in season which is when many people fish for them around here. Whitefish ran good late also.

- Appreciate the opportunity to communicate these updates - I consider it a privilege and thanks for all the comments and just for being on the list. I'll send out a notice when the 2010 email update album is done and on web. Have a great winter and see many of you around.

Picture: 1. Remembering the bright, green, warm days of summer. 2. Each year before the snow comes mushers get the dogs in shape by driving them around the streets of Tanana with trucks and four wheelers. 3. All the fishwheels hauled out for the winter.



This section is **all** the "Ideas to help the King run" that get posted in the DailyInfo tab. Because of the large positive response I'm getting to these I will be incorporating comments that get emailed to me if I think they are valid additions or criticisms. Therefore the "Ideas" may be different from when first posted. In no particular order and I will try to use the word "we" instead of lower or upper river or fishers or managers etc. Lets see how it goes.

(Ideas and opinions expressed on this Rapids Update, are the authors only or persons volunteering ideas. It is not paid for or the result of any US / Canada, Federal or State funding from any source. All the comments are and always have been the author taking public information and interpreting it on his own time for no pay. It is not a request, requirement, or supported by any other entity. If you do not like the updates please notify me and I will gladly remove you from the email list and show you how to start your own)

Ideas to help the king runs #1

The [quality of the fish](#) we put on the spawning grounds is absolutely essential. It doesn't matter how many other king problems we have if we don't deal with that were sunk. We need to manage escapement not by an overall number, that each year includes more tiny and small male king that contribute almost nothing to the next generation, but by the number of king that are capable of laying the necessary amounts of eggs. We have already damaged the run genetically. We need to take into account the loss of our 50 - 60 lb king, the decline to almost no 40 pounders and the fact we rarely see 30 pounders anymore by figuring that in to the management scheme.

Escapement must be based on female rates also. **We** cannot continue each year to put into Canada a bunch of small male king and say we met escapement. As I heard someone say it defies logic to continue that policy any more.

Ideas to help the king runs #2

King salmon need some sort of [window of opportunity](#) to get to the spawning grounds. Back in the 1980's and early 90's when the problems surfaced, we could have reduced our 100,000 king commercials riverwide by some small percent (say 20,000) and sent them into the spawning grounds and still had a decent commercial (hell by today's standards a great commercial). Now in 2010 after a bunch more king generations, and more declining numbers and size, getting fish upriver and effective windows has changed and now means no commercials and complete pulse closures plus more, for even subsistence (as sad as that is).

We can still pass better escapement. In 2001 and 2009 we did that with true windows. We all remember 2009. As for 2001, Canadian Border escapement that year was 85% more than the 1991 to 2000 average and the return years for those king (5 and 6 year olds in 2006 and 2007) produced the 2 highest average weight, length and large king rates (Rapids Data Collection) from the start of the project in 2004 to the 2009 year. In 2009 we had an average weight of 14.5 lbs and 29% female rate when pulse 1 was fully windowed (closed to fishing). The year before, pulse 1 (2008 - not protected) weight was 9.7 lbs and 7% female. We are at the sad point now, where limited subsistence alone, as reduced as it is from years past, is having a severe effect on just meeting basic escapement.

While past attempts have failed, we need to get the Board of Fisheries to designate Yukon Chinook salmon as a stock of management concern. Then there needs to be a consistent regulatory plan, for a fish generation for starters, where we let windows work and don't stray from the **true** conservative management **we** failed to provide this year.

Ideas to help the king runs #3

If we are going to deal with the problem of our Chinook runs we have to admit there is one. Only until recently has that begun to happen, and those whose job it is need to step up and tell people who are less educated in biology and management about it. Fishers like to fish and cannot be expected to see a problem when they are told it doesn't exist. Board of Fisheries members cannot be expected to pass needed, effective regulations when they are told things are under control.

We need to [do something about the things that matter](#). At our meetings and teleconferences we hear over and over about the bears that eat the salmon and seagulls the fry and pollack fishermen that ruin the king runs with bycatch fishing. Some of the blame is beyond misplaced and some is so unsupported by the data its plain wrong to perpetuate it – and it takes our good energy to do something positive for future runs, and wastes it.

We have data showing we had up to 50% of our female king on some years being in a diseased condition, weeks away from reaching the spawning grounds, and we still maintained the same management strategies. Then we blame each other for practicing our hardworking, ethical fishing lifestyles of commercial or customary trade instead.

We have the middle and upper river converting almost 100% over to a highly selective gear type (large mesh gill nets) that targets our larger female king and lets the small ones go by and we provide no compensating management tools. And then we wonder why our 50, 40 and now 30 lb king are rare and we see averages in the fishwheels down to 10.8 lbs, and female rates for the entire run at 14% as in 2010.

And our only solution at the 2010 Board of Fisheries Meeting this spring was to lower the mesh size to 7 ½" which has been shown in studies and to fisherman who have tried it, to only more effectively target the mature king that we have coming back into the river now due to the genetic reduction in size of king. The very king that is our best hope of rebuilding the run - if **we** ever decide to do something about the things that matter.

Notes:

- Document and pictures are for anyone's use - I enjoy them being used, please email for original if higher quality is needed. They are all the authors and/or have no copyrights attached.
- Editing info: Pictures copied from daily excel updates and pasted as non resized, tight formatted, enhanced metafiles to new document which is then turned to PDF.
- Opinions expressed in these Rapids Updates, are the authors only or persons volunteering ideas. It is not paid for or the result of any US / Canada, Federal or State funding from any source. All comments are and always have been the author taking public data and entering and interpreting it on his time and for no pay. It is not a request, requirement, or supported by any other entity.