Get a glimpse of the Upper Yukon River salmon runs by reading: *Rapids Daily Email Updates 2007* A Daily Log of Project, Subsistence and Commercial Etc. Activity

In season short comments on activity in the Tanana, Rapids and Rampart area through word of mouth and observation are sent in with the daily data worksheet updates. Combined these give an idea of the season from ground zero through the eyes of a non objective observer. Often with some sarcasm, always with an agenda, sometimes trying to be professional. Inside are the 2007 season's daily updates:



Project reports etc. at web site RapidsResearch.com

6/17/07

-Hello again. Here's to a good fish run. -Water is high but dropping. No drift at moment. Temperatures been running around 60 F.

-About half the Rapid area camps populated with 3 wheels ready and some Chinook net activity. One king net in better eddy 24 hrs a day for days now. No Chinook yet but figure any moment.

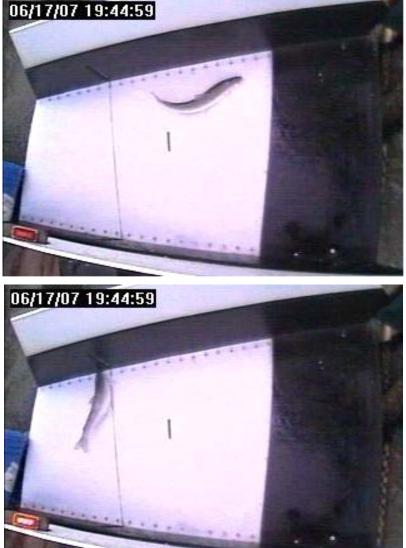
- New video project wheel done and turned on today for 2 hours about, with only bering cisco being caught. Should start officially late tommorrow.

-Will be doing Chinook length, sex, weight, girth, ICH and bulk genetic sampling similar to 2006 (see KingData)

-Will be getting below graphs, etc going in coming days. Please report and forgive any errors - got a lot happening as we get going here.

Stan Zuray

Pictures: cisco before and after breaking infrared beam which triggers it's video capture (new chute)



6/18/07

- Ran video wheel and got 2 king in almost 9 hours. No live box in so they went right back in river and we got none to eat. Live box goes in in morning.

- Water dropping - 61.2 F.

- Some other wheel activity (but no king) after video wheel caught king but expect all three wheels to turn all day tommorrow, plus 3 nets

- Cisco run pretty slow. Sometimes pretty heavy this time of year but not yet this year. Had three people ask about types of cisco - here's what I wrote last year:

Cisco count should be considered bering cisco even though video does not allow for accurately distinguishing between least and bering. For example a genetics sampling effort for least cisco at Rapids in 2005 did not even produce 20 samples by the end of the season using multiple sources. The first least was not even seen until August 23rd. Each year a significant run of least cisco into the upper Yukon does start up by the end of September and continues on as the ice flow stops fishing in October.

Stan Zuray Pictures: new video wheel, new chute,



6/19/07

- Most fisher getting 1 or 2 king a day with contiuous wheel and net effort. Things will pick up in few days.

- Water dropping still - 62.6 F.

- Blue tab graphs/worksheets below with active 2007 data started.

- 7 of the 14 (about) area camps populated and ready for fish.

- will be attempting to post pictures of all the area fishers over the summer. If their names are there it's because they okayed it.

Stan Zuray

Picture: Ruth Altoff and Charlie Campbell of Tanana with their first king of the year today at Rapids. They fish a wheel in fast current closest to Rock Island. It's a tricky, rather dangerous spot. Looks like their kids will have breakfast tomorrow.



6/20/07

- Most fisher **still** only getting 1 or 2 king a day with continuous wheel and net effort. Video wheel 1 last night and none today. Looks like things will pick up in couple of days according to lower river data.

- It is wonderful having daily, consistent, lower river data. It really helps fishers here prepare for what is coming better, especially with gas prices etc.

- Water dropping still and temp now 64 and warming fast - not good for oncoming king probably.

- Student techs started data collection today with area fishers supporting their efforts. Of course area fishers are the parents of many of the techs. See <u>KingData07</u> for today, and hopefully will be able to keep up with the entry as the sampling continues. Stan Zuray

Picture: Stan Zuray, video project mismanager adding a paddle to keep wheel rotation consistent as water drops and water velocity slows. Keeping the wheel turning at a slow consistent speed is an important aspect of the fish friendly operation.



6/21/07

- One wheel had 4 last night and video wheel had two although only one all day. A few larger ones being caught (20 -25 lb).

- Water dropping slower and temp. now up to 64.8.

- Some more king data in KingData07 .

- some people are starting to cut strips, although few fish. This to will pass.

- some large drift coming down today so wheels may not have run tonight but closure so they are not anyway.

Stan Zuray

Picture: Tsood Peters of Tanana. High school senior and been doing data since 2001 although grew up in fish camp. One of the three main techs overseeing the data collection and a larger crew of other techs. He's working to pay of his new Yukon race boat.

- Weighing up top and ADF&G genetic fin clips on bottom.



6/22/07

- Seems like king are going to increase now. We are 19 days about from lower river getting their first low numbers so it is time. Kings coming in more now.

- Water temp. rise slowing up a little

- Getting questions on fish size so far this year. Each year the largest king weight averages are at the beginning of the run (except for the small numbers of stragglers at the very end of the run which run large and with high percents of ICH. So:

2006 - first week - 203 king - average weight = 14.6 2007 - few days - 20 king - average weight = 13.7 (need to get more fish to say much!)

Stan Zuray

Picture: nice thick juicy king - maybe 25 lbs.



6/23/07

- Little slow today on kings but just know they're coming. Nets are particularly slow so far. One wheel had four last night however.

- Water temp. same at 65.1 F

- Got a 35 lb female in video wheel.

- Almost all area camps populated and most are running fishing gear.

Stan Zuray

Picture: Kathleen Peters Zuray and grandson Malaki cutting the first few king into strips at Rapids. Kathleen spent her summers as a young girl at Rapids and other places upriver of Tanana. Presently she runs the environmental office for Tanana Tribal Council.



6/24/07

- Area fishers think fishing is a little slow but as one said as long as this isn't the first pulse it's okay. Some years they hit hard and fast and others like last year and this, they trickle by until the first major pulse hits. If nothing else in about 6-7 days we should see some serious rises in catch rates for everyone.

- Cisco run is slow for this time of year. Sometimes when we first start fishing the cisco are in the middle of large runs (in early June even). It's possible one has already taken place or maybe they are just late? Either way there will be many more to come soon.

Stan Zuray

Picture: Fishcamp by Larson's Eddy just upriver of Rapids Canyon. Solid outcropping of rock into river creates a unique and okay king eddy. 40 ft deep channel off end of rocks by the net. First strips hanging under tarp.



6/25/07

- Of the 16 camps active in 2006 upriver of Tanana, 11 have fishing activity in them. Five don't but are expected to again. Right in Tanana there are a number of fish camps also, as well as a few downriver.

- King data collection going well - <u>KingData07</u> (57 king):

* Average weight - 14.4 lbs (14.6 in 2006 for first week also)

* 9% visible Ichthyophonus in hearts (disease rate) -This is within 2004-2006 ranges for first week of king run. Usually ICH disease rate is lowest this time of year at Rapids

- Technician hire for data collection is funded this year through an R&E / YRDFA grant and donated money from Rapids Research Center. Stan Zuray

Picture: last couple of miles of a 40 mile, 2 day trail break to the Tozitna River. Started with 14 and got two barely walking behind me. I was resting the team every 1/10 of a mile at this point.



6/26/07

- Had nine fishers show up for the YRDFA teleconference today, but like the Ruby fishers we kept getting cut off. Anyone getting this update pretty much knows the Rapids report I was going to give. Some had some questions (management):

- Fisher question: Any idea when 5B commercial may take place. This person would like to plan things with her buyer.

 Fisher comment/question: If pulse # 2 is weaker than expected, would the department consider a 5B opening on the 1st pulse which was healthier?

- One thought (mine) was the 2nd pulse will be hit on pretty hard as it travels up river during prime fishing time (weak pulses get fished longer gear hours than larger ones and then add commercial) ?? Stan Zuray

Picture: Wheels turning right at 6 pm Tues. opening. Because the first pulse is a few days off and king numbers are small all the eddies and wheels are running 24 hrs a day. Also many fishers are afraid something like last year may happen where they were not able to catch enough fish after 1st good pulse.



6/27/07

- King numbers definitely up. Nets as well as wheels all reporting slightly increased numbers. Gear being run pretty steady as numbers still not large enough to stop fishing. Expect that will come soon with first pulse.

- New Graph: <u>AllChinCums</u> compares the projects cumulative king catch each day, all season, for years 2000 - 2007.

- First Sheefish caught. Sometimes see some good numbers in July but mostly they run in August and September.

- Water temp. steady around 64 F, and water height below normal but not as low as it was earlier for this time of year.

Stan Zuray

Picture: Broad whitefish Sheefish Coho Salmon Chum Salmon Humpback Whitefish All that's missing is a king and a cisco to complete the fish we usually see here.



6/28/07

- Not much change in catches but enough fish people are working. At this camp we have enough now but this weekend more family will come and we could have multiple households putting up fish along with wanting to give some away to others who don't fish (prime fishing time coming up). That's where the first and following pulses will come in handy.

- As the infrared video capture system, wheel and chute are all new this year, my helpers and I shut down everything and made sure things were good for the coming pulses. It took a while hence the shorter run hours today.

 more <u>KingData07</u> - 127 king sampled: Average weight - 13.9 lbs - 26 females / 101 males Ichthyophonus heart disease rate at 10% Stan Zuray

Picture: Last fourth of July at my camp. If there's no fish for these four households ADF&G is not the only one going to catch hell. I had plenty this day however.



6/29/07

- Slow during day for king <u>but</u> late in day (just before 6pm subsistence opening) larger, nice, king started hitting and did so in all gear. So even though CPUE for today does not show it I think the first pulse is arriving especially as it should be here run timing wise today (about) anyway. Tomorrow should be interesting I think. - Water temp slightly rising probably as days are very hot, 64-65 F.

Stan Zuray

Picture: Steve O'Brian of Manley Hot Springs ready to cut king on his cutting table. Steve is a YRDFA board member and been fishing nets and wheels for a long time. His wheel is starting to get increasing numbers tonight also.



6/30/07

- King up slightly and nice fish with lower "jack" rate.

- 2 wheels above video wheel doing about 2 to 2 1/2 times my hourly rate which is normal unless their spots are having difficulties. Lower water is should be reducing my efficiency somewhat, however this time in 2002, 2003, and somewhat 2004 the water level was the same.

- Water temp up with real hot days. 65.7 F Stan Zuray

Picture: Rapids Data Collection Project - starting to get some net king data - will it be as ICH prone as wheel caught fish? See: <u>KingData07</u>



Above left to right - today:

Shawn Erhart - Tanana high senior and a serious data guy. Joe (visiting from Thailand writing data).

Ria Conrad - lives in Thailand, college bound, summers-Yukon. Esra Conrad - Tanana high senior, does science studies on his own sometimes for fun.

Linda Johnson - fisher from Manley Hot Springs, spent adult life on Yukon, drives dogs, runs camp by herself.

Tsood Peters - Tanana high senior, Mr. dependable each year.



7/1/07

- King up slightly again and still nice fish with low "jack" rate. Other 2 wheels above did not notice increase today. But both had trouble -one with slow current and other with big rock under wheel . Nets and wheels all still on 24 hr run time which speaks for itself (kings coming in okay but not in big numbers). Pulse 1 will change all that I'm sure soon. Subsistence marches on.

- Although I report "low jack rate" many of the fish are just over 70 cm total length. As the second week of kings end, the large average size portion of the king run is probably over and the average size should drop from here (as it does each year).

- For 165 king weight samplings the average is 14.2 lbs. - KingData07.

- Water temp up again to 66.4 F - no ICH seen or reported in flesh yet however even with high temps.

Stan Zuray

Picture: Swans flying over Rapids in 2007



7/2/07

- Don't have a clue about the king except it's the calm before the storm maybe. Anyway the wheel is fine and turning great. I'm still catching cisco. Sat by wheel this morning for 2 hours to make sure video was not missing them. Last night only two king from 12 midnight to 10 this morning and one was 12' long about. No other gear to compare to as it's closed fishing time. This to will pass.

Stan Zuray

Picture: Frank and Angie Carruthers and young daughter (asleep in boat at 2 am) live year round in Rapids Area. Frank for over 30 years. Subsistence net and wheel fishers they had to be evacuated from their home today as a fire got close and they were in danger. We just finished moving all their stuff to another camp at 3 am. Because of State and Federal policy on unowned land a BLM crew camped a half mile upriver was unable to defend his home.





7/3/07(7/4/07 - 1:20 am)- King numbers are back up a little but size offish is down. Out of 3 - 150' nets in the bestRapids eddies after 4 hrs they had 12 fish.Wheels above video wheel were running slowand size small also but as usual counts were 2 ot3 times video wheel. Have more tomorrow onhow it all went and hopefully it will pick up as thepulse comes in more. Fish buyer VirgilUmphenour here now

- Water temp continues to rise - 67.8 F, and water height kinda stable at present and suppose to slightly rise.

Stan Zuray

Picture: Joe Zuray, Tsood Peters and Frank Carruthers (driving) setting out nets at 6 pm commercial opening. Joe and Tsood are buying Frank's license (have helpers permits this year) and most important his fishing eddies. While sale of fishing spots are not legally binding by law, the barter or sale of them is how the majority of them are tranfered. Frank got these 18 years ago. Even my fishwheel video project site was given to me that way.



7/4/07

- Commercial was a mix. One wheel fisher with a low water spot did okay. All others did on the poor side with a couple not even selling. Nets were on the low side with the best Rapids eddy only taking 1000 lbs and some only a few fish. Buyer will do okay as he was going to pick up more upriver off Rampart and Bridge fishers

- Some commercial king data:

Had a hard time getting many meaningful samples as some fishers sell only the larger fish, smaller fish or a multitude of other situations which ruin catches for data taking, however below is random.

Fishwheel king - 135 samples - 12.9 lbs. average

Net king - 58 samples - 18.2 lbs. Stan Zuray

Picture: Commercial day. Virgil Umphenour and crew buying fish from fishers at 6 am July 4th. Usually a few more sellers some decided to cut strips instead. Virgil left with one of two boats full. Smoke from two fires within miles of numbers of camps.





7/5/07

- Fish buyer left Rapids today with 415 king (5561 lbs).

- Only 4 fish over 30 lbs with biggest at 34.4 lbs.

- So Commercial # 2 fishing definitely better for all I talked to and fishers ran till 6 pm closure for subsistence afterwards with about same catch rates.

 Have a big backlog of king data and average weights from 2nd commercial and should be able to get it posted soon.

- <u>ChinPilot07</u> has readjusted run timing and is best guess at present. Stan Zuray

Picture: Helen Peters of Tanana and daughter Kathleen fighting with a big king today and smiling for the camera. Helen grew up in the Rapids with the Edwin family and has run her own camps all over. She owned and ran her own dog team when younger and raised a big family. She cuts and cans fish each year now at Rapids and is the Episcopal minister of Tanana. Kathleen is my better half.





7/6/07

Biggest king day so far this year. Seems like some tired ones and ICH flesh starting to show as we approach the backside of pulse 1. However most fishers feel quality has been good except for the lack of large king up to now and some poorer ones are really a normal part of any run.
Water temp. staying high and water height drop has stopped and risen slightly but still low for this time of year.

- Some chum showing lately. Stan Zuray

Picture: Left - Long time fishers Karen and Ed (Gopher) Lord come over to Rapids each summer from Nenana to get some Yukon Kings. They are moving into a new camp at present and just set a net at the 6 pm opening. Right - Quest and Iditarod Champ Charlie Boulding comes to Rapids each summer from his Tanana River home near Manley Hot Springs. In back is fire about to come over hill today.



7/7/07

- Cisco up a little finally
- chums picking up more
- most gear down in size and numbers Stan Zuray

Picture: 1. Mike Parker and Dani Everson of ADF&G discussing the importance of Rapids Research Center to fisheries management on the Yukon (notice everyone is laughing) (Kathleen Zuray center). 2. Mike at the video wheel helping with subsistence.





7/9/07

- fresher looking bunch of king today but numbers down. Small on average but the there were a few good size ones (20 lb or so). Noticed by others also.

- Chum (summers) starting to be noticed in their numbers. Most fishers don't want them in quantity as they have white flesh lacking in good oil content. They spawn relatively close to here so worn out kinda.

- readjusted run timing again - <u>ChinPilot07</u> Stan Zuray

Picture: This is Ichthyophonus 2007. At the end of each major and minor pulse, peak etc. the quality of fish is noticeably poorer. Also as the season progresses the fish in general lose their quality. Each year for the last dozen or so, in this area, ICH has been the main quality issue and reason the subsistence fishery slows and then stops. In the lower river the disease has not developed that bad to do that and upriver of here closer to Canada and beyond the stream where all the ICH king go to spawn has not been found yet.



7/9/07

- Again some nice looking king and some size to some. Clearly (I think) pulse 2 is starting. Pulse 2 is suppose to be a week of decent numbers but no real high peaks. That sounds fine to subsistence people.

- Water temp really high now at 68.5 F

- Water height creeping up though not as high as the first week of fishing. Any issues with the video wheel catching inefficient because of low water should have been gone days ago. Will continue to monitor the other Rapids gear close however as many questions seem to exist on the strength of the run. Stan Zuray

Picture: 3 of 5 king wheels turning in Rapids area in 2007. At the lowest wheel (video and closest in picture) the channel starts to flatten and by the time the fish get to the two upper wheels the water depth has shallowed considerably and current increased somewhat (the narrowest place). Fish move in towards shore (and wheels) creating good king fish wheel sites which are rare and hard to find. Chum sites on the other hand are a dime a dozen.



7/10/07

- All Rapids commercial and subsistence gear back on at 6 pm opening and first reports show catches similar to last commercial or most better although one wheel and one net showed slower.

- Cisco pulse/run finally here in large numbers in all wheels. They seem late this year unless some came before project started in early June which is quite possible.

- Dave Daum with USFWS Fairbanks Field Office here to work on fine tuning new infrared sensor system for detecting fish coming down video chute and this year we want to work out a complete backup system in case of a complicated system failure.

Stan Zuray

Picture: In less than one hour 3 1/2" of rain fell. They say you should always water your dogs good each day.



7/11/07

- Virgil left Rapids with 281 king and 3711.4 lbs. Commercial fishing poor although myself and some others thought the quality was okay and some of the king okay on size. The best Rapids eddies reported the lowest numbers in an opening in 18 years of owning his license.

- King numbers since are now enough some gear is shutting off at night and in general quality is still good.

- Chums not showing sharp increases yet.

- New water height graph going back to 1977 - WaterHeight07

Stan Zuray

Picture: 3rd commercial in district 5b (Rapids). Size of some kings were larger but numbers down for most. This king caught in a net was 38.3 lbs and is the record so far this year in the subsistence/commercial for this area. The water boxes in front are full of 38 degree circulating water which the fish go in immediately after being caught.



7/12/07

- Subsistence catch out of video wheel last night was the nicest catch in terms of larger fish in years. The downside was with all the good size fish came an increase in visible lchthyophonus. Sampling from 2 camps today showed a high percent of ICH disease and a number of the big ones being cut for dog food because of it visible in the flesh.

- Looks to me that if our future catch rates can be reflective of the run strength shown at Pilot Sonar our cumulative could end up being low but better than they are showing now. Stan Zuray

Picture: 1. There are 20 people at this camp now. Tanana Tribal Council is holding Spirit Camp here so the kids can learn about data collection and subsistence. These are some of the wonderful kids and their teachers. 2. The biggest king caught so far at this camp - 38 lbs.



7/13/07

- Some large King still and quality nice.

- Chum numbers seem like they might be not to many.

Stan Zuray

Picture: Lester Erhart of Tanana. Grew up and lived all his life subsistence. He still traps in winter and fishes at his camp in summer for his 40 dogs which his family runs and races in winter. He's a YRDFA board member



7/14/07

- King quality down as pulse/peak ends. In Tanana reports of fresher fish arriving from next pulse.

- Looks like a weak summer chum run here. Fishers are happy about it (poor quality fish). Our summer run often has little size correlation to the larger summer run downstream of us. Stan Zuray

Picture: clockwise:

1. Great quality catch and Tanana kids giving their gang signs.

 One of the main techs (Tsood -senior) teaching younger students genetic fin clipping.
 While Dave Daum (USFWS Fairbanks) was out working on our new video capture backup system he explained the video wheel operation to the Tanana School kids

4. Beautiful king on outside, nice red flesh on inside, but a bad case of ICH disease flesh. You never see flesh like this without the heart showing signs first. Often a fish with visible ICH on the heart will have flesh that is fine to use for strips or eating fresh.



7/15/07

- Today is the calm before the next pulse of King. People figure this coming pulse may be the last one that will be fishable because of ICH and poor flesh color existing in too high a percent of the kings after this one (normal). Also looks like this next one will be the last with any numbers looking at the lower river data. If the numbers keep tracking as they have however we may miss half the final pulse because of the 2 day closure which starts tonight.

- Figured I'd stop the wheel early to do some repairs that were building up, as this is a low point in the run.

Stan Zuray

Picture: 1. Faith Peters cutting king at Rapids. Councilor for the Tanana Tribal Council and just opened her own store in Tanana (Sunshine Boulevard Quick Stop). Has her own boat and always driving somewhere. A fisherwoman all her life, she runs nets.

2. School kids hot tubing at Rapids.



7/16/07

- Much more king data entered in <u>KingData07</u> **Up to June 13th:**
- average weight 11.7 lbs.
- average length 70.6 cm (eye / fork)
- 613 samples have 24 king over 25lbs.
- 613 samples have 4 king over 30 lbs
- 613 samples have 35.6 lbs as largest king.
- visible ICH in all king 10.7%
- visible ICH in 65.5 **cm** and above 13.1% Stan Zuray

Picture: Here's a picture (2007 I hope) of a big sheefish from the lower Mackenzie sent in by world renowned sheefish expert Randy Brown of the Fairbanks USFWS Field Office. While we will be seeing many of these pretty soon as they migrate upriver to their spawning grounds rarely do we see ones this large. Here's a fact I never seem to be able to fathom: these fish stop eating (the ones going to migrate and spawn) in early June - they will not start eating again till some time after they pass Rapids on their downstream migration after spawning in October/November. They swim 1500 miles plus without eating.



7/17/07

- Correction from yesterday: visible ICH in 65.5 cm and above - 13.1% (not 65.5") sorry..

 3 wheels report lower king numbers after 6 pm opening but nice looking fish. Pulse may not be fully here however.

- Water temperature and height still high for this time of year.

- Cisco pulses not really showing numbers this year. So little is known about their runs. Last year we had a very large run with two pulses by this time that hit over 150 cisco a day in the video wheel. Still have August as there often is a big run then also. Possible that they don't need to run similar every year to maintain a healthy population??.

Stan Zuray

Picture: Getting Married on the Yukon River in 2007. Looking upriver towards Rapids Canyon.





7/18/07

Kings slowed down but size of some and quality good so far, for a later season pulse.
Fishers will probably do okay around here as far as "needs being met". Because of fishers taking more seriously, reports of a weaker run this year, people worked harder and wheels and nets ran almost continuously to ensure enough take. All fishers talked to around here think run strength was very weak this year overall. Stan Zuray

Picture: This is what Rapids data collection pay will buy when your 17. Three of my techs taking some days off for the upcoming Tanana 440, their first race. They just showed up tonight on a test drive with their new lower unit and head to Fairbanks by Tanana River tomorrow. Shawn Erhart on bow helping - boat owned by Tsood Peters and Joseph Zuray. Boat called "Chasing Tail" (chasing the boat in fronts rooster tail)

PS: forgot to name the Wedding couple yesterday: Don and Debbie Rambadt of Fairbanks - they don't fish here they just wanted to get married here.



7/19/07

King seem to be dropping as day went on.
Starting to do some chum flesh color sampling to get an idea of what the summer chums are like prior to the arrival of the fall chums. Today 11% of the chums sampled had red flesh using our standard color chart. this is normal for summer chums before the fall chum arrive. Stan Zuray

Picture: Dan and Hank Ketzler of Nenana come over to Rapids most summers to fish for some Yukon Kings. They have a family camp at the upper end of Rapids Canyon. Here they are getting ready to head home to Nenana, happy they got some good fish for the family.



7/20/07

- King really dropping off in all the camps and all the gear. The end is near.

- Water very slowly dropping but still above mean. Water Temp - 65.8 F

- Not many sightings of chum in the little local creeks around here but that is the way on low summer chum run years like this. At this point it is probably safe to not expect a big increase in those numbers.

Stan Zuray

Picture: Kathleen Zuray, Rick Loomis and Ken Weiss all using the Rapids Research Centers Starband internet connection at the same time. Rick (photographer) and Ken (writer), work for the Los Angeles Times newspaper and came up to Alaska to research Ichthyophonus disease on the Yukon River.



7/21/07

- Stopped at some downriver camps and quality (white flesh and ICH) a big king issue now with ICH disease rates fluctuating a lot from day to day but running as high as 50% some days. This shows the inability to get proper info on ICH and many other issues such as size from a hit and run sampling method. Had I fished at some periods this summer I could easily have the opinion this was a super run with large fish or the worst run ever, full of small fish with ICH all over them. Full season sampling is absolutely neccessary. Stan Zuray

Picture: Katlyn Zuray and Malaki Derrickson (Katlyn is his aunt) catching burbot to get genetic samples for Randy Brown's (USFWS Fairbanks) burbot research. Katlyn just graduated high school last year and started UAF last semester. She has worked for the USFWS for a couple of summers and is firefighting this summer. Wants to study in Japan. Malaki just got his first fish and this is his first research project.



7/22/07

- Added <u>ChumPilot07</u>, and last years <u>ChumPilot06</u> for comparison, to tabs below - it's getting close to fall chum time here. Deleted some king graphs to make room.

- Started flesh color sampling to establish summer red flesh percents before the fall chum arrival.

Sunny days and water temp up a little. About
68 F again. Water height a little above mean.
Stan Zuray

Picture: 1. About 60 miles up Tozitna River and 8 miles above BLM's summer weir project, in the winter of 2007. This was my year round front yard from 1973 to 1984. Each summer morning watched chum and king spawn and travel past this point. Note open water from upwelling water in gravel. Even at 50 below it would be open. This exact spot was the heaviest chum salmon spawning spot on the Tozitna in the years I was there with hundreds of spawning beds on the biggest run years right in one view. 2 + 3. Two ways to get there in the winter of 2007.



7/23/07

Added <u>ChinEagle07</u> - looks like Eagle is about half way. Not sure on the millage etc. however, so if anyone has better correct me.
Added 144 lines of data to <u>KingData07</u>
Up to fish # 1066):
average weight - 11.8 lbs.
average length - 70.9 cm (eye / fork)
visable ICH in all king - 11.8%
visable ICH in 25 lb king and above - 23%
Stan Zuray

Picture: Interesting picture sent in by whitefish expert Randy Brown (USFWS Fairbanks). His words: "Here is a picture from an airplane of dead least cisco, humpback whitefish, and probably broad whitefish lying on the margins of a shallow lake in the Innoko River drainage. I think they were trapped in the system the previous fall and died in the winter. It looked like there were 2 or 3 thousand dead fish altogether. We saw them in early July and they were very rotten. We could smell them from the airplane flying over. There was no observable blockage in the stream between the lake and the river system, but it was shallow and if the water was lower last fall it could have been impassable".



7/24/07

- Water temp real high for this time: <u>Water</u> Height07

little increase in summer chum - will test flesh color tomorrow (fishing was closed last two days)
 Notice lack of jack king as is normal this part of the run each year.

- Most fishers reluctant to fish because of ICH. I closed live box to get some to cut tomorrow however.

Stan Zuray

Picture: Tanana 440 Boat Race. About 8 boats just raced from Fairbanks to Tanana and back. They travel at speeds sometimes above 70 mph and the front ends are light enough you can lift them with one hand. This is real big stuff in the villages. Many often blow engines or lower units. Boats often rise up out of the water to a vertical position and flip from wind. One racer said he has done this enough times he now rides on his knees so he will not get trapped under the boat. Racers get out of the boats visably shaking and worn from the stress of tight muscles.



7/25/07

- While a number of fishers ran gear for dog food for awhile today only myself and one other Rapids fisher that I know of ran to cut king. Subsistence king fishing here is essentially over for most I'd say.

- Some Humpback Whitefish showing up.

- 0% red flesh chum today so no sign of fall chum yet.

- <u>ChinEagle07</u> timing changed ??? Stan Zuray

Picture: Can never figure this fishing. Out of the clear blue I catch these huge size fish. While this is for over 24 hours and is therefore small in numbers, it is the highest average weight for a random sample for the season. One of the big red ones is 33 lbs. All other gear that ran today got high weight king catches also. This would be a good average weight for an 8 1/4" net. The down side of larger end of run king is the second picture and probably why some of these are at the end of the run. Piece on left is surface and right is a cross section (Ichthyophonus disease)



7/26/07 -Stan Zuray

Picture: While I had a picture of Charley Boulding earlier it didn't include his wife and backbone of the operation, Robin. Here they are at their camp a few miles above the Rapids canyon. They fish both wheel and nets and are moving strips out of their smokehouse now to pack up and go home to the Tanana River where they will run a tagging wheel for ADF&G and a separate subsistence wheel for their needs this fall. They still have some dogs but have traded in their large, winning Yukon Quest and Iditarod dog yard for a sail boat in the southern seas.



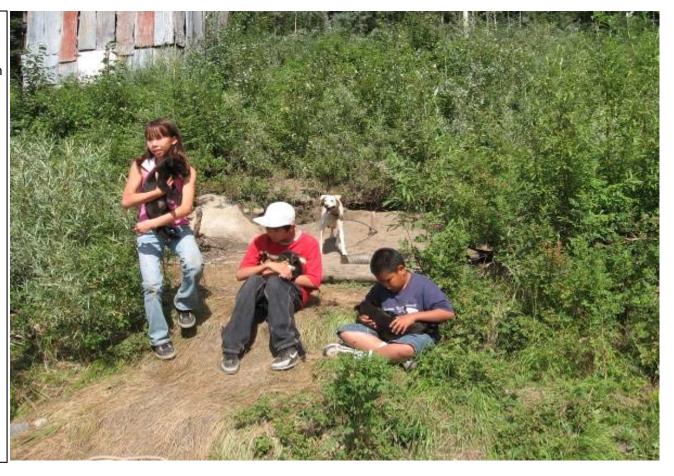
7/27/07

- Summer chum showing up in some of the small creeks. Not as many as in some of the heavy run years. Kids like to go there and watch them spawn.

- Water temp high still - don't understand how there can be all those cold water currents in the lower river with all this heading their way all summer.

- Interesting how pulses are smoothed out by the time they make it to the Canadian border, see <u>ChinEagle07</u>. We have seen this before and the best explanation I've heard is the difficult travel through the maze of channels in the Yukon Flats. The ups and downs of daily counts and pulses at Pilot and Rapids are one big bump at Eagle. Stan Zuray

Picture: Haley Brigham, Cody Vanderpool and Max Weihl are at spirit camp being held at Rapids Research Center this year. Here they are visiting the puppies at Lester Erhart's camp 6 miles downriver. Lester has 4 litters on his beach here and one older litter on an island across the river.



7/28/07

- Cisco whitefish showing a little build in numbers.

- Last of the king fishermen shut off here except for myself and I'm just going to do a few more days for data collection sake only as quality a large problem now. The ones that are good however are as red fleshed as the best of them and they get cut into strips etc.

- Few more chum lately but definitely summers and lots of females. Stan Zuray

Picture: Young men of the Rapids. These guys all spent there summers here from the time they were little babies in fish boxes. Esra Conrad, Colin Campbell, Joe Zuray, Tobin Hugny-Farr, Shawn Erhart - Today at a birthday cookout for two of the boys. Three are high school seniors and two graduated last year and are college bound. These are also some of the main data collection techs here.



7/29/07

- Cisco whitefish running good now and nice to see after a long dry period.

- No king fishing except for us now. Today all 7 fish cut were bad (Ich or white flesh) so we are just doing it for data sake for couple more days. Always feel guilty putting these king on dog rack and that's what makes everyone quit, but no way are these fish going to make it 500 more miles to Canada (?) so really doesn't probably matter. Stan Zuray

Picture: Earlier this summer Frank, Angie and Smilie had to be evacuated from their camp because of an area fire. They stayed at our camp and today they are doing what so many people think about. They are loading up what they really need and "sailing" of to the mouth of the Yukon and then up the coast to hopefully the Kobuk River to find a new place to live in the bush somewhere. They still have their 12 dogs to pick up at another camp.



7/30/07

- Cisco increasing more.

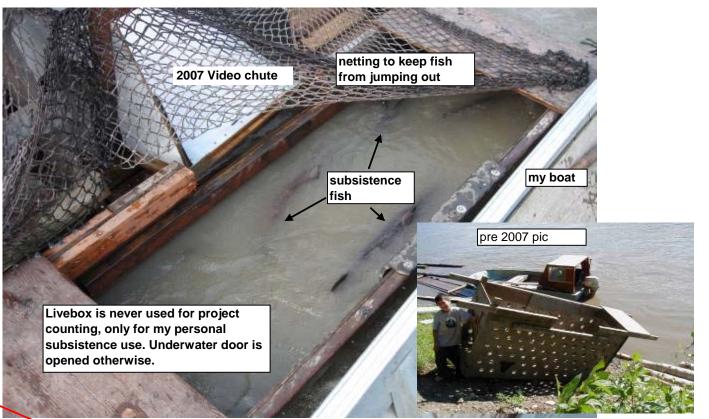
- Water temp remains scary high. Global warming ??

- People wondering where and waiting for fall chum. No more king fishing anywhere here. Stan Zuray

Picture: In 1999 Tevis Underwood (USFWS Fairbanks) and myself got a Yukon River Panel R&E grant to develop a more friendly way of counting fish using cameras and computers. The reason was Tevis's concerns over the harm it seemed we were causing to livebox held fish in the Fall Chum Tagging project at Rapids. I had never typed a letter in my adult life never mind turn on a computer in 1999. So if you don't like what I do blame it on Tevis.

Any way he and his research partners just got a livebox mortality study published by the AFS.

- Click on web site link in red at bottom to read abstact or download a copy of the whole study.



7/31/07

- 24 hr cisco count is up to 180 fish. That's a good healthy number so maybe they are doing okay this summer.

- Water height dropping, and with cloudy days so is water temp ever so slightly.

Stan Zuray

Picture: Rapids data techs (Tsood, Shawn, Joe) cutting lumber with a chainsaw attachment. A plywood (marine) bottom for a new race boat is \$1500 so they decided to go with white spruce. They're hauling out a 5/8" piece for crosspieces here.

- other 2 pictures are video chute pictures of how nice some of the kings still are on the outside. Inside is often another story which is why no one is fishing.



8/1/07

- 24 hr cisco count is up to 263 fish.

- Chum up slightly but still definitely summer chum. Got a 3.7% red flesh rate today out of 27 chum sampled. That means out of 27 chum 1 had nice red flesh similar to a fall chum. All summer long, prior to the first fall chum pulse, we will get about a 5-10% red flesh rate each day we sample. Even in the very beginning of the summer run some will have red flesh. What we look for with the arrival of the first fall chum pulse is an increase over a few days to over 50% red flesh (and up to 70 - 90% some years). This only happens when the fall chum come. This event is as distinct as elephants arriving in town for the circus and has been traditionally noted and waited for long before our sampling and color charts were ever used. Stan Zuray

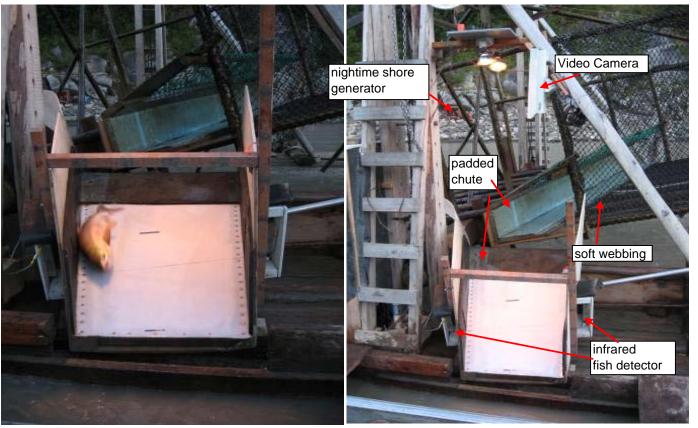
Picture: Practicing at Rapids. The boys took off to another race in Fairbanks tonight. Last time they made it all the way to Fairbanks and blew a piston the night before the race start. Here's wishing them better luck.



8/2/07

- Cisco and chum up slightly. King worn out but large (25 lb etc.) Tomorrow last king sampling day and then to finish up <u>KingData07</u> Stan Zuray

Picture: 1st picture is of a chum just breaking the infrared light beams which will send a signal by microwave transmitter on the fish wheel to a receiver at camp. "Signal" then goes to a computer interface, then to a computer which is receiving streaming video from the fishwheel all the time. The computer is running Salmonsoft software and is set up to extract frames from the streaming video upon signal and add those fish pictures to the ones before. At the end of the day I essentially am viewing a "movie" of one fish after another and do a keyboard count using another <u>Salmonsoft</u> program. This new infrared detector developed in partnership with Dave Daum USFWS Fairbanks is incredibly simple next to the older, door + magnetic switch way we had before (which was a fine way also). Need a video counting system - call Dave at 907 456 0290 or email me.



8/3/07

- Entered last of data from Rapids Chinook sampling - Final except needs to be gone over this winter for errors:

average weight - 12.1 lbs.

average length - 71.7 cm (eye / fork)

visable ICH in all 65.5 cm and > - 18.2%

visable ICH in all 65.5 cm and > female king - 26.7%

visable ICH in all 65.5 cm and > male king - 14.2%

- All data similar to last few years but weight and length average drove upward by those larger kings at runs end, slightly. See <u>KingData07</u>, and new graphs <u>%ICH</u> and <u>YearlyICH</u> which I'll delete after a couple of days, below.

- Got a higher red flesh rate for chums today (21.4%) but sample size was small (14 chum). See more tomorrow about fall chums coming and do larger sampling. Stan Zuray

Picture: Lester Erhart (cutting) and Gary Frank in the last days of the king season. Gary came over from the Tanana River to help Lester this year and Lester says Gary works him to hard. Lester has been active on the river every year since he was a kid at his dad's fishcamp. Most elders his age quit long ago (He's still young though). He fills his smokehouse up each year by standing at his cutting table day after day like in the old days. He's got a new hat.



8/4/07

- Sampled 34 chum today and 11 had nice red flesh so that's a 32.4% red flesh rate. With yesterdays 21.4% that seems more than a coincidence to get two high days in a row so I'd think the fall chums are building. When they reach 50% or more red we declare Fall Chum Arrival day. So seems like they are on time (slightly later) but may be very weak looking at Pilot data. Will cut all we can in next few days to get a good picture of the flesh change and fall chum arrival. Since I have been here, but before the data collection and color charts, I remember an Aug 8th arrival and fishers talk of an Aug 15th arrival prior to my time. Since the data project's been operating the past dates are:

2000 - July 25	2004 - July 27
2001 - Aug 3	2005 - July 31
2002 - July 26	2006 - Aug 4
2003 - July 30	2007 - ???
- Fishers are gearing up for cutting people food fall chum.	
Leater Trheat has already started	

Lester Erhart has already started. Stan Zuray

Picture: How about a nice scenery picture - Rapids Research Center, subsistence fish camp, or whatever it's called. The valley behind provides the water to cool the fish.



8/5/07

- Today from 35 chum cut we got 20 that had nice red flesh. That's 57.1% red. With Saturdays 32.4% and Fridays 21.4% red flesh rate I think it's safe to say the fall chum have arrived. As the rate passed 50% today, official fall chum arrival day at Rapids is Aug 5th. Seems like the pulse that came through Pilot Sonar on July 17th - 19th (<u>ChumPilot07</u>) is what brought them here.

- Normally the first pulse of fall chum are the richest and have the highest percent of red flesh with all pulses after declining in quality to the point that by late fall the chum are no better than a ready to spawn summer chum. See an example of this below in tab <u>%red04</u>. We did a large chum flesh study in 2004 and 2005. - At my fishwheel site I say I like to see the first bright (or silvers as others call them) fall chum pulse, get at least up to 500 or so per day for a few days. We're a long way from that healthy a number now but the pulse is just starting. Stan Zuray

Picture: I don't like to say a chum is a summer or fall for sure, as fishers have no definite way of knowing - but a boat load of these tells me the fall chum are probably here. Also here is the color chart we use to provide some sort of standardized grading year to year.



8/6/07

- Nobody is cutting as weather is way to bad - even for dog food. One of the best edible chum (people food dried chum) cutters here always says you need sun on the fish before going in the smokehouse to not have them sour.

- Water temp dropping in response to rainy colder days.

- Water height running a bit above normal. Water height and fishwheel efficiency during chum season are not a factor as counts are precisely adjusted using the ZRMC2 discharge formula developed by Rapids Research Center. This then gives us the exact number of chum passing Rapids each day. (okay, so I exaggerate a little) Stan Zuray

Picture: Bill Carter, crew leader at Gisasa weir, Travis Varney, crew leader at Henshaw weir, and Deb Lawton a volunteer, netting chum out of livebox at video wheel. They helped with flesh sampling and got to be in on "official Fall chum day" yesterday. Note the ducky weather. They spent their day off here and then continued to Yukon River bridge this morning.



8/7/07

- Chum up a little (<u>ChumPilot07</u>). With the break in rain fishers will start to cut chum for drying as people food. Fishing just opened tonight at 6pm.

- Cisco whitefish hit 428 in a 24 hr period today. Since monitoring began in 2000 the run often got close to 300 per day. So today is a big record breaker.

- Water temp continues down with cloudy days.

- Put Icthyophonus graphs with <u>KingData07</u> Stan Zuray

Picture: 1. Charlie Campbell and family run a fishwheel in between shore and a rock island in the middle of the Rapids. A fast and tricky spot to run, it catches about 2 1/2 times what my video wheel does, downriver of him. He also gets first shot at those big green spruce trees that come floating down river. Turning on now as the weather is breaking.

2. Nice chum sliding down floodlight lite video chute at night. This guy is about 3' away from going back into the river and continuing upriver.



8/8/07

- Chums still running about 50% red fleshed. Getting questions about the run timing. Do not think the fall run is late as it showed up at a normal time. It is very weak so far though. I don't expect the rest of these beautiful fish to show up later - I think that's a dream. What is coming in the mouth now is probably a pulse of nice but reduced quality chum that we normally get on into the season. I'm not late for the party if I never show up - but what do I know. Hopefully one of the end of the run pulses, will be exceptionally strong. Stan Zuray

Picture: **1**. This is why we look forward to the first fall chum pulse. The two with white flesh will dry like cardboard and be something I wouldn't want to feed my dogs on a cold night. The two red fleshed ones will drip oil as they dry (probably fall chum). Summer chum that make it to Rapids don't need the oil content as most are not traveling far upriver from here. Many spawn in creeks right around here.

 One of the many bering cisco that are migrating up river now. They like the salmon (but unlike the sheefish, broad and humpback whitefish) will make the journey up, spawn and die.
 The video fish wheel livebox has about 200 - 3" holes in it so even when door (Joe's arm) is closed for subsistence most cisco get right out (pre 2007 picture).



8/9/07

- In 1998 Rapids discharge adjusted fall chum passage estimate on Aug 8th totaled 2102. This year it is 3173. 1998 ended very poor but did see a strong late push of chum. On Aug 8th the cumulative for the big run of 2005 totaled 134,840. Shows how variable chum runs are. See added cumulative graph: <u>AllChumCums</u> below.

- Red fleshed chum have decreased last two days (today only 34%) and myself and other fishers notice quality down - probably the backside of the pulse but also think summer chum still present and making up more of run as 1st fall chum pulse moves on. Not normal to see a steep drop in quality this early in run - but then not used to dealing with this small of a pulse of fall chum.

- On a positive note the cisco break record again - 506.

- Most of <u>KingData07</u> was put online to reduce this email size links right to it will be found under this tab however. Stan Zuray

Picture: The rock island in mid river Rapids looking downstream today. There is no white water just strong swirls and water shallows on either side of island. This is where I put my puppies when they get to old to run around camp. Clean, no bears and wolves and lots of water to drink.



8/10/07

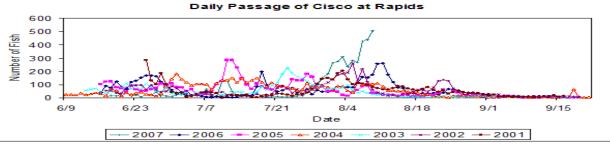
- Less than 20 days from now going to be a lot of chum in Rapids, see what just hit Pilot Sonar: <u>ChumPilot07</u> - very good news and hope for more.

- cisco finally peaked here - 400 today. Check out cisco graph below picture, sent by ADF&G Fairbanks who have been tracking this big pulse from the mouth.

Most of <u>KingData07</u> was put online to reduce this email size
 links right to it will be found under this tab however.
 Stan Zuray

Picture: Tired of fish, how about some Samoyed huskies. No not to eat - I mean a picture of some to look at. This spring (2007) a team of pure bred ones came through Tanana with the Serum Run. A yearly reinactment of the old Serum Run that saved Nome. Onward you huskies.





8/11/07

- Chums are down as expected but the flesh color and quality are way down also and that's not normal. Almost like the small pulse of fall chum went through and we are left with summers again. Hard to figure, but don't ever remember this before but probably has happened before ?

- All fishers here stopped cutting even though good weather. We only had 6 red ones to cut today out of a catch of 55 (10.9% red) and will not cut now till things change.

- Another big day at Pilot Sonar (will hit Rapids in approx. 19 days) so at least our fall dog food is coming at it's normal time around September 1st.

Stan Zuray

Picture: My happy wife Kathleen taking a break by her flower garden on the Yukon River today.



8/12/07

- Was in Tanana today and nobody cutting from Tanana to Rapids with all fishers noticing the lack of fall chum or red fleshed chum. Next small pulse of fall chum hitting about Aug 19th with the big one at end of month. Just a waiting game now probably.

- Temperature continues down - it was 62.2 F today

- Water up above average for this time - drift been hitting wheel and I hit lots of it coming up in dark from Tanana tonight at 1 am.

Stan Zuray

Picture: A Rapids fish camp. This one has the typical tin smokehouse and to the right of it a screen shed which is used for cutting in and to dry the strips etc. in for a day or so before they go into the smokehouse. Strips and dry fish, dry and cure for 2 to 4 weeks depending on weather in a very light smoke and cool temperature. Nowadays people try to get them to town to freeze as that preserves the fresh taste best and some of the moisture. When I first came to Tanana before alot of freezers were in use, strips would be gathered together and put in gunny sacks and stored in a high corner of the smokehouse till winter brought the cold. They were very dry and stronger tasting when stored like that.



8/13/07

- Another big day at the test net project at mouth. Looks like the fall chum run is saved from disaster. Still needs to get counted at Pilot (and of course Rapids) but run looking much better now. Still below what was expected by management I'm told

- Added graph for Chandalar Sonar Project, where about 1/3 of all fall chum past Rapids go: <u>RapChan07</u>

- I have been asked about access to past email updates and also persons wanting larger pictures in the complete seasons updates I put out each year. So below picture is a click on link to <u>Daily E mail updates 2007 (PDF)</u> up to Aug 12th (also found at zuray.com web site).

Stan Zuray

Picture: 1. Something like: "switch places and see how you like the rain"?

2. A large king, late for the big meeting in Canada (today).



8/13/07

- Good to hear about the continued fall chum numbers into the mouth. It's one thing to have to do without some dry edible fish and another to go without a winters supply of dog food. The two big pulses will hit here just at the right time for that.

- Chum numbers way down (36 in 24hrs) as expected: Chumpilot07

- Cisco continue to steal the show - 346 today. Stan Zuray

<u>Picture</u>: Frank is in his 60's and his wife and him are headed out to the back country to build a cabin and spend the winter upriver from here. See, your never to young to have fun. <u>News on past pictures you've asked for</u>: 1. No news yet on Frank and Angie's move to Kobuk by riverboat - will update when they contact someone. 2. Our race boating data techs made it to the starting line of the Fairbanks to Nenana race in one piece and did good time to Nenana - had their boat float away while eating during short layover and go completely under a barge and wash up on a log jam sandbar where they had a dangerous time retrieving the boat. Broke boat side and twisted and broke metal on motor. They got it going and was allowed a late no time penalty start as rookies and finished in good time back in Fairbanks taking on water. They deserve congratulations and credit for extreme perseverance.



8/15/07

- Getting quiet at Rapids. Just 5 camps open and 2 pulling out soon. Still not any cutting - some cutting planned on the pulse coming around Aug 19th. At this point I'm just going to get my dry fish for dogs. What's here now is to poor flesh for that but the coming pulse should be better. I'll remember this year as the time the fall chums came twice.

- Cisco not quiting yet 345 in 24hrs.
- Water temp 62.4 F

Picture: 1. Would you buy a used car from this guy? - not me. Remembering the nice sunny king days of summer and making filets for strips.

2. Another late for the party king - today.



8/16/07

- Water staying pretty high for this time of year - drift mostly has gone away.

- Water temp getting closer to mean level for this date - around 62 F.

- One last attempt to get chum people food coming this weekend for remaining fishers. 2 small, close pulses of better fish expected to be here Sunday. Seems like quality may be raising today a little - see tomorrow.

Picture: Linda and Carol checking out some chum for making strips to can before they leave Rapids in a few days to go back to Manley Hot Springs. Linda has run a camp in the area for over 30 years and Carol often comes over to help out. They thought some of the quality is coming back. Notice a few nice silver chum in their fish tub today.



8/16/07

3 camps back to cutting people food and reporting over half with red flesh. Not doing flesh sampling as that project over, so just going by fishers best guess. I'll cut tomorrow and do a red flesh sampling however.
All fishers when asked however said it did not seem like the "bright" or "silver" run from looking at the fish - that it seemed like the normal, more marked fish, we get for the second pulse - seemed like that to me also which is why I asked.

Picture: Pulled a fishwheel today and this is what did it. 12 hp Wisconsin off a ditch digger from the dump turns a pulley on my old truck transfer case which turns a big pulley welded on a jack shaft through 2 more stages of reduction on an old mining winch and up comes the wheel like the motor isn't even working. Isn't it beautiful. Today's picture.

- Fish tote with today's chums which were increasing later in the day, heavy on males, much better quality and size, and back to over 50% red flesh. Like I said the other day, this will be the year the fall chum came twice.



8/18/07

- Sheefish, humpback and chum up, cisco down

- Cutting of edible chum in full swing amongst the few survivors here at Rapids. Weather nice, numbers up and chum of good enough quality.

- Down to 4 camps still going in area now.

- Water up to 30 year maximum with drift coming down today, enough so traveling is on one side of the river (depending on wind) <u>WaterHeight07</u>. Hope fishwheel doesn't get hit by a big tree - I like my days uneventful when it comes to that stuff. Now watch, for saying that it will.

Picture: 1. Well traveled trails can get pretty deep sides where it doesn't blow in winter. This one is close to Tanana. Spring 2007.

2. Smallest fish I have ever video captured. Only possible because of the new infrared light beam in chute. I get moths occasionally to.

3. Amanita Muscaria mushroom. Real colorful but pretty toxic. They're coming up all over here now.



8/19/07

- Chum numbers same. Good cutting weather. Closure started at 6 pm for 2 days. Drift has slowed a lot.

Picture: 1. Called edibles or dry fish they are put up for people food. No salt brine usually they are hard to make properly and require more care than strips I feel. These ones are a filet cut in half and dry easier. They are of the same value as strips for barter, etc. and are almost more popular in the villages around here. These just cut today - into smokehouse maybe tomorrow.

2. Called dry dog food (vented) - just cut. The lack of care and attention given to these are apparent, next to people food. The object is quantity and saving as much as will dry without to much trouble from flies - the biggest problem. They are hung skin out for one day and flipped. Everyone cuts different from camp to camp. I run 14 dogs and will use 1000+ of these for traveling food and 1400 cribbed frozen fish for feeding in town.



8/20/07

- Chum numbers up slightly (117). Nice weather again. Just waiting for tomorrow night opening now. Be nice to see the numbers go up. Don't even feel like I'm counting chum really at these numbers. I'm sure I'll be complaining the other way when the first big pulse hits and I'm counting all night.

- Seeing sheefish every day now (7-10) so think their run is starting in earnest.

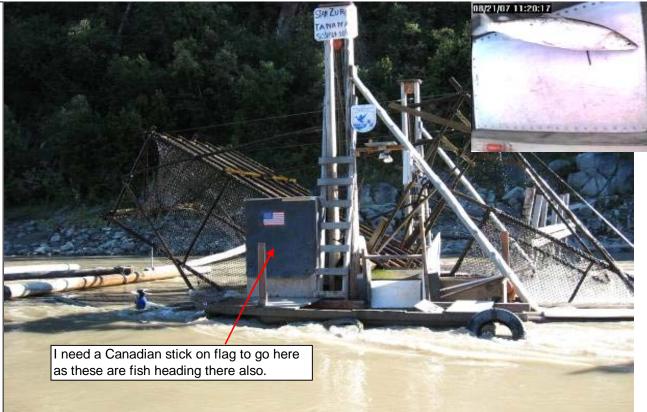
Picture: "Fisheries technicians": Cy, Tsood, Ezra, and Joe pulled down the wall tents and packed up their gear this weekend and now back to school - three are seniors. Just writing them their last checks which is always the highlight of their work day. Had 6 men and 2 ladies as the data collection project's main workers this summer. Those 8 collected weight, sex, girth, length, and lchthyophonus disease data on over 1000 king caught, over the entire run, in this area. Note their devious smiles.



8/21/07

- Cisco numbers falling after a good long heavy pulse. - Following is a response to questions I've been getting about chum numbers: I think the low numbers at the video wheel are mostly because of a lack of fall chum in the river - but that is going to change in a few days (see ChumPilot07). If as ADF&G has stated there is a heavier than normal amount of summer chum mixed in this beginning part of the run then I have always felt that I could then be missing a higher percent of chum because I feel some of the summer chum, much like the broad and humpback whitefish tend to travel more on the inside of my lead and avoid capture. I have no proof in the form of studies etc. but myself and USFWS personel have seen what happens when I add lead sections closer to shore. My whitefish counts double. Also I have a bunch of other reasonings. If that is true then you can imagine the trouble a fishwheel project would have with comparing year to year if it built leads or wheel basket different sizes over the life of the project. There's enough variables in the game without adding them in yourself.

Picture: Video wheel and sheefish caught on camera today at 11:20:17 am



8/22/07

- Getting the real big sheefish now. Cisco continue decline. Occasional broad and humpback whitefish.

- Water height continues down - almost to mean level for this date.

Picture: 1. Remember the picture of the freshly cut chum edibles two days ago well here they are after some good drying days dripping oil. Like I said these are tricky and some bad weather and things turn sour fast. One trick is to put a stove pipe on the smoke stove and run it outside turning it into a heating stove, to keep moisture out of the smokehouse.

2. Catch from today. Red flesh chum running about 1/3 of total, everyone here thought. Some nice fish.

3. Bonnie at ADF&G sent the graph and said, "Here is another Cisco update based on the Rapids data. The Cisco have peaked and set a new all time record as expected based on record passage also observed at Pilot Station".



8/23/07

- Chums increasing, more males, bigger, and 60.1% of them have red flesh. I think we have a combination of the third tiny pulse of fall chum showing up with the front runners of the 1st big fall pulse. On the graph ChumPilot07 I expect the numbers to just ramp upward and not drop as at Pilot, as the influence of the big pulse gets greater. My percent caught of Pilot Sonar is going up also which indicates to me true fall chum taking over the river. It's a game when looked at like all that, but to the people who need the fish upriver it's not. - Down to 2 camps at Rapids. Mine where I'm mostly alone (poor me), and Campbells where they got kids running all over (poor them). In Tanana, downriver 40 miles, some of the earlier Rapids residents and many town residents are setting up wheels for fall dog food. That's where much of the late action takes place. Campbells and I will get ours here.

Picture: Remember I said people on the river are really into race boats. During Spirit Camp this summer I didn't get them doing this - they do it by themselves. Notice my sharp plane blade resting on the dog chains.



8/24/07

Headlines: Chum Salmon Pouring into Rapids - Well I exaggerate a little but did get 315 in 24 hrs.

Has to be the big pulse starting. To many chum for it to be anything else. Darker fish outside but still nice flesh in many which is normal for fish this time of year.
Should see increasing numbers for days to come now. <u>ChumPilot07</u>

Picture: Anatomy of a good fishwheel spot (one of two left in Rapids today): On the outside (left) of the wheel there is good current which the fish try to avoid by swimming closer to shore. On the inside where the lead fence is you have an eddy caused by the rock point in front of the wheel, which the fish like because they can move upriver with little effort. The river channel is not that far away outside of the wheel also which seems to be a must for king salmon. Chums don't run in the channel here so that doesn't matter for them. In wheel fishing (especially for king) the name of the game is location, location.



8/25/07

- More Chum Salmon: catches double to 616 per 24 hrs.

- Either the chums in the 1st big pulse are very fast or we are going to see some much bigger catches than this before it's all over <u>ChumPilot07</u>. Pretty nice to see all the fish after the king season and 1st part of this chum season we had. Looks like another pulse coming in the mouth also from Lower River net data today.

Picture: Had a small (200 chum) commercial today in district 5B. Virgil our fish buyer came down from the Yukon River bridge (100 miles upriver) to get some nice red flesh fish. Andy and Mike (ADF&G) taking scale samples before the fish go into Virgils boat. The new blue totes were donated by YRDFA to help improve fish quality in our fishery. Here we are using one to store ice for the opening and the other for whole fish. Between the cold creek water here and these totes Virgil will be getting top quality fish to Fairbanks same day caught. Go get some at his plant in Fairbanks or visit www.santassmokehouse.com



8/26/07

- More **Chum Salmon:** catches up 1/3 to 932 per 24 hrs.

- Campbell got a 19.9 lb chum today (electronic scale) - picture tomorrow.

- Water right at mean level - temp on high side.

Picture: 1. This is the "Hunter" overlooking Hunters Eddy downriver of the Rapids. Facing out towards the river he (or she in these modern times of sexual equality) looks on with eternal vigilance - thinking what only god knows. One of the best king eddies in this area, it is just off the main channel so has access to both the side and channel running king. For a number of years now these normally high producing king eddies have been unable to produce using the large mesh nets still in use here (8" and 8 1/4"). The smaller average size of king salmon now has most fish going right through those nets. Net fishers will eventually adjust and use smaller mesh nets so they can then catch higher numbers. Pull out the cisco nets fishers. 2. Sheefish and chum traveling together.



8/27/07

- And more **Chum Salmon:** catches up a couple hundred to 1108 per 24 hrs.

- Been great weather for dying dog food so far. That's what's going on here at the two camps left.

- Heard there is about a half dozen wheels in the water in Tanana. Almost all are for dog food and they are running very little hours to get what is needed for the day's cutting work.

Picture: 1. Rapids Ruth with a 19.9 lb fall chum caught in her fishwheel yesterday. Many of you have already seen pictures of this fish circulated from Virgil's plant in Fairbanks. It weighed 1/10 lb less there after time had past.

2. Very late king salmon heading to spawning grounds by herself.

News from the past:

- Frank, Angie and Smilie, the Rapids family that took off for the Kobuk River 1400 miles away in two small riverboats were seen outside of Unalakleet a few days ago. They were waiting out some weather on a sandbar and doing fine so far. Wishing them good luck on the dangerous coast.



8/28/07

Chum quality down as pulse cresting (normal). 37.5% red flesh out of 96 cut. May stay high numbers for a few days however.
Getting to feel like fall here - one boat went by all day. Soon the hunters will come through heading downriver in numbers though.

Picture: 1. Fresh cooked fish soup. 99% of the food most local sled dogs eat all summer is this. About 25 whole salmon and whitefish and some water - slow cooked for a few hours. Good enough for people to eat, (that's one pot that better not call the kettle black). For years I never cooked dog food as it would just spoil immediately so instead I just hung fish to sour and fed it like that.

2. Then a friend showed me how to cool it down and keep it fresh for days. Gravity fed cold creek water constantly run into a box. The wonders of modern technology and it's DEC approved.

3. My leader Crazy sure likes it.



8/29/07

- Chum continue to run about 1100 per 24 hours for third day now. The projects water discharge formula converts the 24 hr catch into a guess at the chum passage through Rapids that day. We are looking at about 11,000 chum a day through here. During the record run of 2005 we had a day close to 100,000. I put the 2005 graph below in case anyone wants to see it: <u>ChumPilot05</u>

- Water continues to stay high and not drop. Warm water this year.

Picture: Climb the ridge right behind my fish camp and this is where you end up. Rock Island right in Rapids is seen by arrow. These hills have caribou in them and a well beaten trail still exists up to here from years of hunting. In the old days I'm told, it was another thing that made Rapids a good place to summer. A fast climber can be to this point in 1 1/2 hours. You are pretty much looking at the whole canyon upriver of Rock Island in this 2007 view.

2. Sheefish going for ride on the fishwheel so fish friendly they come back for more.



8/30/07

- **Chum pulse goes higher**, caught 1,465 today and figure about almost 17,000 went through Rapids in same period. Supposedly this present pulse has a high percent bound for the Canadian Border (genetic info) - First coho caught - will not see many here. Most go up Tanana River. Late in season however, after project breaks down, a real coho run goes into the upper river even as the ice is forming.

Picture: Campbell family turned on their subsistence wheel tonight before dark to get 25 chum salmon. We all stood there and watched it catch fish in every dip with this being five in one basket. Trying to stop the wheel without a fish getting caught on the final basket was to hard so one of the kids just went in and got it.



8/31/07

- Chum pulse maybe peaking but then know tomorrow for sure. Don't expect an extreme drop as at Pilot Sonar this far upriver from mouth (731 miles). Here slower fish from this pulse will get mixed with faster one from the next and fill in Pilot's no chum period between the pulses: <u>ChumPilot07</u>.

- Anyway cumulative is looking much better and climbing fast.

- Was in Tanana today and many fishers are holding off on putting up dog food as weather is to warm they say. When they do a large amount of chum will be caught for split, vented and crib fish. While Tanana has about 1/4 the dog teams it did in say 1979 (survey) it is one of the few places that still have some teams left.

Picture: While cutting dry dog food the last few days I've been picking out the best chum for smoking and then each day bag up another batch. While king is the preferred fish for strips, dry fish and canning my kids don't like it as well for eating fresh or one day smoked as this is. Whitefish and chum filets is what we eat all winter for fish meals. While I don't care as I'll eat anything if I'm hungry I think the king may be to rich for some people on a regular basis.



9/1/07

- Chum cumulative reaching level of the weaker runs in past years. While maybe not the strongest run, with another good pulse coming, counts should remain high for another week and raise cumulative considerably.

Picture: 1. Fred Jordan carefully watches his dogs at Tanana's spring carnival sprint races while his son Charlie gets ready to take off.

2. This weekend saw 3 days of Memorial Potlatch for Fred and 3 other Tanana residents who have passed on. Fred was a legend in life and I feel privileged to be his friend. He **was** subsistence and can think of no one who fished, hunted, drove dogs and snowmachined etc. more than he. At home at his camp in the Rapids or Fish Lake he often would not be found at potlatches and town functions, but none of those ever took place without food provided by him. He was as full of it as the best of us but was an absolute no bullshit human being.





9/2/07

- Dropping numbers of chum signal backside of big pulse #1. Will move right into big pulse #2. According to ADF&G genetic info next pulse will have about 1/3 of it going up the Tanana River and rest up mainstem past here.

- Both Rapids camps left are through cutting dry dog food and now get ready to crib chum around Sept 10th. Need to make large log raft to haul them. In Tanana dog food cutting will start getting heavier now. They do things later there as no time pressure from the need to break camp and move to town for winter like us.

Picture: Clockwise :1. Live Burbot - cod family good eating and bad looking. Once a year right at this time they move up or down (I don't know) river in big numbers and the kids catch them by hook and line close to shore eating our fish scraps. Hardly ever caught in wheels they probably hug the bottom and swim inside of lead avoiding capture. 2. Large sheefish very full of ripening eggs headed for Fort Yukon area to spawn in mainstem.

- 3. Very late King salmon
- 4. Small male coho salmon caught (2) today .



9/4/07

- Second big pulse may be starting to hit Rapids. Timing from last pulse would be right if it was.

- Water temp is going down slowly but relatively high compared to past years.

- Water height has dropped a fair amount below the normal level for this time of year. This has caused current at wheel to slow a bit and efficiency to lessen. Extra paddles were added today to keep it turning at proper speed. This is all normal and water discharge formula is designed to take it into account. As current lessens chum have less reason to hug the bank where the wheel is. We have 10 years of data showing wheel efficiency varying like this all season.

Picture: This is Laurie Boeck (ADF&G) who organizes all the data this project and others send in each day, for her loving superiors. Knowing only full throttle speed she patrols the rivers joyously in search of projects sending in late data. Boat is traveling on the Tanana River. Photo sent in by Bill Busher and comments by me may be slightly exaggerated.



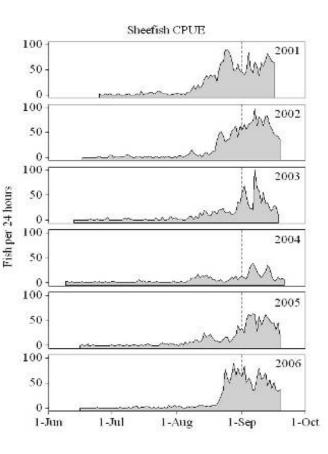
9/4/07

- A few questions today about project discharge formula: Changing the days chum catch into a best guess at the number of chum passing Rapids is based on fishers knowledge about water current speed and wheel efficiency. 10 years of project data at this wheel shows a clear linear correlation between these. When speed decreases fish spread out - when it increases they move tighter to shore and wheel. At this site these changes are directly related to water discharge measurements taken at the Yukon River bridge above here. Applying those measures to a simple formula using different wheel efficiencies at each discharge produces a passage number that has been remarkably successful, especially for a fishing gear type project. see: EscVidTag

Picture: 1. Just a fresh dog team and toboggan sled trail looking back on a sunny cold day. Big tripods are good markers in open country.

2. Randy Brown, whitefish expert with the USFWS Fairbanks office, sent in the multiyear sheefish graphs. In his words, "Sheefish numbers seem to be down this year, although in 2003 through 2005 they were not particularly high by early September either. You should see them pick up substantially over the next couple of weeks".





9/5/07

- Seems like big pulse # 2 is fading and will probably drop pretty fast and numbers will soon get rather low as there are no new pulses for awhile - and the last ones are not that strong.

- Fishers are hoping the last pulses will give them the fish they need as many are putting off fishing, and are waiting as the weather now is still very warm for crib fish. While Tanana's harvest of fall chum is nothing like it use to be, it still has a pretty high take of late fall chum because of the remaining dog teams.

Picture: Fish friendly basket from above. When first getting scoped up underwater, the fish usually head for the outside of the basket and smack the side. Here we have flexable seine webbing as opposed to wire and poles. As the basket raises and comes out of water the fish start to slide toward the basket chute, here there is 1"x1" vinyl coated wire mesh instead of a larger mesh or chain link fencing, to keep their gills from getting hooked. When in chute and they flop back and forth there is 5/16" foam rubber on all sides, so no fish headaches. The wheel rotates "just above a stall" to give the fish lots of time to move towards the chute. This is a new basket but looks many years old (brown slime) from running 24/7 all season.



9/6/07

- Chum continuing to drop, but figure about 15,000 still went through Rapids today.

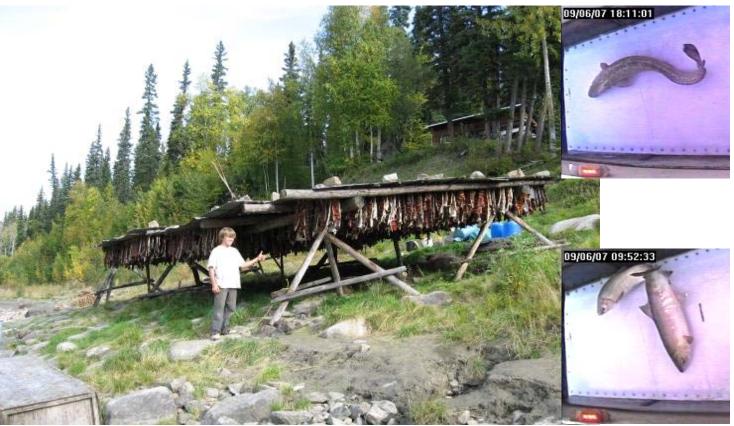
- Added graphs for Eagle Sonar and DFO Border Wheels below: <u>RapEagle07</u> and <u>RapCan07</u>

- Big chum pulse #1 starting to hit Chandalar River: see <u>RapChan07</u>

- Rapids quiet this time of year. See no one or a couple of persons a day at most. What a change from the prime time of king season.

Picture: Cy Conrad by 1600 dry chum for dogs, at Rapids yesterday. This is an immense amount of work even for a large family like theirs. These will be moved and rehung in Tanana in a few days. Without this fishery and resource every dog team in Tanana would be gone because of the costs of shipping an alternative food source from Fairbanks. The leaves are turning yellow.

2. Rare burbot caught in wheel. 3. Broad whitefish and chum mating in video chute.



9/7/07

Chum cumulative still rising steeply but will slow soon.
Sheefish still small numbers. If warm water temp could delay their migration this would be the year for that.

- Water temp is 55 F

- Water level is lower than average and current slow.

Picture: 1. This creek in Rapids has a story. Many creek valleys have gravel deposits that fan way out into the river from years of heavy rain, subsequent slides and the following violent flushing out of the creeks. Some of the best fishing eddies are formed downstream of the gravel bars that way. About 50 years ago a fish camp was here on the upriver side of the creek. The dogs were chained on the beach. A woman and 1 kid were in a tent when the creek let loose. It missed the tent but completely covered the dog yard and never a dog was ever found. Someone who saw it after said the new gravel bar in front of the camp had steam coming out of it for a long time. It's probably a fraction of the size now from years of wearing down.

2. Today's catch of chum - note the darker spawning colors as the run gets on in time.



9/8/07

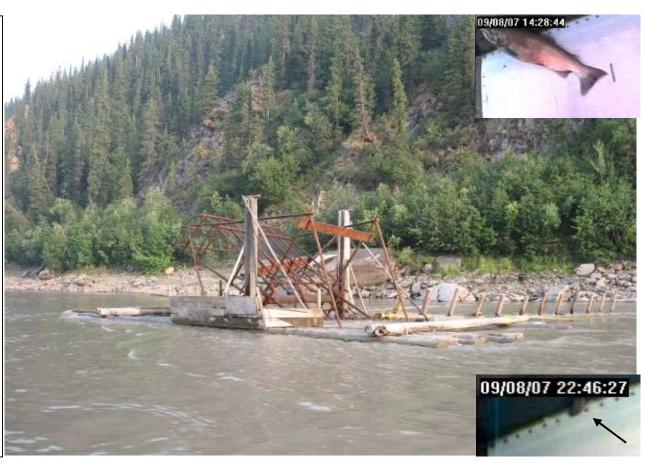
- Nice to see chum numbers staying high relative to Pilot Sonar's few fish in this period. It's just the spread out of a pulse effect happening, but higher counts each day mean more to spawning grounds.

Picture: Lester Erhart's fishwheel at lower end of Rapids canyon, earlier this summer. Good spot for king. These spots are pretty specific areas - Lester says he tried a number of places above and below and never did good at all - just right here.

2. Male coho - still just one or two a day.

3. A vole (under the time stamp 22:) got in the video chute tonight?? and crawled in the infrared sensor hole and triggered the video capture a few dozen times before going on it's way??. Thought I was having a system failure and then I saw it.

Update on old update: Got so much email asking about Frank, Angie and Smilie boating to Kobuk in riverboats from Rapids you will be kept informed as I get news: They made it to Elim and are waiting out weather trying to get around Cape Darby. Say there doing good and people are helping them along the way and they are trying to figure out the ocean (postcard Aug 29).

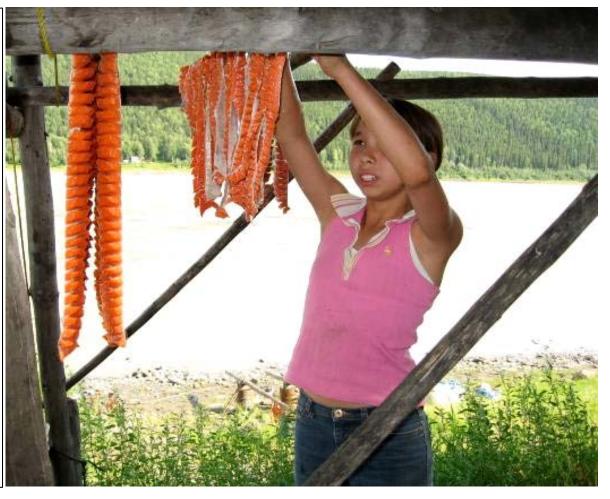


9/9/07

- Changed timing info on Chandalar Sonar graph slightly (<u>RapChan07</u>), and Eagle Sonar (<u>RapEagle07</u>) and DFO Border Fishwheels (<u>RapCan07</u>) by a lot. The big pulse # 1 is so distinct I think graph run timing is not off more than a day or two now. Always easy to see exactly after the fact now it's a little tricky.

- Burbot run in progress. Two of the kids are helping get the last of the burbot genetic samples. They like doing it anyway as they put (freeze) the fish up for themselves. Have no idea why after a summer of kids fishing out front here that in the beginning of September burbot come from down or upriver in good numbers. This is a fairly well recognized happening (after raising kids here for almost 20 years). We need a radio tag study.

Picture: Haley Brigham came to Rapids for Tanana's Spirit Camp this summer. She was really helpful and here she's hanging king bellies for one of the fish cutters. Photo by LA Times writer Ken Weiss (no copyright).



9/10/07

- Dropping chum numbers seem to be slowing - getting close to next very small pulse maybe

- No real action on the humpback and broad whitefish or sheefish yet.

- Water temp still high at 55 F

- Last two wheels at Rapids (Campbells and mine) should start fishing pretty heavy as of openning tonight for crib fish.

Picture: Many really liked the picture from the hills above the Rapids canyon. Here's another. It's not bad walking up there and really not to bad going up. I always say if your willing to camp for the night you got a 50% chance of seeing a caribou or more. Looking south.



9/11/07

- Water level getting right down there. Added larger paddle boards again to keep wheel rotating properly.

- 2 Wheels running long hours to get crib fish now. One fisher hauls by boat to Tanana and I will use a raft of logs and float all at once. Talking about 1400 chum and sheefish etc. for myself whatever is the catch. Usually it takes one or two days but doing it at a low point in the run will take longer. That's for keeping 14 dogs running in a team which usually takes a couple more being tried out or sitting out injuries.

Picture: Rapids Rabbit. Raised from a baby bottle it would follow the kids around camp this summer. It's on its own now running wild.



9/12/07

- Was in Tanana today hauling down some dry fish and lots of chum being cut for dog food. No cribbing there yet.

- Water temp staying high at 55 F about.

- Water level continues to drop with more paddles added to keep wheel turning.

Picture: 1. Into scenery picture taking with no people around this time of year. Bedrock - perigrine nest each year on the big face and a good eddy on the downriver side owned by the Peters family. Between Rapids and Tanana. Looks like it's weathered a few breakups of ice. 2. Real skinny broad whitefish - not the normal. 3. Again not the norm but this male chum is in full spawning colors. By end of run it will be the norm though.



9/13/07

- Was asked to add a Sheenjek Sonar graph and your wish is my command (just don't ask me to be good): <u>RapShe07</u>. - Water is clearing steadily now. Use a seechi disk daily and it reads at 18 centimeters now, twice that of one and a half weeks ago. Water never gets clear enough here I believe to affect fishwheel efficiency as it does at the DFO Border wheels .

Picture: Over 500 chum and a few other whitefish in a fishwheel dead box tonight (for cribbing in Tanana). This box will hold 650 or so. Use to run some wheels (not mine) that held over 1000 and had half the size baskets down at the mouth of the Tanana River. Slow moving wheels that fished in 4' of water sometimes but would some years feed many of the dogs in town. Sometimes a wheel is run by a number of persons each year. Even when I never owned a wheel I would run up to 5 different wheels some years. Subsistence is complicated and that's why it's often impossible to make regulations that don't disrupt some part of it. The downside is they often make criminals out of hard working persons who are only trying to fed themselves or their dogs. For instance I just found out this summer that none of these fish can be used for trapping bait legally - a practice 99% of all trappers do each year. The list of examples just like that one is very lona.



9/14/07

- Seems like the influence of the last pulse of chum is showing itself as number up slightly. Small pulse so may not see much in the way of a big raise in numbers.

Picture: A number of people ask what is crib fish. This is last November on bank of Yukon in Tanana. The tin enclosures are where fish are put whole around this time of year to sour and here they are being spread out for freezing around Nov 1st. It is done on purpose as most breeds of dogs will eventually die from eating fresh uncooked fish (enzymes kill vitamin B - dog dies from deficiency). Dogs also have short intestines and need predigested or broken down (cooked well) food more than humans. Mushers who race and cook fish for adding to store dog food sometimes prefer fish frozen immediately so get crib fish real late when weather is freezing. Mushers who trap and travel with dogs prefer rotten fish as it can be fed as is after long days on trail when no time for cooking food. Crib fish is only used for in town feeding of dogs as it is to heavy to travel with. Dogs fed crib fish at 30 below and colder need good spruce branches or hay under them as the fish is so cold and icy it can cool them more than they can get energy out of the fish otherwise. Even a smaller dog, thin from coming off the trapline can eat a whole male chum 2-3 days in a row. Dogs are amazing athletes when seen in these situations. And yes, crib fish smells incredibly rotten.



9/15/07

- Chum numbers definitely up in both the wheels going in Rapids. Sheefish and other whitefish still noticeably absent in both. Usually at crib time (and we are later than normal) we are getting them in better numbers. Water is still warm though and can't help but wonder if that's putting them off for a while.

Picture: The famous George Attla of Huslia - the greatest dog musher in the world. This was one of the last times he raced in Tanana. First time I met him was one of the first times I ever raced in Tanana so I was pretty green to it all. I was going out in front of him and he came up to me at the start chute and said, "when I pass you, I'll pass you on the right". I thought to myself, "He's going to pass me?". Anyway down the trail he comes up on me like an express train and passes me on the right. For a few minutes my dogs speed up and chase and I thought, "I'm keeping up to him now". Then I look up again and he's gone and I never saw him again. He lives back in Huslia now and still runs dogs.



9/16/07

- Chum up more - getting some good numbers off this last pulse. Campbell wheel went up to 50 per hour today. Video wheel doing about 1/3 that (normal). Both wheels are through subsistence fishing now for season pretty much.

- The big pulse at Chandalar and Sheenjek seems to have peaked and dropping now, and at Eagle and DFO Wheels counts may have hit their high.

- Getting cold and saw first snow flakes in the air tonight.

Picture: About 1300 fish - mostly fall chum ready to float to Tanana. This is the majority of 3 seasons of food for the whole dog team with a pile of sheefish (front left) for people food. Heavy webbing is stretched between the logs first, then a tarp laid in and a cold water hose from the creek fills it up with cold water and keeps it cold till it can go to town. In this case that's in a few days when project shuts down. The raft is half the winters firewood about.



9/17/07

- Changed Sheejek run timing (fixed date format also). Are my graphs wrong (not my graphs) or are chum making it to Sheenjek River as fast as the closer Chandalar?

- 28 sheefish today so hopefully they are going to increase.

- Couple of least cisco seen today - seeing the odd one every day or so.

- Water rising but below mean level still.

Picture: Untouched photo of northern lights at Rapids sent in by Mike Parker with ADF&G. Over the hill across river. I was asleep getting my beauty rest when he took it a couple of nights ago.



9/19/07

- Chum pulse seems to be slowing but will be a gradual decline looking at Pilot Sonar estimates for next few days.

- Broad and Humpback whitefish up slightly - most this season.

- Water at mean level for this time of year.

- Make some calls tomorrow but plan so far to cut off after counting on 20th. Been a long, good season but still have more than a week of moving after turn off.

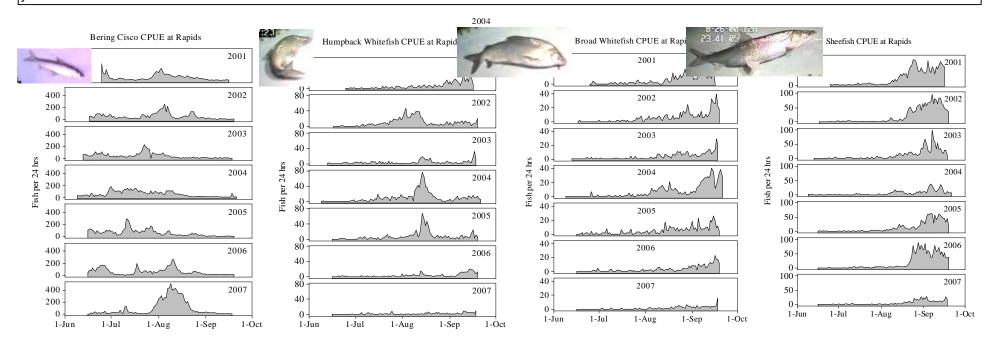
- Family got some nice fish - Students got some good data - New infrared fish detection system worked flawlessly - new wheel never even broke a nail yet ran 24 hrs a day almost every day for over 3 months - more than doubled the persons requesting the email update data - good season.

Picture: Remember the 25' lumber the boys cut for their new race boat. It's all dry and looks real nice today. Need a flat bed (very important), then lots of spacers for between the boards, and lots of weight on top (water).



9/19/07

- All upriver projects run timing adjusted - think were pretty close to correct now. Tomorrow last day - will have update (and picture). Picture: Sorry to replace the daily picture with graphs (yuk) but with the recent interest in whitefish data I felt I should get these out. Randy Brown from the USFWS Fairbanks did a lot of work on these and sent them in. Some of his comments: " I realize there may be some additional data to come, but I wanted to take a preliminary look. The Bering cisco were relatively more abundant this year than in previous years with a really serious bump there in August, while the sheefish, humpback whitefish, and broad whitefish are relatively less abundant this year than in previous years. All the caveats that go along with CPUE data generally, and the difficulty in comparing between years, apply to this data set. But, the large spike in Bering cisco argues against the idea that the wheel was just set in an inefficient manner for whitefish. These data suggest a poor spawning run of sheefish, humpback whitefish, and broad whitefish compared to other years."



9/20/07

- Well surprise, chum are way up. Little straggler pulse seems stronger than the last one. Heard Tanana was getting them heavy also. So as I'm so devoted to this job I will let wheel run while I set everything up in town. Can leave a laptop here to do the video work, just will not be able to count or send data out for a couple of days. Will have numbers in a couple days and will update upriver graphs also. Also will keep in touch with Tanana wheels for any higher than usual, late whitefish numbers as season continues there right up till the ice comes. Get some Tanana pictures.

- Sheefish up a little (37) but humpies down to 0
- Water height around mean level
- Water temp dropping to 49 F

- Fixed a mistake I found on Sheenjek timing. Picture: 1. One last picture of wheel for season. Really catching chum right now. 47 per hour when picture taken this evening. Even hit a fish (sorry God) with prop, coming up to wheel which is something that usually only happens when fish run heavy.



9/23/07

- In last few days sheefish have been up around 55 per 24hrs. (Tanana wheels been up on sheefish also) Had 6 coho 2 days in a row. Humpback down and down in Tanana also.

- And biggest news is the surprise big chum pulse that I think we got on the decline now, and glad I monitored it as it will be interesting to see if it hits upriver anywhere. One Tanana wheel fisher said he was three feet off bottom and was catching them real heavy for days. Net fishers were doing 100 per picking etc.

- Rapids wheel was stopped for good - ice all over logs - had a terrible time this morning just getting from one side to the next without falling in.

Picture: 1. Christian Richta and Pat Moore checking wheel in Tanana yesterday. Behind Pat's wheel is the mouth of the Tanana River, behind Chritian is the upper Yukon. This wheel catches mostly upper Yukon fish same as at Rapids. 2. Crib fish and firewood heading to Tanana from Rapids today. Been a long windy day. Up to Rapids again to pull wheel out and get dogs - have another update on Tanana and upriver projects in bunch of days.



10/1/07

- One more update after this - updated the four upriver chum project graphs below with recent counts and do so again in few days. Rapids run timing final adjustment made (<u>ChumPilot07</u>).

- Sunday was last trip from Rapids and project wheel and everything pulled up bank etc. - nice to be through - it's not particularly fun this time of year in the Rapids - little sun, no people, lots of work (I hate work). Good to be in Tanana.

Picture: 1 Catch in Tanana north bank wheel on Sunday. A few more coho, Sheefish still running okay (so they may have been late and not really weak) and broad whitefish increasing (late also ?). 2. Typical Tanana fall chum and whitefish wheel. Smaller than the king wheels at Rapids and placed close to shore with lead fences that go almost to shore to maximize whitefish catches. These spots and wheels would not catch many king in summer and many are not even used till fall when kings are all gone. They are great for chum and whitefish as you can see.



10/11/07

- Last update - upriver projects and graphs below are done for season. Since 1996 Rapids had only 4 years with higher discharge adjusted cumulative passage counts. Cumulative CPUE was low relative to adjusted counts this year due to lower water during the bulk of the fall run - this is why the project <u>does</u> <u>not</u> use unadjusted CPUE for run timing or run strength assessment and will continue to suggest others not use it as it is not anywhere near as accurate.

- Thank you all for being on the update list. It helps the project. It is the only way what we really do here gets out. I will have a PDF of the complete seasons 2007 Daily Email Updates soon and it will be posted on our website - the link on this page will also link to the completed one when done.

- Thank you also for the positive comments all season and also for all the requests as it gives me an idea what people what to see. Most of you want "real time pictures of what goes on out here". See you next June - have a good winter and see many of you at meetings this winter. Stan

Picture: 9 of 14 wheels in Tanana in 2007. Taken Oct 10th, you can see the solid shore ice and floating ice that shut down fishing this year slightly earlier than normal. Chains are put on front raft logs and wheels pulled out with a Cat or other heavy machinery. Took two days and just finished pulling the last of these.





