

Get a glimpse of the 2005 Upper Yukon salmon run by reading:

All 2005 Daily E Mail Update Comments, Stan Zuray

8/1/05

Last week of student data collection project started today. When Saturdays chum sampled, the red flesh color showed a rise to 44%. If tomorrows sampling of Sundays fish show similar results it may mean a dropping off of summers and a further influx of fall chum as the 24 hr counts have remained relatively stable.

The 2 day lag in data over each weekend is because the student groups are only here on the weekdays and the subsistence closures Sun. to Tues.

Should have full seasons Chinook ICH data soon. It will show disease rates all season running roughly half of that of last year, for both males and females. This is possibly significant as Ichthyophonus researcher Dr. Kocan stated after looking over the 2004 student project Ichthyophonus data that it was "right in line" with his previous 5 years of data. This would maybe mean "possible ICH" disease rates the lowest in 6 years of monitoring. Hopefully this trend will "possibly" continue.

Stan Zuray

Also all data is preliminary and subject to change and manipulation to suit our needs.

8/2/05

Sampling of Sundays chum showed a further rise to 61% red flesh. It should mean a dropping off of summers and a further influx of fall chum as the 24 hr counts have remained relatively stable.

July 31st is official fall chum count start at Rapids video project. Before this date although some fall chum were present the majority was summer chum, and after this date although summer chum will continue to migrate through the majority are fall chum

On years when there is a clear separation between summers and falls the first bright chum will run up to 90% red flesh

Summers by themselves run about 10% red flesh (2005 prefall baseline was slightly less)

Stan Zuray

8/3/05

Fall chum getting darker last couple of days as bright fall run ends. (change noticed by tag crew, Campbell, Obrien and myself). Still good flesh color though and people cutting fall chum steady.

Much fewer fishermen active in chum season as opposed to king season however these last years. Without chum commercials, fall subsistence has been steadily dying from Galena to the Yukon River Bridge that I know of, and probably more than that really. Sad.

On a happy note there's lots of chum.

Stan Zuray

8/4/05

Chum flesh sampling will continue for a while to document the steady decline of the quality of the fall chum to the point where the falls in late September will have as white and fat free flesh as the summer chum. With eggs and milt often ready to spawn I've often wondered how they will make it to Canada etc.

Time to get the chum timing and project comparison graph ready.

Stan Zuray

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8/5/05

Started discharge adjustments to Fall Chum counts and cumulative all years graph. If there gets any more smoke I'll start adjusting counts for that also.

Stan Zuray

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8/6/05

Adding Pilot Sonar to Rapids Run Timing Chart (Pilot05)

Lester Erhart says most bright fall chum he's seen this early since the 60's. Was surprised people were reporting they were still waiting for the fall chum on the last teleconference when he's been cutting them steady for 2 weeks.

Stan Zuray

Note: all data is preliminary and subject to change and manipulation.

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8/5/05

Cisco run starting up again and chums increasing in response to big days at Pilot around July 19 or so. Broad, humpback and sheefish been showing signs of their fall increases also.

Stan Zuray

Note: all data is preliminary and subject to change and manipulation .

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8/8/05

Chums still good looking but not like the earlier pulses. Coming in big numbers - see 4 to 5 to a basket at times. Many fish (flesh fat and color) still okay for people food.

Student data project ended this weekend. No OSM funding for next year because of general funding policy changes - anyone think the ICH and disease and chinook length, sex, weight, and fall chum arrival data worth continuing ?

Stan Zuray

Partial student ICH summary for season: see Ich05 and Ich 04 for comparison below.

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8/9/05

Report from Tanana says catches were up today so Rapids on Wednesday should be higher on chum. A subsistence fisherman will run his wheel tomorrow for short time. We plan on doing a video as his wheel often gets about 2.5 times as many fish as the video test wheel. That's over 4000 per 24 hrs.

Other than that I'm getting tired of pushing the chum button on my computer fish counter.

Stan Zuray

Partial student ICH summary for season: see Ich05 and Ich 04 for comparison below.

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8/10/05

Humpbacks starting to do a run through.

Got 6 or so Rapids camps putting up people chum now to some degree.

Some talk of cut and dry dog food but too warm for it big time yet.

Stan Zuray

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8/12/05

Severe smoke still.

Chums showing their colors a lot and many thinner which is typical of the backside of a pulse. Often the first fish of the next pulse although later will be better quality than these now but only for the very beginning of the pulse.

Most people who were cutting people food chums have stopped because of declined quality (normal) in the last week but much too warm for dry dog food in big numbers. Most consider first falls or brights or silvers or whatever they're called to have been a good run. However: When in Tanana yesterday did meet people who were still waiting for the silver fall chums - they will have to wait till next year I'm afraid.

Stan Zuray

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8/13/05

Chum numbers going down as we go into the low period at Pilot 19 days ago. Pretty low period for subsistence now, between people and dog food times but not ideal for either now.

Removed Pilot comparison for now from AllYearsCum because of trouble comparing using different start days.

Adding EscapeVid which looks at water adjustments to CPUE.

Flesh color sampling will be less frequent but sample sizes will increase with dog food cutting.

Stan Zuray

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8/14/05

Chum numbers still going down as we go into the low period at Pilot 19 days ago.

Flesh color took a dive responding to the backside of the last large pulse and the normal decline this time of year in quality. Expect the very first of the next pulse to be some good fish briefly but then down even more in quality. The best fish will show just as the CPUE begins to rise.

Stan Zuray

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8/15/05

Chum numbers still going down

New ICH graph ICHYears

Finished new formula for water (discharge) adjustment and reflected in graph EscapeVid.

Basically why discharge adjustment works at all is because from the lowest water (last fall) to the highest water, there is never a time when the current does not speed up if the water goes up or slow down if the water goes down. This is not the case with most fishwheel sites such as my Rapids north Tagging wheel or the other Rapids subsistence wheels. The discharge and water speed have a linear correlation or relationship (took current readings all last summer). TEK says fish move to the bank in fast water and spread out in slow. After 9 years of Rapids Tagging Project data it is clear that the efficiency of the fishwheel increases in fast water and decreases in slow water (again linear). Using these daily efficiency points or % caught of the Tagging Project plus manipulations using escapement data a crude primitive formula arises that produces adjusted CPUE many times more accurate than the unadjusted. All Rapids data points in the graph were produced applying the same formula each day (from 1996 - 2004) to the 24 hour CPUE.

Stan Zuray

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8/16/05

Chum numbers still going down

Big sheefish coming in -

Got year 2000 data for graph EscapeVid and added what Rapids unadjusted CPUE looks like when compared.

Subsistence opens tonight so will cut fish tomorrow and have flesh color rate tomorrow.

Severe smoke- can't see wheel across river. When fish get caught in wheel they get smoked as they go down video chute. Sending smoked salmon to Canada.

Stan Zuray

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8/17/05

Chum numbers up and a few better looking ones. Cumulative should start a steady rise now as the low period of Pilot 19 days ago has just past and we head towards the BIG ONE.

Weather cooling so better for dry dog food cutting though still lots of flies.

Water very stable for long time now with a slight drop now.

Have to make up some new graphs soon!

Stan Zuray

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8/18/05

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Stan Zuray

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8/19/05

Stan Zuray

8/20/05

Four camps in the Rapids area are putting up dry dog food for winter now.

Extreme smoke again - sore throats etc.

As the summer chum have faded away and replaced by the fall chum, the percent Rapids video wheel catches of Pilot Sonar seems to have risen with each pulse (normal). See Pilot pulses of July 10, 13, 20 and now Aug 1 on Pilot05. (majority of summer chum passing Pilot don't make it up this far but the fall chum do.)

Stan Zuray

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8/21/05

Chandalar graph added but short some days for now. ChanRapDis

Showing signs of leveling off as we reach the peak of this pulse. Shouldn't drop much with the BIG one so close.

Cumulative should continue to pull away from 1996 which was the only other big year since Rapids CPUE started. AllYearsCum

Stan Zuray

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8/22/05

Seems like it's not going to drop in chum numbers between this pulse and the BIG one because numbers are going up, fish are starting to fly all over the wheel and got 6 in one Tag wheel and 5 in the other at one time today etc. etc.

Sonar behind wheel shows a fairly constant stream of hits. About every 10-20 sonar fish the wheel catches a salmon. This is fairly normal even at lower fish levels and of course depends on variables of beam width, where behind wheel, etc. although the latest sonar used here since 1996. Center of stream of fish comes up behind the shore side logs of the fishwheel raft. Have used sonar through the years to keep the wheel centered somewhat over the stream of fish. Doesn't work with king as they are spread too much at this site.

Cumulative should rise rapidly at the Rapids in response to the heavy run.

Stan Zuray

8/23/05

A subsistence wheel above the test wheel caught 220 chum in 50 minutes then turned off with enough to cut for the next day (6000 per day). In the first basket they had 10, next one 6, next one 4. They said they had a dog pot in 1 1/2 turns of the wheel. Got wheel on video camera. The BIG pulse is not even here on paper and is still a day or two away, supposedly, with 19 day travel time. It is just so big it's like pushing a wave of fish in front of it.

Having to adjust the scale of all my graphs and taking hours to count now also.

In 1997 had some days of catching 2600 and 2800 etc., however the water was very high and when adjusted for discharge the "index passage daily scale" (that's what I say cause I'm not suppose to say daily estimate) was much lower than today catching the same (2703 chum).

Stan Zuray

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8/24/05

Record day in a few ways. Largest 24hr count, south bank video had 8 chum in one basket, and largest daily discharge index number (78,002).

Also % of red flesh chum is rather high for this late but maybe because these fish passing through now are the heathiest of the 800,000 chum which should peaking in a day or two. 19 days ago Pilot was passing very low number. These 3734 chum today are only the front runners.

Going to go blind from counting video fish. I'll go on workers comp.

All graphs rescaled again.

Stan Zuray

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8/25/05

Another Record day. Largest 24hr count, and largest daily discharge index number of (89,802).

Relatively speaking today was not that much more than yesterday and may be a product of the two low days at Pilot, 19 days ago, just before the first big day of the BIG one. It's all a quessing game but tommorrow sometime all hell may start to break loose.

Glad I'm insured with Geico lower unit insurance cause I had more collisions with fish today.

Stan Zuray

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8/26/05

Another Record day.

Largest 24hr CPUE, largest daily discharge index number of 98,243, and 235 in one hour near days end.

It's funny we don't even bother to look much unless the basket has 4-5 in it and an empty basket is more noticable than say 3 at once. Fishing will never be the same again I'm afraid.

Was having trouble with comparisons within my Pilot05 graph and so ran same with CPUE discharge adjusted (Pilot05Dis) and as you can see it changes things in some significant ways. For one, it shows the large amount of summer chum in the pulse by Rapids on July 29, and the increase in falls by the pulse on Aug 1 much better than the unadjusted. It's also much more in line with the red flesh chum data.

Will keep including unadjusted CPUE numbers but beyond being able to say my wheel caught this or that many, to another fisherman I'm having less use for it all the time when compared to the discharge adjusted data.

Because of huge file sizes (over 1GB a day) and getting them off the capture computers I am going to partial days - trying for about 23 1/2 hours long.

Stan Zuray

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8/27/05

It's all downhill from here. I think the Tag crew operating here and myself are ready for normal fishing but it was great to see that much fish.

Fish are noticeably darker now that we're past mid pulse and darker than last pulse also. Most have healthy but leaner bodies and more teeth development.

If it continues to drop pulse may have been more like an 18 day travel time (34 miles a day)

Stan Zuray

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8/28/05

Still lots coming in but down by about 1000 a day.

Can see the last two pulses took about 18 day travel time (Pilot to Rapids) or 34 miles a day.

Flesh quality back down and probably get real bad soon. So many fish however a good number of persons in Tanana I'm told, took advantage of the big pulse and put up eating fish.

Heard some funny stories like not being able to set nets so many were hitting the net and getting all the fish wanted in 3 minutes with a wheel.

Stan Zuray

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8/29/05

Shut everything down for equipment check after all the use it got. Did 23 hour count about.

Changed around travel time offset on both Pilot to Rapids graphs for different look.

About a coho every day or so. Some years we see maybe 5 on the highest day. Almost like it's not a real run but adventurous fish that missed the Tanana River.

However in late October and up till ice forms on the River I have fished with net and at that time you get a real run of coho and can catch good numbers that I'm told some go to Black River. You can see the pulse that they are in each year right near the end of Pilot Project.

Stan Zuray

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8/30/05

The chum will not go away. Numbers are staying steady for 3 days now. May be the two smaller big days after the 314,000 one?.

Biggest sheefish day - large and full of eggs.

Got 4 coho also.

Water steady for couple of days but suppose to rise a little.

Stan Zuray

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8/31/05

Added graph (don't want anyone to get bored) 5ARpRmPil05.

Anyway was trying to figure why chum numbers were not dropping evenly as Rapids came off the BIG pulse as Pilot did. So far didn't figure anything but was surprised to see 5A testwheel doing the same and even more. One theory: the two smaller big days after the really BIG day had a very large Tanana river component. Why that affects Rapids is beyond me -maybe it's a fishwheel thing but water has been steady cause of rain stopping the drop.

Fish really dark - as Lester Erhart said yesterday it don't even make good dog food. But must be thankful for everything!

Running through this data fast each day - if anything don't look right let me know.
Stan Zuray

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9/1/05

Broads and sheefish up in numbers. Cisco lowest of all season. Coho at a couple a day now and chum continue downward. Water pretty steady.

Fishermen talking putting up crib fish soon.

Hunters starting their annual migration downriver.

Stan Zuray

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9/2/05

Water still steady. And relatively speaking there is still a lot of chum going by.

Not much fishing going on except keeping dogs fed.

Quality down - red flesh down to 12%, will do a sampling tomorrow also.

Stan Zuray

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9/3/05

Water still steady.

Biggest sheefish day and a low period in the bering cisco run.

2 coho today. Chums still high relative to Pilot 18 days ago. All the slow movers from the big pulse coming through.

Stan Zuray

9/4/05

Water slight drop.

Biggest sheefish day again

Crib fish starting in Rapids area. Sometimes it can be done earlier if run looks poor as numbers often are down late in season. This year dog mushers can pick the best time for them. People who cook the fish all winter don't like them rotted to much so will wait a couple of weeks. People who feed them without cooking like them soured good so dogs digest them easily, so will get them now or soon.

No flesh sampling as constant drizzle is making it bad for cutting any more dry fish. Will get some end of season samples however to show rates probably equal to the low rates of the earlier pale fleshed summer chum.

Stan Zuray

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9/5/05

Biggest Broad whitefish day. Because of the increased interest in whitefish I'm putting together all the data from 1996 to present so I will be able to report relative year to year comparisons of the CPUE from bering cisco, sheefish, broad and humpback whitefish. This will be in final report and hopefully some soon also.

David Daum (USFWS) who developed the original video system is here to test a new video tripping device using an ultrasonic transducer/reciever. If it works it would make tranfer of the fish friendly system to other wheels easier and eliminate some moving parts on existing video wheels.

Stan Zuray

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9/6/05

Biggest sheefish day. Cisco run is about average - working on comparisons.

Ultrasonic transducer/reciever work is going great and seems to be extremely fast ,accurate and adjustable. Is ready to go on wheel and we now plan on running it side by side with existing system to see how it does for rest of season. Counts will be using old system and we will not be adding any counts in from new system. Counts should not change anyway as that is not why we are going to ultrasonic trigger.

Crib fishing going on in Rapids. I should start in a few days also - probably get entire winters supply in one day and float it to town on big raft as normal.

Stan Zuray

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9/7/05

First sun in a long time.

Chum still down more.

Started 24 hour ultrasonic video trigger switch evaluations and will do it till end of season.

Stan Zuray

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9/8/05

Water still rising slowly and counts up a little as we come into the final pulse.

Had a video file get corrupted and cannot read it to get a count, so 24 hr count based on 12 hours. Out of about 2000 files made since year 2000 this is the first corrupted file we have had and it was probably caused by all the ultrasonic evaluation work we were doing on the capture computer as it was doing it's normal transferring and capturing etc. May be able to open at a later date but not hopeful.

Took some liberties with Chandalar graph to make it clearer, but as said before at Rapids Video all data is preliminary and subject to change and manipulation.

Stan Zuray

9/9/05

Water still rising as it has been doing for 5 days now. and counts up a little more as we get more into final pulse. A few large wheelkiller trees coming down but missing wheels. A wheelkiller is like a 60' spruce with all it's branches - unstoppable it will take out a lot of the wheel underwater, especially bigger wheels like we run in Rapids.

Starting to put up a raft of crib fish myself. Running a friends high catch subsistence wheel and should be doing over 100/hr. Have all my fish in 12 hours for whole winter. It's not all that easy really as each fish will be moved 6 times before going into a dogs mouth (boat to raft to truck to crib to spread to freeze to truck to yard pile to dog).

Flesh quality and color continues to drop with some few examples of good fish still.

Stan Zuray

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9/10/05

Water still rising as it has been doing for 6 days.

Chum counts stay about the same.

Got 1000 fish put in crib fish raft in 7 hours fishing with a friends Rapids subsistence wheel. It usually catches 2.5 to 3 times what video wheel catches and did so again.

Probably through cutting chum and looking at flesh color but as %red05 graph shows we're back to the same quality of fish that we had during the summer chum run. Like I said before I can't see

how many of these chums will make it very far. Maybe it's nature's way and many of them will not?

Picture is 2 chum cut 6 weeks ago. One a pale fleshed female and the other a red fleshed male. Picture taken yesterday.

Stan Zuray



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9/11/05

Water crested

Chum counts steady but seem going up today (12th)

Got 1400 fish put in crib fish raft and ready for trip downriver.

Had a sunny day - dog dry fish got to dry some.

Stan Zuray
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9/12/05

Water 1" down

Chum counts up little today

Changed Can05 graph. See how it looks after awhile and can adjust better later. Not sure if it's okay to do this, but then I look at what some smart people are doing and it doesn't seem like there's any rules so what the hell.

Seems like upper river is still getting a good percent of the fish off this last pulse.(Pilot05 graphs)



Stan Zuray

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9/13/05

Should see the final drop in chum numbers tomorrow or next day.

As mentioned before the % of Pilot estimate that we're catching, whether discharge adjusted or not, indicates upper Yukon got a good chunk of the pulse and it did not mostly go up the Tanana. Often these later pulses seemed to get shared between the Tanana and the upper Yukon and not always going up the Tanana as a lot of fishermen and others say.

Will be running video wheel but need to take a day off counting to run freight to Tanana and back. Counts for Wednesday should be emailed around 3 am Friday morning.

Picture of the day: Rapids video wheel one foggy morning

Stan Zuray

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No 9/14/05 – none, hauled crib

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9/15/05



Should be the final drop now of the last chum pulse. North tagging wheel dropped in numbers also.

Ultrasonic video trigger works well but have problem with wind and false triggers that needs to be worked on.

Because of very stable water for last part of fall season the comparison between unadjusted and discharge adjusted counts do not differ as much as in many of the past years (just an observation).

Picture of the day: hauling crib fish on Wednesday

using half built fishwheel.

Stan Zuray



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9/16/05

Chum dropping steady. North tagging wheel dropped in numbers also.

As long as drop keeps following Pilot numbers the last day of video counting will be on Monday.

I'd like to thank all those who requested the updates and the 1 or 2 who actually read them. The USFWS Fairbanks Field Office has provided the Starband internet service to send the updates out each day. Project is funded and was originally developed through the Yukon River Panel R+E fund.

Anyone wanting project info, final report, feel free to contact me (best by email). As with all the projects, see you next year if funded.

Stan Zuray

Picture of the day: Rapids from on top. Can see Rock Island in mid river. Aside from some impressions I have heard about, it is neither all that deep or violent with the video site current slower than some fishwheel sites in Tanana and Rampart. Arrow marks the fishwheel site.



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THE END IS NEAR



Tagging stops tomorrow and video next day
Will send update till internet taken down and then will update graphs from Tanana and send out infrequently till other projects close.

Stan Zuray

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9/18/05

THE END HAS COME

Tagging stopped today and video tomorrow

Tomorrows data plus graph updates done in about a week when I get to Tanana.
Picture of Tagging crew earlier this season. Includes a local fisherman and YRDFA board

member and two local youths (YCC program). These two young men have also worked in the Rapids student data collection project for the past 5 seasons.

Have a fine winter and see many of you at those wonderful meetings.

Stan Zuray



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9/19/05

Finished moving camp to Tanana as of yesterday, Oct 1st.

Last day of fish counted and other project graphs updated as much as I could get data for.

Few fishwheels still running constantly in Tanana to get crib chum and whitefish for dog mushers and will till ice comes probably.

Again - good winter.

Stan Zuray

Picture - Wheel coming out of water at Rapids, 2005



The End