



YUKON RIVER DRAINAGE FISHERIES ASSOCIATION A United Voice for Yukon River Fishers

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YRDFA reserves the right to include or omit any submissions to the Yukon Fisheries News. The views expressed in this newsletter are those of the author and may not necessarily reflect the views of YRDFA.

## SUCCESS STORY CELEBRATING 20 YEARS YRDFA HOLDS 20<sup>th</sup> ANNUAL MEETING IN NULATO

By Jill Klein, Executive Director | It was with great honor and appreciation that YRDFA held its 20th anniversary year meeting in Nulato along the Yukon River. With an almost full delegation at the table and representation from most villages along the Yukon River in attendance, YRDFA was able to conduct a successful meeting. Hosted by the community of Nulato, the meeting took place at the Andrew K. Demoski School. We had our meals and lodging at the school and had

many gracious helpers from the community who worked to provide meals for us, drive us around town and coordinate home stays—always a great welcome to our board members and other attendees and a great way to get a true flavor for the community we are visiting.

Traveling to the meeting, the lower river delegation had a scenic tour up to Nulato, while the interior folks also all made it in due to good weather all around western and interior Alaska. This nice weather spanned to the coast, so our friends from Hooper Bay and Scammon Bay could be in attendance. We also had Carl Sidney and Ron Chambers from the Canadian headwater communities of Teslin and Haines Junction, respectively, at the table as ex-officio board members.

The first meeting day was framed by the attendance of our guests from Senator Murkowski's office and Senator Kookesh who updated us on legislative issues impacting rural Alaska and listened to the concerns of YRDFA and the public.



Attendees of YRDFA's 20th Annual Meeting pack the bleachers for presentations and potlatch.

There was a good turnout from Nulato and the neighboring communities of Kaltag and Koyukuk. People came to meet and hear from their legislators and their offices, as it was mentioned that legislators have not been out to the middle Yukon River very much in the past to hear directly from the people.

The end of the first meeting day was highlighted by a presentation on traditional knowledge natural indicators by Catherine Moncrieff of YRDFA. Attendees reviewed the findings from the four year project YRDFA and Alaska Department of Fish & Game Subsistence Division carried out and then talked about how to use traditional knowledge in western fisheries management.

The second meeting day started off with a presentation by Sarah Palmer and Brian Manwaring from the U.S. Institute for Environmental Conflict Resolution. They shared their thoughts and observations about YRDFA and where it has been successful in

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## A MESSAGE FROM THE DIRECTOR

*By Jill Klein, Executive Director* | After a busy winter season of meetings, we are faced with many new aspects of familiar Yukon River issues. People along the entire length of the



Yukon River in Alaska came together at the State of Alaska Arctic-Yukon-Kuskokwim Board of Fisheries (BOF) meeting in late January. It was a great

chance for people to see each other and warm greetings were exchanged among all people in attendance. As the meeting went along and the issues we have been struggling to address came to a head, the dividing lines started to appear. People camped out with those who shared similar opinions. In the end, when it came time for the BOF to deliberate on methods to limit the harvest of the large female fish needed for the spawning grounds, they made a decision to end the days of unrestricted mesh size on the Yukon River and change the size of king salmon gillnets people use along the Yukon River to a maximum of 71/2 inch mesh. After the decision, both the supporters and the opponents had mixed feelings about using this new mesh size as some fear this will target the next largest fish left that return to the river. With this new gear set to be in

...there is also the hope
that funds will be used
to purchase new nets...

use by summer 2011, it will be important for us to measure the impacts of this change on the salmon to see if our efforts are making a difference to save the larger female fish that help sustain the runs into the future.

Just before this took place, on January 15, 2010 a fisheries failure, or fisheries disaster, was declared by Secretary of Commerce Gary Locke. This provided some hopeful news, considering the potential appropriation of funds to assist with relief to the areas of western and interior Alaska affected by the poor salmon returns of 2008 and 2009. The disaster funds will potentially be used to provide income for communities and coverage of necessities for living in rural Alaska, as cash from commercial fisheries would have provided. Related to the BOF mesh size change, there is also the hope that funds will be used to purchase new nets for the fishers who need them to continue their way of life along the Yukon River, which includes subsistence and commercial fishing.

YRDFA was honored to have staff from Senator Murkowski's Anchorage and Washington D.C. offices travel out to Nulato for our 20th year annual meeting this past February. We discussed the need for a fair and equitable distribution of new nets and a tradein program in which people would exchange one old net for one new net in light of the recent BOF action. Most people in attendance expressed concerned about their abilities to purchase new nets. The Murkowski staff listened to all messages relayed to them and said they would bring the messages back to D.C. and pass them on for the Senator and others to hear. Stay tuned... these efforts are currently underway.

I hope this issue of Yukon Fisheries News keeps you informed and updated about the issues facing the Yukon River today, and I hope that you and your families are doing well and enjoying the beginning of spring.

## Yukon River Fisheries Meetings Spring & Summer 2010

DATE	MEETING	LOCATION
March 15-18	Tanana Chiefs Conference Convention	Fairbanks
March 22-26	Yukon River Panel	Anchorage
April 5-7	ADF&G Interagency Staff Meeting	Fairbanks
April 6-13	North Pacific Fishery Management Council	Anchorage
April 8	Summer Season Preparedness Meeting	Fairbanks
April 13-14	Federal Subsistence Board	Anchorage
April 21	Summer Season Preparedness Final Teleconference	
April 23	Western Alaska Salmon Stock Identification Program (WASSIP) Advisory Panel Meeting	Anchorage
May 4-7	State of the Salmon Hatchery Conference	Portland, OR
May 21-24	River Rally	Snowbird, UT
June 1	YRDFA Inseason Teleconferences Begin	
June 7-15	North Pacific Fishery Management Council	Sitka

### "CELEBRATING 20 YEARS..." continued from front page

its work compared to other environmental challenges facing the U.S. This led to attendees sharing stories about how YRDFA has built relationships among the different people who live along the Yukon River and how we can keep doing this into the future. We also learned about a smattering of topics from Paula Cullenberg with the Marine Advisory Program of the University of Alaska, including climate change, outreach efforts from the North Pacific Fisheries Management Council, and efforts to get more students from rural Alaska into the undergraduate and graduate fisheries degree programs at the University of Alaska.

The YRDFA board and others in attendance worked to pass resolutions that covered many interesting, timely, and relevant topics (see related article on this page). The community hosted a covered dish dinner where many delicious foods such as beaver bacon from the local area were served. As a special item on the menu, Lester Wilde from Hooper Bay brought up coastal treats such as walrus, seal, and smelts to share for a true river-wide exchange of culinary tastes.

YRDFA hosted a raffle with awesome prizes that drew in the community members and in YRDFA fashion we had our own musicians including Lester Erhart and Bill Derendoff who played with the best of the local talent. We were treated to traditional Athabascan songs and dance and also Ron Chambers from Haines Junction in Cananda presented his traditional dance, song and regalia to the meeting attendees and the school kids in their classrooms.

YRDFA feels it is important to give back to the communities in which we meet. This year we did this by working with the school to present activities in the classrooms with the school children. We were able to have a YRDFA AmeriCorp Volunteer with us who carried out



YRDFA co-chairs Richard Burhnam (left) and Bill Alstrom (right) present Henry Weihl with a vintage Yukon River tee shirt to commemorate his 20 years of service on the board of directors.

both active and artistic activities with the younger children. He also worked with the older students on developing questions for them to ask the YRDFA board members about in the meeting forum. Bringing youth into the meeting is always important to try to have the generations learn from each other.

Overall the YRDFA meeting was a success, and we all enjoyed our time in Nulato. We looked back at our accomplishments over the past two decades with pride, we worked hard on current issues, and we look forward to continuing our work well into the future.

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Nulato youth show off their salmon art.



Bob Walsh and Edward Hild from Senator Murkowski's office present details on the recent disaster declaration.



Peter Demoski of Nulato shares his views.



Ron Chambers of Haines Junction presents traditional clothing and drumming to students in Nulato.

## 2010 YRDFA RESOLUTIONS

**Resolution 2010-01:** Gratefully thanking the people of Nulato for their generosity and hospitality. THEREFORE BE IT RESOLVED that the YRDFA Board Members, delegates and staff of YRDFA gratefully thank the Andrew K. Demoski School, the City and Tribal Council, and the people of Nulato for their generosity and hospitality.

**Resolution 2010-02:** Salmon Bycatch. THEREFORE BE IT RESOLVED that YRDFA requests that the Secretary of Commerce rejects the Council's approved management action, and use his emergency regulation authority to implement a hard cap of 32,500 effective immediately.

**Resolution 2010-03:** Chinook Salmon Escapement Data Gathering. THEREFORE BE IT RESOLVED that YRDFA recommends that the Yukon River Panel address the quality of escapement by gathering data and creating a method to utilize this data in assessing acceptable border passage.

**Resolution 2010-04:** Area M Wanton Waste. THEREFORE BE IT RESOLVED that YRDFA asks the State of Alaska to review fish ticket information submitted by Virgil Umphenour on chum harvests to the Alaska State Board of Fisheries in addition to historical fish ticket information to review chum harvests and potential under-reporting of chum harvests in Area M.

**Resolution 2010-05:** THEREFORE BE IT RESOLVED that YRDFA strongly recommends that the Governor of the State of Alaska take the utmost consideration of potential BOF members to ensure they are suitable candidates to make decisions on salmon fisheries in the AYK region of Alaska.

**Resolution 2010-06:** Net Replacement. THEREFORE BE IT RESOLVED that YRDFA will work river-wide to determine the number and size of new nets needed and the amount it will cost to purchase these nets and asks to be involved in determining a process for affordable, efficient and fair distribution.

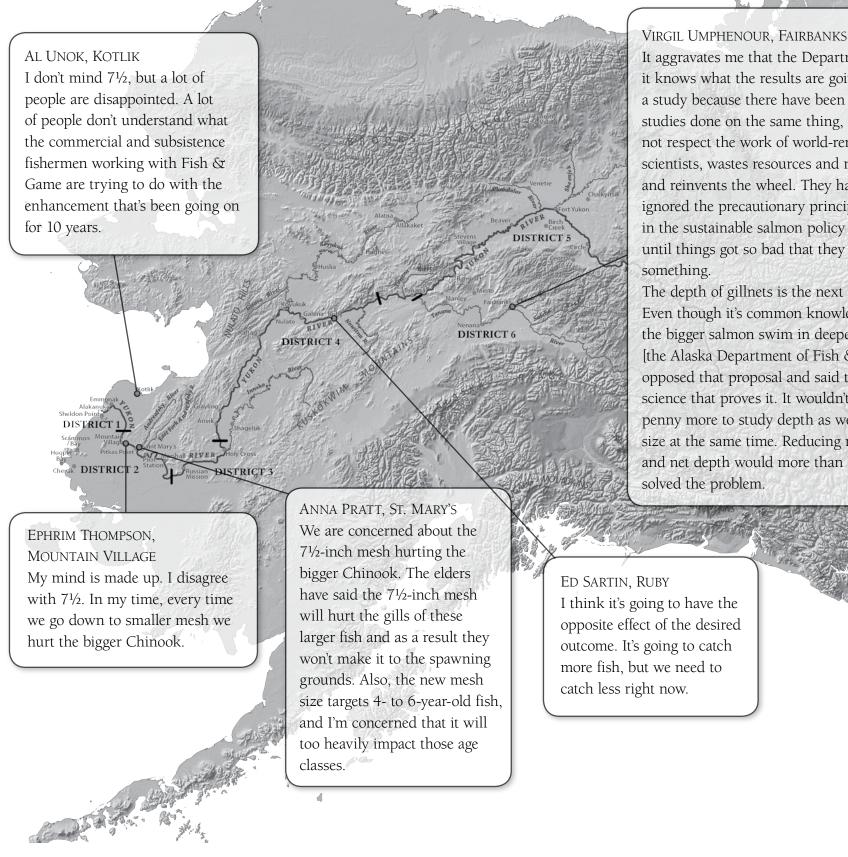
**Resolution 2010-07:** Subsistence Harvest Data. THEREFORE BE IT RESOLVED that ADF&G carry out analysis of post-season harvest surveys in a timely manner to deliver it to the public for use in post-season review and planning for the following season.

**Resolution 2010-08:** Water Temperature Monitoring. THEREFORE BE IT RESOLVED that YRDFA supports increased water temperature monitoring at the near-marine estuary of the Yukon River Delta, which includes the four main mouths, especially at low tides and that this information be used to learn about the relationship between water temperature and in-river migration and be made available to the public on an annual basis.

# Voices from the River

## "What do you think of the recent Board of Fisheries action restricting gillnets to a maximum mesh size of 71/2 inches?"

In February 2010, YRDFA communications director Jason Hale asked this question of fishers from up and down the Yukon River. Here are their thoughts:.



It aggravates me that the Department, when it knows what the results are going to be on a study because there have been multiple studies done on the same thing, does not respect the work of world-renowned scientists, wastes resources and money, and reinvents the wheel. They have totally ignored the precautionary principle found in the sustainable salmon policy and waited until things got so bad that they had to do

The depth of gillnets is the next issue. Even though it's common knowledge that the bigger salmon swim in deeper water, [the Alaska Department of Fish & Game] opposed that proposal and said there's no science that proves it. It wouldn't have cost a penny more to study depth as well as gillnet size at the same time. Reducing mesh size and net depth would more than likely have

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## Update on Federal Subsistence Program Review

On February 23, 2010, a representative from the Department of the Interior presented an update on the ongoing review of the Federal Subsistence Program to the Eastern and Western Interior Regional Advisory Councils. His comments are summarized below in a letter he provided at the meeting.

United States Department of the Interior OFFICE OF THE SECRETARY 1689 C Street, Suite 100 Anchorage, Alaska 99501-5151 Federal Subsistence Program Review Status Report to Federal Subsistence Regional Advisory Councils February/March 2010 Secretary Salazar initiated a Departmental review of the Federal Subsistence Management Program in October 2009. The intent of the review is to evaluate how the program is fulfilling the purposes of Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA). In launching the review, the Secretary emphasized that the review should focus on how the program is serving subsistence users as envisioned in Title VIII. The Secretary's Special Assistant for Alaska Affairs has led this review. From November through mid-January meetings were held with a wide variety of stakeholders in communities throughout the state including Ketchikan, Saxman, Prince of Wales Island, Juneau, Ninilchik, Kenai, St. Mary's, Bethel, Kotzebue, Fort Yukon, and Fairbanks. A number of meetings were held in Anchorage with groups and individuals located there as well as with a number of visiting folks from rural Alaska. Written comments from over 100 groups and individuals were received. Two meetings were held with Regional Advisory Council Chairs, first in December and a second time in January. In addition, meetings were also held with several individual RAC members, and other RAC members provided written comments. The comments of RAC members were especially helpful and appreciated because of the knowledge and experience of members with subsistence uses and the challenges of dual management of Alaska's fish and wildlife resources. Through February and March we will analyze the comments we have received and develop options and recommendations for the Secretary to consider. We have summarized the comments received and posted them on the web at http://www.doi.gov/whatwedo/subsistencereview/. For your convenience the summary of comments is also included below. As you can see, these comments cover a wide range of subject areas. Resolution of some of these issues would entail relatively simple policy changes that could be immediately directed by the Secretary. Other issues would require regulatory changes requiring an additional formal public process, while some issues would require statutory changes or other actions beyond the immediate authorities of the Secretary. Thank you for your service as a Regional Advisory Council member. Your dedication and personal commitment of time and energy is recognized and greatly appreciated. ama Pat Pourchot Special Assistant to the Secretary for Alaska Affairs

## Secretary of Commerce Declares Fisheries Failure for Yukon River

By Becca Robbins Girclair, Policy Director | On January 15, 2010, Secretary of Commerce Gary Locke determined that a "commercial fishery failure" had occurred on the Yukon River in 2008 and 2009. The determination is based on a complete lack of a commercial Chinook salmon fishery on the Yukon River in 2009 and a 2008 commercial harvest that was 89 percent below the 5-year average.

The Secretary declared the disaster under Section 312(a) of the Magnuson-Steven Act in response to requests from the Association of Village Council Presidents (AVCP), the Alaska Federation of Natives (AFN), and several villages and with the support of the Alaska Congressional delegation and Governor Sean Parnell.

The fishery disaster declaration does not automatically provide any funding, but it does give Congress the opportunity to appropriate funds to the region. Regional groups, the Alaska Congressional delegation, and the State of Alaska are now working to request specific funding associated with the disaster declaration. More information about the specific funding available will be available in the coming weeks. **S** 

## Preseason Outlook for Yukon River Chinook Salmon

From the Alaska Department of Fish & Game | The 2010 Yukon River Chinook salmon run will likely be below average to average. It is therefore prudent to enter the 2010 season with the prospect that subsistence conservation measures, much less severe than those used in 2009, may be necessary in an effort to share the available subsistence harvest and meet escapement goals. Conservation measures may include promoting voluntary reductions such as encouraging a shift in harvest to other species, spreading harvest out over the duration of the run, reductions in extended sharing, and keeping fish harvested within local areas.

Some reductions in subsistence fishing time may be necessary if the run is lower than the preseason outlook indicates; however, reductions similar to those implemented in 2009 are not anticipated. It is unlikely that there will be a directed Chinook salmon commercial fishery in 2010 on the mainstem Yukon River.

... reductions similar to those implemented in 2009 are not anticipated.

The Alaskan preseason management plan for Yukon River Chinook salmon will be developed jointly by state and federal fisheries managers, fishers, Tribal Council

representatives, and other stakeholders through teleconferences and a meeting coordinated by YRDFA, funded by the Yukon River Panel. Specifically, there will be an initial public teleconference on March 10, an in-person meeting in Fairbanks on April 8, and a final teleconference on April 21 to present the management plan.

For more details, visit www.yukonsalmon.org or call YRDFA toll free at 877-999-8566 extension 105.  ${\bigstar}$ 

## How to Get a summer Job in Fisheries

By Lauren Sill, Program Coordinator | Are you looking for a job in fisheries this summer? If so, there are many options available! YRDFA, the Alaska Department of Fish and Game (ADF&G), and the U.S. Fish and Wildlife Service (USFWS) all hire part- or full-time temporary positions during the summer and fall working on fisheries-related jobs. Also look to your tribe, tribal groups, and other organizations working in your area.

At YRDFA we have occasional summer job openings working with USFWS or ADF&G as technicians. Positions we have hired for in the past, and that may be available this year, are inseason harvest interviewers



Janice Carroll, inseason harvest interviewer for Ft. Yukon in 2009, talks to a local fisher about his harvest while her assistant, Gavin, looks on.

and subsistence assistants. Inseason harvest interviewers are hired in ten villages along the river for six weeks during the summer fishing season. Responsibilities include weekly interviews with all fishers in the area about fishing effort and reporting those results during the weekly YRDFA teleconferences. Subsistence assistants are hired for short-

term positions in the majority of villages along the Yukon River and work with ADF&G surveyors. During September and October, assistants help

the surveyors conduct household interviews about subsistence activities. If you are interested in this type of work, check out our website at www. yukonsalmon.org or give us a call at 877-999-8566, ext. 101, before May 1 to see what's available.

The Alaska Department of Fish & Game hires directly for short and long-term fisheries technician jobs. ALEXSYS (http://alexsys.labor. state.ak.us) and Workplace Alaska (http://notes5.state.ak.us) are the best places to go to find out about employment opportunities. Listed on these websites will be many positions with ADF&G, including fish and wildlife technicians, subsistence surveyors, and program technicians. Work locations are available throughout the state. For information on local assessment project jobs in the Emmonak area, contact Amanda Kelly at (907) 267-2118 prior to May 1.

The USFWS also hires for short-term summer positions. The Kenai, Fairbanks, and Anchorage offices of USFWS post all available jobs online at USA Jobs (http://usajobs.opm.gov). Positions include working as a technician at sonars or weirs, as well as some roles in habitat research, videography, or radio telemetry. Additionally, USFWS offers similar employment opportunities to college students through the Student Temporary Employment Program (STEP) and the Alaska Native Science and Engineering Program at the University of Alaska Anchorage. Contact the USFWS Division of Human Resources at 907-786-3610 for more information. **≤** 

## Alaska Board of Fisheries AYK Meeting Outcomes

By Becca Robbins Gisclair, Policy Director | The Alaska Board of Fisheries (BOF) met at the Princess Lodge in Fairbanks, January 26–31, 2010, to discuss and vote on Arctic-Yukon-Kuskokwim (AYK) proposals. Many people from throughout the Yukon River watershed attended the meeting and provided excellent testimony for the BOF to consider. The BOF adopted 10 proposals (some with amendment) and failed or took no action on 13 proposals affecting the Yukon River management areas. All proposals that passed will be in effect for the 2010 fishing season, unless otherwise noted.

The following proposals were adopted by the BOF:

**Proposal 81:** Clarification of the subsistence fishing schedule in Subdistricts 4-B and 4-C. Subdistricts 4-B and 4-C will now be open from 6:00 p.m. Tuesdays until 6:00 p.m. Sundays when there have been commercial fishing closures longer than 5 days.

**Proposal 82:** Modification of the subsistence fishing schedule in Subdistrict 4-A. Subdistrict 4-A will now have a subsistence fishing schedule of two 48-hour periods each week

during commercial fishing season without interruption.

**Proposal 87:** Review of the Chinook salmon management plan. Subsistence fishing for salmon in the Innoko River will be opened 7 days per week. No other changes were made to the management plan under this proposal.

> The BOF passed an amended proposal that restricts mesh size to a maximum of 7.5 inches.

**Proposal 90:** Prohibition of subsistence and commercial gillnets with larger than 6 inch mesh in the entire Yukon River drainage. The BOF passed an amended proposal that restricts mesh size to a maximum of 7.5 inches. This regulation will go into effect in 2011 to allow people time to purchase new nets.

**Proposal 92:** Prohibition of the commercial sale of Chinook salmon caught during non-Chinook salmon directed fisheries. The BOF passed an amended proposal that provides

ADF&G with emergency order authority to open non-Chinook salmon directed commercial fishing periods during which Chinook salmon can be kept but not sold.

**Proposal 94:** Requirement that the windows schedule be in place for subsistence fisheries even if commercial fisheries are allowed. The BOF passed an amended proposal that provides ADF&G with emergency order authority to close subsistence salmon fishing in a district or portion of a district if preseason forecasts or inseason assessment indicates an insufficient abundance of Chinook salmon to meet escapement goals on specific components of the run.

**Proposal 100:** Closure of the Tok River to sport fishing for salmon.

**Proposal 193:** Modification of the Yukon River Summer Chum Salmon Management Plan by allowing commercial harvest on run sizes of fewer than 1 million summer chum salmon. The BOF adopted an amended proposal that allows a harvest of up to 50,000 summer chum salmon in a directed summer

Continues at top of next page

## IS THE POLLOCK FISHERY SUSTAINABLE?

Monterey Bay Aquarium downgrades pollock fishery sustainability ranking. Marine Stewardship Council recommends sustainability certification

By Becca Robbins Gisclair, Policy Director | In its latest review, the Seafood Watch Program of the Monterey Bay Aquarium downgraded the sustainability ranking for the Alaska pollock fishery from a green "best choices" ranking to yellow. The Seafood Watch program cited salmon bycatch, particularly of Yukon River Chinook salmon, and habitat damage from pollock trawl contact with the sea floor as primary concerns responsible for the downgrade. The program provides a pocket-size guide to sustainable seafood—the "Seafood Watch" card—that many consumers carry in their wallets to guide their seafood purchases. The current ranking may influence consumers to choose more sustainable best choices seafood options in place of the yellow-ranked pollock.

On the other hand, the Marine Stewardship Council (MSC), an international fisheries certification body whose certification process is funded directly by industry, recently recommended after its five-year recertification process that the sustainability certification for the Bering Sea pollock fishery be renewed. The MSC credited the fishery's recent efforts to reduce salmon bycatch as a reason for renewing the certification, despite comments from YRDFA, Kawerak, and the World Wildlife Fund detailing the extent of bycatch problems in the pollock fishery and the impacts on Western Alaska salmon runs. These same groups submitted comments on the MSC's draft recommendation, which will be considered before a final certification decision is issued.

The MSC has come under fire recently for certifications of other fisheries with bycatch issues, including the Pacific hake (whiting) fishery in Oregon and California, which has bycatch issues similar to pollock and is composed of some of the same vessels. Many individuals use the MSC label to guide their seafood purchases, and some large retailers buy only seafood that carries the MSC label.

The latest Seafood Watch card and the full report can be viewed at http://www. montereybayaquarium.org/cr/seafoodwatch. aspx. The MSC report is available at http://www. msc.org/track-a-fishery/certified/pacific/bsaipollock/Reassessment-downloads-1/13.01.2010bsai-pollock-pcdr.pdf. chum salmon fishery when the run is between 900,000 and 1 million summer chum salmon.

**Proposal 194:** Modification of the Yukon River Fall Chum Salmon Management Plan by allowing commercial harvest on run sizes of fewer than 600,000 fall chum salmon. The BOF adopted an amended proposal that reduces the threshold required to have a directed fall chum salmon fishery to 500,000 from 600,000. The threshold in the Yukon River Coho Salmon Management plan for allowing a directed coho salmon fishery was also changed from 550,000 fall chum salmon to 500,000 fall chum salmon.

**Proposal 199:** Modification of the Yukon River Coho Salmon Management Plan. The proposal allows the ADF&G to open a directed coho salmon commercial fishery late in the season. If it determines that there is a harvestable surplus of coho salmon above escapement needs and those necessary for subsistence uses, and that a directed coho salmon commercial fishery will not have a significant impact on escapement or allocation of fall chum salmon, ADF&G may open a directed coho salmon commercial fishery late in the season.

## Federal Subsistence Board Meets in Anchorage April 13-14

By Becca Robbins Gisclair, Policy Director | The Federal Subsistence Board will meet in Anchorage April 13-14, 2010, to consider two fisheries proposals that were deferred from an earlier meeting. The Federal Subsistence Board has management responsibility for subsistence uses of fish and wildlife on federal public lands and waters in Alaska. Because much of the Yukon River is federal public waters, the decisions at this meeting will affect many subsistence users on the Yukon River.

The Federal Subsistence Board process includes reports, public comment, and input from the Regional Advisory Councils (RACs). You can sign up for public comment at the meeting. When available, the agenda will be posted on the Federal Subsistence Board's website at http:// alaska.fws.gov/asm/board.cfml.

The proposals being considered at this meeting were originally submitted during the Federal Subsistence Board's 2009 regulatory cycle. The Board decided at its January 2009 meeting

to defer these two proposals until Spring 2010, after the Alaska Board of Fisheries considered similar proposals at its January 2010 AYK meeting. The two proposals being considered at this meeting are described below.

**Proposal FP09-12:** This proposal requests that the maximum gillnet mesh size be restricted to 7.5 inch stretch mesh for subsistence and commercial salmon fishing in federal public waters of the Yukon River drainage. The proposal was submitted by the Eastern Interior RAC.

*Office of Subsistence Management (OSM) Preliminary Conclusion:* **Support with modification** to limit the application of the proposed mesh size restriction to federally qualified subsistence users only, and to provide only a one-year phase-in period by making the regulation effective beginning with the 2011 fishing season. This action would match the phase-in period adopted by the Alaska Board of Fisheries.

ADF&G Recommendation: **Support with modification** to become effective in 2011 for federal subsistence fisheries. The Federal Subsistence Board deferred taking action on this proposal in 2008 until the Alaska Board of Fisheries reviewed the results of the threeyear study of comparative mesh sizes. The Alaska Board of Fisheries

... decisions at this meeting will affect many subsistence users on the Yukon River.

did adopt a maximum mesh size of 7.5 inches for subsistence and commercial gillnets effective in 2011 in the Yukon Area at its January 26-31, 2010, meeting.

**Proposal FP09-13:** This proposal requests that all gillnets of greater than 6 inch stretch mesh be restricted to not more than 35 meshes in depth in federal public waters of the Yukon River drainage. The proposal was submitted by the Eastern Interior RAC.

OSM Preliminary Conclusion: **Oppose**. Reduction of the depth of gillnets used in the commercial and subsistence fisheries to harvest Chinook salmon in the Yukon River would likely reduce gear efficiency but may not influence the size, sex, or age of fish harvested. Anecdotal information suggests that deeper gillnets may catch larger fish, but this observation has not been confirmed or reported in scientific studies. Reduced fishing efficiency and

the costs of replacing or altering gear to comply with the proposed regulation would adversely affect subsistence and commercial fishers without reasonable confidence that the proposed change would effectively address the concerns raised by the proponents. No additional information was identified by the proponent or was available from other sources since the Board considered and rejected a similar proposal during the 2008 regulatory cycle.

ADF&G Recommendation: **Oppose**. The Federal Subsistence Board deferred taking action on this proposal in 2008 until the Alaska Board of Fisheries reviewed the results of the three-year study of comparative mesh sizes. The Alaska Board of Fisheries considered and unanimously opposed a proposal to restrict subsistence and commercial gillnets to 35 meshes in depth in the Yukon Area at its January 26-31, 2010, meeting. However, the Alaska Board of Fisheries adopted a maximum mesh size of 7.5 inches for subsistence and commercial gillnets effective in 2011 in the Yukon Area. This change in mesh size effectively reduces the maximum depth of commercial gillnets in Districts 1 through 3 by approximately 3 feet from the depth of an 8.5-inch mesh gillnet (commensurate with the current gillnet fishery). **€** 

## **BYCATCH UPDATE** Last Opportunity to Comment on Chinook Salmon Bycatch Cap

By Becca Robbins Gisclair, Policy Director | The fishery management plan (FMP) amendment (Amendment 91) for the Chinook salmon bycatch measures that reflect April 2009 action taken by the North Pacific Fisheries Management Council (Council) has been released, and the proposed regulations will be available soon. Comments on both the FMP amendment and proposed regulations are due by **April 19, 2010**.

The Secretary of Commerce must review and approve the Council's decision before it can take effect. The Secretary will consider these comments in his decision to approve or disapprove the Council's April 2009 decision. This comment period is the last opportunity to provide input on the Council's action before the Secretary approves it.

### The Council's April 2009 Action

The Council's April 2009 action provides for a 47,591 bycatch level in most years, with the potential for the fleet to reach 60,000 in two out of every seven years without consequence if they have industry incentive plans in place. The hard cap numbers chosen by the Council will largely maintain bycatch at levels experienced historically and will do little to actively reduce salmon bycatch, depending on industry incentive plans that operate outside of agency and Council control to reduce salmon bycatch below the specified hard cap levels.

> The hard cap numbers chosen by the Council will largely maintain bycatch at levels experienced historically and will do little to actively reduce salmon bycatch...

### Key Points to Include in Comment Letters

- The Secretary should reject the Council's approved Chinook salmon management action and use his emergency regulation authority to implement a hard cap of 32,500 effective immediately.
- The cap levels under the proposed Amendment 91 (A. 91) will not meet the obligations of the Council and the National Marine Fisheries Service under National Standard 9 to reduce bycatch; instead, the proposed cap levels maintain bycatch levels that are higher than historical averages. The upper limit (60,000) under A. 91 has only been exceeded 3 times in the past 18 years.
- The 60,000 upper limit is roughly double the cap level recommended by those responsible for managing the Chinook salmon fisheries in-river, including the Federal Subsistence Board and Alaska Board of Fisheries, and by those who depend on the

Chinook salmon. Those groups recommended a cap of 29,323-32,500.

- A. 91 relies on industry incentive programs to reduce bycatch below the stated amount. However, these incentive programs operate outside of regulatory control, and we have no assurances that actual bycatch will be any lower than limits placed in regulation.
- Chinook salmon is an essential part of culture, diet, and economy on the Yukon River. Many sacrifices have been made by in-river users to meet escapement goals and protect the future health of the run, including restrictions on subsistence fishing and the absence of a directed commercial fishery in 2008 and 2009. It is essential that impacts from bycatch in the pollock fishery are also reduced.
- The Secretary has a trust obligation to protect the opportunity for Alaska Natives to continue their subsistence way of life.

Make sure to also include a description, in your own words, of what Chinook salmon mean to you, your family, your tribe, and your culture. Although letters should come from tribes if at all possible, individual letters are important, too.

### Identify all comments with RIN 0648-AX89

Letters must be <u>received</u> by April 19, 2010. They can be sent via mail, fax, or e-mail to:

Mail: Robert D. Mecum Acting Administrator NMFS Alaska Region P.O. Box 21668 Juneau, AK 99802

Fax: (907) 586-7557, Attn: Ellen Sebastian E-mail—by choosing either of these actions:

- 1. Go to the Federal eRulemaking Portal: http://www.regulations.gov.
- In Search box labeled "Enter Keyword or ID," enter NOAA-NMFS-2010-0032-0001.
- Click on "Submit a comment" on the right.
- 2. Go to http://www.regulations.gov/search/Regs/home.html#docume ntDetail?R=0900006480aa7397.
  - Click on "Submit comment" near the top of the page.

For more information, visit www.yukonsalmon.org and watch for an Action Alert in the mail! Questions? Call the YRDFA office at 907-272-3141, ext. 105.

This article was prepared by YRDFA under grants from the Oak Foundation and Patagonia. The statements, findings, conclusions, and recommendations are those of the author and do not necessarily reflect the views of the Oak Foundation or Patagonia.

## The Story of a Little Parasite

By Lara Dehn, School of Fisheries and Ocean Sciences, University of Alaska Fairbanks | As I sit here in Dutch Harbor, a long way from the Yukon River, I am looking back at the journey that brought me here. It all started more than three years ago with a little parasite called Ichthyophonus. What does this microscopic organism have to do with Chinook salmon and the Yukon River? The parasite is infecting Chinook salmon, as well as other fishes, including chum salmon, pollock, and herring. It is not harmful to humans, but the effect of the disease on the fish host can be devastating and has led to mass die-offs of herring in Scandinavia. Ichthyophonus attacks first the heart of fish, then other organs, and finally the filet. There is concern that affected salmon may not be able to complete their physically demanding spawning migration. Think of the plight of the migrating salmon as similar to that of a marathon runner trying to finish the race with a heart attack. To make matters worse, water temperature affects the severity of the infection in salmon. The parasite grows quite rapidly between temperatures of 59 and 68 degrees Fahrenheit. Therefore, increasing water temperatures, possibly from climate change, could make the problem even more pressing.

The Yukon River Panel funded a project in 2007 to understand the disease a little better and to monitor what proportion of Chinook salmon entering the Yukon River near Emmonak is actually infected. The measurement of infection is termed prevalence. It turns out that *Ichthyophonus* prevalence changes almost every year, and the disease seems to cycle between years of high prevalence—in 2003, about a third of the population was infected—and low years—about every tenth fish was infected during the last three years. The link with water temperatures also has been observed. For the past three years, ocean water temperatures in the Eastern Bering Sea have been cold; however, some years, such as 2003 have been warm.

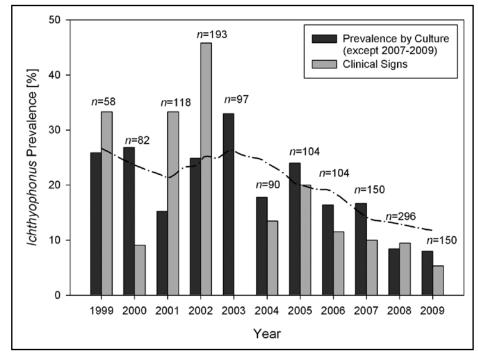
In 2008 and 2009, we added another location, the community of Eagle at the Canadian border, to the project. We also started to ask



Typical clinical signs of Ichthyophonus infection in the heart (white pustules on and inside the tissue) of a Chinook salmon harvested in Eagle.

questions about the effect of *Ichthyophonus* on the number of eggs in spawning females (fecundity) and the quality of these eggs. Yukon River Chinook salmon undertake one of the longest salmon migrations in the world, from river entry near Emmonak to the Teslin River in Canada, about 2,000 miles. To complete this migration, they fatten up before entering the river, making them particularly rich and prized fish. The migrating salmon use up this fat reserve almost

completely by the time they reach the spawning grounds. Each of us who has ever had the flu or a cold knows that disease takes a lot out of you. This weakening, which is no different for fish, is called energetic



Time-series of Ichthyophonus prevalence at Emmonak, Alaska, based on heart culture (PCR in 2007-2009) in Chinook salmon (n = sample size). Dashed line is a statistical smoothing technique to show trends of parasite prevalence over time.

cost of disease. How is this energy deficit covered in infected fish, or do Chinook salmon have a built-in reserve? We wonder whether infected females take fat out of their eggs to complete the migration, which would result in production of fewer eggs or lower quality eggs compared to those of healthy fish. The ability to identify such effects could change the way we look at escapement goals on the spawning grounds. Currently the goals are only determined by fish counts and don't take fish quality into account.

For a bit of good news, but with a caveat... We were able to collect data and tissues from 8 *Ichthyophonus*-infected and 36 healthy female salmon in Eagle, and eggs of these infected females were of the same quality as healthy Chinook salmon eggs. But, and this is a big "but," this finding is based on only eight infected females, which is a very small sample size. We hope to continue this study.

So what brings me to Dutch Harbor? There are still many things we don't understand about *Ichthyophonus*. Where is it coming from? What are the effects of the disease on Chinook salmon survival during their marine phase? In fact, we don't know when Chinook salmon are getting infected with the parasite. The disease is present in salmon entering the river near Emmonak, but out-migrating smolts are not infected, which points to an ocean source. The North Pacific Research Board has funded a research project (being conducted in Dutch Harbor) to collect samples from the Chinook salmon bycatch during the A-season of the pollock fishery in collaboration with local seafood processors, Purdue University, and the National Oceanic and Atmospheric Administration (NOAA) Observer Program to answer some of these questions. Stay tuned...

Finally, I want to thank everybody that helped with the study of *Ichthyophonus* through the years, in particular, all the subsistence fishermen who let us sample their fish and make the projects possible.

The author can be reached by email at dehn@sfos.uaf.edu. 💊

## New Findings Show Increased Ocean Acidification in Alaska Waters

Source: School of Fisheries and Ocean Sciences, University of Alaska Fairbanks | The same things that make Alaska's marine waters among the most productive in the world may also make them the most vulnerable to ocean acidification. According to new findings by a University of Alaska Fairbanks scientist, Alaska's oceans are becoming increasingly acidic, which could damage Alaska's king crab and salmon fisheries.

This spring, chemical oceanographer Jeremy Mathis returned from a cruise armed with seawater samples collected from the depths of the Gulf of Alaska. When he tested the samples' acidity in his lab, the results were higher than expected. They show that ocean acidification is likely more severe and is happening more rapidly in Alaska than in tropical waters. The results also matched his recent findings in the Chukchi and Bering seas.

"It seems like everywhere we look in Alaska's coastal oceans, we see signs of

increased ocean acidification," said Mathis.

Often referred to as the "sister problem to climate change," ocean acidification is a term to describe increasing acidity in the world's oceans. The ocean absorbs carbon dioxide from the air. As the ocean absorbs more carbon dioxide, seawater becomes more acidic. Scientists estimate that the ocean is 25 percent more acidic today than it was 300 years ago.

"The increasing acidification of Alaska waters could have a destructive effect on all of our commercial fisheries. This is a problem that we have to think about in terms of the next decade instead of the next century," said Mathis. The ocean contains minerals that organisms like oysters and crabs use to build their shells. Ocean acidification makes it more difficult to build shells, and in some cases the water can become acidic enough to break down existing shells. Mathis' recent research in the Gulf of Alaska uncovered multiple sites where the concentrations of shell-building minerals were so low that shellfish and other organisms in the region

would be unable to build strong shells.

"We're not saying that crab shells are going to start dissolving, but these organisms have adapted their physiology to a certain range of acidity," Mathis said. "Early results have shown that when some species of crabs and fish are exposed to more acidic water, certain stress hormones increase and their metabolism slows down. If they are spending energy responding to acidity changes, then that energy is diverted away from growth, foraging and

reproduction."

... it is a

clear threat

to Alaska's

commercial

fisheries and

subsistence

communities.

Another organism that could be affected by ocean acidification is the tiny pteropod, also known as a sea butterfly or swimming sea snail. The pteropod is at the base of the food chain and makes up nearly half of the pink salmon's diet. A 10 percent decrease in the population of pteropods could mean a 20 percent decrease in an adult salmon's body weight.

"This is a case where we see ocean acidification having an indirect effect on a commercially viable species by reducing its food supply," said Mathis.

The cold waters and broad, shallow continental shelves around Alaska's coast

could be accelerating the process of ocean acidification in the North, Mathis said. Cold water can hold more gas than warmer water, which means that the frigid waters off Alaska's coasts can absorb more carbon dioxide. The shallow waters of Alaska's continental shelves also retain more carbon dioxide because there is less mixing of seawater from deeper ocean waters.

Ask any coastal Alaskan and they will tell you that Alaska's waters are teeming with biological life, from tiny plankton to humpback whales. All of these animals use oxygen and emit carbon dioxide. Mathis and other scientists call this the "biological pump."

"We are blessed with highly productive coastal areas that support vast commercial fisheries, but this productivity acts like a pump, absorbing more and more carbon dioxide from the atmosphere," said Mathis. "Because of this, the acidity of Alaska's coastal seas will continue to increase, and likely accelerate, over the next decade."

Mathis said that it is still unclear what the full range of effects of ocean acidification will be, but that it is a clear threat to Alaska's commercial fisheries and subsistence communities.

"We need to give our policy makers and industry managers information and forecasts on ocean acidification in Alaska so they can make decisions that will keep our fisheries viable," said Mathis. "Ecosystems in Alaska are going to take a hit from ocean acidification. Right now, we don't know how they are going to respond."

The UAF School of Fisheries and Ocean Sciences (SFOS) conducts world-class marine and fisheries research, education and outreach across Alaska, the Arctic and Antarctic. 55 faculty scientists and 135 students are engaged in building knowledge about Alaska and the world's coastal and marine ecosystems. SFOS is headquartered at the University of Alaska Fairbanks, and serves the state from facilities located in Seward, Juneau, Anchorage, and Kodiak.

## YRDFA Organizes Panel Discussion on Using Traditional Knowledge in Management

By Catherine Moncrieff, Anthropologist | On February 10, 2010, YRDFA moderated a panel discussion at the Alaska Forum for the Environment. The majority of the talks focused on the Yukon River, covering both traditional and Western management styles. Speakers from Hawaii joined the discussion and brought Hawaiian traditional knowledge. Strong connections between the two regions were realized.

Approximately 35 people attended the discussion, which was moderated by Jill Klein, YRDFA executive director. Speakers included Catherine Moncrieff, YRDFA anthropologist; Dani Evenson, ADF&G Regional Research Supervisor; Heather Angeloff, Alaska Climate Research Center climatologist; Bernard Murran, Hooper Bay Environmental Officer, Pua Kamaka, Hawaii NOAA/Coastal American Pacific Islands Region management analyst; and Chadd Paishon, Hawaii navigator.

Catherine presented results of a recently completed project—Natural Indicators of



Chadd Paishon, Hawaii navigator, shares pictures while discussing cultural revival.

Salmon Run Timing and Abundance, Yukon River. Dani discussed the challenges and methods of managing the Yukon River Salmon fisheries. Heather described the Alaska Climate Research Center and provided some preliminary information on wind records that relate to the natural indicator results. Bernard provided some Hooper Bay traditional knowledge about salmon arrival. Pua described the Coastal America program and introduced Chadd, a navigator for the program. Together, Pua and Chadd warmed up our Alaskan audience with pictures and music from the islands and described the Coastal America program, which focuses on cultural revival and strives to reconnect Pacific Islanders to their tradition of navigation.

The panel members were selected in part as the beginning of Phase II of the Natural Indicator project in which YRDFA plans to assemble a multidisciplinary team to correlate weather, fauna, and flora data with salmon records. The data analysis will enable us to begin to understand the mechanisms underlying the natural indicators. We hope to be able to create a model from the natural indicators reported that could become an additional tool to understand salmon run timing and abundance.

The Alaska Forum for the Environment conference, which took place in Anchorage at the Dena'iana Conference Center, is a statewide gathering of environmental professionals from government agencies, non-profit and for-profit businesses, community leaders, Alaskan youths, conservationists, biologists, and community elders. The panel presentations can be viewed on the YRDFA website, and copies of the Natural Indicators of Salmon Run Timing and Abundance, Yukon River report can be requested through the YRDFA office. **S** 

This article was prepared by YRDFA under contract number IHP-06-119 from the Arctic Yukon Kuskokwim-Sustainable Salmon Initiative (AYI-SSI) and award number NA07NMF4720091 from the National Oceanic and Atmospheric Administration (NOAA) . The statements, findings, conclusions, and recommendations are those of the author and do not necessarily reflect the views of the AYK-SSI or NOAA.

## Saying Thanks to Raffle Donors

Despite the economic downturn, Alaskan companies and individuals donated a variety of desirable items and services for the raffle at YRDFA's 20th Annual Meeting. Their generosity resulted in the most successful raffle YRDFA has held to date. YRDFA would like to extend a warm, heartfelt thank you to all of this year's donors!

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Raffle boxes line the gym wall, ready to accept tickets for a host of fabulous prizes.

# SPOTLIGHT ON NULATO



In each issue of Yukon Fisheries News YRDFA highlights a different village. We hope these descriptions will give readers a glimpse into life and history in different areas of the Yukon River drainage.

By Alyssa Agnes, High School Student | My small rural village of Nulato is located between Koyukuk and Kaltag, along the Yukon River. Approximately 250 to 300 people live here. In Nulato we have a very intense Athabascan culture, which is a lot of fun and also interesting. There are a lot of possible places you can go and things you can do. We do everything according to the four seasons.

There are a lot of things we do here, especially in the summertime. We go fishing, camping, and swimming. Also, we have baseball, community races, and enjoyable boat rides to many different places along the Yukon. We travel along the river to participate in baseball tournaments in other villages like Kaltag, Galena, and Koyukuk. In most all of these activities, we do them as a community. This is what we do in the summer months.



After summer has packed up and moved away, fall comes tumbling in. In the fall we go fishing for grayling, hunting for big moose, and travel to Kaiyuh. My favorite thing to do in the fall is to stay out late with my friends before school starts again. These are all the things we do before fall is over.

When fall starts blowing away and the leaves are all gone, winter starts storming up

the river like a tornado hitting a desert. Winter is my favorite season because we go snow machining on the frozen lakes. We also go trapping for beavers, wolves, and marten. We snowshoe across the river. Another thing

we have are carnivals. These carnivals have a lot of activities like snowshoeing, dog races, and many other races. These are mostly all the things we do before the snow starts to melt.

As the snow slowly melts and the river starts to unfreeze, the gloomy and rainy spring

comes along and scares me. In the springtime, we mostly stay in because it is all wet and dirty outside. If we stay in, we do beading, knitting, or crocheting. If we plan to go outside, we go hunting for geese or ducks. This is what we do as the snow melts.

These are all the things we do in my small rural village of Nulato. Now you know many of the things we do here. As you can see, our



lives basically revolve around the four seasons. €



## Yukon River Welcomes New Manager

In fall 2009, Russ Holder, the federal fisheries manager for the



Fred Rue

Yukon River, bid farewell to the 49th state and moved on to fisheries work in the lower 48. In December, his shoes were filled by Fred Bue, formerly the Yukon River fall manager for the Alaska Department of Fish & Game. Fred brings notable experience on the Yukon and a respect for both the residents and the resource to his new position with the U.S. Fish and Wildlife Service. Best of luck, Fred!

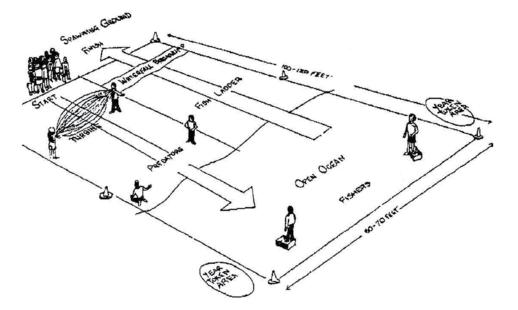
## Did you know...



You can now support the Yukon River Drainage Fisheries Association through the Alaska PFD "Pick. Click. Give." program?

Visit www.pickclickgive.org to learn more!

## Teach Youth about the Salmon Life Cycle with Hooks & Ladders



By Evan Blankenship, Communications Assistant | "Hooks and Ladders" is a fun way to show students in grades 3 through 7 the challenges and obstacles salmon face during their anadromous life cycle. This activity easily adapts to match the characteristics of local fisheries and ecosystems, and ties into a variety of school curricula (such as ecosystems, human environmental impacts, salmon biology, and mathematical concepts). The key word is ACTIVE!

The playing field setup can be seen in the diagram. Students start as eggs and are "hatched" one by one. The fry pass through a dam's turbine (jump rope) and evade predators on their way toward the ocean. They must avoid fishing boats (students with a box/ bucket on their foot) while collecting tokens to represent each year spent feeding (4 to 8 for Yukon Chinook salmon). Tokens are piled in safe zones on each side of the ocean and salmon must cross back and forth once for each year spent feeding. Any salmon that have been killed (touched by the jump rope representing a predator or fishing boat) sit in the return stream as rocks, creating eddies. Returning salmon must swim around each rock two times. But if an "open fishing window" is called out, the rocks become fishing nets trying to catch salmon with their hands. The final

### These materials are needed:

- Playing area of 50 by 100 feet
- About 500 feet of marking material
- (rope, masking tape, etc.) or 6 cones • Jump rope
- Two foot-sized boxes or buckets
- 100 tokens (playing cards, poker chips, building blocks, etc.)

step for the surviving salmon is to jump over a gap representing the Canadian border to the spawning grounds.

Some topics to use as follow-up discussions might include one or more of the following: How does the "survival ratio" of student-salmon compare with reality? What obstacles caused the greatest casualties? What changes could be made to help more salmon return (such as placing limits on the fishing boats, removing or mitigating the dam, shortening or decreasing the fishing periods)? These changes can then be tested in the next round of Hooks and Ladders.

To view a demonstrative video of Yukon River school kids carrying out this activity, please visit www.youtube. com/watch?v=fiMxXJIfifQ or www. yukonsalmon.org.

Adapted from Western Regional Environmental Education Council. 1987, 1992, 2000 Aquatic Project WILD. Bethesda MD: Western Regional Environmental Education Council. Project WILD Coordinator, Alaska Department of Fish and Game, 333 Raspberry Rd, Anchorage, AK. (907) 267-2216.

## Catch the Buzz about Yukon Salmon Online

By Evan Blankenship, Communications Assistant | YRDFA is exploring new, Internet-based ways to share information and opportunities concerning Yukon River fisheries. More and more people are turning to the web to learn and share news, and we want to make it easy to keep up with all the latest happenings on the river.

In this article we explain each Internet-based tool and how we hope to use it. Don't worry, we're still sending out our paper newsletters. The following are just other ways to keep in touch.

### Twitter

Twitter is an online messaging tool. YRDFA is using our new account (www.twitter.com/yrdfa) to share what's going on with the organization, our projects and meetings, and timely concerns of Yukon River fisheries. Follow us, and you can expect to receive several tweets per week.

### Facebook

The YRDFA fan page on Facebook (www.facebook. com) acts like a hub to keep track of our varied activities. Share it with your friends, gain access to videos and photos from our projects and meetings, and keep track of what's going on up and down the river.

#### **E-News**

YRDFA is sending out monthly e-mail newsletters. These brief, pointed e-mails deliver news to your inbox about upcoming events, policy issues, and other timely topics. To sign up, look for the "Join Now" button on the left side of YRDFA's homepage or send an e-mail to evan. blankenship@yukonsalmon.org with the subject line "Subscribe for E-news." Of course, we'll keep your contact information private and you can unsubscribe anytime.

#### **Online Forum**

YRDFA created an online forum for fishers and community members to discuss 2010 Board of Fisheries proposals. YRDFA staff will create similar forums in the future to reflect upcoming issues. Participation in an online forum is free, and its simple to share an opinion or ask a question. The forum is a way for everyone to be involved in the conversation.

This article was prepared by YRDFA under award number 701819G019 from the U.S. Fish & Wildlife Service and award number NA07NMF4720091 from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, administered by the Alaska Department of Fish and Game. The statements, findings, conclusions, and recommendations are those of the author and do not necessarily reflect the views of the U.S. Fish & Wildlife Service, the National Oceanic and Atmospheric Administration, the U.S. Department of Commerce, or the Alaska Department of Fish and Game.





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