Salmon in the Classroom

2017/2018

Pilot Program Review

Developed In Partnership

Fish On Yukon

BigFish LittleFish Consultants

Yukon River Panel Alaska • Yukon

Rivers to Ridges

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"I hope that you can come back and tell us more stories! I really enjoyed them."

- Gr. 6 Student to Dorothy Smith (Participating Elder)

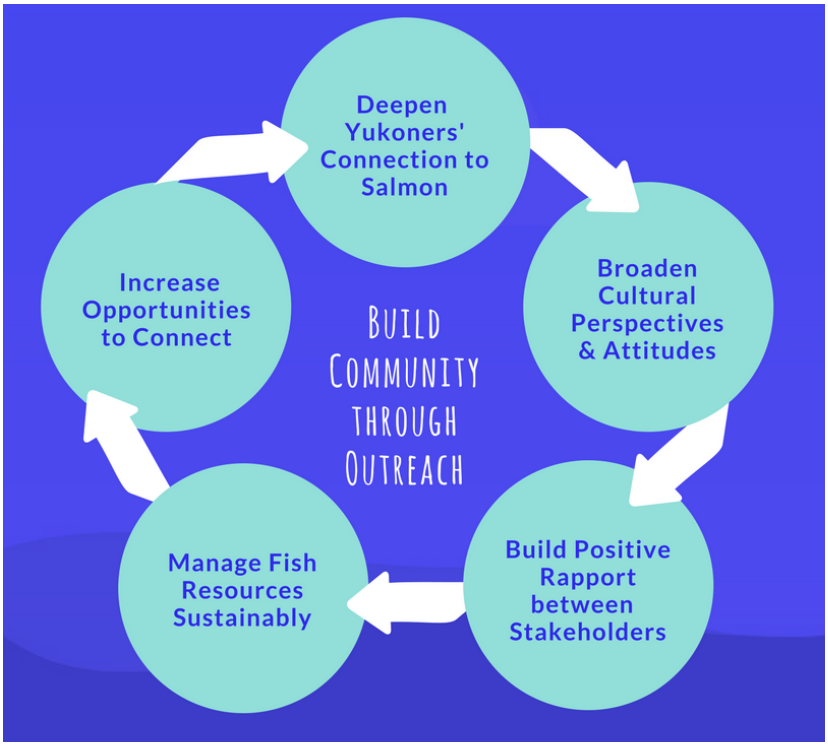
Project Goals and Objectives

Goal

Develop, articulate and maintain a personal connection to salmon through engaging experiential programming with youth across the Yukon

Objectives

- Reflects indigenous values around salmon and recognizes the public connection to salmon
- Understanding and showcasing the connection and relationship between Alaska and Yukon as it relates to salmon
- Builds on the "Salmon Know No Boundaries" campaign
- Builds on Yukon salmon knowledge and presents it in a meaningful way in the classroom.



Principles

- *"Every Fish has a Story"* - all fish have a story to tell, whether large or small, freshwater or saltwater, whether harvested or not harvested
- *Encourage participation* - with the resource either through understanding, viewing, harvesting or consuming
- *Holistic* - must support a holistic, big picture view
- *Legitimacy* - fits within the new Yukon Department of Education (BC) approved curriculum
- *Personal* - all people can have a personal connection with salmon, whether urban or rural, First Nation or non-First nation, Alaskan or Yukon
- *Indigenous perspectives* - aligns with indigenous values and follows principles of reconciliation: within ourselves, with each other, with other species
- *Scaleable and flexible* - allows for a variety of teaching approaches to elementary or high school, rural or urban, indigenous or non-indigenous audience
- *Legacy* - program builds on itself and has a longer lasting legacy
- *Interactive* - includes digital, dynamic content including social media
- *Relevant* - customizable and flexible to allow space for local and community content

Legacy

These modules aim to foster a deep sense of understanding about how salmon relate to participants' lives, and to the lives of the people and organisms around them. A focus on First Nations perspectives and practices (past and present) should allow students to connect with a variety of perspectives on salmon through first-hand accounts, experiential activities and innovative projects.

One of the goals for this initiative is to start rebuilding (or deepening) meaningful, personal connections to salmon for Yukoners. By working with young people, we have the opportunity to use stories, experiential activities, games, arts and other evocative means to communicate the message that salmon are an incredibly important part of our ecosystem. A focus on sensory and tactile experiences will increase connection to and retention of the material.

Another goal of the initiative is to incorporate a lasting online legacy piece, where participant stories and experiences can be showcased. This will allow for other students, local leaders and members of the public across the Territory and beyond to have access to the work being done through the initiative. For this reason, audio, video, photo and other evidence of projects and experiences should be documented. This focus on digital storytelling will allow the participants to transition from action to reflection, and to take on the role of storytellers.

Salmon in the Classroom Modules

Components of Each Module

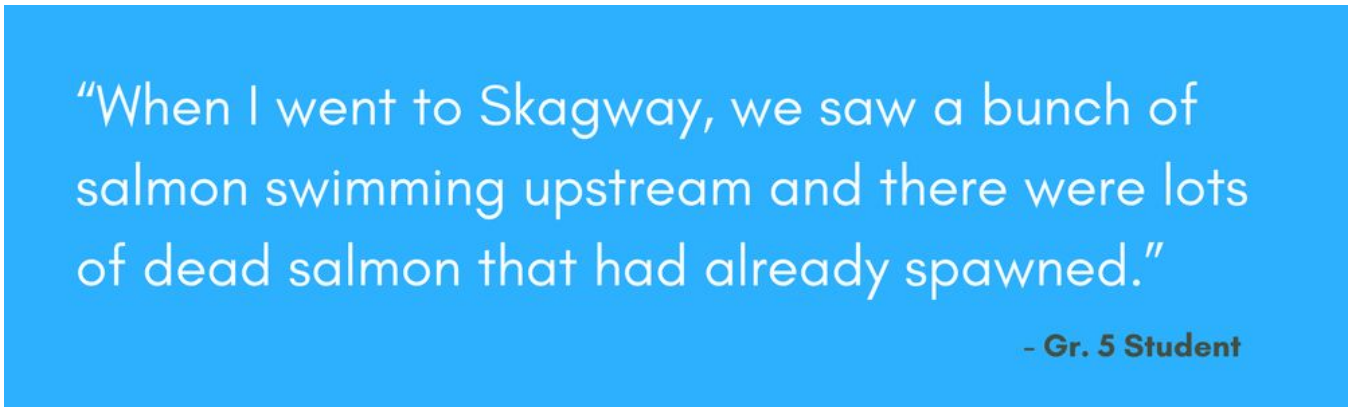
All modules should:

Include connections to each of the three themes (Fish, Habitat & People). E.g. While your focus will be on one of the themes, each program should involve activities or content that connects the three themes together	Be designed as a 1.5 hour long session. There will be a part of the table to list some extensions to the module such as space for localized knowledge sharing like Elders' songs and stories, fishing workshops, processing workshops, games, etc.
Highlight local First Nations' perspectives (when possible, in-person sharing should be prioritized, and historical information should be balanced with contemporary experience)	Allow the magic and engagement of storytelling flow through the workshop & focus on creating personal connections to salmon for students
Aim to ask powerful questions to engage deeper learning and inquiry	

Module 1: Species & Colour (Fish)

Theme: Fish		**Topic:** Species & Colour
GRADES 7/8/9	**Subject:** Science	**Time**: 1.5 hours
Big Idea: Evolution by natural selection provides an explanation for the diversity and survival of living things (Gr. 7)		
Overview: The colour of salmon changes with species, life cycle and human intervention. The colours tell important information to humans and other salmon. Students will explore salmon through colour-based experiences that deepen understanding of species, life cycle and human impacts.		
Students are expected *to be able to*:	• Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information (Gr. 7, 9); • Experience and interpret the local environment (Gr. 9) • Express and reflect on a variety of experiences and perspectives of place (Gr. 8)	
Students are expected *to know*:	• Characteristics of life: Living things respire, grow, take in nutrients, produce waste, respond to stimuli, and reproduce (Gr. 8)	
Materials/ Resources	• 15 coloured salmon cards (steaks), laminated images of 4 species of salmon (ocean and spawner for Chinook, Chum, Coho and Sockeye), 10 pool noodles, rope, 20 pylons, 30+ species-specific bandanas, whiteboard + markers, camera	
Component	**Description and Details**	
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the stage for the day with the Essential Question: What's your salmon story?	
Hook Opening	**Salmon Colour Wheel** Create groups of 2 or 3 students. Hand out 'salmon steaks' and ask the group to arrange themselves in order based on colour. Form a circle and show off the 'steaks'. **Qs:** Which colour of salmon looks most appetizing? Why is salmon flesh different colours? What is the colour difference between wild and farmed salmon?	
Activity	**Salmon Mix-n-Match** The inside of the salmon isn't the only part that can change colour. The outsides change, too. And each species changes in their own way. They need to pay attention to the colours so that they can find a mate. Images of salmon (ocean and spawning) are laid out, and volunteers can come to try and match the pairs. **Qs:** What similarities or differences do you notice between species? Why do salmon change colour on the outside when they return to spawn? Why might they look different? What is the value of salmon at the headwaters? In the ocean? Along the way?	
Transition / Discussion	Salmon Management (Then & Now) + Language & Attitudes towards Salmon (Commercial fisheries vs. Subsistence fisheries) **Qs:** How do you think these different groups of people talk about salmon? What is similar/dissimilar in the way they view salmon? Does how people talk about salmon affect how they treat salmon? How would salmon like to be talked about/treated? If you were a	

	salmon, how might you want to be treated? What rights would you want?
Activity	**Salmon Tails** Students are either salmon or fishers (Round 1: Commercial - Round 2: Subsistence & Recreational/Sport - Round. 3: Both). Commercial fishers get pool noodles (with a short, connected rope). Salmon receive a bandana with their species' spawning colour (Chum - green, Chinook - red, Coho - blue) . Half of the play area is ocean and half is a narrowing river. Salmon must go out to the ocean, swim around and touch a pylon (birthday) three, five or seven times (depending on the group), before heading back into the river to spawn. In the river, they must let their banada hang out of a pocket and swim around looking for a mate of the same species. Once they find each other, they grasp hands and run over to the bucket (roped-off area for caught fish), where they release one fish back into the headwaters. This represents the average of the one or two salmon eggs that become adults and make it back to their spawning grounds. The Commercial fishers may catch fish in the ocean, and may decide to link their pool noodles together to form a net. Subsistence and Recreational fishers must stay along the river banks. They may also decide to form a net. The game continues until there are no fish left or the educator decides to end the game.
Transition & Closing	**Qs:** What else depends on there being enough salmon in the rivers? (forests, birds, animals, recreational fishers, etc.)? What happens when too many fish are harvested? Which part of the waterway is the most important for salmon? What story or advice would a salmon tell to humans so that we can continue to harvest them? Where do fish farms fit into this model? **Closing circle** - End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).



Module 2: Lifecycle & Journey (Fish)

Theme: Fish		**Topic:** Lifecycle & Journey
GRADES 1/2/3/4	**Subject:** Science	**Time**: 1.5 hours
Big Idea: Understanding salmon life cycle as it relates to an arduous journey		
Overview: Salmon can travel incredible distances to spawn. They encounter many challenges and obstacles along the way. We will explore the salmon life cycle through active and hands-on games using all of our senses.		
Students are expected *to be able to*:	• Experience and interpret the local environment (Gr. K, 1, 2, 4) • Consider some environmental consequences of their actions (Gr. 2) • Identify FIrst People perspective and knowledge as sources of information (Gr. 3, 4)	
Students are expected *to know*:	• First Peoples use of their knowledge of life cycles (~stewardship: **sustainably hunting/fishing in response to seasons and animal migration patterns** (e.g. seasonal rounds, etc.) (Gr.K, 1, 2, 3, 5)	
Materials/ Resources	• vials/containers labelled with a Yukon salmon-bearing river, with 5 different, 6 colours of rope, mats, feathers, cotton balls, 5 pieces of fabric, bandanas, river label tags, stands	
Component	**Description and Details**	
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the stage for the day with the Essential Question: What's your salmon story?	
Activity	**Lead-in story** Elder sharing, personal story or storybook from resource section. **Map** Show students the map of the Yukon Watershed and ask them to trace the route from the ocean to their location. Then ask them which First Nation territories the river flows through. **Qs** What other ways could the salmon have chosen to go? Why would they choose to come back here (introduce the idea of genetic stocks, show map if applicable, that salmon return to their home stream). **Salmon Forms** Students move their bodies through the lifecycle of salmon as eggs, alevins, fry, parr, and adult salmon. Students stand up, and move their bodies as each life stage is called out, taking the form of each.	
Transition / Discussion	Salmon have endless perseverance. They remind us of circles, and of sacredness. Explain the game inside, and give students the responsibility of helping create the playing area together.	
Activity	**Salmon Scent Tag** Each student receives a cotton ball with a scent on it (lavender, lemon, rosemary, etc.) before joining the game. Students start in the 'Headwaters/Spawning Grounds' and must swim down the ocean, swim around the 'Ocean' and collect 4 different coloured 'food pieces' before heading back to the 'Headwaters/Spawning Grounds' to spawn. When they get back to the 'Headwaters/Spawning Grounds', they must find another	

	salmon with the same scent on their cotton ball (representing the same genetic stock which would go back to the same stream). If they are able to do this, they can spawn (release a caught salmon from the 'Smokehouse'). If salmon are caught by a predator, fisher folk, etc., they go to the 'Smokehouse' to wait to be released (either by spawning salmon or a resource manager - teacher or student managing fish populations).
Transition	**Qs** What are challenges when migrating? What did you learn to find their way back to their spawning grounds? What strategies did you use to avoid the obstacles and predators? What role do resource managers play for salmon?
Closing	**Closing Circle** Go around the circle once more, and allow for gratitudes, lessons learned, stories or highlights of the day to be shared. End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).

This was a very engaging afternoon for my students. It added knowledge to their study of salmon in an active, fun way.

- Gr. 4 Teacher

Module 3: Salmon & The Web of Life (Habitat)

Theme: Habitat		**Topic:** Salmon & The Web of Life
GRADES K-5	**Subject:** Science	**Time**: 1.5 hours
Big Idea: Living things have life cycles adapted to their environment (Gr.2); Living things are diverse, can be grouped, and interact with their local ecosystems. (Gr. 3); All living things sense and respond to their environment (Gr. 4);		
Overview: Salmon feed many living things, including humans. Salmon are an important part of the web of life.		
Students are expected *to be able to*:	• Experience and interpret the local environment (Gr. K, 1, 2, 4) • Consider some environmental consequences of their actions (Gr. 2) • Identify FIrst People perspective and knowledge as sources of information (Gr. 3, 4) • Communicate ideas, explanations and processes in a variety of ways. (Gr. 5)	
Students are expected *to know*:	• First Peoples use of their knowledge of life cycles (~stewardship: sustainably hunting/fishing in response to seasons and animal migration patterns (e.g., seasonal rounds, etc.) (Gr.K, 1, 2, 3, 5) • The nature of sustainable practices around BC (Yukon)'s resources (Gr. 5) • **S**ensing and responding in humans (five senses) and other animals (e.g. salmon), (Gr. 4)	
Materials/ Resources	• Salmon Song recording + speaker, list of animal forms and stretches, 10 hula hoops, red/orange flagging tape, 3 pool noodles, whiteboard, whiteboard markers, camera, print-outs of Wild Guardians posters (blank and with slogans), blank paper, pencils, colouring pencils, etc.	
Component	**Description and Details**	
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the Stage for the Day, Share a Story, Essential Question	
Hook Opening	**Animal Forms Stretch** Lead a series of fun, dynamic stretches in the forms of: Eagle, Sealion, Common Merganser, Dolly Varden, Worm, Bacteria, Gull, Insect, Bear. Qs: What do all of these animals have in common? (Eat salmon). **Qs** How do they eat salmon? (Discuss bacteria vs. bears vs. other fish) Do you think salmon are important to the web of life? (Connection to so many other creatures) Have you ever eaten salmon? (Connection to our lives as a source of food - We are all connected to salmon).	
Activity	**Salmon Eater Tag** Kids are divided into 2 groups (Salmon Eaters & Salmon). Salmon have a red tail (flagging tape or bandana), and they swim (run) around the stream (play area), and try to stay alive. They can be tagged while out in the stream, and are only safe in deep water (hula hoops). Salmon Eaters start out as different non-human organisms. When they catch a salmon's tail, the salmon must lay down to decompose and count to 10. Then they get up and begin to hunt for food as a Salmon Eater. A human is eventually introduced to the game. When a human catches a salmon they only have to tag them below the knees with a pool noodle (distance from fish is increased).That salmon must then leave the stream and go to the smokehouse. It doesn't get a chance to decompose or come back as a wild Salmon Eater. The human may be encouraged to catch as many fish as she can, or she may be encouraged to think about the ecosystem and other salmon eaters when	

	harvesting. If the salmon run out from over-fishing, the other Salmon Eaters can create rules for the human. More humans can be added to the game, and deep water (hula hoops) can be removed to show human impacts. * human putting unused parts of the salmon in the river * human releasing fry into the stream
Transition / Discussion	**Qs** Did everyone have a chance to eat some delicious salmon? What happened when the human came to fish for salmon? Why don't salmon decompose on the land when humans harvest them? What kinds of rules would other Salmon Eaters like humans to follow when they go fishing? What kinds of rules would salmon like humans to follow when they go fishing? Has anyone been taught how to respect fish by their Elders? What does respect for fish look and sound like?
Activity	**Wild Guardians** Students can choose from (or design their own) Wild Guardians poster. This poster should state a message that salmon or salmon eaters would want salmon to think about during harvest. Taglines should be written from the perspective of a Salmon Eater (wild or human). **Qs** Have you ever heard stories about the relationship between humans and animals in the past? Have you ever heard of humans and animals talking to one another? Or changing shape to become both human or animal? Some First Nations have very important stories about the ways that humans and animals used to interact on equal grounds. Do you think this kind of relationship would affect the way that people treat animals?
Transition & Closing	**Closing Circle** Allow students to share their Wild Guardians posters. **Qs** Why did you choose that slogan? Do you think that salmon are important to the lives of other animals and critters? How are salmon important to your life (direct and indirect)? End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).

We would love you guys to come again! Recurring visits from organizations result in further engagement from students because they "know" you!

- Gr. 7/8/9 Teacher

Module 4: Rivers & Forest (Habitat)

Theme: Habitat		**Topic:** Rivers & Forests
GRADES 7/8/9	**Subject:** Science & Socials	**Time**: 1.5 hours
Big Idea: Salmon are codependent on the habitat (specifically rivers and forests) around them and forests rely on salmon. This relates deeply to the seasonal round and traditional fishing methods and sustainable harvesting.		
Overview:		
Students are expected *to be able to*:	• Make observations aimed at identifying their own questions about the natural world (Gr. 8) • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information (Gr. 7, 8, 9); • Experience and interpret the local environment (Gr. 8, 9) • Contribute to care for self, others, community, and world through personal or collaborative approaches (Gr. 8) • Express and reflect on a variety of experiences and perspectives of place (Gr. 8)	
Students are expected *to know*:	• Characteristics of life: Living things respire, grow, take in nutrients, produce waste, respond to stimuli, and reproduce (Gr. 8)	
Materials/ Resources	• Paper & drawing materials, seasonal round graphic (local is best), music or drumming recording, Tree Cookie with rings, polaroid cameras, items for group round/river (pebbles (coloured), bundle of sticks, piece of fishnet, animal figures, something to represent a rod, a net, images of salmon in different stages, seasonal symbols (plasticized red leaf, paper snowflake, wooden plant, flower image). From My Seasonal Round: An Integrated Unit for Elementary Social Studies and Science, Open School BC, 2013 https://www.openschool.bc.ca/elementary/my_seasonal_round/pdf/SeasonalRound_unit.pdf	
Component	**Description and Details**	
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the Stage for the Day, Share a Story, Essential Question	
Hook Opening	Drawing on the board to create a circle while telling a story of seeing the celebratory return of the salmon. First, feelings of sadness related to the lack of salmon in the local rivers, then community action and conservation, then the return!	
Activity	**Imagining Exercise** Play local drumming music or natural sounds of the boreal softly. Students close their eyes and ask them to remain silent until after the exercise is finished. Dim the lights in the class. After each question, pause for about 5-10 seconds to allow the students time for imagining. **Say** With your eyes closed, imagine you are living hundreds of years ago. You don't have heated houses for shelter, vehicles to travel around in, or stores to buy food and clothing	

	from. In your mind's eye, look around. What season is it? What do you see around you? Are there people? Animals? What does the landscape look like? What do you hear? How do you feel? Are you warm or cold? What are you wearing? What do you smell? You are now walking towards your home. Who is with you in your home? What is it made of? Is there a fire burning?Is there something cooking on the fire? If so, what is it? If there is nothing cooking on a fire, go to the place you will find food. What are you eating? How does it taste? What is the texture? Have students write about or illustrate what they imagined. They can be as creative as they like **OR** Play local drumming music/sounds of the boreal landscape, have students draw out images or scene that comes into their mind. Above description adapted from My Seasonal Round (see Resource section)
Transition / Discussion	Break out in small groups around the room and write questions on the board to provoke discussion. **Qs** What sorts of things did you imagine? How might you vision preparing for colder months? How does your imagination connect in with the important role of salmon in the ecosystem and your life?
Activity	**Building a Group Seasonal Salmon Round** Either: a) move desks and use the floor space in the classroom, or b) take the activity outside or in the gym This activity will work best in a classroom that is cohesive, or the kids know each other well. They are given a series of tasks, one after the other to collaboratively design a seasonal salmon round with the knowledge they have. They are given items one by one that represent the elements, and need to find space to put them in. Items handed out include: pile of small pebbles, pile of sticks, items representing rods, boats, trollers, a piece of net, pictures of salmon in various stages **Qs** Where do the seasons fit in? How does the salmon cycle connect in? Where and how do we harvest salmon? What fishing methods could you use to catch fish? In what ways? Traditionally and contemporary? Subsistence and Commercial and Recreational? Preservation? Conservation? Migration? **OR** Draw a RIVER/OCEAN on the ground using scarves/scrap material and follow the same steps. The river needs to be diverse (lots of eddies, interesting features, logs, rocks, banks, tributaries) Ask 1-3 student photographers in the class to capture the wheel/river through photo (use the polaroid cameras).
Transition & Closing	**Closing Circle** **Qs**: What connections do you see between issues and obstacles salmon face and the role of various fishing methods through time? Why are sustainable fishing practices important? How do we decide these? Who decides these? End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).

Module 5: Treaties & Communities (People & Agreements)

Theme: People & Agreements		**Topic:** Treaties & Communities
GRADES: 6/7/8	**Subject:** Social Studies, Science	**Time**: 1.5 hours
Big Idea: There are many people and communities that depend on the salmon. It is a shared resource with Alaska and Yukon. We have constitut ional agreements that support this sharing and managing.		
Overview: Students will understand that while we think of our salmon locally, they are shared with many other people, even internationally. Students will understand that we have international agreements that help us facilitate this sharing and management. Also that there are many different users (commercial, subsistence, recreational/public), and communities (rural and urban) along the river.		
Students are expected *to be able to*:	• Take stakeholders' perspectives on issues, developments, or events by making inferences about their beliefs, values, and motivations (perspective) + Differentiate between short- and long-term causes, and intended and unintended consequences, of events, decisions, or developments (cause and consequence) (Gr. 6)	
Students are expected *to know*:	• First Peoples use of their knowledge of life cycles (~stewardship**:** sustainably hunting/fishing in response to seasons and animal migration patterns (e.g., seasonal rounds, etc.) (Gr. 6, 7) • Concept of Traditional & Spiritual Law	
Materials/ Resources	• 4 large laminated *Salmon Know No Borders* Maps, 4-5 sets of cut-outs with FISHING TYPES fish nets, fishing rods, dip-nets and predators (bears, eagles/seagulls, pike), mason jars with red stones (fish), blank stickies for other groups/impacts, etc..	
Component	**Description and Details**	
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the Stage for the Day, Share a Story, Essential Question	
Hook Opening	**Map Exploration** Bring the students around the large laminated *Salmon Know No Borders Map* and talk generally about the sheer size of the river and the land around it. Look at the habitat, communities, watersheds, oceans, mountains and anything else on the map. Discuss that all of this is connected to our salmon, we are all connected.	
Activity:	**Local, Regional, National and International, Global** As a large group, look at the map and discuss how salmon connect to you locally. Kids can tell stories about how and where they have seen salmon, fished for salmon or eaten salmon. Identify their LOCAL or REGIONAL CONNECTION to salmon. Encourage them to think about other communities in Yukon to focus on REGIONAL. Once they understand their local and regional connections, show them on the map, the border near Dawson City and discuss how they are US fish and then they are Canadian Fish. Explain the Pacific Salmon Treaty - Yukon River Salmon Agreements. Let them know about border and spawning escapement targets which are NATIONAL and INTERNATIONAL targets. You can also bring in: imported fish farming discussions, things that happen in the Bering Sea with Japan, Russia, international trawlers and freshwater fish implications.	
Transition / Discussion	Recap the local, regional, national, international, global connections to salmon. We see them locally but they are connected globally.	
Activity:	**Map Scenario Exercise with Icons** In small groups of 5-6 kids gather around the maps with a series of icons (cut-out) with types of fishing (discuss - fish nets, fishing rods, dip-nets - and the different types of fisheries) place them on the map next to communities, have	

	some predators (bears, eagles/seagulls, pike) place them on a map. Have a mason jar full of red stones (fish) starting as adults in the Bering and coming back through to Yukon River/Porcupine/Alsek. Ask them: what do they face along the way? How many will people take in each of the 50+ communities? How many will predators take? We need to have enough to go to the border and then enough to go to the spawning grounds. Ask each group to go through their scenario and run through to see how they would divide it up.
Transition & Closing	Ask each group to report back on their scenarios and what they were thinking? Discuss how fisheries managers must balance these various objectives and meet treaty obligations. **Closing Circle** Allow students to go around and share highlights, lessons learned or gratitude for salmon and their contribution to the ecosystem. End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).

"Ensure a local Elder is at every presentation. We greatly benefited from Dorothy [Smith's] presence."

- Gr. 6/7 Teacher

Module 6: Salmon and First Nations of the Yukon (People & Agreements)

Theme: People & Agreements		**Topic:** Salmon and First Nations of the Yukon
GRADES 3 & 5	**Subject(s):** Science	**Time**: 1.5 hours
Big Idea: Living things are diverse, can be grouped, and interact with their local ecosystems (Gr. 3); Multicellular organisms have organ systems that enable them to survive and interact within their local environment (Gr. 5) First Nations communities in the Yukon have a long history of living in close relationship with salmon, including taking care of the water and the environment, limiting harvest so that the salmon come back for future generations, and knowing that if we take care of the salmon the salmon will take care and feed us.		
Overview: This lesson will focus on what Traditional Knowledge is and how important Elders knowledge is for taking care of the salmon (just as important as science based knowledge), the importance of transferring this knowledge to young people in school, Traditional Laws, and overall cultural value of the Salmon for Yukon First Nations.		
Students are expected *to be able to*:	• Demonstrate curiosity and sense of wonder about the world, Experience and interpret the local environment, Consider some environmental consequences of their actions, Express and reflect of personal experience of place (Gr. 3) • Demonstrate a sustained curiosity about a scientific topic or problem of personal interest. (Gr. 5)	
Students are expected *to know*:	• Knowledge of local First Peoples of ecosystems (interconnection between living and non-living things, our shared responsibility to care for the local environment (i.e. stewardship), information shared from the local First Peoples community and Elders) (Gr. 3) • First Peoples concepts of interconnectedness in the environment; The nature of sustainable practices around BC (Yukon)'s resources; First Peoples knowledge of sustainable practices (Gr. 5)	
Materials/ Resources	• Local Elder or Knowledge holder in the community with salmon knowledge, First Nations language instructor or language speaker (this can also be the Elder), Map of the communities along the Yukon river (from Salmon Know no borders), Map of the Yukon First Nations Territories, Nuu-chah-nulth Curriculum for reference, The Salmon Twins picture book	
Component	**Description and Details**	
Opening Circle & Welcome	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the Stage for the Day, Share a Story, Essential Question.	
Hook/ Opening Activity	**Opening Story** Listen to Elder tell or teacher reads the students a traditional salmon story (The Salmon Twins book or the salmon story on page 9 of the Nuu-chah-nulth curriculum in a generic version). The youth can draw what comes to mind while they listen or just listen.	

Activity	**Finding our Place on the Map** Put a map up of all the communities along the Yukon river with salmon runs. **Qs** How many communities and different First Nations are there who rely on the salmon for food? Tell students that each of the First Nation in the Yukon have different customs, languages and practices around the salmon if they have them, though there are some similarities. One similarity is the concept of Traditional law: For example in the Selkirk First Nation their Traditional or Spiritual Law for the Northern Tutchone is called Doòli. These include important values that are important to Indigenous peoples. Traditional law is closely guarded by and held for First Nation's people. -Salmon have a spirit and are sacred living beings like brothers and sisters -Northern Tutchone people are always supposed to show RESPECT, CARING, SHARING and pass on the TEACHING to each other, respect for the ocean and river the salmon live in, the salmon themselves, and the land and other animals that rely on the salmon. The first salmon caught each year should be shared with everyone in the community and often a celebration ceremony is carried out to celebrate the first catch and the return of the salmon back to their home after such a long journey to the ocean and back. Salmon fishing camps are an important place for families to come together to share stories, pass on the culture, traditional skills and practices for harvesting and drying salmon, playing games like stick gambling, and listening to Elders. Everybody has a job to around camp, everyone is valued and has an important role in the community. It can also be a time to collect berries, sap, spruce bows, rabbits, gophers and plant medicines. When the salmon return this is a very important and special time of year to celebrate. -Traditional knowledge is closely held and can not be shared with anyone. Permission has been granted or publically available sources have been identified here. Some examples of traditional knowledge from Selkirk First Nation and the Arctic Institute of Community-Based Research: · Indigenous peoples in the Yukon have eaten and taken care of the salmon for over 10,000 years, it is only recently that salmon populations have declined. Some Elders say it's because they started being treated as a product (for resource for profit) and not a respected living being and food source. · A lot of planning goes into preparing for the salmon to return, setting up camps canvas tents or opening up cabins, making and gathering fishing gear (repairing nets), gathering drying poles, cooking utensils, sleeping supplies, gathering wood etc. · When you get the first north wind and big rainstorm in July that tells you that salmon are on their way back from the ocean · When you see lots of bears and the the Kingfisher bird comes out the salmon have arrived back to the community · In July, when you cut the bark off a poplar tree and if you see poplar tree water and when the soapberries turn from green to red that means the salmon are ready to harvest · When you see lots of soapberries on the bushes, you know there are going to be a lot of salmon that year · The Elders know where all the good fishing spots are (eddies for example) and how to catch them (for example fishing on the other side of the river from a noisy camp) · Cut salmon by the shore or clean up right after to keep camp clean and avoid bears · With the salmon declines, Elders are recommending now that creeks blocked by beaver dams be cleared and more beavers hunted to help open up spawning creeks for salmon · The Trondek Hwech'in have chosen to honour and respect the King salmon by not fishing until they come back again, this has been hard to do, but in order to maintain their cultural and pass on knowledge they don't want to lose the salmon

	Qs Have you heard any traditional knowledge or stories around the salmon that they would be comfortable sharing? Have you learned anything from friends, family, Elders who have fished with you? Have you ever been to fish camp? What time of year are fish important? What are different roles within the community?
Transition / Discussion	**Qs** How can you show respect for salmon or for Elders who are teaching about salmon? E.g. Not wasting, putting the bones back in the water to keep the nutrients in the water, keep the camp clean, feeling the Elders first, learn to listen and observe before taking, learn some of the traditional names for salmon, keeping the water and land clean (not polluting the rivers)
Activity	**Salmon Language** If a Language Teacher is available, learn the terms for salmon and related practices or technology found in the community: Chinook or King, Pink, Coho, Chum, Sockeye OR **Imaging Fish Camp** Explain how important fish camps were and still can be for the community. This importance included families coming together to share stories, play games, and spend time together. It also included passing down traditions and salmon-based skills. *Building a Community at a Fish Camp* 1. Imagine we are all a part of a big Salmon Camp in the late summer and we have to get the camp ready, set up and then have to keep it running. Each and everyone of us here is going to have a role in this camp. Who wants to start. If I can get two volunteers to come up into the middle of the circle. What person or role would you like to have at this fish camp. There is no talking during this exercise. 2. Possible roles include, setting up camp, cutting poles, making cabins or tents, harvesting food, preparing food, building nets, fishing the fish, making and tending fire, setting up drying racks, harvesting berries, hunting for small animals, making moccasins, preparing food, hauling water, taking care of the little ones/ children, cleaning/tidying up camp, telling stories etc. 3. Other types of roles could include, mother, father, grandfather, grandmother, aunty, uncle, Elder, children (who are also helping out) 4. One at a time a different youth will choose their role quietly (or get support with an idea) and join in the camp-scene, and go about their role, until everyone is working or doing a role. They can continue until it feels like the exercise is done. 5. Ask youth how they felt during the exercise. Did they like it? Why? Why not?.
Transition & Closing	Gather back in circle. Have some refreshments or a snack. Thank the Elder or language teacher for joining us and sharing their knowledge with a Tobacco offering or other gift (ask one of the youth to present this to them) and go around circle and everyone can share something they learned today. End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).

Module 7: Salmon Fishing (People & Agreements)

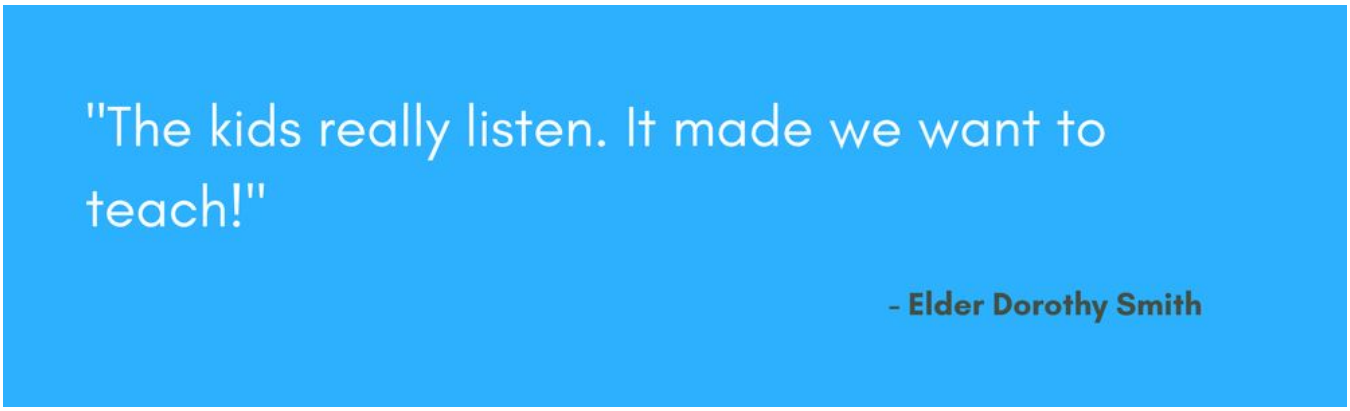
Theme: People & Agreements		**Topic:** Salmon Fishing
GRADES: 7/8/9	**Subject(s):** Phys. Ed., Science	**Time**: 1.5 hours

Big Idea: Evolution by natural selection provides an explanation for the diversity and survival of living things. (Gr. 7); Lifelong participation in physical activity has many benefits and is an essential part of a healthy lifestyle. (Gr. 8); The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows (Gr. 9)

Overview: Go through the various types of fisheries (commercial, subsistence, recreational/public fisheries) techniques, and how they catch salmon. Students will learn the fisheries concepts of by-catch, and selective harvest (species, size, sex ratios), catch and release and effort across all fisheries. Older students will understand how fishing can affect the concept of "quality of escapement". Students will specifically look at techniques for First Nation/subsistence fishing and recreational/public fishing and discuss the ethics and concepts (sacrifice on behalf of all; chum salmon fishing).

Students are expected *to be able to*:	• Participate daily in physical activity designed to enhance and maintain health components of fitness (Gr. 8, 9) • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information (Gr. 7, 8, 9); • Experience and interpret the local environment (Gr. 8, 9) • Contribute to care for self, others, community, and world through personal or collaborative approaches (Gr. 8) • Express and reflect on a variety of experiences and perspectives of place (Gr. 8)
Students are expected *to know*:	• Characteristics of life: Living things respire, grow, take in nutrients, produce waste, respond to stimuli, and reproduce • First Peoples use of their knowledge of life cycles (~stewardship: sustainably hunting/fishing in response to seasons and animal migration patterns)
Materials/ Resources	• Pictures of FN/comm./Rec fisheries and techniques, Smoked salmon to try - gravlax or smoked (traditional or industrial), Canned salmon, salmon salmon rigs and techniques, types of tackle, fishing rod, reels, etc..
Component	**Description and Details**
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the Stage for the Day, Share a Story, Essential Question
Hook Opening	**Qs** Who like to eat salmon? How do you think the salmon was caught? Talk about the different ways salmon is caught and processed along the Yukon River.
Activity	**Types of Fisheries** Share the types of fisheries on the Yukon River, Alsek and Porcupine Rivers - fishnets (type of mesh and size), dip nets, gaffing, drift nets/set nets, fish wheels, fish traps, commercial, public fisheries with rod and reel (spin and fly) . Talk about the different types of fisheries and where they fit. **Qs** Why are there different kinds of fisheries and self-government agreements and priority fishery? Ask them to group together fishing techniques under First Nation, Commercial and Rec. Public fisheries. Ask them if these types of fishing techniques can impact salmon? Explain the different types of fish nets and size how this impacts catch of fish (large or small) and what the implications of this are to the number, size, gender, age of fish. Look at selective harvest for each techniques. Discuss catch and release and the challenges of this concept between First Nations fisheries and public fisheries. Identify the concern of "playing with food" balanced with the opportunity to selectively harvest. Discuss the words "sport" and "recreational" fisheries

	when discussing the public fishery and why this is a concern?
Transition / Discussion	Recap types of fisheries and techniques used and explain how which techniques have impacts on the fishery. Finish with trying some salmon (canned, cooked, smoked, cured).
Activity: Recreational/Public Fisheries	Students will understand the public fishery and its place within Yukon's salmon fishing. A look at the map to talk about opportunities on the Yukon River as well as the Alsek. Discuss recreational fishing in Alaska (Haines and Skagway) and implications to Yukon. Students will learn about technique (spin and fly), catch and release and selective harvest as well the First Nation perspective around this. Students will learn about fishing rods, reels, line, and lures/presentation. This will include: lures (spoons, spinners, hooks), bait fishing, fly fishing. Students will learn about knots, tackles (floats, swivels, leaders, etc..) and catch and release (including the science behind it). Type of water, flow and river conditions and how this impacts fishing. Discuss angling ethics around the public fishery.
Transition & Closing	There are many ways to fish. Public recreational fisheries are essential to keep the public engaged in order to protect the fish. Becoming disconnected to our fisheries means we will no longer to support or protect them. Being an angler can be an environmental steward. Gather back in circle. Have some refreshments or a snack. Thank the Elder or language teacher for joining us and sharing their knowledge with a Tobacco offering or other gift (ask one of the youth to present this to them) and go around circle and everyone can share something they learned today. End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past).



Module 8: Web of Life (Habitat & Ecosystem)

Theme: Habitat & Ecosystem		**Topic:** Web of Life
GRADE 7/8/9	**Subject:** Science	**Time**: 1.5 hours
Big Idea: Living things are diverse, can be grouped, and interact with their local ecosystems.		
Overview: Salmon feed many living things, including humans. Salmon are an important part of the web of life.		
Students are expected *to be able to*:	• Make observations aimed at identifying their own questions about the natural world (Gr. 8) • Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information (Gr. 7, 8, 9); • Experience and interpret the local environment (Gr. 8, 9) • Contribute to care for self, others, community, and world through personal or collaborative approaches + Express and reflect on a variety of experiences and perspectives of place (Gr. 8)	
Students are expected *to know*:	• Characteristics of life: Living things respire, grow, take in nutrients, produce waste, respond to stimuli, and reproduce (Gr. 8)	
Materials/ Resources	• Salmon-eaters images for roaming activity, yarn, Salmon Song recording + speaker, 10 hula hoops, red/orange flagging tape, 3 pool noodles, whiteboard, whiteboard markers, camera, print-outs of Wild Guardians posters (blank and with slogans), blank paper, pencils, colouring pencils, etc.	
Component	**Description and Details**	
Opening Circle	Form into a circle, acknowledge the traditional territory the lesson is taking place on. Introduce Elder or language instructor if they are present, otherwise ask the class if they know of any Elders in their community or lives that are important to them, and to share if they have ever told them anything about salmon. Go around circle and express gratitude. Set the Stage for the Day, Share a Story, Essential Question	
Hook	**Knowledge Net** Collect Student knowledge, questions and stories on the board under the themes of FISH, LAND and PEOPLE	
Activity	**Find the Salmon Eater** Students must use guided questions to discover what Salmon Eater they are: Bacteria, Gull, Grizzly Bear, Eagle, Seal, Common Merganser, Dolly Varden, Worm, Insect, Tree **Web of Life connection** Throw the yarn across the circle, and explain how your eater is connected to another eater across the circle. Pass the yarn around until everyone is holding it and connected in some way. **Groupings** Arrange the salmon eaters in order of… in groups of… cross the line if…	
Discussion	**Qs** How are salmon connected to other organisms?	
Transition	**Explain Outdoor Activities** Salmon Tails; Guard the Redd; Salmon Eater Tag	
Outdoor Activities	**Salmon Tails** You have a red salmon tail. Other salmon are going to try and take your tail. If your tail is taken, you're caught and you go to the smoke house. If another salmon catches more than 2 tails from other salmon, they have 'spawned' and must give up their third tail to a salmon in the smokehouse (represents the next generation). **Guard the Redd** A female sockeye salmon (hen) will lay 2000-5000 eggs in 4-5 redds. 1 in 1000 will make it back to spawn as an adult. During the spawn, males will quiver beside the female to release milt along with the eggs, which are they buried in the redd. The female will guard them for around a week until she dies. Males will go off to continue to	

	spawn. These ping pong balls represent your eggs. Everyone around the circle is a predator, and you must Guard Your Redd from them. If you tag them when they enter your redd, they must go back outside and try to come in again. If they steal all of your eggs before the time is up, none of your eggs will live to become adult salmon.
Closing	Gather back in circle. Have some refreshments or a snack. Thank the Elder or language teacher for joining us and sharing their knowledge with a Tobacco offering or other gift (ask one of the youth to present this to them) and go around circle and everyone can share something they learned today. End the circle with the word for 'thank you' in the local language (ask the youth what this is if you don't know it or use a language app). Mention how the salmon are still important to First Nations people today (to reaffirm present tense cultural instead of it being something in the past). **Qs** How are salmon important to your life (direct and indirect)? How do you think salmon would want us to tell their stories? What does respect for salmon look like?

Program Extensions

The extensions below were available to teachers and educators who wanted a longer program experience for their classes:

Elders & Cultural Practices

- **Elder Stories** - If Elders were available and keen to share their stories, time was created or extended so that this could be a priority for all programs.
- **Sharing Food** - The program could be extended into a community lunch or dinner with a focus on salmon as a source of food and nutrition, and sharing stories over food.
- **Language Teacher** - If the schools had a First Nations language teacher available, space was built into the program so that they could teach language related to salmon, fishing and respect for fish.

On the Land Extensions

- **Fishing Lessons** - Depending on weather, numbers and available equipment, the program could include lesson on fly or spin casting, fishing knots, etc.
- **Personal Photography** - Some programs Included a deeper discussion about our relationship to salmon through photos. Students took polaroid photos objects and areas that represented their connection to salmon.
- **Salmon Preparation** - If possible, students could work with Elders to learn about fish handling and care. This could also include learning ways of cooking and preserving salmon, and preparing a few salmon recipes.

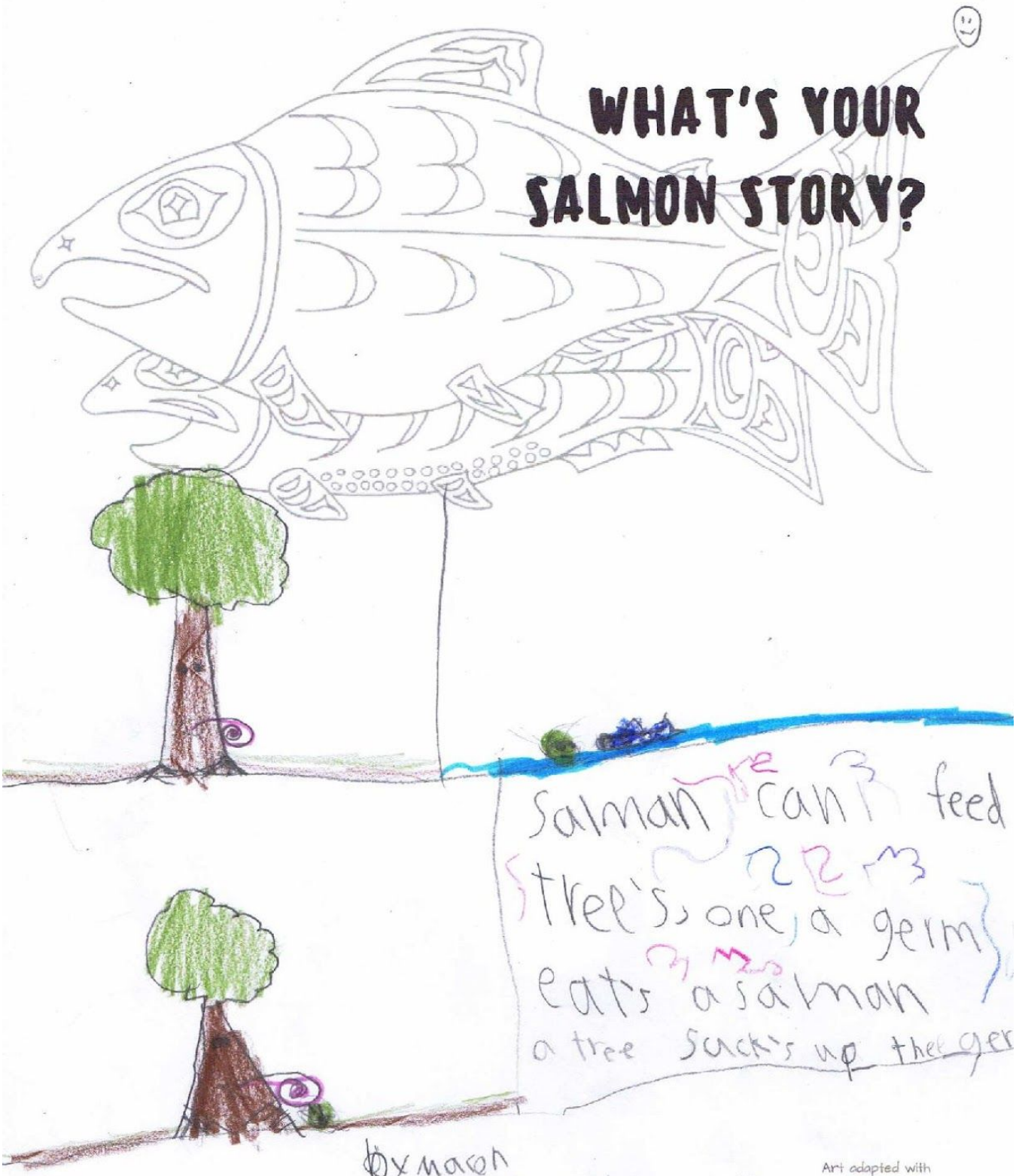
Classroom Extensions

- **Freshwater Fish** - Freshwater fish (Lake Trout, Pike, Whitefish) could be included in the discussion and activities related to resource management, cultural practices and language.
- **Watershed Exploration -** Print and trace watershed maps of Yukon salmon runs with Yukon communities and First Nation territories. Explore the border and spawning targets and what this means. Go through scenarios with climate change (high-water, water temperature rising, increased predators), industry (hydro, mining) or natural disasters.
- **Storybooks -** Understanding can be deepened by incorporating storybooks about salmon life cycles and their connection to the ecosystem.
- **Yukon Salmon Subcommittee Videos -** Watch and discuss the Yukon Salmon Subcommittee online video resources about historical and contemporary salmon management.
- **What's Your Salmon Story? Template**
    - **Storyboards** - Students draw images that represent their personal connection to or ideas about salmon. This could include connected words, sentences or paragraphs to describe what is going on in the images.
    - **Collage** - Students to collect their own photos, online images or cut-out images from magazines that visually tell the viewer about their connection to or ideas about salmon.
    - **Interview an Elder** - Students brainstorm a few questions and then collect their answers on the template.
    - **Comic Strip** - Students use 6 squares to draw what a life of a salmon might looks like, migrating from ocean back to spawning grounds. What challenges might they encounter along the way?
    - **An Egg Point of View** - Students draw a picture of the view of the spawning grounds from the perspective of a salmon egg (think subsurface!)
    - **Short Story** - Students write a story from the perspective of a salmon or a salmon-eater (animals, bacteria, humans, etc.)

Below are some completed "What's Your Salmon Story?" Student Examples from the Pilot Program.


WHAT'S YOUR SALMON STORY?
salmon
arestrong
Name: Troy
School: CKES
Date: november21
Grade: 3
Art adapted with permission
Uy-a-thluk

WHAT'S YOUR SALMON STORY?



By mason

Name: Mason marcuson Date: Tue Nov 14th 2017

School: ckes Grade: 3H

Art adapted with permission

Uy-a-thluk

WHAT'S YOUR SALMON STORY?

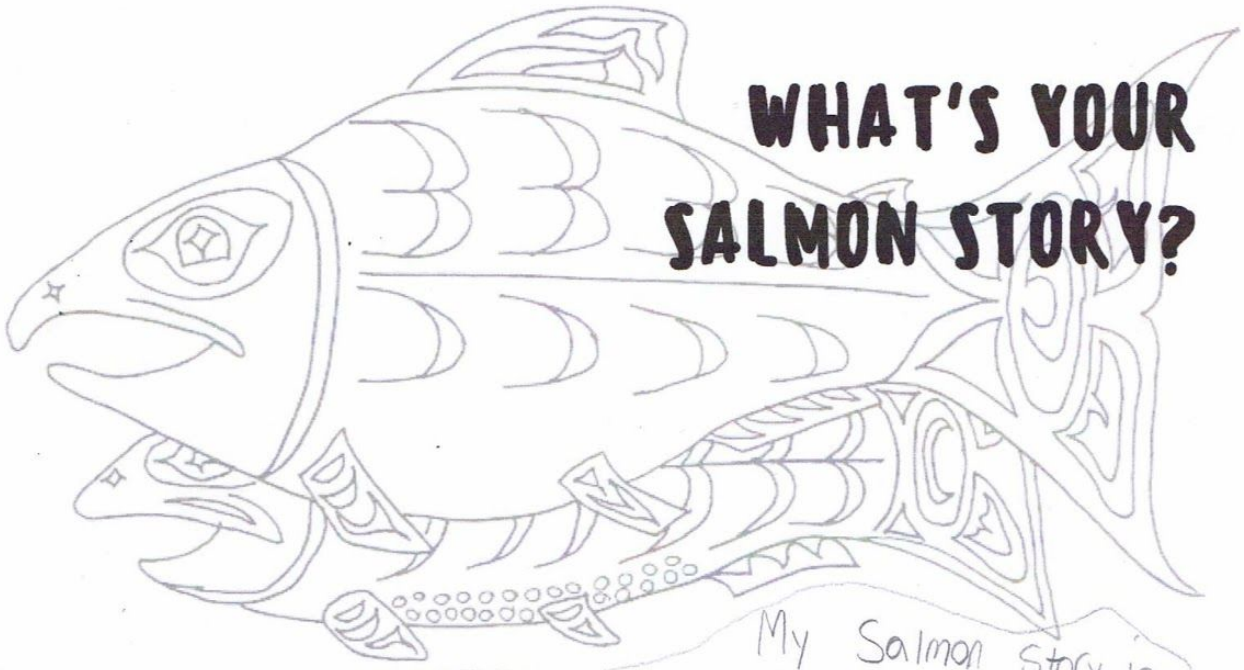
In Alaska I went to a park and there was a stream with salmon that were either dead or spawning or fighting for females.

Name: Callie Yu Schott Date: Nov 14 2017

School: CKES Grade: 3A

Art adapted with permission

Uy-a-thluk



WHAT'S YOUR SALMON STORY?

My Salmon Story is

Me and My grampa went to Mayo for the weekend to go fishing on his boat we were on the Stuwart river to set a net to get salmon to eat. The next day I went and chekcd the net to see if theres salmon on the net. I pulled up the net and there was a humuges salmon on my net! With I cut it open So much eggs fell out!

Name: Koston Cox Date:

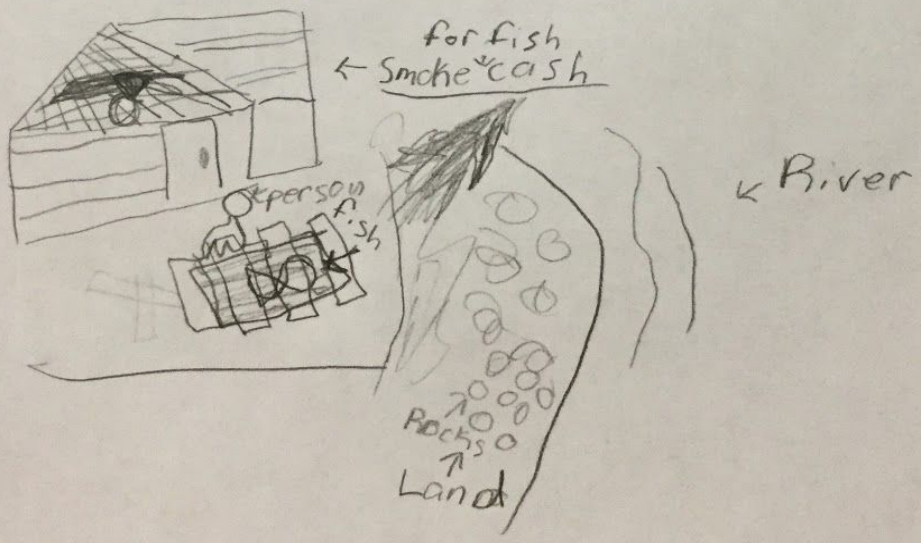
School: cres Grade:

Art adapted with permission

Uy-a-thluk

WHAT'S YOUR SALMON STORY?

I ate a salmon, klo kut. When I saw it I said wow, I want some. I ate some eggs ▽▽▽



Name: Tynestta Charlie Date: Tus Jan 16/18
School: CZGS-Old Chow Grade: 6

Art adapted with permission

Kayden

WHAT'S YOUR SALMON STORY?

I made a fsh hole up
mountain by the water.
hn it myself Withshew.
I went with Travis and
my grand pa. We eat o salmur
eggs. My grandpa got one
big one. Eggs are babies.

Name: Kayden Bruce Date: TUE. JAN 16/18
School: CZGS- Old Crow Grade: 4

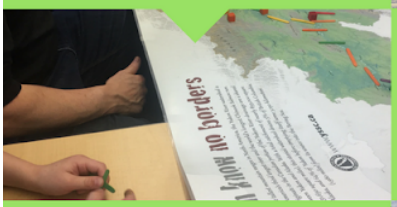
Art adapted with permission

SALMON IN THE CLASSROOM 2017-18

PROGRAM SUCCESSES

This program was delivered over a four month period from October 2017 - January 2018. The content was uniquely developed by the Salmon in the Classroom team and relied heavily on Elders and local First Nation knowledge.

215 STUDENTS SERVED OVER THE FOUR MONTH PERIOD



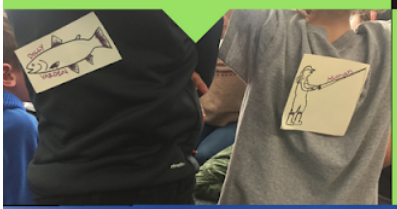
545 HOURS OF PROGRAMMING EXPERIENCES

PROGRAM HOURS X NUMBER OF PARTICIPANTS

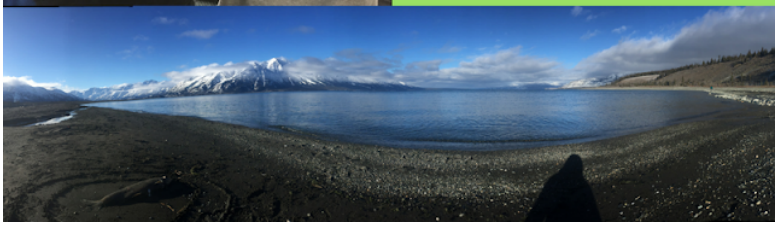
10 SCHOOLS VISITED ACROSS THE TERRITORY

8 FIRST NATIONS ELDERS WHO VISITED CLASSROOMS

40% AVERAGE % OF TIME SPENT OUTSIDE IN EACH SESSION



7 COMMUNITIES VISITED ACROSS THE YUKON



Case Studies

Teslin School Pilot Review

Rivers to Ridges

June 2017

Introduction

Dennis Zimmerman approached Rivers to Ridges to design an innovative Salmon in the Classroom pilot program to be run with all grades of the Teslin School. This program was to coincide with the Renewable Resource Council (RRC) Annual General Workshop facilitated by Dennis Zimmermann, and to produce a final visual piece to be used to provide a youth perspective on salmon and to continue the discussion on salmon management in Teslin and the Territory.

Program Outline

The Essential Question explored throughout the program was:

How do salmon connect to me and to my land?

Right: Mayor Clara Jules sharing Salmon stories

The 1.5 hour program was designed to engage students with the Essential Question, and to have them create a final product (photo web) that represented their personal answer to the Question.

To achieve this, the students, staff and visitors joined us on the school playing field for an Opening Circle to share stories about salmon, and to set the tone of respect when talking about these fish. Students then took part in an active tag game that mimicked the life cycle of salmon, and allowed for reflection on the human impacts on the local salmon species.

The final portion of the program allowed students to take polaroid photos of (or hand draw) something that captured their answer to the Essential Question. Students then labelled their photos and drawings and placed them the net. The full program outline can be found at the end of this report.

Pre-Program Planning

Before launching the program in Teslin, Rivers to Ridges reached out to Chris Hobbis for guidance on creating a program for students in the community. Besides offering some important cultural protocols to be followed, Chris also suggested a number of contacts to make within the Teslin Tlingit Council (TTC). On the Tuesday before program, Rivers to Ridges went to Teslin to:

- assess the locations most suitable for students to use for program,
- check in at the Teslin School to meet with the Administration,
- meet with Gillian Rourke and Kaitlin Wilson (TTC), and Darryl Peters (Game Guardian) to invite feedback and advice on the program, and
- reach out to Clara Jules (Mayor of Teslin) to extend an invitation to attend the program.

This pre-program visit allowed Rivers to Ridges to create community connections that would ultimately enhance the program.

Post-Program Outreach

Post-program community engagement: Displaying the fish net and student photos (L) and the Rivers to Ridges booth at the Renewable Resource Council Meeting (R).

After the Teslin School program was complete, Rivers to Ridges brought the final visual product to be displayed at the Community Barbeque. This public event was attended by the attendees of the Renewable Resource Council meeting, as well as the students and members of the community. There was also time to network with other organizations and attendees of the RRC meetings throughout the afternoon.

Refining the Program

Upon review of the program, Rivers to Ridges would retain and refine certain elements in order to create a larger impact if this program is run again in the future. Here is a summary of those reflections:

Retain	Refine
• Checking in with local leaders and knowledge keepers before program • Completing a site check before program • Touching base with the school staff and administrators and acquiring information about the number of students and the available locations for program • Utilizing any buddy systems or colour groups already in place at the school when planning programs • Sharing the program outline with someone who understand the cultural protocols of the community, and who can advise on any pertinent modifications (e.g. no photos of water birds such as loons, rocks or sticks should be placed in the net) • Keeping program timing flexible so that Elders and knowledge keepers are able to share relevant stories and information • Setting up ahead of time (fishnet and any activity supplies) • Opening the day with a personal story to form a relationship	• Requiring a minimum of 2 hours to run this style of program OR modifying the program to better fit the allotted time • Creating a quieter opening space/ arranging the group so that Elder teachings are more easily heard by participants • Using teachers as resources during program, and setting out clear roles for them ahead of time • Designing and sending out a pre-program activity guide for teachers, so that students are primed to take part in activities focused on salmon • Allowing more time for participants to try 'framing' their photos before taking them • Guiding students to decide on the word or phrase that they want to capture before allowing them to use the cameras (they were very excited, and didn't have enough time to reflect on the question) • Having a simple way to gather feedback (handwritten or verbal) from staff and students right after the program • Taking more photos of the program in action • Connecting with the school to ensure photo releases are in place before program • Considering a different way to display the photos in the net • Changing the ratios in the salmon tag game, and introducing 'pressures' (e.g. fishers, predators, dams, etc.) slowly so that students are able to feel the effects of changes to the environment

The final presentation of the net with student photos and pictures at the RRC meetings in Teslin.

Salmon in the Classroom Workshop for Teslin School

June 8th 2017 - 10:30 am - noon (1.5 hours)

Essential Question: How do salmon connect to me and to my land?

8:00 - 10:00 Drive to Teslin
10:00 - 10:15 Set Up Game & Scout Locations (set up tarps if needed) + Set up Fishnet by the Water
10:15 - 10:30 Intro at the School

- Opening Story
    - Respect for fish + Salmon as lifeblood
- Who we are
- Why we're here in Teslin today (exploring the Essential Question)
- Plan for the day

10:30 - 11:00 Opening Circle on School Field + Salmon Tag

- Welcome any guests
    - Mayor: Clara Jules, Game Guardians: Darryl Peters and Dick Dewhurst, folks from TTC Lands Department: Gillian Rourke and Kaitlin Wilson, others?
- Ask if anyone knows anything about salmon they'd like to share
- Intro to Salmon Tag Game - Focus: Salmon have a special life cycle + there are many pressures on salmon
- Play Salmon Tag Game
- Circle up and quick debrief - What was it like to be a salmon? How do humans play a role in the lifecycle of salmon?

11:00 -11:45 Photo Project

- Intro to Photo/Art Project (Essential Question + use of fishnet that needs mending - metaphor for relationship to salmon)
- Group Brainstorm (Examples of personal, ecological, cultural (historical and contemporary) connections to salmon
- Introduce camera use (older kids + younger kids, how to hold cameras, how to turn on to correct setting/exposure, one shot per kid → importance of framing)
- Intro option to draw (seasonal/locational challenges, etc.)
- Walk down to water
- Framing Activity
    - Hand out one frame to each group, after they have decided which photo to take, they can use a camera. Kids who want to draw can use the materials to draw and then take a photo
- Kids will use sharpies to write their name (on the back), and a word or phrase on the front (essential question)
- Collect all photos once kids have seen them develop (or have kids hold them if they seem responsible)

11:45 - 12:00 Photo Display & Closing Circle

- Gather as a group in front of the fishnet
- Ask kids to come up and clip their photo into the net, and to share their answer to the Essential Question
- Talk about connections within and between photos
- Group photos with a similar theme together
- Closing circle, thank-you/Gunalchish!, transition to BBQ

Introduction

Dennis Zimmermann presented the Yukon Fish and Game Association (YFGA) with the opportunity do some some stream restoration work on Wolf Creek outside of Whitehorse, Yukon as well as teach a component of the new Salmon in the Classroom program. The YFGA is a Yukon-based fishing and hunting based not for profit. They also work with salmon through the Whitehorse Fish Ladder and the Wolf Creek Fry Release. YFGA has hosted and operated an Outdoor Education Camp for the last 25 years taking approximately 12 boys and girls between the ages of 12 and 16 into the wilderness for experiential learning. Hunting, fishing and stewardship are the core values being taught within this camp. Dennis Zimmermann has been the camp leader for the past two years.

Program Outline

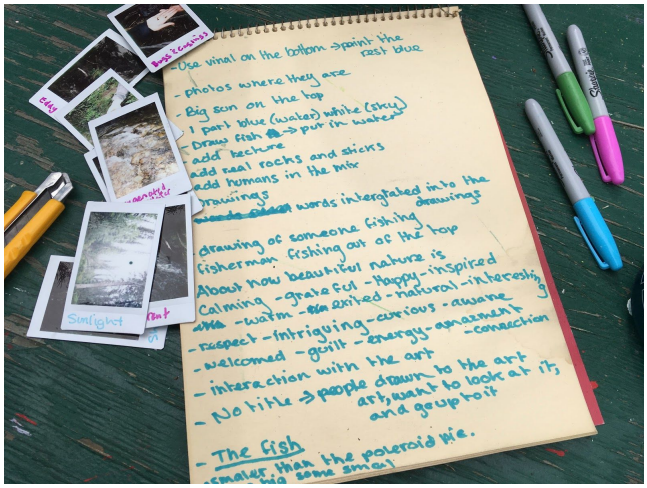
The focus of this camp is hands on experiential learning and the project being proposed was a Wolf Creek stream restoration project. Wolf Creek is within Whitehorse and an accessible area where Yukon River Chinook salmon fry are released by the public every year. Wolf Creek is a small creek that winds its way from the highway to the Yukon River upstream of the Whitehorse Dam. The river is set within a campground and a large forested area. The creek is often choked up with debris and fallen trees from windstorms. Initially the youth were going to clear out a portion of the stream to support fry migration and rearing, however, the task was too large and focus was put on clearing out the areas with interpretive signage for the fry release and fish habitat. The youth had approximately two hours set aside for environmental education whereby we designed an art-based Salmon in the Classroom project.

A local mixed media artist and environmental educator Misha Donahue was hired to design and deliver the art-based program. The students would use various materials to collectively tell their salmon story. They also had access to polaroid cameras to take instant photos of their observations and incorporate them into the art project. The students spent two hours creating a 3-D masterpiece using a large piece of chimney pipe.

Pre-Program Planning

Misha prepared for the event by collecting a series of art materials that would provide for enough creativity and allow for freedom of expression. The students were asked to collect local materials from the river and surrounding area. The students were led through a river walk by Dennis Zimmermann observing the various aspects of fish habitat. Students agreed to split into three groups, based on fish habitat related elements above the water (i.e. trees, flying insects, birds, precipitation), within the water (i.e. aquatic invertebrates, floating, debris, logs), and under the water (i.e. rocks, substrate, aquatic invertebrates).

Students took photos of the various fish habitat related elements above the water, within the water, and under the water.



Post-Program Outreach

The art project was to be shared at an upcoming Yukon River Panel meeting and with groups such as the Yukon Salmon Sub-Committee. The final art piece ended up being complex and was very difficult to transport within the project van, therefore it was decided that the project would not be transported too far. A photo with the group was taken to be shared in this report.

Refining the Program

This art based focus for Salmon in the Classroom was a unique attempt at bringing more art into the environmental education focus. Art has a place and is very important within environmental education. The students really enjoyed working with a professional artist and being able to express themselves with a variety of materials. For many it was the first time they have worked on a collaborative art project.

The art project was complex and difficult to transport. It was beneficial to have something related to hands on stream restoration and tie it back to salmon habitat. This project would be recommended as a filler exercise within an existing module. Doing it outside at the river's edge was beneficial.

Retain	Refine
• Art and personal expression are essential for youth to connect to fish and habitat • Hiring a professional mixed-media artists • Outside venue tied to a hands on restoration project supports many different types of learning • Focus the art on an interpretive water • Structure around the project with the three layers of the creek habitat • Modify program based on time and location changes	• Not develop such a complex art piece - must be transportable • Consider two dimensional art (such as posters and images as they are easier to share) • Allow students to finish on their own time if required • Incorporate as an exercise within a module - does not need to stand alone

"[In the game,] I was pretending to be a salmon eater, and I was about to catch a salmon, but the fisherman caught it before me. It was hard."

- Gr. 3 Student

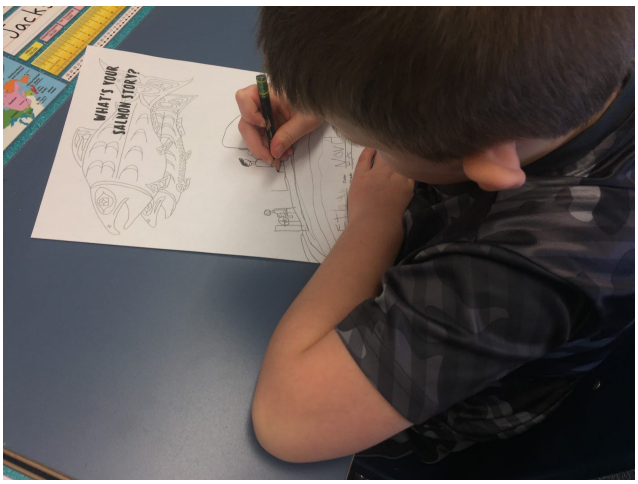
Program Description

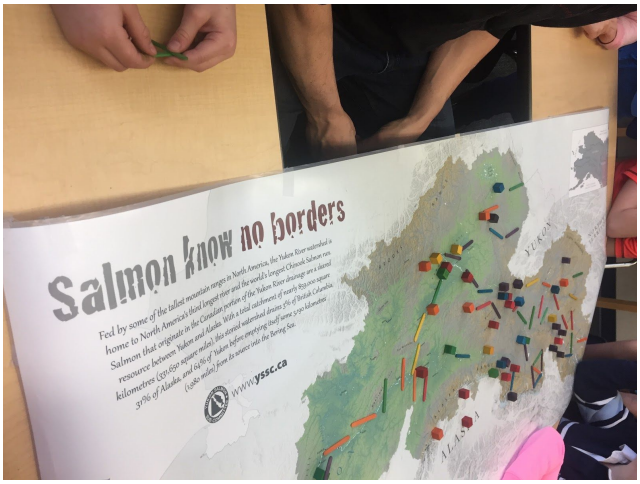
Dennis from Fish on Yukon and Big Fish LIttle Fish Consultants and his son Max ran a short program with Erin and Emily for the Kluane Lake School a Silver City. During this mixed event, participants watched for spawning chum salmon along Kluane Lake as Dennis allowed them to explore the Yukon Salmon Sub-Committee's Salmon Know No Borders map and the route the chum had taken from the lake and back. Erin and Emily ran a game of Salmon Eaters tag with educators and students, and discussed the different organisms that rely on salmon (including humans). Afterwards, participants gathered around the fire to share food and stories before the next presentation.

Retain	Refine
• The group was able to see the spawning Chum along the shoreline, and the students were able to take part in a variety of activities. Cold children was not an issues, as the weather was particularly warm and sunny, and there was a fire. • Incorporate adults into game play • Allow students to share the knowledge that they already have and to help with activities • Intergenerational program involvement	• The Salmon Eater tag game was run for the first time. In the future, it would be good to consider boundaries and game materials. If this program were run in colder weather, it would be important to have access to a warm indoor space and for students to have proper outdoor clothing. Alternatively, you could incorporate an action component into the 'smokehouse' component of the game.

Christ the King Elementary School #1 Pilot Review

Nov. 14 2017





Program Description

Erin and Dennis facilitated a two-hour program for a Grade 3 class at CKES. Starting in a circle, the group talked about First Nation territory and the importance of respect for fish. Dennis shared a story about Fish Camp, and his experience with. Erin led the group through an active Salmon Eater animal form activity and the group talked about different ways that salmon are affected by and have an effect on different organisms. Dennis highlighted the movement of salmon by Salmon Eaters, and salmon forests. Dennis introduced the Salmon Subcommittee video about the Ta'an Fish Camp, the strong connection between salmon and culture and the issues facing subsistence fishers along the Yukon River who have voluntarily given up their right to fish. We watched 6 minutes of the film, and discussed the importance of Fish Camp. Next we ran two 20-minute stations (Erin ran a station using the WYSS template, and had students draw and write about their own connection to salmon, and Dennis utilized the Yukon Salmon Sub-Committee's Salmon know no Borders map to engage kids in a game about pressures on salmon along the rivers). Erin gathered the group to explain the Salmon Eaters tag game, and the kids went outside to play 15 minutes of the game before a final debrief on the challenges of being a salmon, a salmon eater, and a human, and on the importance of respect for fish at all times.

Retain	Refine
• Collect important questions from the students to answer throughout or at the end (as a group) of the session • Open with a story • Incorporate FN perspectives in their own words (Salmon Subcommittee videos from Ta'an fish camp)	• Details about Fish Camp and other fish-related activities to leave with the teacher to promote kids connecting with fish in the future • Elder recordings for visualization • Language embedded into the worksheets • Lighten the visual on the WYSS worksheet template • Send out media release in advance • Ask teachers to take photos during the presentations/workshops

St. Elias School Review

Nov. 16 2017

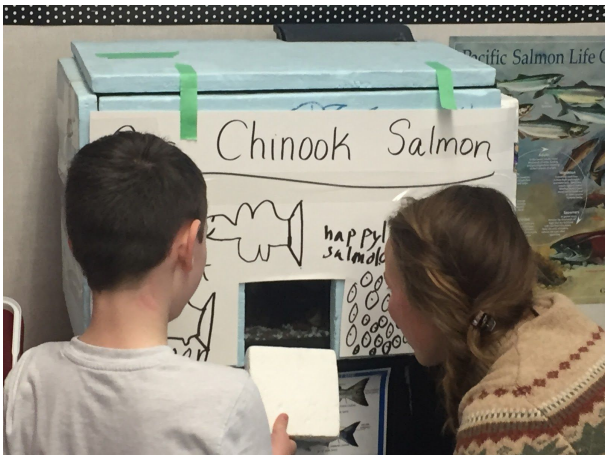
Program Description

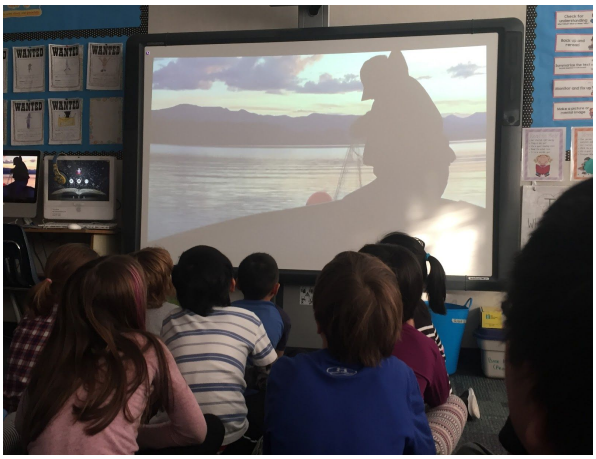
Emily and Dennis facilitated a two-hour program in Andy Preto's Grade 9 Science class at St. Elias School, in the community of Haines Junction. We invited a local Champagne-Aishihik Elder Larry Joe to join us for the morning session, which he did. We opened the session by going around in a circle and sharing any stories and personal connections we have with salmon. Emily ran a web of life activity, where everyone wore a specific salmon eater name tag and image, and one by one each students had to name a connection that they had to salmon, and to one another. This activity led into a mapping activity that Dennis facilitated. This activity inspired meaningful conversation in the room about respect for the land, and the importance of developing a sense of stewardship at a young age. Students in the class are lucky to spend a lot of time on the land with their teacher during the year, and this message was highlighted through this mapping activity. As a group, we were left with final questions such as: "How do we become responsible consumers of salmon?" and "How can we preserve our salmon stocks for future generations?"

Retain	Refine
• Movement-based activities • Changing locations worked well with the flow • Elder presence and holding space for local and FIrst Nation stories	• Modifying Web of Life game to and reframing more specific and themed questions • Ensure outdoor time happens (it didn't here) • Shorten personal stories at the beginning • Ask specific questions for mapping activity and listen more deeply for answers

Christ the King Elementary School #2 Review

Nov. 21 2017





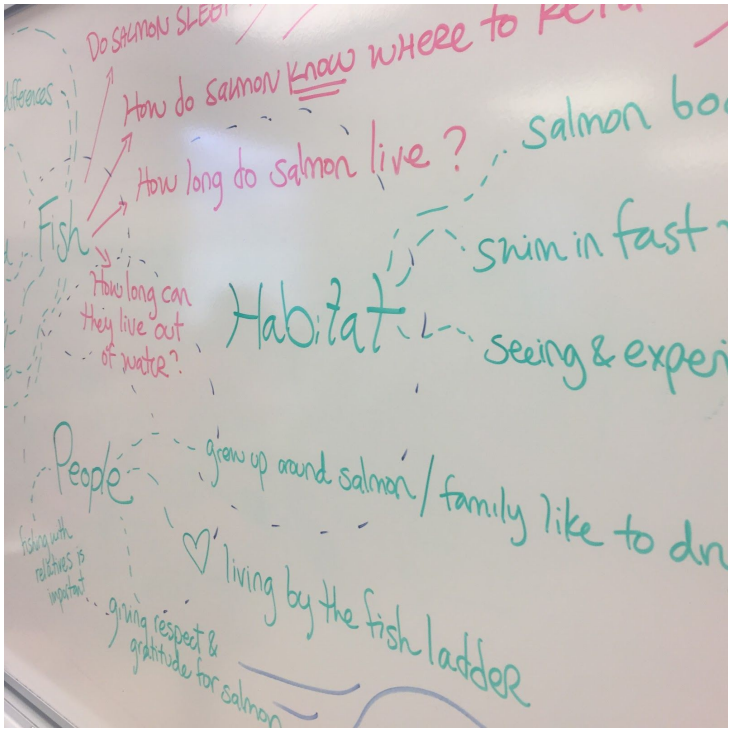
Program Description

Erin and Emily facilitated a two-hour program for another Grade 3 class at CKES. Starting in a circle, the group shared their personal connections that they have with salmon. Erin and Emily both shared a story about how they came to care about salmon in their life. We then opened with a movement activity called Salmon Forms. Emily led the students through a series of movements and animal forms that relate to the lifecycle of salmon. After this, we gathered around their local classroom salmon tank and Emily asked a series of questions about how they care for their salmon eggs, how and where they will release them and what we can learn by doing this. Erin then led us outside and led a rousing game of salmon tag, which the kids really enjoyed. We debriefed the game with questions such as “What did it feel like to be salmon?”, “Why was it hard to be a salmon eater at certain points in the game?” and “What did the resource manager teach us about how and when they released the fry back into the stream?” Everyone came back inside and we watched a short clip from Yukon Salmon Sub-Committee’s Ta’an Fish Camp, and discussed why Fish Camp is important. We then split into two groups: one guessing Web of Life game exploring salmon connections led by Emily and one drawing activity led by Erin. After swapping groups, we came back together to close up the day and went around in a circle sharing one thing that they loved or learned about from the afternoon.

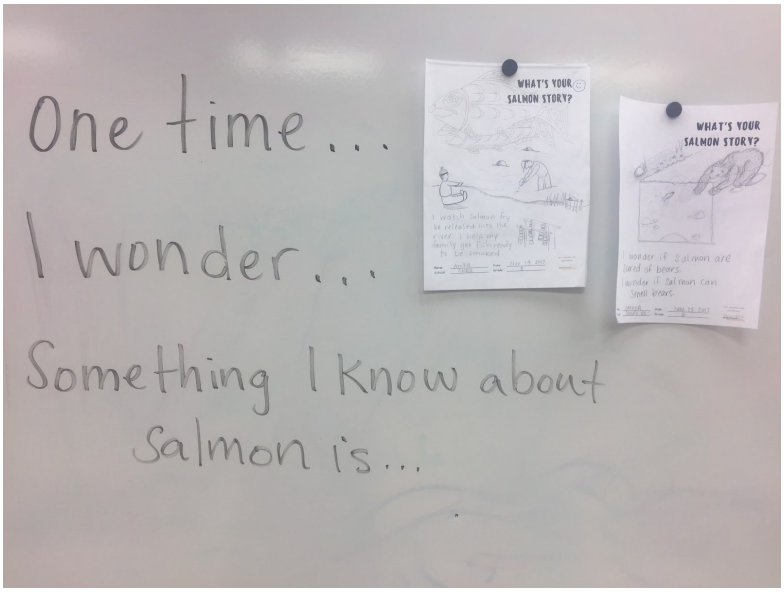
Retain	Refine
• Active component for the ‘smokehouse’ role within the Salmon Eaters Tag Game • Web of Life activity with guessing for the different organisms that rely on salmon • A focus on interconnectedness	• Making more space for FN students to share their knowledge and experience • Write up Salmon Song lyrics and use the song as an animal forms movement piece • Create a web of information based on students’ prior knowledge and areas of interest to tailor the program • Shorten mapping activity to give kids more time to discuss

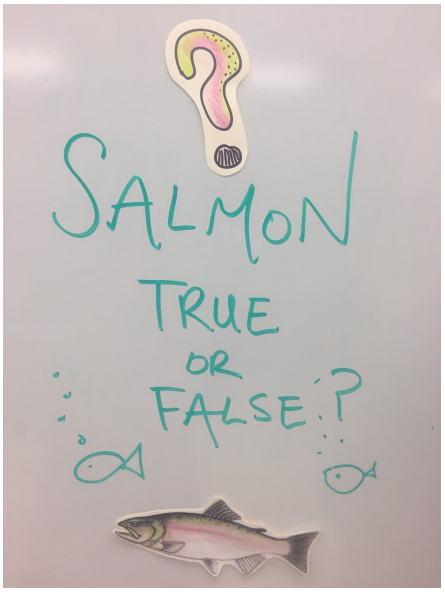
Program Description

Erin and Emily ran a two-hour program with Alison Morham's Grade 6 class. We opened with a circle, shared stories about our connections to salmon, and then went around the circle and had students introduce themselves and share any personal connections to or knowledge of salmon. Emily created a giant web of knowledge and questions on the whiteboard. Afterwards, we played a round of Salmon Eater Tag in the forest behind the school. One of the students was on crutches, and he became the Resource Manager in charge of deciding when to 'release fry' to help increase the salmon population. We debriefed the game outside afterwards before heading in to talk about Yukon First Nations who are voluntarily giving up their right to fish to help populations rebound. We showed a video from the Yukon Salmon Sub-Committee's Ta'an Kwa'chan fish camp video, and talked about the ties between conserving fish and conserving culture. We then split the group into two, and ran sessions on the web of life and the different parts of the habitat of which salmon is a part. The other group worked on telling their salmon stories (and asking their salmon questions) using a writing template. The groups later switched, and then the class came back together for a final circle at the end, and to play a true or false game.



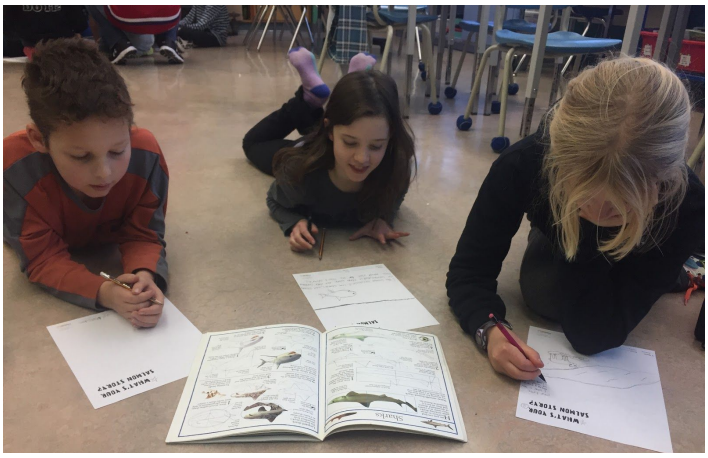
Retain	Refine
• With older kids, choose a student to be the 'Resource Manager' the game. • Allow students to go around the circle and share their personal knowledge • When acknowledging FNs, ask if there are any kids from any local FN so that they can help to share that perspective • Use prompts for What's Your Salmon Story? writing activity (I wonder... One time... Something I know about salmon is...) etc.) • Ask for thank-you or other common words in the local language	• Move the 'What's Your Salmon Story?' activity to its own spot (too quick to run it and get good, finished products in a short session) • Active components for the kids who need to move • Connect with the language teacher ahead of time so that the teacher doesn't have to • Minimize the number of emails to teachers so that they don't have to take much time out of their schedule • Go the Yukon Native Language Centre to develop resources with language already incorporated

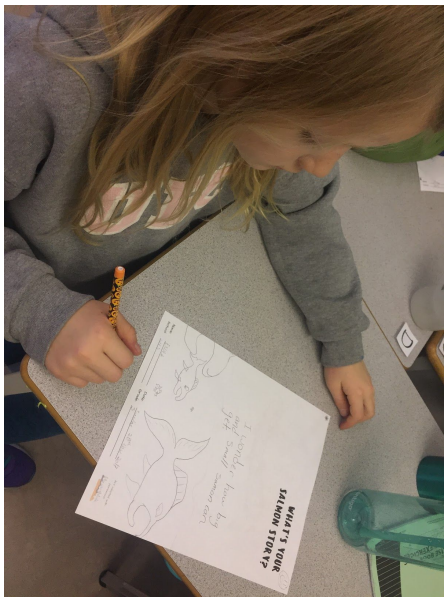




Whitehorse Elementary School Pilot Review #1

Nov. 28 2017

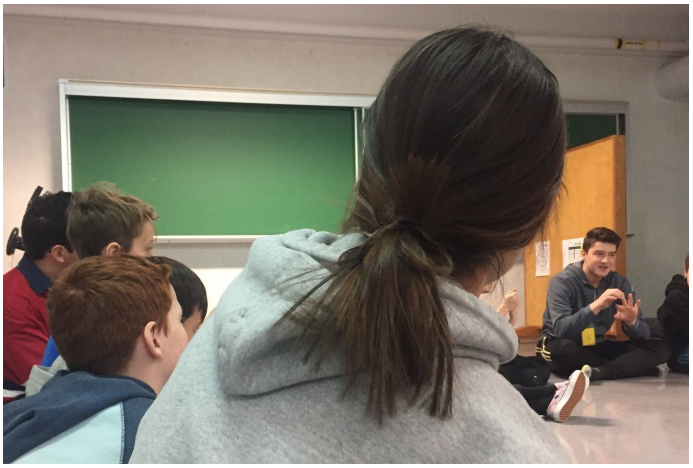




Program Description

Erin and Emily arrived at Whitehorse Elementary School (WES) to meet the 4 Experiential Science (ES) 11 students taking part in the program. It should be noted that the ES students were being developed as mentors in order to be able to teach Environmental Education as part of their program. Dennis, Erin and Emily met with them in the spring to provide an overview of the program and expectations. At WES Each ES student had prepared a story from their trip to share with the students in the Opening Circle. We were joined by the Southern Tutchone teacher who shared some language and stories about salmon. Students were asked to share gratitude for something in the natural world, and then the ES students shared their stories, which flowed through a range of themes including political issues affecting salmon, conservation and habitat restoration, as well as salmon as food. Afterwards, we went outside to play Salmon Eaters Tag together. The ES students left for the last part of the program which was indoors in two small groups. Students worked on drawing and writing their salmon stories and then took part in a watershed mapping activity before the Closing Circle where students shared their learnings and favourite aspects of the program.

Retain	Refine
• ES Students involvement through stories, game demo and game play, sharing gratitude • Gratitude circle • Modify habitat throughout the game (add or remove habitat and safe spots) • Questions to ask after the game: How does habitat loss occur for species that live in the water? What is difficult about being a salmon? A salmon eater? How could you tell that the Resource Manager was doing a good job? Would you suggest any changes? • Play 2 rounds of the game after asking some of the questions • Southern Tutchone language teacher involvement & stories • Modify program based on time and location changes	• Design rounds flow of the day, with 4 aspects of self as a starting point • Pay to bring in an Elder to spend more time with the group • Consider setting up the WYSS writing activity with different prompts (in multiple languages)



"I'm thankful for my Grandparents who taught me how to catch and prepare fish."

- Gr. 5 Student

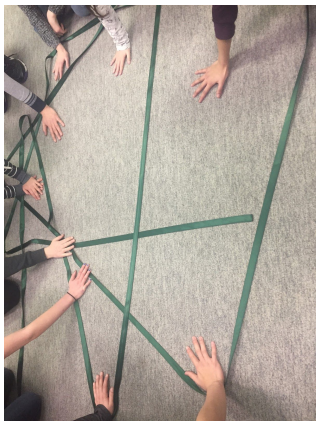
Program Description

Erin and Emily ran two program sessions in Ross River: the senior students in the morning and Gr. 2/3/4 in the afternoon. Each session was joined by Dorothy Smith and her sister Tootsie, who shared wonderful stories about their experiences at Fish Camp as children. Dorothy drew on the board while Tootsie explained some of the Fish Camp set up in Kaska. The students in the senior classes listened to the stories and then we traced the watershed map to Ross River to get a sense of the journey salmon take to the ocean and back. Inside, we played a game of Guard the Redd and talked about the role of female salmon. We then went outside to pay Salmon Eater Tag and Salmon Tails, and came back inside to watch the Yukon River salmon management video by the Salmon Subcommittee. We gave students time to design their own salmon stories visually, and then we ended with a small Closing Circle before lunch. After lunch, we joined the Kindergarten class. Dorothy and Tootsie shared again in the Opening Circle, and then we explore the Yukon Salmon Sub-Committee's Salmon Know No Borders map and talked about salmon journey and lifecycle. We went outside and played active, salmon-based games in a forest space near the school yard, and then came inside for a closing circle and to explore interconnectedness through a Web of Life activity with our visiting Elders.

Retain	Refine
• Encourage the speaking of the local language (even if facilitators don't speak it) • Allow Elders to open the circle • Elder drawings to bring their stories to life • Opening prayer if appropriate • Using dry erase markers to trace the waterways on the map • Bring in young male leaders from the community • Web of life brainstorm in local language	• Shorter or more dynamic session planned for the older students • More time with young, male leaders within the circle

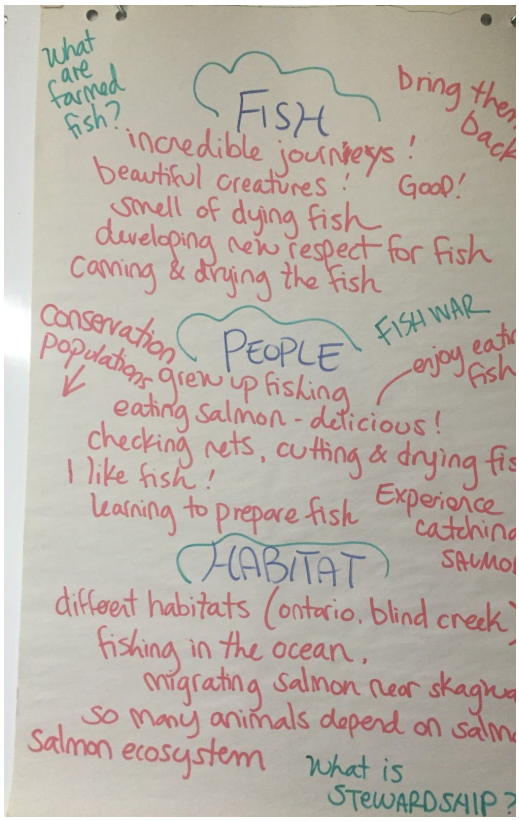
Del Van Gorder School Pilot Review

Dec. 8 2017



Program Description

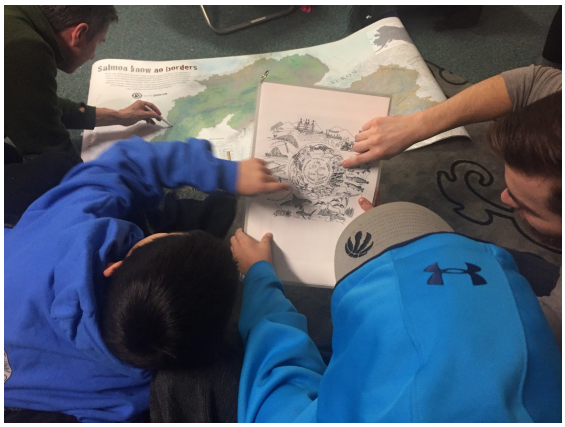
Erin and Emily ran two program sessions in Ross River: the senior students in the morning and Gr. 2/3/4 in the afternoon. Each session was joined by Dorothy Smith and her sister Tootsie, who shared wonderful stories about their experiences at Fish Camp as children. Dorothy drew on the board while Tootsie explained some of the Fish Camp set up in Kaska. The students in the senior classes listened to the stories and then we traced the watershed map to Ross River to get a sense of the journey salmon take to the ocean and back. Inside, we played a game of Guard the Redd and talked about the role of female salmon. We then went outside to pay Salmon Eater Tag and Salmon Tails, and came back inside to watch the Yukon River salmon management video by the Yukon Salmon Sub-Committee. We gave students time to design their own salmon stories visually, and then we ended with a small Closing Circle before lunch. After lunch, we joined the Kindergarten class. Dorothy and Tootsie shared again in the Opening Circle, and then we explore the Salmon Know No Borders map and talked about salmon journey and lifecycle. We went outside and played active, salmon-based games in a forest space near the school yard, and then came inside for a closing circle and to explore interconnectedness through a Web of Life activity with our visiting Elders.



Retain	Refine
• Elder and community member participation • Mixed groups of students working together • 30 minutes pre-program to survey the outdoor areas, check in with administration, set up classroom • Have a central classroom or indoor space into which you can welcome the students (rather than going class to class)	• Work with the older grades first, and bring them in as leaders/experts/storytellers with the younger grades • Add in drama or skits with the very young (e.g. puppet shows to compliment a story)

Cheif Zheh Gittlit School Pilot Review

Jan. 11 2018'



Program Description

Erin, Dennis and Jessie Trerice (Executive Director from the Yukon Salmon Sub-Committee) ran 2 one-hour program in Old Crow. The first program was in the 4/5/6 classroom with 5 students. The group started off with a relaxed Opening Circle where the adults and some of the students shared stories about seeing, catching, processing or eating salmon, and everyone was introduced. Dennis then led an experiential mapping activity where students were encouraged to participate in mapping the watershed and talking about factors that affect salmon as they swim between Fishing Branch and the ocean. Students learned about other organisms within the ecosystem and practiced managing salmon so that all people and animals were able to eat. The group then transitioned to the gym to play Guard the Redd. We closed the day with a short Closing Circle before recess. After recess, we gathered in the 6/7/8 classroom and we were joined by community member and Vuntut Gwitchin Government's Fish and Wildlife Manager, Darius Elias who was an amazing asset to the program. He shared his own stories and encouraged students to share their own. He was able to express the importance of managing salmon from a cultural perspective, and he added a lot of ideas and concepts to the watershed mapping activity that Dennis was leading. Afterwards, we transitioned to the gym and played Guard the Redd (with increasing consideration of predator organisms, and defensive strategies), and then Salmon Tails. We talked about the amount of energy required to swim from predators and protect eggs after a long journey and no food. We ended with a Closing Circle before lunch. Students were also welcomed to the community salmon meeting that evening, and some of them were present for that.

Retain	Refine
• Community member in the classroom if no Elder is present (who knows the kids and can encourage them to share) • Multiple adults present to ask questions and guide the activities if the students are hesitant to take part right away • Classroom as a focused, discussion space • Transition to gym as an active space • Keep the tone conversational, and informal to encourage participation and a range of answers • Bring snacks and swag to give away • Invite students to community salmon meetings if appropriate	• Ensure students know they are not required to tell their stories if they are not comfortable doing so • Build relationships with students and staff through repeat visits • Use 'swag' as a way to reward answers and ideas shared within the group

Whitehorse Elementary School Pilot Review #2

Jan. 2018

Program Description

Emily and Erin delivered the last Salmon in the Classroom pilot program at Whitehorse Elementary School. The grade six class was eager to share stories during the opening circle and knowledge net, and many of them had insightful questions. The class viewed the Ta'an Fish Camp video and discussed some of the main issues surrounding salmon management. They brainstormed other organisms that rely on salmon, as an introduction to Salmon Eater Tag. The Southern Tutchone Language Teacher was unable to join us, so we went outside to play Salmon Eater Tag (with the addition of a changing ecosystem and habitat through changes made to the game boundaries and 'safe spots'). The students debriefed the issues they experienced as fishers, salmon and wild salmon eaters, and connected with the complexity of the need to manage salmon sustainably. They they played a game called Resource Race, which allowed them to see the interplay between resources available for salmon and population strength. Inside, a final activity allowed students to gather around the Salmon Know No Borders and to discuss

Retain	Refine
• Focus on management as a key overarching concept • Active, running games on colder days • Drawing on the knowledge and experience of the students • Document questions, and guide the program towards the answers • Closing circle including the map	• Incorporate a closing circle knowledge net • Work to include at least one outside community expert or knowledge holder • Design language resources to have on hand if no language teacher is present

Program Evaluation & Review

Teacher Review

Each teacher involved in the Salmon in the Classroom pilot program received a Program Evaluation Form (see Appendix 2). While not every teacher was able to submit their form in time for the final report, many teachers were keen to share their feedback. Ratings, comments and responses received from the Program Evaluation Form were used to modify the program as it developed, and have been combined below.

Program met my expectations	poor	fair	satisfactory	good (1)	excellent (5)
Teacher Comments: ● Exceeded expectations ● Very engaging and diverse ● I did not do the arranging, so I really did not know what to expect.					
Program curriculum content	poor	fair	satisfactory	good (2)	excellent (5)
● I really appreciate the First Nations connection ● Fits in well with salmon unit and biodiversity ● Provided great connection for us to explore further in grade 6/7 science and language ● The content was interdisciplinary, multiple grades, a good fit for all					
Presenters ability to communicate content	poor	fair	satisfactory	good (1)	excellent (5)
● Both were excellent with the students, engaging and kept students interest ● Clear with expectations ● The presenters were keen and knowledgeable					
Usefulness of pre-program handout	poor	fair	satisfactory	good (3)	excellent
● I did not keep track of email, so I did not utilize, but totally my fault ● I did not see the pre-program handout					
Student engagement & inclusion	poor	fair	satisfactory	good	excellent (6)
● Conversation/community-based style was great for the students ● Students were engaged and active participants in learning ● Very inclusive and made a point to include everyone ● The students were excited and asked questions.					
Communication & program booking process	poor	fair	satisfactory	good (2)	excellent (2)
● If possible, getting in touch earlier with handout would be great					
Overall program rating	poor	fair	satisfactory	good (1)	excellent (5)
● Would love you guys to come again! Recurring visits from organizations result in further engagement from students because they “know” you! ● Excellent, engaging and passionate about subject ● This is an important issue for us in the Yukon. The young people need to know.					

Would you recommend this program to other educators, teachers, or colleagues? Why or why not?

- We did a half-day. Yes, it was great! A lot of listening involved which is important, but perhaps include hands-on activities like trivia or mix-and-match. I really liked the Wood Street kids presences. It added engagement.
- Yes. Great hands-on activities and enthusiastic presenters.
- Yes. Informative and relevant. Visuals were great.
- Absolutely - This was a very engaging afternoon for my students and it added knowledge to their study of salmon in an active, fun way.
- Yes. It was a great opener for our science and language program
- I would recommend it. It made students think.

Do you have any suggestions that would help to improve future programs?

- It's a great link between all programs (science, First Nations, social studies).
- Videos (already downloaded) are always great for visuals, but it went great without
- No, it was wonderful and I would love to have this every year. It really adds to what the students are already learning and ties in First Nations ways of knowing and doing.
- To ensure a local Elder is at every presentation. We greatly benefited from Dorothy's presence. Also, to follow up at the Spring fry release

Do you have any highlight moments from the program?

- Students enjoyed the game; the presence of older students; sharing stories; links to First Nations
- Connection to Old Crow and management of salmon; importance for the future
- Just seeing the students engaged and active, participating in the activities was wonderful. They really had fun while learning sooo much.
- Realizing the connection between the traditional Kaska story and the science behind the migration route
- Outdoor learning

Additional Comments:

- Science part like a fish to look at or eat?
- Thank-you!
- Awesome! Next year I would LOVE a full-day!!
- We followed up with ice fishing the next school day using salmon eggs for bait. That was neat.
- I appreciated how Emily and Erin did not rush and had a well-timed program.

"There's eyed eggs that are going to hatch into baby salmon, and then we're going to release them into a creek."

- Gr. 5 Student

Facilitator Review

Evaluation is pivotal for the continued success of this program. To evaluate the program, facilitators have reflected on the feedback received from teachers and community members to review what elements of the program should be retained, and which should be refined or eliminated. These reflections have been summarized in the table below.

Retain	Refine
• Design community, conversation-based programs • Use the Salmon Know No Borders camp to create a visual understanding of geographical context • Focus on historical and contemporary management challenges • Create energy in the body through active games to increase engagement • Request Elder and community knowledge keeper presence well in advance of program • Allow community knowledge and stories to be the focus for discussion • Welcome and encourage local language/s to be spoken • Offer flexible dates for booking to meet teacher and facilitator needs • Connect with the Salmon Tank program in applicable schools • Spend as much time as possible outside on the land • Collect teacher and student testimonials and quotes • Focus Opening and closing circles on local knowledge and gratitude for the natural world • Utilize movement-based activities	• Build in more time to build relationships with local Elders • Create a larger budget for Elder involvement in module design and refinement + in the classroom time for schools without Elders in the school or language teachers • Integrate high school students more deeply in reviewing modules and taking part in on-the-ground delivery • Work with local artists to create Yukon-specific artwork and content for use in the classroom • Adapt the What's Your Salmon Story template for broader use by teachers • Include Salmon in the Classroom on standard media & photo release forms for each school so that teachers do not have to manage another set of forms/extra paperwork • Utilize an iPad/tablet to create an online evaluation form for teachers to fill out during program (all responses are immediately catalogued and require no time to seek out completed forms) • Budget for additional thank-you cards and gifts • Bring a talking piece (feather, etc.) • Bring salmon to eat or examine • Create foundation of understanding with review of basic salmon lifecycle • Include a question about prior salmon knowledge in teacher booking form • Bring in young leaders from community • Find clarity for Elder payment in advance • Bring in multiple community members for maximum participation in small communities • Including a territory/language map in all programs • Redesigning the lesson plan model to incorporate a round season/ four aspects of self wheel format

Partnerships

Rivers to Ridges
Environmental and land-based educators focused on program design for children and youth

Jenn Redvers
Indigenous land-based curriculum and cultural program review

Wood Street School
Kelly Choy's Experiential Science 11 Class - Mentoring and program design with four grade 11 students to assist with program creation and delivery

Nuu-chah-nulth Tribal Council
Uu-a-thluk Fisheries Department educational salmon program

Takshanuk Watershed Council
Derek Poinsette (Science Director/ Interim Executive Director); Chilkat Calendar

Department of Education, Government of Yukon and Schools
Participation and curriculum support

Nick de Graff (Canick-a-Nick Environmental Services)
Salmon in the Classroom Tanks - aquaculture, raising fry and releasing in the schools

Pacific Salmon Foundation
Community Salmon Program support for publishing and distribution

Yukon Salmon Sub-Committee
"Salmon Know No Borders" campaign assets, and video; participation of Jesse Trerice

Department of Fisheries and Oceans Canada
Past curriculum, assets and support from the Stewardship Coordinator

First Nations Governments and Communities
Support with Elders honorariums, logistics and curriculum assets

Social Media Campaign

The pilot program was promoted on social media by utilizing the hashtag **#whatsyoursalmonstory?** Below are a selection of social media posts on Instagram highlighting key moments from various programs across the Territory.

yarrowbrew
Kluane Lake

Liked by **adriacollins**, **sketchytedd** and **38 others**

yarrowbrew Spotting spawning chum at Kluane.
#whatsyoursalmonstory

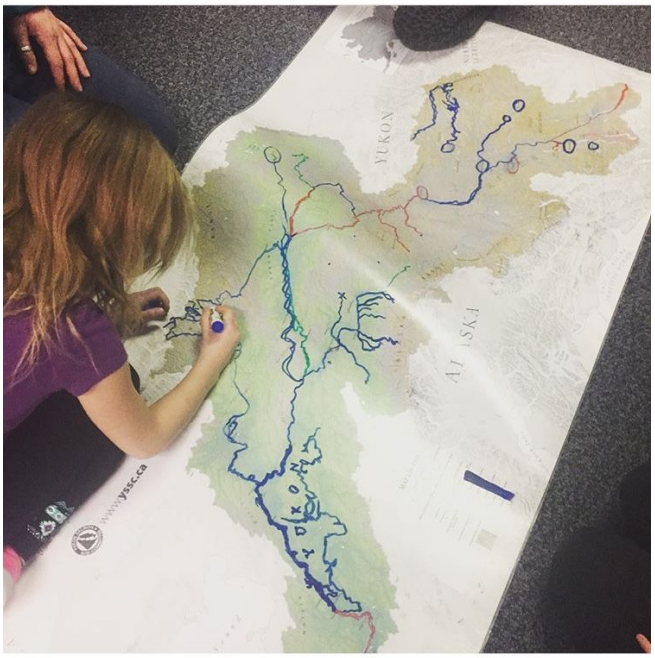
erinmilkyway

Liked by **yam.paul**, **adriacollins** and **30 others**

erinmilkyway What's your salmon story, Old Crow?
#salmonintheclassroom #whatsyoursalmonstory
#riverstoridgesyukon

JANUARY 9

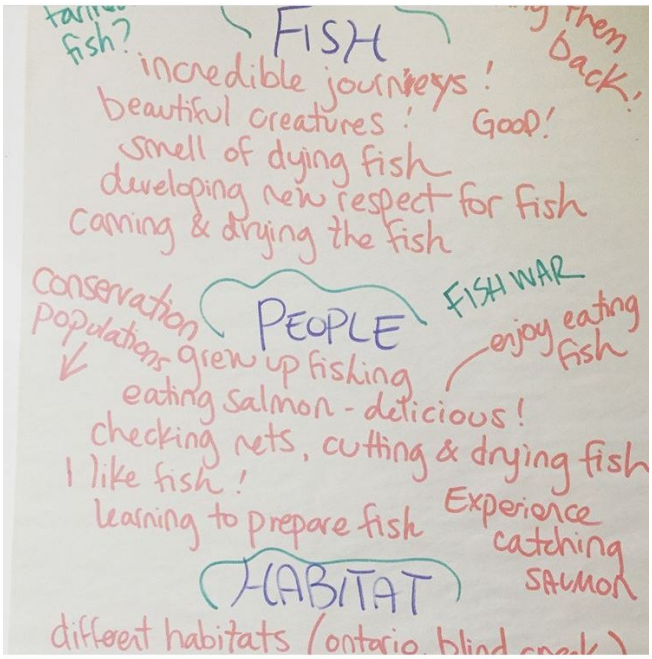
erinmilkyway



Liked by **adriacollins**, **parsenberg** and **23 others**

erinmilkyway All about salmon in Ross River and Faro last week 🐟 #whatsyoursalmonstory? @yarrowbrew @fishonyukon #riverstoridgesyukon #getoutside #salmonintheclassroom

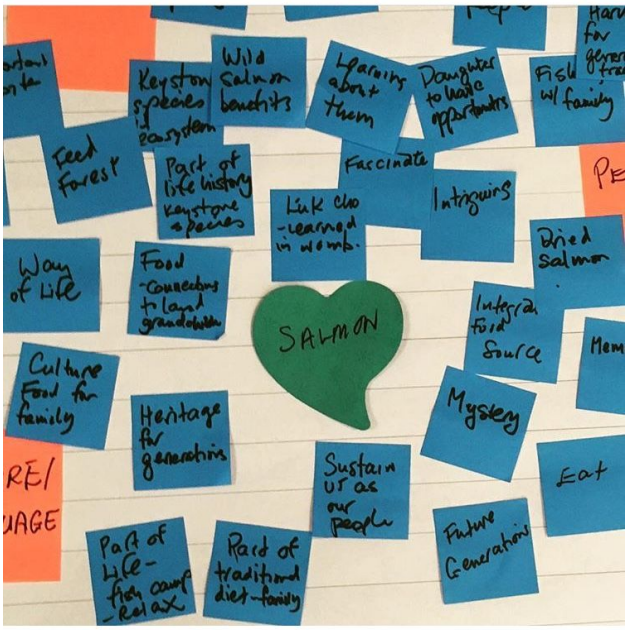
erinmilkyway



Liked by **adriacollins**, **parsenberg** and **23 others**

erinmilkyway All about salmon in Ross River and Faro last week 🐟 #whatsyoursalmonstory? @yarrowbrew @fishonyukon #riverstoridgesyukon #getoutside #salmonintheclassroom

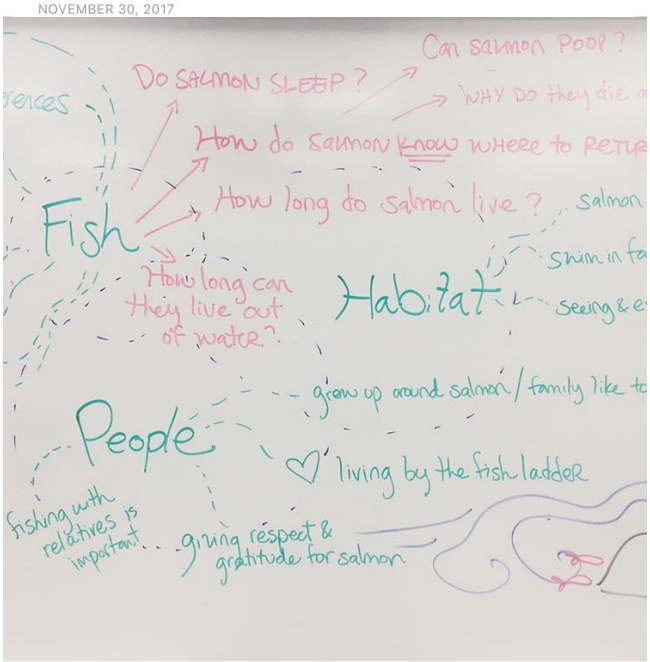
fishonyukon · Following



11 likes

fishonyukon Salmon lifeblood of the ecosystem #whatsyoursalmonstory

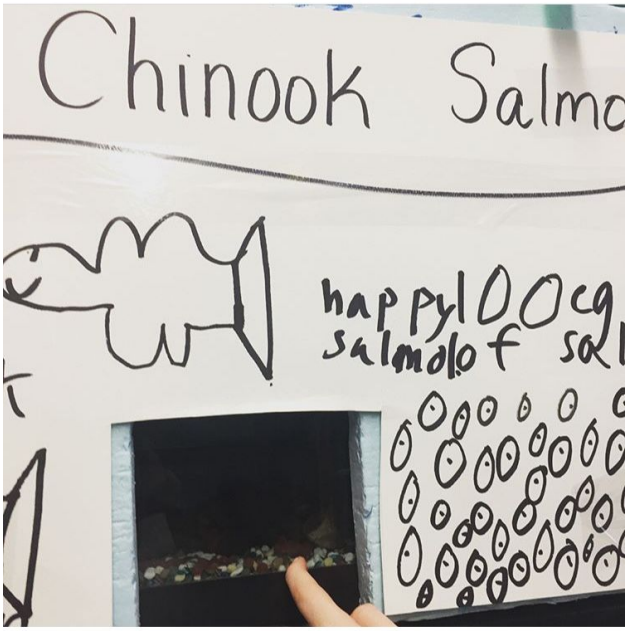
NOVEMBER 30, 2017



31 likes

erinmilkyway It's all about salmon these days (maybe it's always all about salmon?) #whatsyoursalmonstory? #dosalmonpoop? #youcouldbeasalmon

erinmilkyway



31 likes

erinmilkyway It's all about salmon these days (maybe it's always all about salmon?) #whatsyoursalmonstory? #dosalmonpoop? #youcouldbeasalmon

fishonyukon · Following
Whitehorse, Yukon Territory

22 likes

fishonyukon Getting the next generation involved in sound #yukonriver salmon management #whatsyoursalmonstory #salmonintheclassroom

NOVEMBER 15, 2017

Appendix 1: Cultural Guidelines

These cultural guidelines were generously shared by Jenn Redvers, and were used to inform each of the modules and programs on the ground.

Major Guiding Ideas

- Bring language teachers and Elders into the classroom, and give Elders the time they need.Ensure they know what is expected of them. Ask them what their priorities are and what specific skills or knowledge they have. Provide them with a gift (tobacco or otherwise). Kids could be asked to present the gift.
- Reorient the class or group to be sitting in a circle for opening, closing, and group discussion.
- Have First Nations created content, posters/books/references. Allow participants to see themselves in the materials you are presenting.
- If there are no traditional knowledge holders available, reach out to youth as experts. Youth are a huge source of knowledge (and may not know that they have it). Create space for them to share their experience with a practice you're referencing.
- Acknowledge traditional and spiritual laws that impact practices around salmon and harvesting.
- Ensure that culture is infused within each module, and acknowledge cultural differences as well as similarities. Get permission to use/adapt resources designed by other First Nations.
- Explain that salmon can be seen as fellow living spiritual beings, and discuss the importance of Traditional knowledge to preserving the salmon including Traditional laws.

Additional Guidelines

- Prioritize Yukon First Nations content (specific to the Nation) where possible. Ask specific Nations to use their information or reference correctly from print sources.
- Ensure there is not a value judgement being placed on certain knowledge. Traditional knowledge should come across as equal to scientific knowledge.
- Reference culture in the present tense, unless it is a practice that is not done anymore.
- Use language consistently (e.g. First Nations, First People, Indigenous, etc.)
- Be mindful of terminology such as "modern" and "traditional". Traditional doesn't mean static in the past (e.g. using different modern harvesting technologies, doesn't mean that the practice isn't based in traditional concepts. Harvesting can adapt and be dynamic).
- Acknowledge Reconciliation & Rights of Traditional Harvesting. Harvesting has been severely restricted (cannot fish on their lands, and not being able to gather for ceremonies). Students should know that it's been specifically taken away from them historically.
- Using art or resources with animals? Know or ask if there are local clans connected to those animals and what the significance is for speaking about these animals.
- Avoid stereotypes (subsistence vs. commercial roles).
- Avoid role-playing First Nations in games and activities.
- Include a map of First Nations territories, map of language areas, and community maps between Alaska and Yukon (Salmon Know No Borders). For example, they are great to have on the wall for reference throughout the lesson.

Appendix 2: Booking Forms & Teacher Communications

Booking Email

October 2017

Hello Teachers,

What's your salmon story?

Salmon connect us to wild and human communities. They are a vibrant, yet vulnerable, keystone species. This school year, we want to deepen your students' connection to these amazing fish through experiential, curriculum-linked programs. There are many aspects to salmon and we intend to broaden the discussion around Yukon salmon and their connection to people, habitat and the fish themselves.

As you know, the Stream to Sea program run by Nicholas de Graff is in place at schools throughout the Territory. Mr. de Graff mentioned in a September email that there are also some new enhanced education and outreach programs available this school year. Through storytelling and local expertise, these new programs will combine experiential, hands-on activities with discussion and dialogue on local practices and traditions.

Our budget for these new pilot programs can only accommodate a certain number of programs. If you are interested in having us in to work with your class, please fill out the following form, and email it to us at salmonintheclassroom@gmail.com. We hope to be able to visit as many schools as possible!

All the best,
Salmon in the Classroom Facilitation Team
salmonintheclassroom@gmail.com

About Us:
Dennis Zimmermann, Erin Nicolardi and Emily Payne are working together this year to deliver these new programs. Dennis has a wealth of experience working with salmon, and how they relate to communities, First Nations, science, and the management of these magnificent fish. Erin and Emily are outdoor educators and nature mentors with many years of experience developing and delivering land-based curriculum for children, youth and families.

Booking Form

Hello!

We want to plan the best workshop for your class, so please fill out this quick form to give us an idea of your educational objectives and availability.

Teacher name:	School:	Contact (phone or email):
Grade(s) taught:	Class size:	Elder(s) in the School (if applicable):

1. I'm interested in a:

- ❏ Quick Program (~1.5 hours)
- ❏ Half-day AM Program (~2.5 hours)
- ❏ Half-day PM Program (~2.5 hours)
- ❏ Full-day Program (~5 hours)
- ❏ Multi-day Program (Note: We are not able to accommodate all requests, but please provide details below for us to better understand your request.)

Please provide any necessary details:

2. Ideally, the program will take place (select all that could apply):

- ❏ On-site at school (classroom, gym, schoolyard, etc.)
- ❏ Off-site that is within walking distance from the school (natural area, forest, river, etc. outside OR indoor space such as a rec centre, fish hatchery, fish camp, etc.)
- ❏ Off-site location accessible only by transportation (e.g. cars, bus, etc.)

Please provide any necessary details:

3. Dates that would work for my classroom schedule include (please choose at least 3 options):

❏ Tue. Oct. 24	❏ Tue. Dec. 5
❏ Thu. Oct. 26	❏ Thu. Dec. 7
❏ Tue. Oct. 31	❏ Tue. Dec. 12
❏ Thu. Nov. 2	❏ Thu. Dec. 14
❏ Tue. Nov. 7	❏ Tue. Jan. 9
❏ Thu. Nov. 9	❏ Thu. Jan. 11
❏ Tue. Nov. 14	❏ Tue. Jan. 16
❏ Thu. Nov. 16	❏ Thu. Jan. 18
❏ Tue. Nov. 21	❏ Tue. Jan. 23
❏ Thu. Nov. 23	❏ Thu. Jan. 25
❏ Tue. Nov. 28	❏ Tue. Jan. 30
❏ Thu. Nov. 30	❏ Thu. Feb. 1

***Note:** Programs are not confirmed until an official confirmation has been received by the teacher.

Please provide any necessary details:

4. The area(s) of focus most important to my class are (select as many as you like):

- ❏ Fish: Species & Colours
- ❏ Fish: Lifecycle & Journey
- ❏ Habitat: Bears & Animals
- ❏ Habitat: Rivers & Forests
- ❏ People: International Treaties & Governance (Alaska & Yukon)
- ❏ People: Fishing for Salmon

Please provide any necessary details:

5. How did you hear about these Salmon in the Classroom programs?

- ❏ Colleague
- ❏ Administrator/Principal
- ❏ Previous Visit
- ❏ Website
- ❏ Other:

Follow-Up Emails for Teachers

Hello,

We're looking forward to coming into your classroom, and, if you're receiving this email, we've reached out to confirm the date of our visit. Below is some information to make sure that everything goes as smoothly as possible during our visit.

Prepared students = Positive experiences

Unless specifically requested, all programs include time outdoors - rain, snow or shine! Please have students wear appropriate footwear and dress in layers.

Media Release Forms

Signed Media Release Forms (attached) from all participants (we will be taking photos, video and audio recordings of students and their work.

Pre-Program Activity

We have also attached 'What's Your Salmon Story?' templates (in English, French and an open format to include other languages) to prepare your class for our visit by having them uncover some of their own salmon stories. Some ways you could use the template include:

1. **Storyboards** - Students draw images that represent their personal connection to or ideas about salmon. This could include connected words, sentences or paragraphs to describe what is going on in the images.
2. **Collage** - Students to collect their own photos, online images or cut-out images from magazines that visually tell the viewer about their connection to or ideas about salmon.
3. **Interview an Elder** - Students brainstorm a few questions and then collect their answers on the template.
4. **Comic Strip** - Students use 6 squares to draw what a life of a salmon might looks like, migrating from ocean back to spawning grounds. What challenges might they encounter along the way?
5. **An Egg Point of View** - Students draw a picture of the view of the spawning grounds from the perspective of a salmon egg (think subsurface!)
6. **Short Story** - Students write a story from the perspective of a salmon or a salmon-eater (animals, bacteria, humans, etc.)

*Note: If you have not connected with me about your Elder in the school, please let me know as soon as possible so that I can make arrangements for them to take part in the program!

Email with any questions that you have.

Hello Ryan & Stan,

My name is Erin, and I wanted to connect about delivering some Salmon in the Classroom programs in Old Crow next week.

PROGRAM OUTLINE
We will be exploring local human and ecological connections to salmon, and Yukon FN management of and relationship with salmon through discussions, games and activities.

Each workshop is flexible, and would run 2 - 2.5 hours long. We will start inside (in an appropriate classroom or gym space) with an Opening Circle and some activities related to personal salmon knowledge and understanding, resource management, ecosystem dynamics, etc.. If weather permits, we will head outside for a number of activities/games. If the weather is harsh or if students are unprepared to be outside, we will run some of these activities indoors in a gym space or classroom.

TIMELINE: Tuesday, January 9th

- 9:30 - noon (Gr. 4/5/6)
- 1:00 - 3:00 (Gr. 7/8/9)

Please confirm whether or not these dates and times work for you and your staff.

ELDER INVOLVEMENT
If there are 1 or 2 Elders with language or stories to share about salmon who would like to take part in the program, they are welcome to attend.

If you have any suggestions or changes to the outline, please let me know, as we are flexible with the duration and flow of the program. Our aim is to highlight local stories, language and knowledge, and to deepen the students' understanding of local geographic context within the larger watershed.

All the best,
Erin
Salmon in the Classroom Team

Salmon in the Classroom Media Release

Our staff may photograph, video and/or audio record programs and special events to catch participants in action. If you or your child object to our taking and/or using your photograph or scanned copies of work they have done, please let us know.

I grant to Salmon in the Classroom, its representatives and employees, the right to take photo, video and/or audio recordings of my child and their work, _____ (print child's name), in connection with Salmon in the Classroom programs. I authorize Salmon in the Classroom, its assigns and transferees to copyright, use and publish the same in print and/or electronically. I also authorize Salmon in the Classroom, and their respective agents to use the media for educational, organizational, and program or series publicity purposes. I further consent to any reproduction, copyright, exhibition, broadcast and/or distribution of the Media in whole or in part, without limitation or compensation.

I agree that Salmon in the Classroom may use such photos, video and audio recordings of my child and their work with or without my name and for any lawful purpose, including for such purposes as **publicity, promotional posters, illustration, social media (such as Facebook, Instagram, etc.) and other forms of advertising and web content (such as webpages)**. These recordings may be released to third parties for connected promotional purposes (e.g. Yukon Salmon Subcommittee, Fish On Yukon, Yukon Fish and WIldlife Enhancement Trust, etc.).

I understand that my child's participation in Salmon in the Classroom confers upon me and my child no rights to use, ownership or copyright of the whole or part of any materials created as part of the process of the programs.

I have read and understand the above:

_____ _____

Date Signature of parent/legal guardian

Program Evaluation Form

Salmon in the Classroom Program Evaluation Form

Reflections on your experience of the program are highly valued and taken into account as we continue to improve our programs for future participants. Thank-you so much for your feedback!

Program Location:
Facilitators:
Date:
Your Name (optional):
Email or Phone (optional):

Please indicate your level of satisfaction with each of the following:

Program met my expectations	poor	fair	satisfactory	good	excellent
Comments:					
Program curriculum content	poor	fair	satisfactory	good	excellent
Comments:					
Presenters ability to communicate content	poor	fair	satisfactory	good	excellent
Comments:					
Usefulness of pre-program handout	poor	fair	satisfactory	good	excellent
Comments:					
Student engagement & inclusion	poor	fair	satisfactory	good	excellent
Comments:					
Communication & program booking process	poor	fair	satisfactory	good	excellent
Comments:					
Overall program rating	poor	fair	satisfactory	good	excellent
Comments:					

Would you recommend this program to other educators, teachers, or colleagues? Yes No
Why or why not?

Do you have any suggestions that would help to improve future programs?

Do you have any highlight moments from the program?

Additional Comments:

Màhsi' choo	Màhsi' cho	Sógá sénlá
Másin cho	Shàw níthän	Gùnèłchīsh
Gunałchîsh	Tsin'įį choh	Thank-you

FOR YOUR FEEDBACK!

Appendix 3: BC Curriculum Connections

Links to the full BC/Yukon curriculum can be found online here.

Grade	Subject	Big Ideas	Curricular Competencies *Students are expected to be able to do the following:*	Selected Content *Students are expected to know the following:*
K	Science	Plants and animals have observable features	* Make exploratory observations using their senses * Experience and interpret the local environment * Recognize First Peoples stories (including oral and written narratives), songs and art as a way to share knowledge * Express and reflect of personal experience of place	* basic needs of plants and animals * adaptations of local plants and animals * local First Peoples uses of plants and animals
1	Science	Living things have features and behaviours that help them survive in the local environment	* Demonstrate curiosity and sense of wonder about the world * Experience and interpret the local environment * Consider some environmental consequences of their actions	* names of local plants and animals * structural features of living things in the local environment * local First Peoples understanding and use of seasonal rounds
2	Science	Living things have life cycles adapted to their environment	* Demonstrate curiosity and sense of wonder about the world * Experience and interpret the local environment * Consider some environmental consequences of their actions * Express and reflect of personal experience of place	* Metamorphic and non-metamorphic life cycles of different organisms * Similarities between offspring and parent (salmon change a great deal as they grow and need fresh and saltwater environments to survive) * First Peoples use of their knowledge of life cycles (~stewardship: sustainably gathering plants and hunting/fishing in response to seasons and animal migration patterns (e.g., clam gardens, seasonal rounds, etc.) ~sustainable fish hatchery programs run by local First Peoples)
3	Science	Living things are diverse, can be grouped, and interact with their local ecosystems.	* Demonstrate curiosity about the natural world * Identify FIrst People perspective and knowledge as sources of information	* Biodiversity in the local environment * Knowledge of local First Peoples of ecosystems (interconnection between

			* Contribute to care for self, others, school and neighbourhood through personal or collaborative approaches	living and non-living things, our shared responsibility to care for the local environment (i.e. stewardship), information shared from the local First Peoples community and Elders)
4	Science	All living things sense and respond to their environment	* Demonstrate curiosity about the natural world. * Suggest ways to plan and conduct an inquiry to find answers to their questions. * Experience and interpret local environment * Identify FIrst People perspective and knowledge as sources of information Order is a pattern that can be recognized as having levels - big to small, simple to complex - or as a process with a sequence of steps. How is order apparent in the adaptations of forest animals in BC? How does the order of seasons impact local plants and animals?	* Sensing and responding in humans (five senses) and other animals (e.g. salmon), plants (response to light, water, touch, gravity) * Biomes are regions grouped by similar temperature and precipitation (including terrestrial and marine ecosystems)

5	Science	Multicellular organisms have organ systems that enable them to survive and interact within their local environment.	* Demonstrate a sustained curiosity about a scientific topic or problem of personal interest. * Communicate ideas, explanations and processes in a variety of ways. * Contribute to care for self, others, neighbourhood and community through personal or collaborative approaches (A system is a set of interacting of interdependent pieces of components that come together to form a whole. A system occupies a physical of a temporal space within a set environment, has a representative form, and possesses a purpose or function.) How can you observe the concept of interconnectedness within ecosystems in your local area?	* First Peoples concepts of interconnectedness in the environment * The nature of sustainable practices around BC (Yukon)'s resources * First Peoples knowledge of sustainable practices
6	**Socials** (Global Issues and Governance)	Complex global problems require international cooperation to make difficult choices for the future.	* Take stakeholders' perspectives on issues, developments, or events by making inferences about their beliefs, values, and motivations (perspective) * Differentiate between short- and long-term causes, and intended and unintended consequences, of events, decisions, or developments (cause and consequence)	* economic policies and resource management, including effects on indigenous peoples * international cooperation and responses to global issues
6	Science	Multicellular organisms rely on internal systems to survive, reproduce, and interact with their environment.	* Identify First Peoples perspectives and knowledge as sources of information * Express and reflect on personal, shared, or others' experiences of place	**? Relate to Salmon** * local First Peoples knowledge of separation and extraction methods (historical and current First Peoples use of separation and extraction methods (e.g., eulachon oil, extraction of medicines from plants, pigments, etc.)

7	Socials (Ancient World - 7th century)	Religious and cultural practices that emerged during this period have endured and continue to influence people.	* Explain different perspectives on past or present people, places, issues, or events, and compare the values, worldviews, and beliefs of human cultures and societies in different times and places (perspective)	* scientific, philosophical, and technological developments * interactions and exchanges between past civilizations and cultures, including conflict, peace, trade, expansion, and migration
7	Science	Evolution by natural selection provides an explanation for the diversity and survival of living things.	* Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information (Ways of knowing refers to the various beliefs about the nature of knowledge that people have; they can include, but are not limited to, Aboriginal, gender-related, subject/discipline specific, cultural, embodied and intuitive beliefs about knowledge.)	* survival needs * natural selection * First Peoples knowledge of changes in biodiversity over time * local First Peoples knowledge of climate change (oral history, change in traditional practice (e.g., the timing of harvest has been impacted by climate change), etc.)
8	Socials (7th century - 1750)	Human and environmental factors shape changes in population and living standards.	* Explain different perspectives on past or present people, places, issues, or events, and compare the values, worldviews, and beliefs of human cultures and societies in different times and places (perspective)	* social, political, and economic systems and structures, including those of at least one indigenous civilization * scientific and technological innovations
9	Science	The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them. (How do First Peoples view the cycling of matter and energy?)	* Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information * Experience and interpret the local environment * Express and reflect on a variety of experiences, perspectives, and worldviews through place	* First Peoples knowledge of interconnectedness and sustainability
10	Socials (Canada and the World: 1919 to the Present)	* Worldviews lead to different perspectives and ideas about developments in Canadian society. * Global and regional conflicts have been a powerful force in shaping our contemporary world and identities.	* Compare and contrast continuities and changes for different groups during this period (continuity and change) * Assess the significance of people, places, events, or developments, and compare varying perspectives on their significance at particular times and places, and from group to group (significance)	* human–environment interaction * economic development and Canada's role in a global economy * truth and reconciliation in Canada

	Science	Not very applicable		
11	Human Geo	A geographic region can encompass a variety of physical features and/or human interactions.	* Assess the significance of places by identifying the physical and/or human features that characterize them (sense of place)	* relationships between cultural traits, the use of physical space, and impacts on the environment, including First Peoples cultures * relationships between natural resources and patterns of population settlement and economic development
12	Phys. Geo	Human activities and resource use affect the environment	* Identify and assess how human and environmental factors and events influence each other (interactions and associations) * Assess the significance of places by identifying the physical and/or human features that characterize places (sense of place)	* Natural resources and sustainability

Appendix 4: Resources For Educators

The best resources available are local Elders and knowledge keepers. The young people in the classroom during program can also be excellent sources of information. Each program should be guided by local knowledge and expertise, and the more appropriate community members you can include, the better the program discussions and learnings will be. The resources below are for extensions that can be added after first including local Traditional Knowledge.

Resources		
Cultural Context	Keeping our Traditions at the Fish Camps: Our Ancestors' Gift to our Youth document (Selkirk First Nation, Pelly Crossing) Native Language Dictionaries (online language app for Southern Tutchone and Northern Tutchone dictionary online)	Nuu-chah-nulth Cultural Perspective to Complement the DFO Primary Salmonids-the-Classroom Pilot Version Curriculum A Time When Salmon are No More (Teslin Tlingit Council)
Books	Life Cycle of a Salmon (Bobbie Kalman) Life Cycle of a Salmon (Angela Royston) Salmon Forest (David Suzuki) Salmon Stream (Carol Reed-Jones) A Salmon for Simon (Betty Waterton)	Swimmer (Shelly Gill) Red Tag Comes Back(Fred Phleger) Salmon in the Trees (Amy Gulick) **Leap! A Salmon's Story** Adventure (fiction) 400 words, Level K (Grade 2).

Worksheets	SalmonWILD	Young Naturalists Club of BC PDF of Salmon Life cycle (7/8/9)
Games/ Activities/ Songs	The Salmon Game Hooks and Ladders (similar) Salmon Circle Song Salmon Song	Salmon Wild Obstacle Course My Seasonal Round - OpenSchoolBC You Could Be a Salmon song (Black Spruce Bog)
Online	www.salmoninthetrees.org Alaska Salmon in the Classroom Curriculum (journal template, ID cards, etc.) Alaska's Sea's and Watersheds - A Salmon's Life Journey Alaska Sea's and Watersheds - Fish Finders (Could Salmon Live Here?) Salmon Subcommittee Videos Salmon ID Quiz	Pacific Streamkeepers Foundation Earthling Enterprises - Salmon Education Resources Salmon-Forest Connection Graphic Pacific Salmon Foundation Red Gold Film - Trailer (2008) Salmon Confidential Film (2013) My Seasonal Round - OpenSchool BC
Other	**Social Media and Public Engagement** The Marine Detective Save Our Wild Salmon Salmon Beyond Borders Friends of Wild Salmon Stand for Salmon Watershed Watch Salmon Society Salmon Protection and Watershed Network (SPAWN) **Other In-class Resources** Columbia Springs layout of sample SITC activities broken down by grade Salmon Know No Borders map (Yukon Salmon Subcommittee) Pacific Salmon Life Cycle poster (Fisheries and Oceans Canada) **Leadership Programs** Fraser Basin Council Youth Leadership & Mentorship Program Review (Fraser Salmon & Watersheds Program)	

Appendix 5: Salmon in the Classroom Tanks - Participating 2017/2018 Schools

#	Location	School	Teacher	Email Address	Aquarium Status	Aquarium Size (gal)	Species	Stock Origin
1	Rural	Beaver Creek	Elizabeth Churchill	Elizabeth.Churchill@yesnet.yk.ca	Filled	30	Chum	Kluane River
2	Rural	Carcross	Sam Traynor	Sam.Traynor@yesnet.yk.ca	Filled	30	Chinook	WRFH
3	Rural	Carmacks	Alysha Coates	Alysha.Coates@yesnet.yk.ca	Filled	30	Chum	Yukon River (Minto)
4	Rural	D-Bay	Johnson	Alyce.Johnson@yesnet.yk.ca	Filled	30	Chum	Kluane River
5	Rural	Dawson	Angela Edmonds	Angela.Edmunds@yesnet.yk.ca	Filled	30	Chum	Klondike River
6	Rural	Faro	Frank de Jong	frank.dejong@yesnet.yk.ca	Filled	30	Chinook	Blind Creek
7	Rural	Haines Junction	Andy Preto	andy.preto@yesnet.yk.ca	Filled	30	Chum	Kluane River
8	Rural	Mayo	Laura Erickson	laura.erickson@yesnet.yk.ca	Filled	30	Chinook	Mayo River
9	Rural	Pelly Crossing	Hilary Coburn	Hilary.Coburn@yesnet.yk.ca	Filled	30	Chum	Yukon River (Minto)
10	Rural	Ross River	Fran Etzel	fran.etzel@yesnet.yk.ca	Filled	30	Chinook	Blind Creek
11	Rural	Teslin	Brittany Banks	Brittany.Banks@yesnet.yk.ca	Filled	30	Chinook	WRFH
12	WH	Christ the King	Michelle Gillard	michelle.gillard@yesnet.yk.ca	Filled	30	Chinook	WRFH
13	WH	Duks'a Headstart	Johanne Koser	johanne.koser@kdfn.net	Filled	30	Chinook	WRFH
14	WH	Ecole Tremblay	Annie Lavallee	annie.lavallee@yesnet.yk.ca	Filled	20	Chinook	WRFH
15	WH	Elijah Smith	Rebecca Bradford	Rebecca.Bradford@yesnet.yk.ca	Filled	30	Chinook	WRFH
16	WH	Goldenhorn	Fran Nyman	fran.nyman@yesnet.yk.ca	Filled	30	Chinook	WRFH
17	WH	Grey Mountain	Barb Reid	Barb.Reid@yesnet.yk.ca	Filled	30	Chinook	WRFH
18	WH	Holy Family	Vanessa Stitt	Vanessa.Stitt@yesnet.yk.ca	Filled	30	Chinook	WRFH
19	WH	Jack Holland	Lois Moore	lois.moore@yesnet.yk.ca	Filled	30	Chinook	WRFH
20	WH	Porter Creek	Erica Keenan	erica.nickel@yesnet.yk.ca	Filled	20	Chinook	WRFH
21	WH	Selkirk	Alison Morham	Alison.Morham@yesnet.yk.ca	Filled	30	Chinook	WRFH
22	WH	Takhini	Pricilla Dawson	Pricilla.Dawson@yesnet.yk.ca	Filled	30	Chinook	WRFH
23	WH	WES	Sabrina Bouayad	Sabrina.Bouayad@yesnet.yk.ca	Filled	30	Chinook	WRFH

Appendix 6: Salmon in the Classroom Enhanced Outreach Programs 2017/2018

Number	Location	School	Teacher	Email Address
1	Rural	Faro	Frank de Jong	frank.dejong@yesnet.yk.ca
2	Rural	Haines Junction	Andy Preto	andy.preto@yesnet.yk.ca
3	Rural	Pelly Crossing	Kevin Dyck	Kevin.dyck@yesnet.yk.ca
4	Rural	Ross River	Michelle Ruminski	Michelle.Ruminski@yesnet.yk.ca
5	Whitehorse	Christ the King	Michelle Gillard	michelle.gillard@yesnet.yk.ca
6	Whitehorse	Christ the King	Amber Harper	Amber.Harper@yesnet.yk.ca
7	Whitehorse	Selkirk	Alison Morham	Alison.Morham@yesnet.yk.ca
8				
9	Whitehorse	Whitehorse Elementary	Julie Bourdeau	julie.bourdeau@yesnet.yk.ca
10	Whitehorse	Whitehorse Elementary	Sabrina Bouayad	Sabrina.Bouayad@yesnet.yk.ca

Appendix 7: Salmon in the Classroom Team

Erin Nicolardi and Emily Payne - *Rivers to Ridges*

Rivers to Ridges believes that deepening our relationship with the natural world is crucial for healthy bodies, minds and hearts. We aim to build empathy, awareness and community through active mentoring relationships on the land. We design and deliver outdoor, land-based programs for children and youth in all four seasons.

Our innovative programming is designed and guided by Erin Nicolardi and Emily Payne, certified teachers and experienced outdoor educators. We are based out of Whitehorse, Yukon and we respectfully acknowledge that many of our programs take place on the traditional territory of the Kwanlin Dün First Nation and the Ta'an Kwach'an Council.

With the support of Dennis Zimmerman and Jenn Redvers, Emily and Erin designed and delivered much of the content for this project. Dennis also supported the compilation of final review and report.

Rivers to Ridges is a 2017 Laureate of the Arctic Inspiration Prize. For more information on Rivers to Ridges visit: www.riverstoridges.org.

Dennis Zimmerman - *Fish on Yukon Outreach and Instruction* and *Big Fish Little Fish Consultants*

Dennis Zimmermann is a Whitehorse, Yukon based consultant who has been working as an environmental educator for the last 15 years. His work mainly revolves around the intersection between people, fish and wildlife and habitat. With close to 25 years in the north he has worked in numerous sectors and with First Nation Governments, Government of Yukon, private sector companies, land claim organizations and not for profits.

His two companies are dedicated to fish, wildlife and habitat related work. For a list of planning, communications and outreach related projects through Big Fish Little Fish Consultants visit: https://bigfish-littlefish.ca/past-projects/. Dennis also has an award winning recreational fishing related instruction, outreach and environmental education business called Fish on Yukon - Instruction and Outreach. For more information on Fish on Yukon visit: https://bigfish-littlefish.ca/big-fish-little-fish-consultants-yukon/fish-on-yukon/.