**Elder Quotation:** “Salmon was put up in many ways: smoked or air-dried, and cut up in little pieces and stuffed in a seal or sea lion stomach which had been dried, it was also salted. They would smoke and dry the salmon after it came up the streams to spawn, it is not fat and it had stopped eating. The bright salmon are fat and when you dry them the fat molds and turns rancid. But the ones from the streams have lost most of the fat, you smoke or dry them they get hard as a board.”

- Bobby A. Stamp

Bobby Stamp was born in 1926 to a French Canadian father and Dorothy Vlasoff from Nuchek. He moved to Chenega at the age of seven where he lived a subsistence lifestyle and was taught cultural values and lore by the village Elders. He died in 2005.)

**Grade Level:** PreK-2

**Overview:** The Sugpiat settled in the Lower Cook Inlet and Prince William Sound because of the bounty of subsistence resources, especially salmon. The Eyak settled in the Copper River Delta and the North Gulf Coast for similar reasons. From eggs to spawning adults the Sugpiat and Eyak developed methods to harvest and preserve salmon throughout its life cycle to sustain them through the long winters.

**Standards:**

<table>
<thead>
<tr>
<th>AK Cultural:</th>
<th>AK Content:</th>
<th>CRCC:</th>
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<tbody>
<tr>
<td>D1 (A) Culturally-knowledgeable students are able to engage effectively in learning activities that are based on traditional ways of knowing and learning and are able to: student who meets this standard should: 3) interact with Elders in a loving and respectful way that demonstrates an appreciation of their role as culture bearers and educators in their community.</td>
<td>Science F3 (F) A student should understand the dynamic relationships among scientific, cultural, social, and personal perspectives and should: 3) develop an understanding of the importance of recording and validating cultural knowledge.</td>
<td>SS(8) Students should know the appropriate seasons to fish, hunt, and gather. Language L1: Students should understand the value and importance of the Sug’t’stun language and be actively involved in its preservation.</td>
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**Lesson Goal:** To learn how the Sugpiat and Eyak peoples harvested and used salmon throughout its life cycle.
Lesson Objectives: Students will:
- Model the salmon life cycle.
- Identify traditional subsistence uses of the salmon throughout its life cycle.
- Learn the listed Sug’t’sun and/or Eyak vocabulary.

Vocabulary Words:

<table>
<thead>
<tr>
<th>English:</th>
<th>PWS:</th>
<th>Lower Cook Inlet:</th>
<th>Eyak</th>
</tr>
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<tbody>
<tr>
<td>Listen (directed to 3+)</td>
<td>Niicugniluci!</td>
<td>Niicugniluci!</td>
<td></td>
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<tr>
<td>sea/ocean</td>
<td>imaq</td>
<td>imaq</td>
<td>lahdz</td>
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<tr>
<td>red (sockeye) salmon</td>
<td>nikliq (pl.: niklit)</td>
<td>nikliq(pl.: niklit)</td>
<td>cha’ch</td>
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<tr>
<td>river</td>
<td>kuikcak</td>
<td>kuikcak</td>
<td>aan</td>
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<td>stream</td>
<td>kuik</td>
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</table>

Web Resources:
Salmon Life Cycle Stages

- [http://www.adfg.alaska.gov/static/education/educators/curricula/pdfs/salmon_in_the_classroom_unit_1_overview.pdf](http://www.adfg.alaska.gov/static/education/educators/curricula/pdfs/salmon_in_the_classroom_unit_1_overview.pdf)  pp.4,5 Life Cycle Stages Descriptions & Ocean migration routes by species; pp.6,7 Salmon Life Cycle Needs and Threats; p. 10 Salmon Life Cycle Drawings


- “The Odds” [https://scienceandmemory.uoregon.edu/the-odds.html](https://scienceandmemory.uoregon.edu/the-odds.html)  (5:23) Time lapse photography of artist’s watercolor rendition of salmon life cycle


Materials/Resources Needed:
- Local Elder or Recognized Expert knowledgeable about subsistence resource locations.
- Scent jars (4 jars with strong, easily identified scents to ‘label’ each natal stream such as vinegar, kibble, cedar, smoke, dried fish, dried mushroom, blueberry jam…)
- Small plastic fish randomly labeled 1, 2, 3, 4 to correspond to with the four different natal stream scents (one per student) – (In kit)
- “Salmon Eggs” (orange marbles, Tic Tacs, candy fish. cheetos…) in small plastic bags
- Props for Village Elder: Bucket, dipnet, or bit of fish net
- Salmon Recipe Cards with photos of dish and salmon life cycle stage

Kit Library:
- Miller, Debbie S., et al. *A King Salmon Journey*
- Stamp, Bobby A. *Chenega as I Saw It – It’s people*
**Teacher Preparation:**
- Review activity plan and practice Sug’t stun and Eyak vocabulary.
- Contact your local Education Coordinator or local Tribal Council for a list of Elders that could share their expertise on the lesson content.
- Invite an Elder or Recognized Expert to share information on when and where local salmon are harvested and what traditional foods are made from salmon throughout its life cycle.
- Before the Elder or Recognized Expert arrives review with students how to respectfully interact with the Elder during his or her visit.
- Reconfigure the classroom with a large empty area to represent the open ocean, a large pathway between the desks and tables to represent the river, with smaller pathways between desks branching off from the ‘river.’ Draw a picture of a sun setting behind some mountain peaks on the whiteboard.
- Fill each scent jar with a strong identifiable scent. Draw symbols to represent each of the scents on the whiteboard, i.e., a tree for cedar, a camp fire for smoke…Place scent jars at entrances to ‘streams.’
- **Optional:** Have students help set up same during the class period.
- **Optional:** Ask student parents to provide a small salmon snack for class to try at end of lesson.

**Opening:** Of all the fish we eat here in ________________ which fish is the most popular? (Accept all answers but encourage students to choose salmon by reminding students of popular salmon recipes, i.e., barbecued, smoked, air dried, patties, salad…) Salmon! How many different ways do students’ families use salmon? Alaska is famous around the world for its salmon and it was salmon that first attracted the Sugpiat people to settle here in our region. All five kinds of salmon (king salmon, dog salmon, pink salmon, coho, and red salmon/ nikliq) are very important to our community. Salmon still fills our stomachs and our pantries.

**Activities:**
1. Today students will use their imaginations and these little fish (*hold up examples*) to become red salmon/ nikliq and act out the life story of the salmon.
2. Explain the re-configuration of the classroom, i.e., the open area represents the open ocean/ imaq. The path leading from the ocean/imaq between the desks is the river/kuikcak (*Insert name of local river*). Each of the smaller paths is a stream/kuik.
3. Introduce Elder and encourage students ro listen (*Niicugniluci!*) as he or she represents the Sugpiat village of (*Insert name of local village*). This village settled here to take advantage of the salmon runs.
4. The Elder/Teacher stands by the river mouth with fishing props (bucket, dip net…) and describes where the village is located relative to the sunset on the whiteboard and to the local salmon streams.
5. Students gather in the mouth of the river/kuikcak just short of the ‘ocean/imaq.’ Distribute fish to students and announce that they are adult red salmon/ nikliq who were born in a small stream/kuik, grew up there in the fresh water, and now are big enough to leave their childhood home by the village and swim out into the ocean/imaq to find food like plankton (small organisms that float or drift in great numbers in bodies of salt or fresh water) to make them grow big and strong.
(Note: Red Salmon eat plankton while all other salmon species eat other fish, squid, eels, and shrimp.)

6. Send student salmon into the ocean in small groups. Students school up far away from the river mouth and swim around pretending to eat. What are you eating? (Plankton)

7. Students ask Elder/Teacher if now is the time to harvest any red salmon niklit to eat?

8. Elder/Teacher explains that no, they are too far away. After one to four years of feeding in the ocean it is time for them to come home. In the spring and summer it’s time to raise the next generation of salmon.

9. How do the red salmon niklit find their way home? Can the salmon see their village? Do they have a map to help them? Explain that the sun’s position can tell them a little about which direction to travel. Also salmon can ‘follow their noses’ home to their river/kuikcak, home to their stream/kuik. Their childhood stream/kuik has a particular smell and their noses have a little tiny magnet that acts like a compass letting them find their direction to the stream/kuik of their birth.

10. Label the scent symbols on the white board 1, 2, 3, and 4. Have students look on the bellies of their fish to locate their numbers and determine which of the four scents they want to find as they slowly swim toward the river/kuikcak. As they reach the river/kuikcak they stop eating but keep swimming around in the mouth of the river/kuikcak.

11. Students ask Elder/Teacher if now is the time to harvest the red salmon niklit to eat?

12. Elder/Teacher explains how red salmon niklit by the mouth of the river/kuikcak are harvested: by net/spear/weir… with recipe examples for using the salmon caught and how preserved. (See also Bobby Stamp quote above.)
13. Students continue swimming up the river/kuikcak and search for the stream/kuik where they were born using their sense of smell. [Note: A salmon can recognize one drop of water from its natal stream in 250 gallons of water.]

14. As students find their home streams they circle around pretending to create gravel nests (known as redds) in which to lay their eggs.

15. Students ask Elder/Teacher if now is the time to harvest any red salmon/ni.klit to eat?

16. Elder/Teacher explains how spawning salmon are caught and used (with recipe examples) and how they are preserved.

17. Distribute small bags of salmon eggs for students to place in their nests (redds).

18. Students ask Elder/Teacher if now is the time to harvest any red salmon/ni.klit to eat?

19. Elder/Teacher explains how salmon eggs are harvested and used with recipe examples, and how preserved. Share the quote from Bobby Stamp listed above.

20. Students pretend to swim and then slowly stop from exhaustion. They place their fish on the streambed (floor) to indicate that they’ve died.

21. The Elder/Teacher explains that now the red salmon/ni.klit are food for the eagles and bears and other wild animals. Their work is done.

22. Wrap up with a class-wide review the stages of the salmon life cycle and which part of the cycle villagers used for traditional subsistence foods.

23. Watch “The Odds” https://scienceandmemory.uoregon.edu/the-odds.html (5:23) a time lapse video of an artist’s watercolor rendition of the salmon life cycle.

24. Optional: Distribute and enjoy small salmon snack.

Assessment
- Students modeled the life cycle of the salmon.
- Students described the traditional uses of salmon at various life cycle stages.
- Students correctly pronounced the Sug’t’s tun or Eyak vocabulary.

i Stamp, Bobby A. *Chenega as I Saw It – It’s People*. Chugach Alaska Corp., 2010. p.11