

Elder Quotation:

“Subsistence has changed drastically because living in the village is different from living in the big city. Nowadays, I’ve become part of the big city, unable to qualify for any of the hunting permits. I applied for a caribou permit once, and I was denied because I did not have enough points. I was disheartened. Here I am an Alaska Native who can’t even get a caribou hunting permit. What am I supposed to do? How am I supposed to live a life of subsistence the way we used to when I was a boy?”

It’s been a challenge for me to talk about stuff like this. It was especially hard for me to talk about the earthquake and the tsunamis that destroyed our village. But it did me good to get it out like that. Our people have been hurt so much. Think about the 1964 Good Friday Earthquake and the Exxon Oil Spill in 1989 happened on the same day exactly twenty-five years apart. Both events – natural and man-made – devastated our culture. The oil spill ruined our subsistence practices for a long time.

But we’re strong: we’ve endured. Sometimes you have to change in order to grow. If you don’t change, you’re not going to grow; and a lot of people are stuck in that. I think subsistence is important for the younger generations. Somewhere down the road they will want to reclaim part of our history, especially how to live off the land and the sea. But they’re not going to have any idea how to do those things. They don’t know which berries to pick, how to skin a seal, how to render seal oil, or when and where to gather seagull eggs or clams or cockles. I never realized it until I left Cordova, but I could get whatever I wanted to eat within thirty minutes in any direction. I grew up eating black bear, seal, salmonberries, cockles, herring, clams, herring eggs, ducks, and even gumboots. Today a lot of people have no idea what gumboots are. They ask, “What do they look like? What do they taste like?” Well, they are a little rubbery, but you can eat them.”

- Steve Eleshansky¹

Grade Level: 9-12



Overview: In a changing world how can the Suqpiat and Eyak people sustain their traditional subsistence practices? What were once matters of tribal tradition and lifestyle are now the subject of governmental regulation and changing lifestyles. How do traditional harvest patterns, multiple user group pressures, population growth, and climate change intersect? How can subsistence harvesters affect government management of fisheries?

Standards:

AK Cultural:	AK Content:	CRCC:
D1: Acquire in-depth cultural knowledge through active participation and meaningful interaction with Elders.	Science C (2): A student should understand and be able to apply the concepts, models, theories, facts, evidence, systems, and processes of life science and should (2) develop an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms;.	L1: Students should understand the value and importance of the Sugt'stun language and be actively involved in its preservation.

Lesson Goal: To define and sustain the subsistence lifestyle in terms of harvesting food from the sea and the traditional ecological knowledge.

Lesson Objectives: Students will:

- Discuss cultural and regulatory definitions of subsistence harvesting
- Research relevant subsistence foods regulation
- Prepare a Subsistence Regulatory Proposal and/or testimony for the Board of Fisheries
- Learn to pronounce the Sugt'stun and Eyak vocabulary

Vocabulary Words: Sugt'stun Dialects

English:	PWS:	Lower Cook Inlet:	<u>Eyak:</u>
our traditional lifestyle	<i>sumacerpēt</i>	<i>sumacerpēt</i>	
foods from the sea	<i>imarlat neget</i>	<i>imarlat neget</i>	
herring eggs	<i>ialuahpat qahyait</i>	<i>ialuahpat qahyait</i>	<u>waaw k'udA'uhdg</u>
fish eggs	<i>iqalut qahyait</i>	<i>iqalut qahyait</i>	<u>te'ya' k'udA'uhdg</u>
seabird eggs	<i>nahuyat peksuit</i>	<i>nahuyat peksuit</i>	

Materials/Resources Needed:

- **Classes 1-4** – access to internet for research; computer projector
- **Class 1** – subsistence dish to share (ideally made with herring eggs or sea bird eggs and items for eating food (paper plates, napkins, serving spoon, cutlery)

Kit Library:

Book: Salomon, A.K. (2011). *Imam Cimiucia = Our Changing Sea*

Book: Smelcer, J. E., & Young, M. A. (2007). *We are the Land, We are the Sea: Stories of Subsistence from the People of Chenega.*

Book: Stamp, B.A. (2010). *Chenega as I saw It – It's People.*

Book: Tabios, D. (2000). *Looking Back on Subsistence: Interviews with Elders of the Chugach Region.*

Web Resources:

19th Century Subsistence Diet

- <https://alutiiqmuseum.org/images/stories/exhibits/WildFoodsTable.pdf> Six page summary of references to Alutiiq wild food harvest and consumption from (mostly) Russian early 19c accounts in Kodiak region

Board of Fish

- http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2017-2018/proposals/2017-2018_proposal_book.pdf How to submit regulatory proposals to Board of Fisheries; Summary of current proposals
- How to submit a proposal to Board of Fisheries
<https://www.facebook.com/YukonRiverFishingADFG/videos/vb.1372765689413207/1723866814303091/?type=2&theater> Use this video as an example guide to produce own video that pertains to specific issue and region.

Subsistence Definition

- <http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.main> ADF&G definition
- <https://www.youtube.com/watch?v=8cxtL5Z5mao> ‘This is Indian Country with Billy Frank Jr.: Native Alaska and the Big Oil Spill’(59:38) 9:45-12:50 Discussion of Exxon Valdez Oil Spill court case ‘reopener clause’ and effect of 1971 Alaska Native Claims Settlement Act elimination of sovereign hunting and fishing rights; 13:40-15:05 Subsistence Defined

Subsistence Resource Management

- <https://akncurriculum.com/videos/> Unit 4- Subsistence – Overview of state and federal subsistence management (53 minutes)
 - Subsistence as Defined by Native Leaders (0-11:30)
 - Subsistence Laws (ANILCA & ANCSA) (11:30-24:00)
 - Federal and State Subsistence Management (24:00 - 28:10)
 - Katie John Cases (State and Fed. Subsistence Mgt Responsibilities) (28:10-34:00)
 - Marine Mammal Subsistence Management (34:00-44:00)
 - Traditional Knowledge and Governmental Resource Management (44:00-52:00)
- <http://www.adfg.alaska.gov/index.cfm?adfg=process.commissioner> Alaska State constitutional authority for natural resource management
- <http://www.adfg.alaska.gov/index.cfm?adfg=subsistenceregulations.main> Subsistence preference
Alaska state law directs the Board of Game and Board of Fisheries to provide a reasonable opportunity for subsistence uses first, before providing for other uses of any harvestable surplus of a fish or game population [AS 16.05.258 (b)]. This is often referred to as the “subsistence preference” or sometimes the “subsistence priority
- <http://www.alaskaseafood.org/sustainability/#families> In Sustainability Brochure - one page graphic of State, Federal and International Management of Alaska’s Fisheries and areas of responsibility

Traditional Ecological Knowledge (TEK) and Western Science

- http://ankn.uaf.edu/Curriculum/Articles/BarnhardtKawagley/Indigenous_Knowledge.html Article Abstract with Venn diagram of TEK and Western Science comparison

Herring Population Decline

- <https://www.youtube.com/watch?v=LlpqIc6fsY0> (also www.pwssc.org/herringsurvey) Herring population collapse overview in Prince William Sound and still unknown cause
- <http://pwssc.org/gwgu-egg-harvest/> Retrieved 6.20.2018 Announcement of 2018-2021 Project quantifying subsistence egg harvest effect on glaucous winged gull nest success

Teacher Preparation:

- Review Activities and practice Sugt'stun or Eyak vocabulary.
- Herring eggs, Salmon eggs, and seabird eggs were chosen as the focus for this project because each represents an aspect of the changes in the environment and subsistence lifestyle. Herring returns since the Exxon Valdez oil spill, are considerably weaker. There has been no commercial herring harvest since the early 1990s. Tastes have changes and fermented salmon eggs are infrequently consumed today. Beebles and salmon caviar are much more popular. The government forbade the collection of sea bird eggs for so many years that the tradition of gathering eggs from nests has almost been lost.
- Class 1: Invite Elder to discuss meaning of subsistence to him or her.
- Class 1: Prepare a subsistence dish using food from the sea to share with the class or ask a student parent to prepare one. (*Ideally the dish should include herring eggs, salmon eggs, or sea bird eggs.*)
- Class 1: Assemble any needed tableware, napkins, etc., needed to share food.
- Class 2: *Optional* – Invite a representative from the Alaska Department of Fish & Game to share information and insights regarding resource management and how regulations are formulated.
- Class 2: *Optional* – Invite a community member who has submitted regulatory proposals to or testified before the Board of Fisheries.
- Class 5: *Optional* – Invite Elders and community members to serve on the mock Board of Fisheries to hear student testimony.
- Before the Elder or Recognized Expert arrives, review with all of the students, ways to show respect for the Elder during his or her visit.

Opening: The Sugpiat and Eyak peoples have always lived off the land and sea and many continue to practice a subsistence lifestyle today. With the advent of modernity and growing population pressures, the subsistence lifestyle/*sumacerpet* now exists in a highly regulated environment. State and federal regulators oversee the management and usage of local resources among all user groups from commercial fishermen to sportsmen to personal users to subsistence harvesters. How do subsistence practices and cultural traditions/ *sumapercet* mesh with the modern world?

Activities:

Class I:

1. Invite students to define 'subsistence lifestyle'/*sumacerpet* of local resources.
2. Write students' ideas on white board.
3. Read the Alaska Dept. of Fish & Game's definition of subsistence use:

What is Subsistence use?

Subsistence fishing and subsistence hunting are important for the economies and cultures of many families and communities in Alaska. Subsistence uses of wild resources exist alongside other important uses of fish and game in Alaska and are especially important for most rural families, who depend on subsistence hunting and fishing as sources of nutrition and cultural practices. An estimated 36.9 million pounds of wild foods are harvested annually by rural subsistence users. Residents of more populated urban areas harvest about 13.4 million pounds of wild food under subsistence, personal use, and sport regulations

<http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.main>

4. Read the quotation from Steve Eleshansky above and discuss how the students and Native perspective on subsistence activities fits, or doesn't, with the ADF&G definition.

**Optional:* Watch the definitions of subsistence from a Native perspective in "This is Indian Country with Billy Frank Jr: Native Alaska and the Big Spill" (See above, 13:40-15:05).

5. There are always tensions between user groups as to how access to resources should be controlled. Traditional usage/*sumacerp* was based on careful observation of local resource availability and personal need. Consider these recollections by Chenega villagers about the 1950s and 60s:

Pete Kompkoff, Jr.: *And there was so much fish around it was just unbelievable, and we kept the creeks from over-spawning. That's where we got the fish, from illegal waters.*

Don Kompkoff, Sr.: *That's the reason why there was a lot of fish, because we took the fish that were going to be over-spawned. The second run that comes in, it wipes the others out, and the way we were doing it, we'd take some out of each creek. Take a few fish out of here, a few fish out of there, and then the next year it would be the same amount come back or even more.*ⁱⁱ

4. The Sugpiaq and Eyak peoples consider their subsistence lifestyle/*sumapercet* an integral part of their cultural heritage. Consider this observation by Patrick Selanoff of Chenega and Valdez:

"I think one of the most important things about subsistence foods is the taste. It's totally different from hamburgers or pizza. It's got its own unique taste. But I think the most important thing is just gathering it. It's healthy to be out there harvesting food. We don't realize it, but subsistence keeps us safe. It keeps the family together. It keeps us busy. If somebody catches something, pretty soon there's a bunch of people around them trying to get some of what was caught. Everyone's mingling with each other. I think subsistence helps us bond with each other. It strengthens our community."

- Patrick "Sweeney" Selanoff, Jr.ⁱⁱⁱ

5. Share a subsistence food from the sea/*imarlat neget* (ideally using herring eggs, salmon eggs, or seabird eggs) and invite Elder to talk about how the food was harvested, processed, and

shared and how any of these practices have changed over time and why (*possibilities: changing climate, changing resource availability, changing tastes, changing regulations...*).

6. Invite the Elder to share personal experience with regulatory compliance. Were the ingredients for this shared food difficult to obtain? Did harvesting depend upon the time of year, the tides, the weather, and/or the regulations? How should the subsistence lifestyle/*sumapercet* be preserved and protected?

7. Direct students to research ADF&G regulations regarding the harvest and use of the subsistence ingredients in the subsistence dish shared in class (or another food of the students' choice) and prepare to share their results in the next class.

**Optional:* Homework – Have students interview Elders, family, and community members about which fisheries' regulations they find particularly helpful or problematic.



Sea Bird Egg Delivery ca.1900-1915; Photo courtesy of San Francisco Maritime Museum

Class II:

1. Have students share the result of their regulation research. Which agencies have jurisdiction over the harvest of food from the sea/*imarlat neget*?
2. Display <http://www.alaskaseafood.org/sustainability/#families> ‘Sustainability’ brochure and review its one page graphic illustrating the State, Federal and International Management of Alaska’s Fisheries and their areas of responsibility over food from the sea/*imarlat neget*.
3. Watch clip from “This is Indian Country with Billy Frank Jr: Native Alaska and the Big Spill” (See above, 9:45-12:50) discussing the Exxon Valdez Oil Spill court case ‘reopener clause’ and the practical effect of the 1971 Alaska Native Claims Settlement Act’s elimination of sovereign hunting and fishing rights in return for land ownership and cash settlements.
4. Watch clip <https://akncurriculum.com/videos/> Unit 4- Subsistence – Overview of state and federal subsistence management (53 minutes)

**Optional:* Invite a representative from the Alaska Department of Fish & Game to share information and insights regarding resource management and how regulations are formulated.

**Optional* – Invite a community member who has submitted regulatory proposals to or testified before the Board of Fisheries to share information and insights about Board of Fisheries’ procedures and his or her personal experience with the process.

5. The Alaska state constitution provides for the management of its natural resources including food from the sea/*imarlat neget* for the maximum benefit of the people:

Unlike many states in the union, Alaska enshrined its regard for natural resources in its constitution. Article 8 — Natural Resources lays out the framework for management of renewable resources: ...

*§ 2. **General Authority** — The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the state, including land and waters, for the maximum benefit of the people.*

*§ 3. **Common Use** — Wherever occurring in their natural state, fish, wildlife, and waters are reserved to the people for common use.^{iv}*

6. It is the role of the Alaska Board of Fisheries to conserve and develop Alaska’s fisheries resources:

Board of Fisheries is the state's regulatory authority that passes regulations to conserve and develop Alaska's fisheries resources. The Board of Fisheries is charged with making allocative and regulatory decisions. The board has seven members, each appointed by the governor for a three-year term. Each member must be confirmed by a joint session of the state legislature.^v

7. Citizen participation is both essential to the regulatory process and encouraged:

The Alaska fisheries and game regulatory process is among the most open regulatory processes in Alaska if not the nation. Alaska’s fish and game users are encouraged to

participate through appointments to the Boards of Fisheries or Game, service on one of 84 advisory committees across the state, submitting proposals for regulatory change, providing written and oral comments, and working with the boards at scheduled meetings. Work conducted by the boards of the Alaska Department of Fish and Game is facilitated by the Boards Support Section.^{vi}

8. Subsistence uses of resources have priority over other user group interests.

“...Board of Game and Board of Fisheries to provide a reasonable opportunity for subsistence uses first, before providing for other uses of any harvestable surplus of a fish or game population [AS 16.05.258 (b)]. This is often referred to as the “subsistence preference” or sometimes the “subsistence priority.”^{vii}

9. Describe how citizens may provide input into Board of Fisheries decisions. (See opening page of Board of Fisheries proposals book:

- <http://www.adfg.alaska.gov/static/regulations/regprocess/fisheriesboard/pdfs/2018-2019/proposals/intro.pdf> (Remember to update the website to correct year.)

10. Discuss how fisheries observations from Elders (TEK) can inform testimony and regulatory proposals before the Board of Fisheries. The Inuit Circumpolar Conference 2014 defined TEK:

“Traditional Knowledge is a systematic way of thinking applied to phenomena across biological, physical, cultural and spiritual systems. It includes insights based on evidence acquired through direct and long term experiences and extensive and multigenerational observations, lessons and skills. It has developed over millennia and is still developing in a living process, including knowledge acquired today and in the future, and it is passed on from generation to generation.”^{viii}

*Optional: Review the Venn diagram comparing TEK and Western Science and their areas of overlap.

11. Divide class into research teams to investigate the subsistence harvest of herring eggs/*ialluhpat qahyait*, salmon eggs/*iqalut qahyait*, and seabird eggs/*nahuyat peksuit* over the next two classes. Each of these three foods has experienced significant changes: Herring eggs are not as plentiful as they once were, particularly post oil spill. The taste for traditional fermented salmon eggs is fading. Seabird eggs were placed off limits for harvest for such a long time that many communities almost lost the tradition for gathering them.

Research Team Project Guidelines:

- Research traditional harvest and usage patterns for their assigned topic.
- Research applicable regulations.
- Interview Elders and community members regarding harvest changes and reactions to regulations over the years.
- Identify pertinent regulations that either should be maintained to preserve subsistence traditions or ‘unduly’ limit traditional harvest practices.
- Prepare testimony and/or a regulatory proposal incorporating TEK to present to the Board of Fisheries.
- Present such testimony before a mock Board of Fisheries in Class 5 prepared to defend their work.

- *Optional:* Students can opt to make a videotape on how to submit a proposal regulation that pertains to their region, similar to the ADF&G Yukon Fisheries video.
 - <https://www.facebook.com/YukonRiverFishingADFG/videos/vb.1372765689413207/1723866814303091/?type=2&theater>

Class III: Research

Opening: – Review the variety of subsistence foods noted in 19th century European accounts of the Kodiak Alutiiq. (See <https://alutiiqmuseum.org/images/stories/exhibits/WildFoodsTable.pdf> listed above.)

1. Research teams work on projects.
2. *Homework:* Survey family and community members about their experiences with harvesting their target subsistence resource.
 - a. How does respondent harvest and/or use the subsistence resource?
 - b. Has respondent noted changes over time in resource harvest and use?
 - c. How have regulations affected the subsistence resource harvest?
3. Remind the students to be prepared to share their survey results!

Class IV: Testimony Preparation

1. Have research teams studying like subsistence resources pool their survey answers and quantify their results.
2. Have students conclude their research and prepare their testimony. Each research team must present a regulation for consideration or testimony to support or contest an existing regulation.
3. Research team suggestions **must** incorporate TEK.

Class V: Mock Board of Fish

1. Set up a seven-member mock Board of Fisheries (aka Board of Fish) to hear student testimony. While just one student from each research team may testify Board of Fish members should be encouraged to ask for any support or clarifications from the entire team regarding their methodology, TEK, or their understanding of the subsistence lifestyle/*sumacerpet*.

**Optional:* Invite Elders, Community Members who have testified before the Board of Fish, and ADF&G representatives to serve as mock Board members.

2. Have students present their testimony. All students not serving on the Board of Fish may blog their observations about the testimony and how successfully it integrated TEK into its proposals.
3. With the Board of Fish members and student bloggers discuss the subsistence regulatory process and any insights gained.
4. *Optional:* Invite students to submit their testimony to the Alaska Board of Fisheries.

5. If the student opted to make a videotape on “*How to Submit Board Proposals*” specific to their region, they would showcase the finished video. (*If desired, submit the video to Chugachmiut Cultural Heritage Program to share on the website.)

Assessments:

- Students can explain the cultural and regulatory definitions of subsistence harvesting.
- Students researched relevant subsistence foods regulation and incorporated into proposal.
- Students presented a Subsistence Regulatory Proposal and/or testimony for a mock Board of Fisheries
- Students learned to pronounce the Sugt’stun and Eyak vocabulary and incorporated into proposal.

ⁱ Smelcer, J. E., & Young, M. A. (2007). *We are the land, we are the sea: stories of subsistence from the people of Chenega*. Anchorage, AK: Chenega Heritage, Inc. 24

ⁱⁱ Poling, D.R. (2011) *Chenega diaries: stories and voices from the past: life and times in Chenega, Alaska 1944-48*. Chenega Future, Inc., 247

ⁱⁱⁱ Smelcer 100

^{iv} <http://www.adfg.alaska.gov/index.cfm?adfg=process.commissioner> Constitutional Authority

^v <http://www.adfg.alaska.gov/index.cfm?adfg=process.main> Alaska’s Fisheries and Game Board Process

^{vi} <http://www.adfg.alaska.gov/index.cfm?adfg=process.main> Alaska’s Fisheries and Game Board Process

^{vii} <http://www.adfg.alaska.gov/index.cfm?adfg=subsistenceregulations.main> Subsistence Regulation Overview

^{viii}^{viii} Sigman, M. (Ed.). (2015). *Community-Based Monitoring of Alaska's Coastal and Ocean Environment*. Fairbanks, AK: Alaska Sea Grant. p 30 Quotation

SEA BIRD EGG HANDOUT



“Egg Hunting”

Story collected by Dolores Kawagley

There she was looking down at beautiful white eggs. “Oh, there are ten in the nest,” she said.

The number differs for each species of bird. For small birds, there are usually only four or five beautiful eggs. The colorations and shape varies with the different bird.

The Eskimos used to egg hunt every spring, before the Fish and Game enforced the white people’s law. It was part of the Eskimo way of life, getting fresh eggs.

Today in the villages, when we want eggs, we go to the store and buy a dozen for \$2.95. Not only is this expensive, but also there often are two or three broken or rotten eggs in a carton. It takes days for eggs to be delivered from outside states to Alaskan villages.

This is how egg-hunting was done: the egg hunter starts off early in the morning out into the tundra for a hard day’s journey. Somewhere there is a goose or a duck laying.

The egg hunter must watch carefully for a bird to fly out of its nest. When he sees a male bird standing he knows there is a female around. He looks around and keeps walking.

Suddenly there is a flurry of wings as a bird takes off. It is a mother bird. The man looks in the area from which the bird took off. Under the overhanging blueberry bushes he spies the nest with eggs in it.

One beautiful part is that the mother bird always takes off toward the wind to make a noise. She runs on the ground as if to distract and draw the hunter away from her nest.

Excerpt taken from Kawagley, Dolores. *Yupik Stories*. Pgs. 63-64. Amu Press, 1975