

TRADITIONAL FOODS AND RECIPES: BEACH ZONATION 9-12 (LESSON 1,2,3)

Elder Quote/Belief: “This is my way of relaxing it’s my own world, on the beach. This is the only thing that makes sense. As old as I am, I still get excited when I start finding urriitaqs”
Vera Meganeck¹,

Grade Level: 9-12

Overview: The intertidal beach zone has provided fresh food for many coastal people throughout Chugach Region for many centuries.

Standards:

<i>AK Cultural:</i>	<i>AK Content Science:</i>	<i>CRCC:</i>
C1 Perform subsistence activities in ways that are appropriate to local cultural traditions;	F3 Develop an understanding of the importance of recording and validating cultural knowledge.	SS2 Students should be able to prepare subsistence foods

Lesson Goal: Students will learn about what beach zonation and the various types of traditional food are provided within each zone.

Lesson Objective(s): Students will:

- Begin a book of traditional foods and recipes based on the Elders traditional ecological knowledge (TEK).
- Describe the layers of beach zonation and what can be found in each zone
- Collect samples of foods found in different areas of the beach
- Illustrate the beach zonation of the local beach in their area
- Apply the correct Sugt’stun Dialects or Eyak language words
- Create a dish using the recipe by Pauline Demas, with what was found in each level of the beach zones.

Vocabulary Words:

Sugt’stun Dialects

English:	Prince William Sound:	Lower Cook Inlet:	Eyak:
Beach		Quta	
Tide goes out		Kenlluni	
Chitons		Urriitat	
Limpet		Melungqucaq	
Snails		Iput	
Seaweed (edible) Bulbous Seaweed		Caqllqaq Iituliq	

(Bulb Kelp Seaweed (broad ribbon) Seaweed (red ribbon)			Tiishiyah IinLxAwah
Rockweed		Ellquaq	
Sea Lettuce		Kapuustaruaq	
Blue Mussels		Amyak	Tsiin
Sea Urchin Sea Urchin Egg		Uutuk	 IiLk'a'd
Starfish		Agyaruaq	
Barnacle		Quaq	Ts'uux
Sea Cucumber		Sanaqusak maybe Kaugyaq	

Materials/Resources Needed:

Elder/Recognized Expert

Handout: Beach Zonation

Camera

Clipboards

Drawing paper, Pencils

Ziploc baggies

Dehydrator

Hot plate

Cooking pot

Cooked rice, Soy sauce, Seal Oil/Butter/olive oil

Medium to large bowl, depending how many students there are and how much rice you have

Cutting board

Toothpicks

Paper cups/bowls, Eating utensils

Metal butter knives (or a utensil for prying chitons and limpets off the rocks)

Books:

Traditional Food Guide

Looking Back on Subsistence

Imam Cimiucia Our Changing Sea

COMMON EDIBLE Seaweeds in the Gulf of Alaska

Alaska's Seashore Creatures, A Guide to Selected Marine Invertebrates, Carmen M. Field

Blueberry Book-student publication

Websites:

<http://jukebox.uaf.edu/NanPG/prtgrham/html/EIMc2.html> (Elenore McMullen interview)
<https://www.youtube.com/watch?v=in-7B93TQTo> , *Bidarkies; Subsistence Intertidal Food*
<http://www.bing.com/videos/search?q=preparing+Sea+Urchin&&view=detail&mid=360B2EED55D6CAE4B501360B2EED55D6CAE4B501&FORM=VRDGAR> , preparing Sea Urchin
<https://www.youtube.com/watch?v=i7SanTJdwCk> , how to clean a sea cucumber
<https://www.youtube.com/watch?v=f0DIjJ6CKIw> , how to clean chitons and slice them
<http://www.eyakpeople.com/dictionary>

Teacher Preparation:

- Review Sugt'stun/Eyak vocabulary words
- Review resource books, websites and YouTube video on Bidarkies; Subsistence Intertidal Food Harvesting in Alaska, Project Jukebox (Elenore McMullen, Port Graham, tape 2 section 2)
- Research local area to prepare for the beach walk, such as; checking any **PSP** warning before gathering mussels by calling Alaska Department of Fish and Game if there are closed areas due to PSP, check the tide book to plan for the field trip during the lowest tide for ideal observation of the various levels of the beach zonation.
- Contact and invite an Elder/Recognized Expert from local area to classroom
- Prepare students for field trip
- Provide a permission slip for each student
- Locate camera, iPad, smartphone to bring on field trip for documentation

Opening: The quote, “When the tide is out, the beach is set.” defines the Chugach Regions coastal people. We will be learning about what our ancestors traditional ecological knowledge (TEK) knew all along, that the low tide beach areas provided many food resources to help sustain their existence. You will learn what beach zonation is and the various types of traditional food that are provided within each zone. We will be going on a beach walk to investigate and document what we find that was a traditional food source. We hopefully will find some goodies that we can prepare as a traditional meal upon return to share.

Activities:**Class I:**

1. Have students listen to the Sugt'stun/PWS/ Eyak dialect of the selected vocabulary words.
2. Introduce Elder/Recognized Expert to the class and share his/her knowledge of gathering from the local beach.
3. Document favorite recipe guest shared
4. Ask students if they have any question for the invited guest. Document question and response
5. Let students view the YouTube; Bidarkies; Subsistence Intertidal Food Harvesting in Alaska and listen to Elenore McMullen, on Project Jukebox site tape 2 section2.
6. Require students to take notes while viewing and listening to the above sites.
7. Ask if anyone has anything they would like to share about what they saw and heard.
8. Let students know there will be a field trip for the next class and be prepared by; wearing warm clothing, boots, hat and gloves if needed for cooler weather.

9. Ask students to start to compile their information into one file that will create a "Traditional Foods Recipe Book."
10. Allow students time to research about beach zonation, take notes of what is found and apply Sugt'stun dialects or Eyak words used for the creatures found in the zones.
11. Place students into groups, explaining they will collect foods (snails, seaweed, chitons, and limpets), from those zones, during the beach walk.
12. Tell students to wear the appropriate clothing.
13. Go over how to be respectful that students listed when walking on the beach.

Class II

1. Collect all permission slips
2. A copy of beach zonation for each student, information and diagram for students to add to the clipboard
3. Give each student a clipboard with several sheets of drawing paper, ask students to take a pencil along to illustrate where they found the ingredients for the rice salad
4. Give each group a Ziploc bag
5. Take a camera along to take pictures as students are walking on the beach collecting food and creating their illustration of their assigned zones and what was found.
6. Ask students if they would like to bring in; soy sauce, rice, butter/olive oil or better yet seal oil for the next class, document who is going to bring what on the whiteboard
7. It is time to take students on the field trip, as the class walks review manners about how to and leave the beach.
8. Allow enough time to walk the beach, illustrate, and collect various food items to bring back to the classroom.
9. Have students rinse off in the Sea water; seaweed/kelp, limpets, chitons, mussels and snails.
10. After returning to the classroom place Kelp/seaweed in the dehydrator to dry to use for the next class.
11. Store (refrigerator), the other food items found for the next class

Class III

1. Put Ipuk salad recipe on whiteboard, have students write this down
2. Use hot plate, place cold water into pot adding some salt, bring to a boil add; snails, limpets, mussels, remove once mussels have opened (save water), bring water back to a boil adding chitons, cook until black skin loosens (about five to eight minutes), remove chitons putting into cold water, remove loose black skin, the eight plates, if there is orange gonads, these can be eaten or added to the ipuk salad, rinse and chop them up, add to mixing bowl.
3. Remove the muscular foot (this is the part that attaches to a rock) from the limpet, chop and add to the mixing bowl.
4. To take the meat out of the snails, use a toothpick to pull them out of the shell and remove the lid (operculum), adding this to the mixing bowl.
5. Clean mussels by removing the filaments (byssus) rinse and add to the mixing bowl.
6. Add rice to the mixing bowl, mix all ingredients, soy sauce to taste, add oil and crumble dried kelp/seaweed on top of rice salad.
7. Have students sample the recipe.

Class IV

1. Allow time for the students to research the listed Sugt'stun/Eyak vocabulary words, illustrate and label the anatomy of what students found on the beach.
2. Have students research about PSP and what sea creatures it impacts and what can happen when humans eat them.
3. Write out the following questions to place on the whiteboard that need to be included in student presentations:
 - What do they eat?
 - How do they provide food for one another?
 - Do you think they provide nutrition? If so what kind?
 - Did you like eating them? Which one?
4. Have students present their PowerPoints to class.
5. Have the students compile their findings into one document that will become a class project of traditional foods and recipes book. This will be an on-going activity throughout the unit so they need to save for later.

Assessment:

- Students are able to correctly use Sugt'stun dialect or Eyak words when referring to the beach zonation.
- Students are able to correctly identify the sea creatures and prepare it for the recipe in this lesson
- Students researched and illustrated what food source was found on the beach at each zone.
- Student made a PowerPoint presentation which included all the documentation of notes, illustrations and research.



“All my life, I depended on that shoreline. I would go down to the beach to collect anything to make chowder for that night’s dinner. If we needed food I knew where to get it. The beach provided for us.”

- Elenore McMullen, Elder and past chief, Port Graham, 2004ⁱⁱ

Photo from Fireweed Cillqaq publication

Ipuk Salad

By Pauline Demas

Recipes Gathered By Nanwalek Students Sea Week 2007, Nanwalek School

RICE cooked

SHELLED ipuk

Seaweed

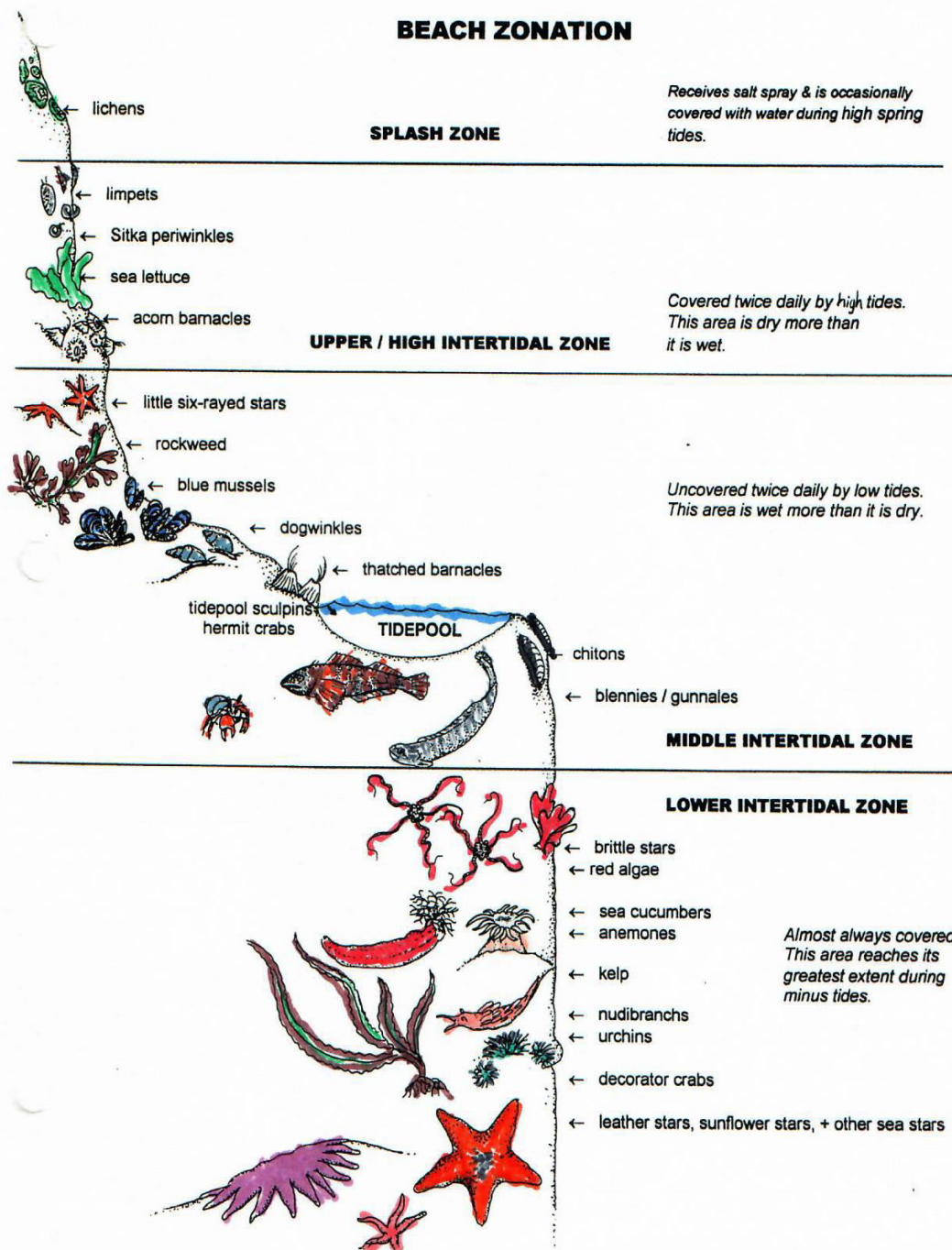
Minced bidarkies

Soy Sauce

*Seal Oil to your own taste

Minced Garlic to your taste

*Seal oil can be replaced with olive oil or butter.



Courtesy of Catie Bursch and Kachemak Bay Reserves and coloring by Nancy Yeaton

ⁱ Meganeck, Vera, YouTube: *Bidarkies; Subsistence Intertidal Food Harvesting in Alaska*



Vera Meganeck, born in Port Graham, Alaska. Vera's parents were Larry and Polly Meganeck. She had four children, she worked in the cannery in the summer and she relied on the resources from the land and sea. Often Vera would row out to catch fresh fish for her meals.

ⁱⁱ "Living from the Sea." *Imam Cimiucia Our Changing Sea*. By Anne K. Salomon. Fairbanks, AK: Alaska Sea Grant College Program, 2011. 2. Print

TRADITIONAL FOODS AND RECIPES: SPLITTING FISH 6-12 (LESSON 4-6)

Elder Quote/Belief: *“Families were busy in the fall putting away salmon for winter. Each family would smoke a couple hundred pounds of fish at least. They would mainly smoke or dry the fish. Then they would store them in either cardboard boxes or gunny-sacks, left from the sugar and flour we used to get. Back in those days, the climate was quite a bit different. The winters were a lot drier, so the fish pretty much kept all through the winter.”* Bill Hjort¹

Grade Level: 6-12

Overview: The Chugach Region people live on the coastline where salmon has been one of the main sources of food. There were many traditional ways of preparing and preserving salmon for the winter. One of the popular ways today is to split the fish for drying and smoking.

Standards:

<i>AK Cultural:</i>	<i>AK Content Science:</i>	<i>CRCC:</i>
D4- Gather oral and written history and provide an appropriate interpretation of its cultural meaning and significance.	F3- Develop an understanding of the importance of recording and validating cultural knowledge.	SS(4)- Students should have knowledge of preservation techniques for traditional foods/plants.

Lesson Goal: To teach the traditional ways of splitting fish for drying, stripping and smoking to preserve for the winter consumption.

Lesson Objective(s): Students will:

- Learn how to split (filet) fish
- Apply the Sugt'stun/Eyak words in their electronic presentation
- Create an electronic presentation

Vocabulary Words: Sugt'stun Dialects

English:	Prince William Sound:	Lower Cook Inlet:	Eyak:
Fish		Iqulluk	
Splitting Fish		Siqluku qukakun	
Strip fish for drying		Tamuleqlluki	
Strip fish for smoking		Paliliaqlluki	
Gills		Paciit	
Backbone		Pukqum nana	

Fins		Culugsutia	
Cut the fish head in half		Kuplluku igullum nasqua	
Brine		Salunam merra	
Smokehouse		Ciqlluaq	
Kidney		Tartuq	

Materials/Resources Needed:

Books:

How to Split, Dry and Smoke Salmon
Looking Back on Subsistence pp. 6-9, p. 23
Chenega As I Saw it-It's people, pp. 9-11, p. 14
We are the Land, We are the People

Websites:

<http://jukebox.uaf.edu/NanPG/nanwalek/html/23506.html> Vincent Kvasnikoff #13. Fishing
<http://jukebox.uaf.edu/NanPG/prtgrham/html/23507.html> Simeon Kvasnikoff # 20 & 21

Video:

Diane Selanoff demonstration for Cordova group
Copy of fish anatomy handout for each student

In the kit:

Chugachmiut apron
Cutting board
A fresh or frozen (thawed for class) salmon
Filet knife or ulu
A metal spoon
Sharpener
Gloves
Clean container for the filets
Twine

School provisions:

Tarp or Newspaper
Cutting board
Garbage can with doubled up plastic bags (place all the waste on layers of newspaper to keep the blood from dripping), for blood and innards

Teacher Preparation:

- Invite an Elder or Recognized Expert into the classroom to share their knowledge on traditional way of splitting fish and the Sugt'stun/Eyak words that correlate with the process.
- If Elder is coming, review with the students, proper ways of showing respect to the guest speaker.
- Review the books and booklet on *How to Split, Dry and Smoke Salmon*, the books have preservation techniques and beliefs

- Review the interviews on the Project Jukebox site
- Review the video of Diane Selanoff showing the splitting process.

First Clip

<https://www.dropbox.com/s/tdtjuem1afp1j97/10a%20Diane%20Selanoff%2C%20Fish%20FileStripCan%20%205.31.2017.MP4?dl=0>

Second Clip

<https://www.dropbox.com/s/bsp1lilf0wxstv/10b%20Diane%20Selanoff%2C%20Fish%20FileStripCan%20%205.31.2017.MP4?dl=0>

Third Clip

<https://www.dropbox.com/s/thkargigm8aqiu4/10c%20Diane%20Selanoff%2C%20Fish%20FileStripCan%20%205.31.2017.MP4?dl=0>

Fourth Clip

<https://www.dropbox.com/s/hzbr77c8pidkfq/10d%20Diane%20Selanoff%2C%20Fish%20FileStripCan%20%205.31.2017.MP4?dl=0>

- The lesson is best to do outside, but if showing how to split the fish inside, please cover the table and floor with a lot of newspaper
- Put cardboard on top of newspaper.
- Give fish heads/fish eggs to Elder/students if they would like to take home and cook.
- Create documentary on information of the salmon
- Insert response from question throughout the classes
- Video the cutting of the salmon, processing, making strips, and cutting twine for hanging fish
- Ask for a volunteer/s to smoke the fish that has been processed and bring it back to the class when it is ready to consume.
- Have the volunteer/s document how the fish was smoked from the beginning to the end.
- A copy of labeling a fish, have students apply Sug'stun/Eyak vocabulary to worksheet
- Students share a recipe

Opening:

Traditional ways of preserving salmon have been passed down from generation to generation. One of the ways is the splitting, drying and smoking of fish for preservation is still a favorite today among the Chugach Region people. This lesson will be how to split fish and depending on time, can include instructions for making strips. Traditionally, no part of the fish wasted, so I will eventually show you how to cut the fish head, how we use the back bone and save the fish eggs. The fish eggs were used in many ways depending where you live; there are several recipes at the end of the lesson. Below is an old belief about salmon when caught and how to treat the remains.

“Fish intestines should be thrown back into the water so that they may turn into new fish. If they drift ashore, the soul of the fish, which remains in the guts, will die and the fish will not come to life again. The first fish (salmon?) caught each year must be eaten entirely except for the gall and the gills. If anything of the fish is wasted, it will never come back.”ⁱⁱⁱ

Activities:

Class I:

1. If an Elder is available, ask the Elder to show the students the traditional way to split fish while at the same time saying the Sugt'stun/Eyak word for the fish parts.
2. If an Elder is not available, have the students watch the video where Diane Selanoff shows how to split fish.
3. Place the whole fish on the cutting board made from the cardboard box, lying on top of layers of newspaper and say the Sugt'stun/Eyak words for each part listed.
4. Start the splitting process by cutting off the head of the salmon, cut under the gill plate near the throat.
5. Gut the fish by cutting off the anal fin and slice up the middle of the belly, starting from the vent up to where the head was removed. Do not cut deeply, avoiding areas such as; eggs, stomach and the gall bladder (if gall bladder is cut, it can ruin the meat of the fish)
6. Pull out the innards carefully, save the eggs if it is a female for later use.
7. Place the innards on a clean piece of cardboard for students to look at and create a drawing or capture the parts with a camera, print it out to label the parts and research what they are.
8. Using a spoon or the ulu and scrap out the blood (kidney), wash the fish and rinse the blood from cavity of the fish, removing as much as you can.
9. Ask if anyone wants the backbone (in my village people will smoke them for a day or so to boil to have with seal oil and rice or just dry them to eat throughout the winter) as well as some of the fins especially if there is fish meat still left on them.
10. Do you notice the lateral line going across the salmon? Have students research the purpose of the lateral line.

Class II:

1. The fish is ready to cut, split and strip, depending if you want to make dry fish or smoked salmon strips.
2. Questions for students;
 - Have you made smoked fish?
 - What kind?
 - Did you make dry fish?
 - How was it preserved?
 - Has anyone had fish preserved in seal oil?
 - Why was it preserved in seal oil?
3. Have Elder/Recognized Expert demonstrate how to cut the salmon into strips.
4. Encourage students to ask questions about brining, smoking and preserving of the fish.
 - How do you make brine?
 - What kind of salt is used?
 - Are there other ingredients you add?
 - How do you know if the brine is ready for the fish?
 - What kind of knot is used when tying with the twine?
 - How long do let the strips sit in the brine?
 - Does it matter what kind of smokehouse you put them in?
 - Do you have to get a certain kind of wood?

- How do you choose your wood?
 - Do you burn wood every day to cure the fish?
 - How long do you smoke the fish?
 - Is the fish preserved a certain way?
5. After discussion make sure students document the responses.
 6. Read, Looking Back on Subsistence p. 6-9, p. 23 and Chenega *As I Saw it-It's people*, p. 9-11, p. 14. Is fish processed this way now? What preservation techniques changed and why?
 7. Have students bring a favorite recipe for fish as part of their electronic presentation

Class III

1. Allow students to create an electronic presentation;
 - Include the steps of splitting, preparation for drying and stripping fish for smoking.
 - Research through books that come with the heritage kit
 - Online about splitting fish for drying and stripping for smoking
 - Preservation techniques; traditional vs. today
 - Recipes using fish and all parts
2. Have students present their work.

Assessment:

- Student correctly describes/shows the process of splitting, preparation for drying and stripping fish for smoking.
- Student applies Sugt'stun/Eyak vocabulary to presentation and labeling of fish worksheet.
- Student shared a traditional recipe for fish.
- Student created an electronic presentation



Splitting fish. Nick Anahonak (Dick's father) is the man at the back. Agrafina Anahonak is the woman kneeling in the middle.

Boiled Salmon Eggs

Fresh salmon eggs, still in the sack

Salt and pepper to taste

Boil a pot of water. Add the eggs to the boiling water. The sack will fall right off the eggs. After a few minutes, remove the eggs from the water, draining well. Season with salt and pepper.

iii

Crunchy Salmon Eggs

1 bucket raw salmon eggs (beebles)

1 onion

Salt and pepper to taste

Rinse the salmon eggs in cold water. Place them in a large bucket and cover them with water. Let them soak in the refrigerator overnight. The following day, drain off any excessive water. The beebles are ready when they will bounce on a flat surface. Place the beebles in a large bowl. Dice up the onion and add to the bowl. Sprinkle with salt and pepper. Mix well.

(The eggs for this recipe is from salmon that are in the streams spawning)

iv

Piinaq

1 pot full of raw salmon eggs

Salmonberries

Blueberries

Place the salmon eggs in a large bowl and mash with a potato masher. The skins from the eggs will come off during this process. These should be discarded. Once the skins have all been removed, set the bowl of mashed eggs in a warm corner, covered. Ferment the eggs for three to four weeks or until the mixture develops a crust. In a large pot, heat several cups of salmonberries for about eight minutes. Mix well with fermented salmon eggs. Before serving, mix with fresh blueberries.

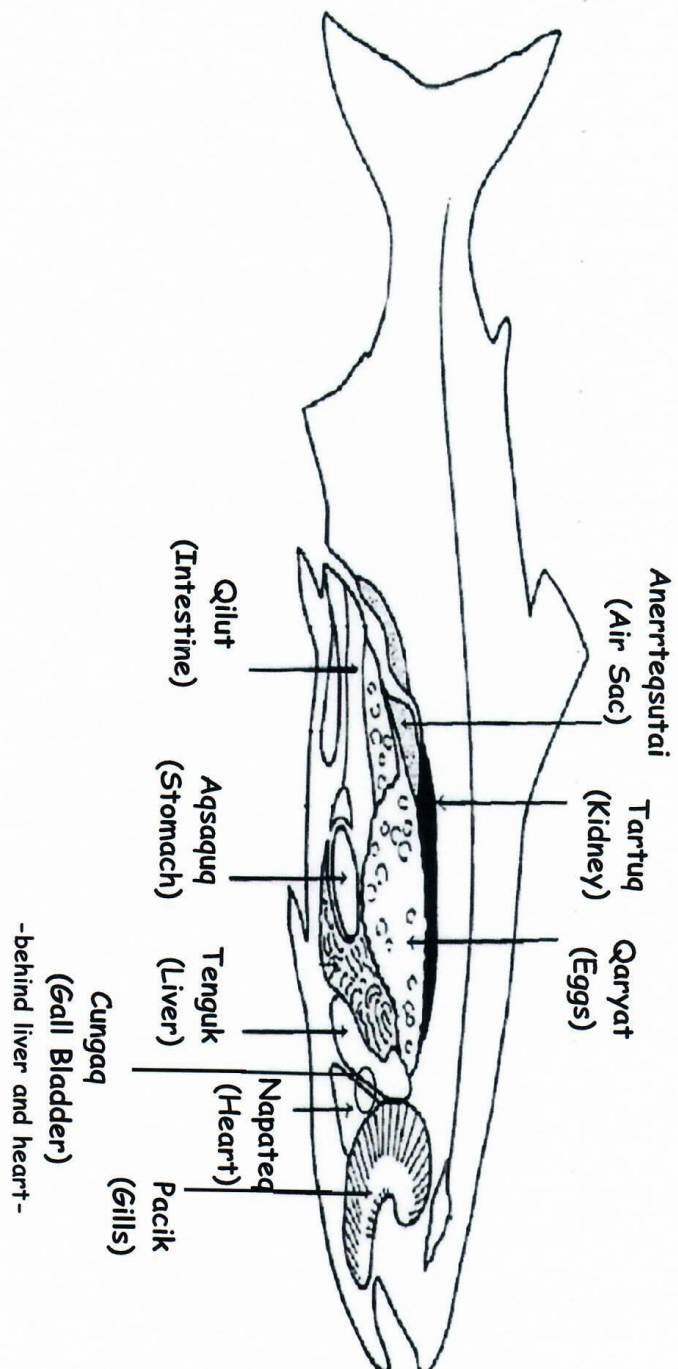
ⁱ Bill Hjort, Respecting Mother Nature, in *We Are the Land, We Are the Sea: Stories of Subsistence from the People of Chenega* (pp. 33). Anchorage, AK: Chenega Heritage, INC.

ⁱⁱ (1953). Birket-Smith K. *The Chugach Eskimo* (pp.42).

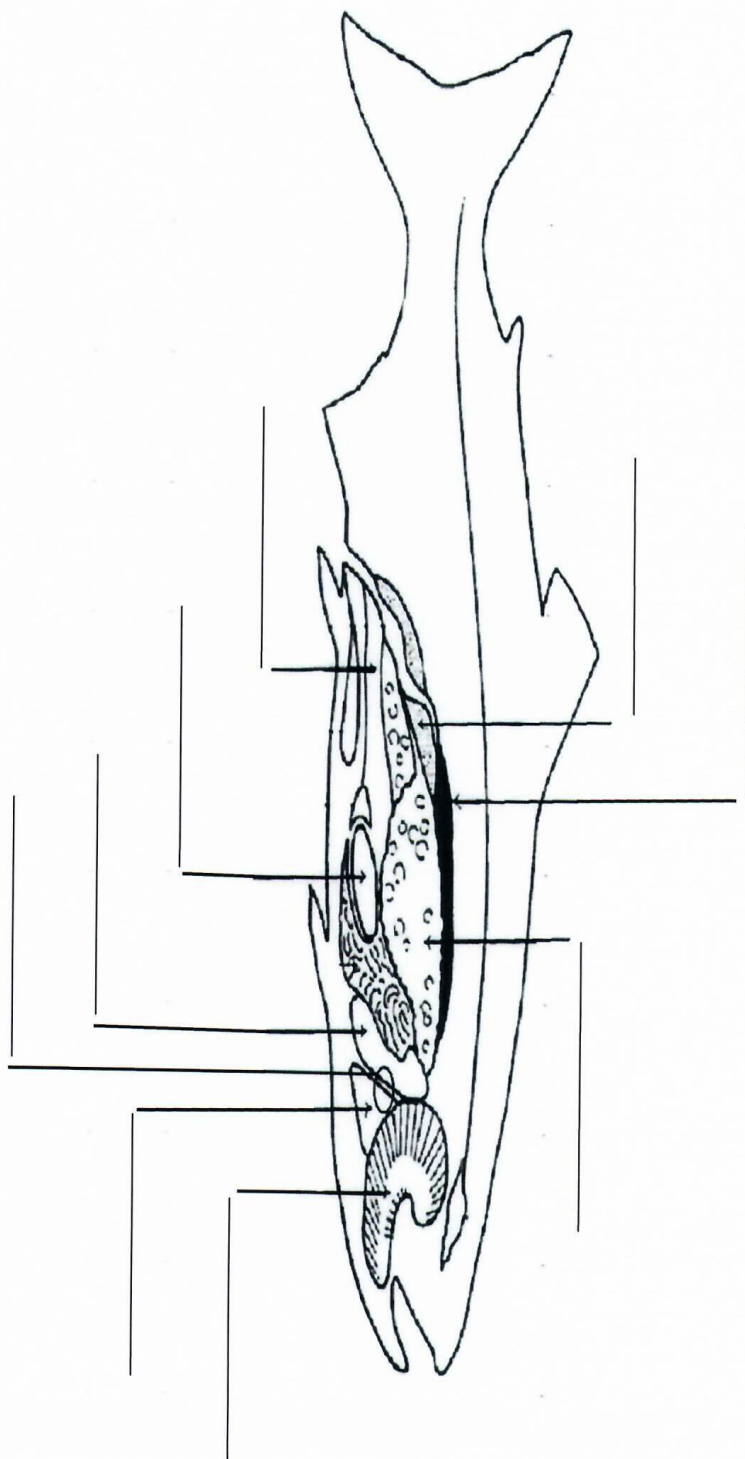
ⁱⁱⁱ (2007). The Old Ways. *We Are the Land, We Are the Sea: Stories of Subsistence from the People of Chenega* (pp. 152). Anchorage, AK: Chenega Heritage, INC.

^{iv} (2007). The Old Ways. In *We Are the Land, We Are the Sea: Stories of Subsistence from the People of Chenega* (pp. 152). Anchorage, AK: Chenega Heritage, INC.

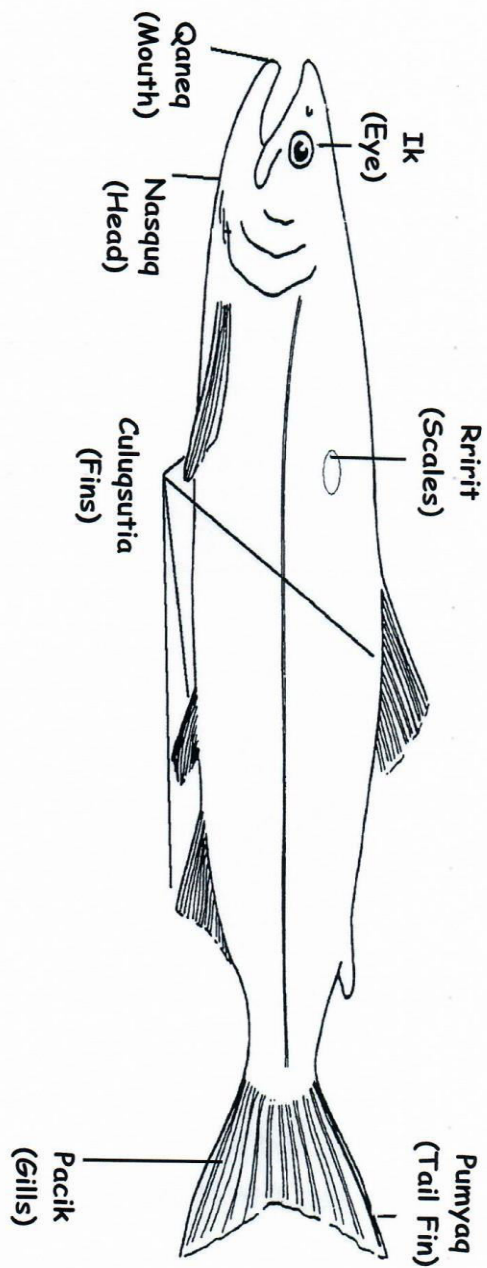
Sugt'surllinaq Nupuglluta: We Only Speak Sugt'stum



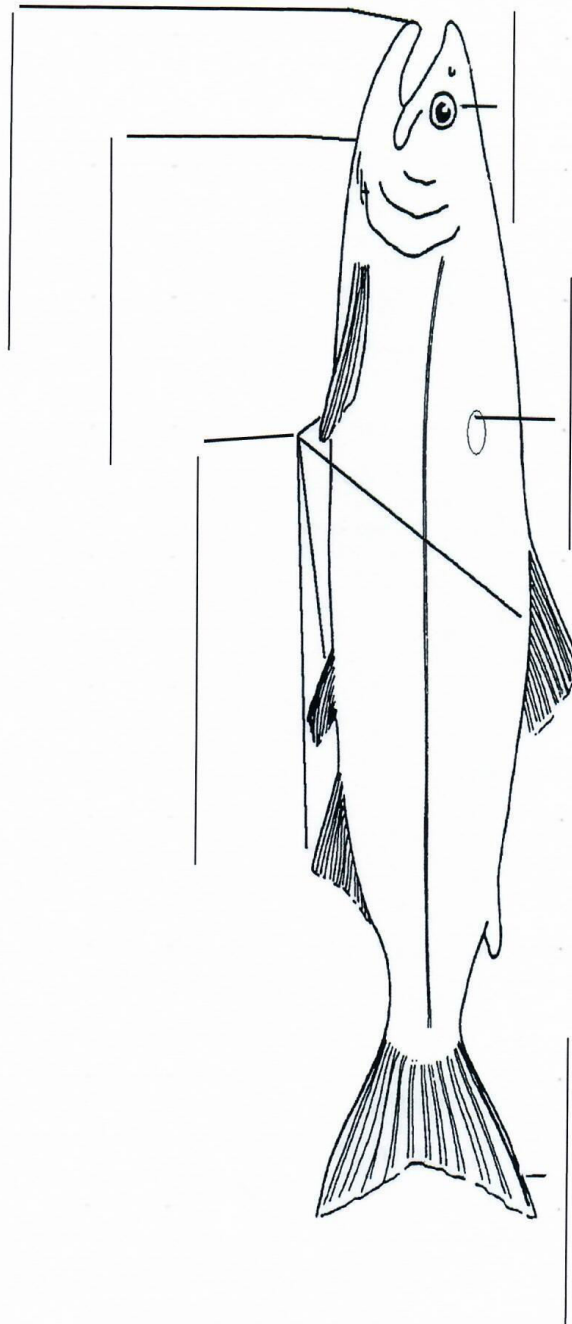
Sugt'sturllinaq Nupuglluta: We Only Speak Sugt'stun



Sugt'surllinaq Nupuglluta: We Only Speak Sugt'stun



Sugt'sturllinaq Nupugllua: We Only Speak Sugt'stun



TRADITIONAL FOODS AND RECIPES: WATER FOWL GR: 6-12(LESSONS 4-5)

Elder Quote/Belief: “My job was to run and grab the duck as soon as Phillip shot it, after it fell to the ground. After I retrieved the third duck, I hollered, “It’s still alive!” Phillip yelled back, “Wring its neck!” So I stood there wringing the duck’s neck like you would wring out a dish rag. Phillip came over and said. “No, no, you don’t actually wring the duck’s neck. You take the duck’s head and spin it around and around until it’s dead.” We had a good laugh about it when we went home.”ⁱ

Grade Level: 6-8

Overview: Waterfowl added more protein to the diet; it was boiled, roasted, dried and even salted. Gathering eggs was done in the spring, which is still practiced presently. The skin some of which was used as part of clothing, bones provided tools and even making beads, the plumage for mattresses, decorative additions to clothing and head dresses.

Standards:

<i>AK Cultural:</i>	<i>AK Content:</i>	<i>CRCC:</i>
A 3: Acquire and pass on the traditions of their community through oral and written history.	A 12: Students will be able to distinguish the patterns of similarity and differences in the living world in order to understand the diversity of life and understand the theories that describe the importance of diversity for species and ecosystems	SS 3: Students should have knowledge of stories about subsistence stories

Lesson Goal: To learn about the types of birds available to hunt in the local area.

Lesson Objective(s):

- Learn Sugt’stun/Eyak dialect for birds
- Research online and resources provided in the heritage kit about traditional uses of birds
- Research hunting regulations of birds
- Share a traditional recipe
- Create an electronic presentation

Vocabulary Words: Sugt’stun Dialects

English:	PWS:	Lower Cook Inlet:	Eyak:
Duck	Saqulek	Saqulek	
Goose	Temngiaq	Temngiaq	
Loon	Tuullek	Tuullek	

Mallard	Ngillqitaq	Ngillqitaq	
Black Saltwater Duck	Cuuwarnaq	Cuuwarnaq	
Puffin	Ngaqngaq	Ngaqngaq	
Blue-bill duck	Egtuk	Egtuk	
Grouse	Egtugtuliq	Egtugtuliq	
Seagull	Maruyaq	Naruyaq	
Bird egg	Peksuq	Peksuq	
Feather	Culuk	Culuk	

Materials/Resources Needed:

Elder/Recognized Expert

Books:

Looking Back on Subsistence

We are the Land, We are the Sea

Qaqamiiġux

ANTHC Traditional Food Guide

Websites:

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

<http://ankn.uaf.edu/Curriculum/Books/DoesOneWay/WILDLIFE%20MANAGEMENT.html>

<http://www.eyakpeople.com/dictionary>

Teacher Preparation:

- Contact Elder/Recognized Expert to share knowledge of ducks/bird from local area.
- Review vocabulary words.
- Record, take pictures during students talking to Elder/Recognized Expert, share this with students for them to add to their electronic presentation.
- Review books, online information.
- Divide students into groups to research the listed ducks
- Have students interview a family member, community member or Elder who knows about duck hunting.
- Create a list with students on questions for the interview
- Share a traditional recipe

The Blind Boy and the Loon
(Makari)

There was a blind boy who went up to a lake and heard a loon calling. He asked the loon to come to him and cure his eyes. "I wish you would come and cure my eyes," I can hear you, but I cannot see you." The loon called again right close by where the boy stood. It said: "Crawl on back, hold me tight and don't let go. I am going to dive with you." The loon went down and swam around the lake five times before he came up. When he came up, the boy could see everything around. Then the boy said: "Wait for me here till I come back," so he could give him something as a remembrance. The boy returned from his house. He brought an apron made of white Dentalium shells. The boy gave it to the loon, "so you can remember me." The loon said: "Wait for me till I come up." Then he dived and when he came up in front of the boy he had the apron on. That is the reason why loons have white breasts."ⁱⁱ

Opening:

What do you know about ducks or other waterfowl? For this lesson, we will be doing some research on what kinds of birds are found locally, whether or not they were traditionally hunted and if so, how was the birds traditionally prepared. We will be researching several questions, such as; what types of waterfowl are hunted currently and what are the hunting regulations today?

Activities:

Class I:

1. Review Sugt'stun/Eyak vocabulary words
2. Introduce Elder/Recognized Expert to the classroom. Have questions ready to ask, i.e.,
 - Did you hunt for birds?
 - What kind?
 - Where did you hunt for them?
 - How did you use the bird?
 - Were there parts used other than eating, if so, what parts and why?
 - Did you age your duck before you ate it and why?
 - When is the best time to hunt?
 - What is your favorite bird to hunt for?
 - Do you know what the current hunting regulations are?
 - Do you gather eggs, if so, when do you usually gather them and what kinds of eggs?
 - Can you share a traditional bird recipe with us?
3. After the Elder/Recognized Expert sharing of Traditional Ecological Knowledge (TEK), create groups with students and explain they will be interviewing a family member, community member or an Elder in their community to gather information about birds that are hunted for consuming.
4. Have the class help come up with additional interviewing questions and ask the students to write them down for the interviews.

5. Ask the students to design a guide to use while interviewing to enhance their electronic presentation.

Class II:

1. Research hunting regulations that apply to the bird they are researching.
2. Allot time for preparing presentations, encourage students to get creative, maybe a song, dance, and/or poems. Requirements that need to be included in their electronic presentation include the research on waterfowl assigned, traditional uses, recipes, where to hunt them or gather eggs and current hunting/gathering regulations. The students need to apply the Sugt'stun/Eyak vocabulary to their presentations.

Class III:

1. Have groups present their presentations

Assessment

- Student created an electronic presentation of their research on the waterfowl with the required elements.
- Student correctly applied Sugt'stun/PWS/Eyak dialect to their presentation
- Student provided a traditional bird recipe(s) to share.

ⁱ (2007). The Old Ways. In *We Are the Land, We Are the Sea: Stories of Subsistence from the People of Chenega* (pp. 152). Anchorage, AK: Chenega Heritage, INC.

ⁱⁱ Birket-Smith, K. (1953) *The Chugach Eskimo*. p. 151

TRADITIONAL FOODS AND RECIPES: WHAT KIND OF LAND MAMMALS DID THEY EAT? GR: 9-12 (LESSONS 9-12)

Elder Quote/Belief: “Goats and bears were the most important land animals hunted by the Eyak.”¹

“Most of the supplies for winter were obtained in the summer. Meat to be dried was cut in strips and smoked over a slow fire of green hemlock (green alder?) because it burns slowly with the little heat. In incident 11, Raven’s partner smokes both fish and meat with drift wood. It takes about a week to smoke meat. Sometimes meat was boiled before smoking. Dried meat was put up in wooden boxes with seal oil and these were kept on top of the sleeping rooms. No pemmican was made. In incident 21, Raven teaches the people to put up goat fat in bark pails the liver of animals was never dried, but was always eaten fresh. Seal brains were eaten.” Excerpt from Kaj Birket-Smith and Frederica De Laguna: The Eyak Indians of Copper River Delta, Alaska

Grade Level: 9-12

Overview: The Chugach Region people depended on all resources for survival. Traditionally, our ancestors would consume and waste very little of the animal. Land mammals provided meat that was dried and put away for winter supply; some food would be stored in dried seal stomach with seal oil as a preservative, the remaining parts were used for clothing as well as using the bones for tools. In Prince William Sound, the fat surrounding the organs of the Mountain sheep was dried and eaten as a delicacy.

Standards:

<i>AK Cultural:</i>	<i>AK Content Science:</i>	<i>CRCC:</i>
D4- Gather oral and written history and provide and appropriate interpretation of its cultural meaning and significance.	A 14a: A student who meets the content standard should understand: a) the interdependence between living things and their environments	SS(9) Students should know the rules and regulations of state and federal laws

Lesson Goal: To learn about the land mammals that was hunted to provide additional meat.

Lesson Objective(s): Students will:

- Learn Sugt’sun/Prince William Sound/Eyak vocabulary
- Research resources; books, internet and interviews about the mammals that were hunted
- What parts were used for food
- Learn about state regulations on hunting
- Create an electronic presentation

Vocabulary Words:

Sugt'stun Dialects

English:	Prince William Sound:	Lower Cook Inlet:	Eyak:
Mountain Sheep	Pehnaiq	Pehnaiq	
Fat from an animal	Uquq	Uquq	
Caul Fat from the Mountain Sheep	Toonuk		
Bear (black)	Tan'erliq	Tan'erliq	
Rabbit/Hare	Uka'iq	Uka'iq	
Porcupine	Qangateraq	Qangateraq	
Deer (more than one deer also applies to Caribou)	Tuntut	Tuntut	

Materials/Resources Needed:

Local Elder/Recognized Expert to share about traditional hunting and preparing game for food
 Computers/iPads/smart tablets or smart phones
 PowerPoint capabilities

Websites:

- <http://www.adfg.alaska.gov/index.cfm?adfg=blackbearhunting.skinning>
- http://www.subsistence.adfg.state.ak.us/download/Special%20Publications/SP2_SP2000-001.pdf p.81- p.83
- <http://www.adfg.alaska.gov/index.cfm?adfg=northamericanporcupine.main> (species profile)
- http://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneeds.view_article&articles_id=491 (porcupine research)
- <https://www.youtube.com/watch?v=0A3gnryhAQ> (how to skin a porcupine)
- <http://www.adfg.alaska.gov/index.cfm?adfg=smallgamehunting.hare> (hunting information)
- <https://www.uaf.edu/files/ces/publications-db/catalog/hec/FNH-00324.pdf> (how to skin and prepare it for consumption)

Books:

- *Looking Back on Subsistence*, p. 17-19, bear and goat
- *Fireweed Cillqaq, Life and Times in Port Graham*, right hand side of p.24 second paragraph, p.25
- *We are the Land We are the Sea*; p. 51-52, p. 74-75, p.92-93, p. 96-97, p.101-103, p.126-127

Teacher Preparation:

- Review
 - Vocabulary words
 - Websites
 - Books listed
- Contact local Elder/Recognized Expert and invite to share traditional knowledge about; hunting, preparing, what parts were eaten, preserving hunted mammals, where they were hunted and were there state regulations that they needed to be abided by as opposed to presently.
- Assign students into six groups to research the six vocabulary words

Opening: Traditionally, the Chugach Region people hunted and gathered all their food from the sea and land only when needed. Today, we are going to learn more about the land animals that were used as our traditional food. There were different ways to preserve, prepare, cook and utilize all of the game that was hunted to ensure no waste. There were many traditional beliefs about hunting animals. In the past, there was no wasting any part of the animal because it was believed the animal gave their life to us so we could survive. We were taught to show our respect for the animal's spirit by utilizing everything. It was a traditional way to maintain and preserve the abundance of the animals for the future. Today, because of the increased number of people hunting there are state regulations that are to be followed. I am going to read a few excerpts of hunting stories, so please pay attention.

Out of the book, *Chugach Eskimo-*

"On bear hunts the hunter carried with him leaves of a certain fern. tuqujulinuq (not spelled correctly from book due to a symbol not available to apply in word), the root of another fern (Polypodium vulgare), and the dried veins from the underside of a bear's tongue, If the bear attacked he would chew this and breathe at the bear, as that would immediately have a soothing effect on the animal. Before killing it, the hunter would say: "We do this because we need you-not for fun". The skull (and the bones not used for tools?) were buried at the place where the bear was killed, facing inland so that the remains might turn into a new bear."ⁱⁱ

Out of the book, *We are the Land, We are the Sea-*

"I was the only woman in Tatitlek who ever went goat hunting with the men. They didn't want to take me because I was a woman. They said they'd have bad luck, but I told my husband I really wanted to go; so they took me with them up that mountain. It was beautiful. We ended up getting two goats. I shot my goat on the hoof first, and then I shot him in the neck. On the way down the mountain you had to climb down those steep bluffs. I remember getting stuck. I hollered to my husband, "I'm stuck!" and he said, "I can't come down, it's too slippery." One guy was above me and he said, "Tie a rope around your waist and we'll lower you down." The other hunters went around and helped me get down. I was pretty proud that I got a goat, and my sons were glad because goat was different kind of meat. You really worked hard for that meat. Even though it was such hard work, we still shared a little of the meat with elders when we got back to the village. We'd go and get bear the same way. That's the way we did things; we shared"-

-Jesse Tiedeman, Tatitlek (Smelcer, 2007)ⁱⁱⁱ

Rhoda Moonin, from Nanwalek, tells this story shared from a past Elder, Nick Romanoff. “One day I visited with Nick (Romanoff), we call him Tusa. I asked him how they hunted porcupines, he said, “When they are on the tree, way up there, you make sure clean the bottom of the tree then get those dried branches hanging on trees, gather them, light a bunch on the bottom this lets the smoke get thicker, smokes up and it frightens a porcupine to fall or climb down. Then you can club them on the head. Make sure the fire is completely out. Take your porcupine home, singe, clean and cook it.”

Nancy Yeaton from Nanwalek explains how her Godfather, Mike Tanape, use to take the porcupine (once the porcupine has been taken from a tree, shot or clubbed on the head) they would have a fire going, and place the porkie on the fire to singe the hair and quills off.

Activities:

Class I:

1. Review vocabulary words with students.
2. Introduce Elder/Recognized Expert to the class.
3. Give students ample time to ask questions, document their questions onto the board and have students take notes.
4. Take pictures of guest and students as they ask questions.
5. Have students apply the pictures to their electronic presentations.

Class II:

1. Give ample time for groups to research the following to put into their PowerPoint:
 - The mammals Sugt'stun/Eyak vocabulary words
 - Where was the animal hunted?
 - How did they hunt for it?
 - Were there any traditional beliefs associated with the animal?
 - What parts were used for food, tools and clothing?
 - How it was preserved?
 - Does your family have a treasured recipe or how would you prepare the meat from the animal you researched?
 - Research a traditional recipe used in family.
 - Research state regulations on assigned animal and find out if the regulations impact hunting now, and if so, how and why?
2. Have students gather pictures to apply to their presentation using the Sugt'stun/ Eyak vocabulary words.
3. Allow for students to prepare their presentation for the next class.

Class III:

1. Have the groups present their electronic presentation to the class.

Goat Fat on Bread

½ pound goat fat
Several slices of bread

Hang the goat fat until it dries. In a large baking dish, add several slices of bread. Slice the dried goat fat and lay on top of the bread. Bake in oven until the fat melts.^{iv}

Porcupine

This recipe was shared by Godfather Mike Tanape, Nanwalek.

Butcher a porcupine into small pieces, even saving the feet (removing the nails, leaving the pads of the feet on, these are the best parts), rinse them in cool water and set aside. In a cooking pot, add chopped onion, garlic, fresh ginger, cut-up potatoes (various sizes) and sauté in your preference of fat (bacon grease, olive oil/Wesson oil), add porcupine, season with salt, pepper and Worcestershire sauce (do not add water, for enough moisture comes from the meat and the potatoes create a delightful sauce). Let it simmer for a couple of hours, and have it over rice.

Nancy Yeaton, Nanwalek

Bear Ribs

Wally Kvasnikoff, Nanwalek

Cut ribs to the size you want. Boil in water with salt, pepper, onion, garlic, L&P Worcestershire sauce, until meat pulls from bone.

Assessment:

- Student successfully created an electronic presentation that included notes, research material and pictures as required.
- Student correctly identified what part of the animal was traditionally used for food, tools and clothing.
- Student applied Sugt'stun /Eyak vocabulary in their presentation
- Student researched state regulations with the animal they choose
- Student shared a traditional recipe within their presentation and the whole class compiled the recipes to share with others.

ⁱ Birket-Smith, K., & Laguna, F. D. (1938). *The Eyak Indians of the Copper River Delta, Alaska*. Kbh. ⁱp.100

ⁱⁱ Birket-Smith, K. (1953) *The Chugach Eskimo*. p. 38

ⁱⁱⁱ (2007) In *We are the land, we are the sea: stories of subsistence from the people of Chenega* (pp. 114). Anchorage, AK: Chenega Heritage, INC.

^{iv} (2007) In *We are the Land, We are the Sea: Stories of Subsistence from the People of Chenega* (pp. 142). Anchorage, AK: Chenega Heritage, INC.

TRADITIONAL FOODS AND RECIPES: WHAT HAVE WE LEARNED? GR: 9-12 (LESSON 13)

Elder Quote/Belief: *“My grandparents, Steve and Anna Vlasoff, really taught me how important it was to live off the land. They taught me everything I know. They taught me how to respect the land the sea. You had to work with Mother Nature in order to survive.”ⁱ*

Grade Level: 9-12

Overview: The Chugach People depended on the provisions from the land and sea. When our ancestors hunted and gathered, it was approached with respect, humility and thankfulness. People were busy throughout the year, hunting and gathering animals, fish and plants for food, preserving the food to add to their winter supply and sharing with one another.

Standards:

<i>AK Cultural:</i>	<i>AK Content Science:</i>	<i>CRCC:</i>
C 1) Perform subsistence activities in ways that are appropriate to local cultural traditions.	F3- Develop an understanding of the importance of recording and validating cultural knowledge.	SS2) Students should be able to prepare subsistence foods.

Lesson Goal: Able to show or explain the traditional ways/ beliefs of hunting, harvesting, gathering, preserving and preparing foods to ensure future abundance of resources. the and research the nutritional values of the traditional foods.

Lesson Objective(s): Students will:

- Apply Sugt'stun/Eyak vocabulary from the previous lessons.
- Create an electronic presentation from accumulated electronic resources of previous lessons.
- Interview and record an Elder, family member or community member making a traditional dish and explaining the entire process of hunting, harvesting, gathering, preserving and preparing foods to create a traditional dish.
- Research and document any nutritional values found about the traditional foods.

Vocabulary Words: Sugt'stun Dialects

English:	Prince William Sound:	Lower Cook Inlet:	Eyak:
See previous list of words in earlier lessons			

Materials/Resources Needed:

- Elders or community members willing to be videotaped, making a traditional dish and explaining process from beginning to end.
- Sugt'stun /Eyak vocabulary words and electronic presentations from previous lessons.

Websites:

http://www.subsistence.adfg.state.ak.us/download/Special%20Publications/SP2_SP2000-001.pdf
p.81- p.83
<https://www.youtube.com/watch?v=in-7B93TQTo> , *Bidarkies; Subsistence Intertidal Food Harvesting in Alaska*
<http://www.bing.com/videos/search?q=preparing+Sea+Urchin&&view=detail&mid=360B2EED55D6CAE4B501360B2EED55D6CAE4B501&FORM=VRDGAR> , preparing Sea Urchin
<https://www.youtube.com/watch?v=i7SanTJdwCk> , How to clean a sea cucumber
<https://www.youtube.com/watch?v=f0DIjJ6CKIw> , How to clean chitons and slice them
<http://www.eyakpeople.com/dictionary>

Audio:

<http://jukebox.uaf.edu/NanPG/prtgrham/html/EIMc2.html> Elenore McMullen interview
<http://jukebox.uaf.edu/NanPG/nanwalek/html/23506.html> Vincent Kvasnikoff #13. Fishing
<http://jukebox.uaf.edu/NanPG/prtgrham/html/23507.html> Simeon Kvasnikoff # 20 & 21

Books:

ANTHC Traditional Food Guide
Imam Cimiucia, Our Changing Sea
COMMON EDIBLE Seaweeds in the Gulf of Alaska
How to Split, Dry and Smoke Salmon
Looking Back on Subsistence
Chenega As I Saw it-It's people,
We are the Land, We are the People
Fireweed Cillqaq, Life and Times in Port Graham
Alexandrovsk No.1 English Bay in its Traditional Way
Qaqamiiġux Cookbook

Teacher Preparation:

- Gather book materials and display them for students to access.
- Copy the list of websites and audio for the students to be able to open and research.
- Compile and review the Sugt'stun/Eyak vocabulary words.
- Computers, iPads available for students to use

Opening: Foods, especially traditional foods, play an important role in our lives. Traditional foods not only were necessary to survive, but also ties us to our past. When a traditional food is being hunted, harvested, gathered, preserved and prepared it stirs old memories and allows us to create new memories by sharing with others.

Activities:**Class I:**

1. Have resources available for students in class to use.
2. Explain to students they will compile all the material from previous lessons and create an electronic presentation of traditional foods and recipes. (Decide whether or not allowing students to work in pairs/groups.)

3. Allow students ample time to look back on their past work, notes, kit resources and online resources to gather information to apply to the electronic presentation.
4. Together as a class, derive a list of open-ended interview questions to encourage more sharing of Elder or community member's traditional ecological knowledge.
5. Explain the homework. Students will be required to videotape an interview with an Elder, family member or community member making a traditional dish and/or explaining the process of hunting, harvesting, gathering, preserving and preparing a traditional dish.
6. Remind students they will then be able to edit the interview and will need to include traditional recipes from home, community and/or from resources.
7. Encourage creativity; dances, songs, stories and even poetry can be included in the presentation

Class II:

Student Presentations showcased.

Assessment:

- Students completed an electronic presentation that included the following:
 - Sugt'stun/ Eyak vocabulary words
 - Researched resources, prior lessons, activities, and traditional recipes.
 - Interview with an Elder/Recognized Expert, family or community member.

ⁱHjort, Bill . (2007). The Old Ways. In *We are the land, we are the sea: stories of subsistence from the people of Chenega* (pp. 33). Anchorage, AK: Chenega Heritage, INC.