

TTCD Lesson Plan (17): Berry Harvest

Unit: Berries	Grade(s): K-12	Class Size: 1-50	Lesson Duration: 60 minutes	Location: Outside
Topic(s):	Harvest and foraging Cultural harvest			
Student Prerequisites:	N/A			
Essential Questions:	What foods did our ancestors make using wild berries? What makes this place a good habitat for many berry species?			
Student Objectives:	Students will identify some of the actions we can take to encourage berry plants to reproduce and thrive. Students will practice harvesting berries in a way that is appropriate to Dena'ina cultural traditions.			
Standards:	Supports NGS Standards: 3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. Cultural Standards: A-4: Culturally-knowledgeable students are well grounded in the cultural heritage and traditions of their community. Students who meet this cultural standard are able to: practice their traditional responsibilities to the surrounding environment. C-1: Culturally knowledgeable students are able to actively participate in various cultural environments. Students who meet this cultural standard are able to: perform subsistence activities in ways that are appropriate to local cultural traditions. B-3: Culturally knowledgeable students are able to build on the knowledge and skills of the local cultural community as a foundation from which to achieve personal and academic success throughout life. Students who meet this cultural standard are able to: make appropriate choices regarding the long-term consequences of their actions.			
Local Context:				
Vocabulary:	harvest stewardship preserve			
Dena'ina language	<i>Added by TTCD or community partners</i>			

words:	
Materials:	• Used 32oz or 64oz yogurt containers • Hole puncher • Yarn or string • Half-sheets of paper • Pens or pencils • Fruit leather recipe from University of Alaska Fairbanks Cooperative Extension (find at https://cespubs.uaf.edu/) • Dehydrator for making fruit leather
Instructor Prep:	• Punch holes on either side of each of the empty yogurt containers, and string yarn through so that kids can hang the container around their necks or over one shoulder. (You may choose to do this activity with the students, so they can learn how to make their own harvest buckets.) • Consider some of the stewardship guidelines you might have for yourself while berry picking today, so that you can share this with the students. • Be sure to let students know days in advance what they need to wear to school for berry picking.
Introduction:	<i>Think-pair-share:</i> In what ways are berries important to our community and to other Alaska Native communities? (e.g., nutritious food source, bonding/learning experience between generations, creating dyes, preserving food for winter, building relationships with plants and land) Hand out harvest buckets (either pre-strung, or guide students to hole-punch and string their own buckets). Explain that today is berry harvest day. It is important that we harvest wild berries in such a way that will encourage our ecosystem (and therefore our berries!) to thrive into the future. Taking care of our environment and the plants and other organisms in it is called stewardship. Pass out quarter-size pieces of plain paper, or have students use their TTCD notebooks. Direct students to write or draw one way that they can take care of the plants and environment today, so that future generations of plants and animals will have healthy berry bushes. (e.g., leave some berries on the bush, “plant” some berries by tossing them to another part of the forest, be gentle with the plant, try not to pull too many leaves or stems, respect nearby plants that we are not harvesting from, share the berries with others).
Activity:	Visit a nearby location to pick berries such as raspberries, blueberries, rose hips, and bog cranberries. Make sure all students are dressed appropriately for the task at hand. Engage students in conversation while hiking and picking berries: • How are berries used in your family? • What are your siblings’ favorite berries? • What is your favorite way to eat or to preserve berries?

	• Why do you think this berry bush grew so well here? • What other plants do you notice grow closely to the blueberry bushes? • What are some of the cultural uses of other nearby plants? • Do you have any stories to share of coming to this place in previous years?
Wrap Up:	Gather the group back together. Direct students to close their eyes, if they are comfortable, and recall a happy moment they had while picking berries today. After 30 seconds or so, have everyone open their eyes. Have them share their stories with a person near them, or share out loud with the group. <i>Evidence of learning: Students who participate successfully in this activity will be actively engaged in berry picking for most of the time, share stories and ideas with the larger group or with nearby peers, and demonstrate respect for the berries and habitat. Their learning is demonstrated throughout the activity, not by any specific check of knowledge.</i>
Lesson Adaptations:	• In the introduction, have older students imagine that they are taking a very young sibling or cousin berry picking. Have them make a list of ways their sibling can take care of the berries and the environment. What would you tell them to do? What would you tell them not to do? • In the wrap-up, hand out another half-sheet of paper (or their TTCD notebook) to each student. Direct them to draw a scene from their time out berry picking. Encourage them to draw all of the living things that were in the scene, including plants, animals, and people.
Extensions:	• Use the collected berries to make fruit leathers with the students: make a berry puree using either a blender (for berries with small seeds) or a sieve (for berries with large seeds). Add honey and spread on parchment paper or a dehydrator tray. Dry using an oven or dehydrator. More recipes and instructions can be found by searching https://cespubs.uaf.edu/. • Participate in a berry monitoring project through Winterberry: Citizen Science for Understanding Berries in a Changing North: https://sites.google.com/alaska.edu/winterberry/home • Invite an Elder to join the class for the harvest and to share about traditional uses of berries or cultural importance of berries. Make sure to show gratitude to the Elder in appropriate ways, potentially including gifts, an honorarium, and a thank you note. Make sure also to prepare the class for the Elder visit. This resource is helpful: https://uasmat.edmethods.com/wp-content/uploads/2016/06/Elders-Presentation-for-UAS-ED.pdf • Invite families to join for the harvest. Have them share in the questions and stories while harvesting.
Reflections:	How did it go? What did students understand most/least? What could change about instruction or lesson plan?
Resources Used	Fairbanks Soil and Water Alaska Agriculture in the Classroom

