Honoring Our Oaks

Description

Oak trees are a keystone species that support a diversity of plants and animals, and are found throughout the Clear Lake region. Acorns are made into a nutritious meal that is a traditional food for Clear Lake's indigenous people. By identifying a role every student can take on to help make this traditional food, students can learn ways that they can also contribute to caring for a species that has sustained life in the region for millenia.

Objectives

Student Objectives	Connect the <i>Quercus</i> distribution iNaturalist data with cultural significance across Tribes.	YCCS Core Activity: Make Meaning
	Reflect on how students' behaviors and data contributions can help care for native species.	YCCS Key Youth Practice: Youth engage in complex socio-ecological problems
Educator Objectives	Through making a traditional food, help students consider how they each have a role in caring for oaks.	YCCS Key Educator Practice: Frame the work globally and locally

Key Vocabulary

Indigenous, Pomo

Instructions

Time

1 hour

Materials

White board and markers

- Printed copies of the Lake County Office of Education's Lake County Strong Map of Tribes in Lake County
- Printed copies of the map of iNaturalist oak observations in Lake County; note that a digital map of iNaturalist oak observations in Lake County can also be explored with students if internet is available.
- Printed and assembled acorn processing cards

Getting Ready

- Review the readings: Ye-Ma-Bax Napo Education and Activity Book Story of Squirrel and Lake County News' Mensam Mundum - World Table: Cuisine in our backyard, acorns article.
- Review the map of iNaturalist oak observations in Lake County and Highland Springs iNaturalist project example. A digital map of iNaturalist oak observations in Lake County can also be explored with students if internet access is available.

Facilitation

Part One

Have students discuss with a partner: When you go to someone's house, what does it mean to be a "good guest"? How do you behave, what do you not do, etc? After discussion, ask different pairs what things they came up with, and write those on the white board. Explain that in California, all non-Native peoples are guests on indigenous traditional lands; even Native people are guests if they are in a land that is not their traditional territory. Read aloud the list of behavior statements. Ask students to give a thumbs up if the behavior represents being a good guest on Native traditional land, and a thumbs down if it does not:

- Walking into someone's house when they are not home.
- Asking if you can borrow something before taking it.
- Cutting down your neighbor's apple tree without permission.
- Offering to help do the dishes after a meal.
- Cleaning up after yourself.
- Dropping off a new pet at someone's house without warning.
- Digging up items in your friend's yard without asking for permission.

Engage students in a conversation about why they would usually not behave according to the examples.

Ask if any students know the name of the indigenous traditional lands they are on right now. Explain that because we are all mostly guests on Pomo traditional lands, we must be respectful by helping to take care of the land; if we are disrespectful guests to Pomo lands, our behaviors

can be harmful for the plants, animals, and humans. Note: use more specific language for the Tribe nearest to your site.

Have students find their location and which Tribe is closest to them using the Lake County Office of Education's Lake County Strong Map of Tribes in Lake County. Have students compare this map with the map of iNaturalist oak observations in Lake County, and discuss with a partner: Can you find observations of oak trees near you? What about near each of the Tribes? Debrief with the whole group and have them notice how oaks are found everywhere on this map. Ask students:

- Why would having oak trees benefit people? Answers: Food source, heat source, shade
- Why would they benefit the animals? Answers: food source, shelter
- What animals rely on acorns from oak trees? Answers: squirrels, birds, people, etc.

Part Two

Transition by explaining that acorns are an important food source for both people and animals. For Native American Tribes in the Clear Lake region, acorns are a traditional food that has been prepared for millenia, and is eaten today. Its importance is reflected in its inclusion in traditional Pomo stories, like the Ye-Ma-Bax Napo Education and Activity Book Story of Squirrel. After reading this story, ask students how do the behaviors we exhibit when we are guests translate to how we care about the land?

• Possible answers: ask for permission before we use something, leave the place we visit better than we found it

Ask if any students have ever made acorn mush before. If there are students that have made it before, ask them what they did to make acorn mush. Tell students that they are going to learn what goes into making acorn mush. Hand out a set of acorn processing cards to each student. Students should move the cards in order as they listen to how acorns are processed into food being read aloud from pages 5-6 of the Lake County News' Mensam Mundum – World Table: Cuisine in our backyard, acorns article. Review the order from the article. If there is a student that has made acorn mush before, ask them if this order is similar or different from how they made it.

Ask students to reflect on which part of the processing they like the most. They should then choose that card, and group themselves by other people who also chose the same card. If certain cards have few or no students, assign a second card to a group. Point out to the students that each person can find a role in making this meal, and every person's help is needed. In this way, making acorn mush is a community effort.

Reflection

Remind students about what it looks like to be a good guest. Once in small groups, have each group brainstorm what they would do to be respectful in order to complete the step of the process on the card they chose. Some examples:

- Gathering: ask for permission to access land, ask for permission to gather from the tree
- Drying: let your neighbors know what you are doing
- Shelling: clear up after yourself/compost the shells
- Grinding: ask your neighbors if they want to help
- Leaching: be mindful of where are you getting the water from, keeping the water clean
- Cooking/baking: share the food with the people around you, clean up after yourself

Reflect on how it takes all of us to be good neighbors and care for the things needed to make acorn mush: acorns, water, community, time, heat source, etc. Ask students: What are some ways we can help take care of acorns as an important food source? Write answers on the white board. Possible answers: don't cut down the trees, make sure the water is clean and plentiful, set aside land for oak trees to grow, restore good fire, eradicate competition from invasive species.

Ask students to refer back to their map of iNaturalist oak observations in Lake County:

- Where can you find the most observations of oaks? Answer: The places with yellow or red colors have the most iNaturalist observations of Quercus recorded in Lake County.
- How might this data on oaks be helpful for Tribal people? Answer: Tribal people can use this data to know where they can find sources for traditional foods (ex. Highland Springs iNaturalist project)
- How might this data on oaks be helpful for non-Tribal people? Answer: We can use this data to know what places need more oaks planted, we can monitor the oak populations over time, or increase public awareness of the cultural and ecological resources of that area.

Ask students if they think they are able to help care for traditional foods by contributing observations of where they are. (Note: connect previous or following completion of the Youth **Engagement with iNaturalist** activity with students here).

Optional Post-Activity

Provide community examples that demonstrate taking action to care for native species like oaks: Oak tree planting projects; Youth taking action.

Additional Uses and Modifications

You can explore the distribution of other culturally significant species in iNaturalist in addition to oaks, and discuss ways for taking care of those species. Listen to parts of the Lake County Tribal Health Consortium "Native Collecting and Uses of Acorns by Anthony and Rose Steele" video.