



Grade Level: 6
Subject: SCI

Harvesting Timber

ESSENTIAL UNDERSTANDINGS

- Since Time Immemorial
- History
- Language
- Lifeways

LEARNING OUTCOMES

- Students will be able to explain the value of timber to Native peoples of the Pacific Northwest.
- Students will be able to describe the relationship between the people of The Confederated Tribes of Grand Ronde and timber from the forests around them.
- Students will be able to demonstrate the timber harvesting process using a flow chart.

CULTURALLY RESPONSIVE PRACTICES

- Connecting to the lives of students
- Higher level thinking: developing
- Interaction with others through group conversation
- Preserving and honoring cultural history
- Student talk, working together and individually

ASSESSMENT

Students will be assessed on the participation in classroom discussions, completion of the Processing Cedar flowchart, and proficient completion of the herbicide writing assignment.

Overview

Since Time Immemorial, Native peoples in the Pacific Northwest have carefully used the natural resources around them to survive. Although it has looked drastically different over the years, one of the most influential resources for people of The Confederated Tribes of Grand Ronde is timber. In this lesson, students will learn about this history of harvesting timber in the Willamette Valley - from traditional practices to modern-day logging.

MATERIALS

- [Connecting to the Earth Reading](#)
- [Harvesting Timber Presentation](#)
- [Knowledge Keepers: Cedar Harvest](#)
- [Processing Cedar Flowchart](#)
- Paper, Pencil

LOGISTICS

- Where does this activity take place?
Classroom
- How are the students organized?

Whole Class Teams: 3-5

Pairs **Individually**

TIME REQUIRED

90 minutes or 2 45-minute periods

STANDARDS

Next Generation Science Standards

MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

MS-ESS3-5. Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

Oregon Social Science Academic Standards

Geography 6.16 Explain how technological developments, societal decisions, and personal practices influence sustainability.

Historical Knowledge 6.18 Evaluate the impact of systems of colonial cultures on the indigenous peoples, such as termination, sovereignty, and treaties.

Historical Knowledge 6.19 Examine the historic and current contributions and relevance of indigenous cultures.

Background for Teachers

Teachers should review the Harvesting Timber presentation prior to the lesson and explore the additional resources linked at the end of the slideshow. Teachers will need to feel confident explaining the information presented in the Speaker's Notes for each slide.

- [Timber and Roads | Confederated Tribes of Grand Ronde](#)
- [AMNH Division of Anthropology Collections](#)
- [Native American Loggers in Oregon](#)
- [Native American Tribes Gaining Recognition For Timber And Forestry Practices](#)
- [CTGR Maps | Reservation](#)
- [Reservation Road Map](#)

VOCABULARY

- **Sustainability** - Sustainability consists of fulfilling the needs of current generations without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care and social well-being.
- **Controlled Burns** - also known as hazard reduction burning, backfire, swailing, or a burn-off, is a fire set intentionally for purposes of forest management, farming, prairie restoration or greenhouse gas abatement
- **Thinning** - a few trees are cut down within the forest to make room for the others to grow
- **Herbicides** - chemicals used to manipulate or control undesirable plant growth.

Opening

Begin by showing students the reading, *Connecting to the Earth* by Kathy Cole. Begin a conversation with students using the following prompts:

- How do Native Americans view their relationship with the Earth?
- What are some ways Native people show their thanks for what the Earth provides?
- What are some materials Native peoples gather from the Earth? What are these materials used for?

Explain to students that today's lesson will be focused on harvesting timber and the importance timber has played to the people of The Confederated Tribes of Grand Ronde.

Activity

1. Start the slide deck: Harvesting Timber. **NOTE:** Teachers should refer to the presenter notes for more information on each slide. The slides are condensed versions of what needs presented. These notes should also be reviewed ahead of time by the teacher.
2. Slide 4 of the Harvesting Timber slide deck identifies a few of the cultural uses of timber. For the small group activity, students will be completing a flowchart explaining the process cedar goes through when being harvested. Students can use the Processing Cedar flowchart as a guide but may need to add more steps if needed.
 - a. Show students the video [Knowledge Keepers: Cedar Harvest](https://youtu.be/A6KS4J8QyNQ): <https://youtu.be/A6KS4J8QyNQ>
 - b. Students can work independently, in small groups, or in a whole group setting to complete the Processing Cedar Flowchart.

NOTE: Teachers may choose to take a break in the lesson here. The closure activity can be completed on a separate day.

Closure

The Confederated Tribes of Grand Ronde prefers to control brush and undergrowth by hand, versus the use of herbicides. In the assessment for this lesson, students will research herbicides and create a Pro/Con list for the use of herbicides in land management. Then, have students write an informative paragraph that answers the following question:

“Do you support the use of herbicides for land management? Why or why not?”

Differentiation

- This lesson can be completed in one sitting or divided into 2 days depending on time allowances.
- All activities can be completed individually, in pairs, small groups, or whole class settings.
- Teachers can collect materials ahead of time to shorten the time needed for the closure activity. Be sure to collect research both in support and against the use of herbicide to give students a well-rounded view of the use.

Extension

- The American Museum of Natural History Collections is full of artifact imagery for tribes all around the world. Allow time for students to research and explore the artifacts for the Native peoples of North America. To direct students to the correct category, use the steps below:
 - Visit the site:
https://anthro.amnh.org/collections?_gl=1*iqk3wg*_ga*MTY0MTg2NzM2NS4xNjY3OTMwNTlw*_ga_H57PJLLHNH*MTY2NzkzMDUxOS4xLjEuMTY2NzkzMDgzNy4wLjAuMA
 - On the left, adjust Input Search Criteria.
 - Collection Area: North America
 - Collection Type: Ethnographic
 - Cultures: All (or students can pick a specific culture)
 - Encourage students to utilize Object Categories (on left) to narrow their search.

Notes/Other

Jan Michael Looking Wolf's or Grand Ronde Canoe Family audio tracks can be played as background music while students are working. These audio tracks can be found on Spotify or Apple Music.

Jan Michael Looking Wolf: [Spotify](#) and [Apple Music](#)
Grand Ronde Canoe Family: [Spotify](#) and [Apple Music](#)

Appendix

- Connecting to the Earth Reading: https://drive.google.com/file/d/1UtV1FsSVtI9UWDwGUZCD1S0AXF2kAD3R/view?usp=share_link
- Harvesting Timber Presentation: https://docs.google.com/presentation/d/1RB1118xhe4SPiKLRVsU6m4cyovFi1_I7iflZMVNOeYg/edit?usp=sharing
- Processing Cedar Flowchart: https://drive.google.com/file/d/1A7GiRuvDFT_u8cN1LNG2E9h81BUw96wS/view?usp=share_link
- Knowledge Keepers: Cedar Harvest: <https://youtu.be/A6KS4J8QyNQ>