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Title of lesson plan: Wabanaki Studies: Stewarding Natural Resources

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School/Organization: Maine Historical Society

Content Areas: MHS Bicentennial Theme – Environment

- Career & Education Development
- English Language Arts
- Health Education & Physical Education
- Mathematics
- **Science & Technology**
- **Social Studies**
- Visual & Performing Arts
- World Languages

Strand and Standard: *Detailed Strand/Standard information on pages 32-33 of packet.*

- Social Studies, Grade 3: Geography 1, Geography 2, History 1, History 2
- Social Studies, Grade 4: Geography 1, Geography 2, History 2
- Social Studies, Grade 5: Geography 1, Geography 2, History 2
- Science & Engineering, Grade 5: 5-ESS-1

Duration: 10 days

Grade Levels: 3-5

Materials and Resources Required: computer, projector, internet access, copy of *The Canoe Maker: David Moses Bridges, Passamaquoddy Birch Bark Artisan* by Jean Flahive and Donald Soctomah, large paper and appropriate writing utensil for group note taking (or whiteboard/smartboard if you are able to keep a record of each day's notes), associated Maine Memory Network slideshow (linked on lesson plan detail page), Student Worksheets A, B, C, D, and E (pages 20-24 of packet), additional Teacher Resources (pages 25-31 of packet) optional assessment rubric (page 34 of packet)

- This lesson plan also draws heavily from the past Maine Historical Society (MHS) exhibit, *Holding Up the Sky: Wabanaki People, Culture, History, and Art* (on view April 2019- February 2020). You may choose to view the online archived exhibit with your students as well (linked below). You will be reading some of the archived "My Maine Stories" contributed by Wabanaki partners for the exhibit that are accessible from the exhibit page (linked within body of lesson plan).
- *Holding Up the Sky* online exhibit: https://www.mainememory.net/sitebuilder/site/2976/page/4665/display?use_mmn=1&page=1

Summary/Overview: *What will students learn? What is the purpose? (ie. Objectives/Learning Targets)*

This lesson plan will introduce elementary-grade students to the concepts and importance of Traditional Ecological Knowledge (TEK) and Indigenous Knowledge (IK), taught and understood through oral history to generations of Wabanaki people. Students will engage in discussions about how humans can be stewards of the local ecosystem, and how non-Native Maine citizens can listen to, learn from, and amplify the voices of Wabanaki neighbors to assist in the future of a sustainable environment. Students will learn about Wabanaki artists, teachers, and leaders from the past and present to help contextualize the concepts and ideas in this lesson, and learn about how Wabanaki youth are carrying tradition forward into the future.

- **Big Idea:** Animals, plants, waterways, and people are all vital parts of one large ecosystem, and people play an important part in the health of the environment.

- **Essential Questions:**
    - What is important about the environment around you?
    - What is an ecosystem and what kind(s) of ecosystem(s) do we see in Maine?
    - Who are the Wabanaki people and who are the four federally-recognized Wabanaki Tribes/Nations in Maine?
    - What are some of the steps that all people can take in Maine to support a sustainable ecosystem?
- **Objectives:**
    - Students will be able to name the Wabanaki Tribes/Nations with federal recognition and reservation lands in Maine, and be able to discuss the impact of Euro-American borders on Wabanaki Homelands.
    - Students will be able to identify the significance of the natural resources that appear in the picture book, *The Canoe Maker.*
    - Students will be able to engage in discussion about what non-Native Maine citizens can do to listen to and act upon suggestions from the Wabanaki community regarding ecological stewardship.
- **Vocabulary:** *dynamic, ecology, oral history, oral tradition, reciprocity, significance, sovereign, stewardship, sustainability, Traditional Ecological Knowledge/Indigenous Knowledge (TEK/IK)*
- *Maliseet/Wolastoqey, Micmac/Mi'kmaq, Passamaquoddy, Penobscot, Pigwacket, Wabanaki*

Educator's Note/Reading this Lesson Plan

MHS recommends reading fully through the content of this lesson plan, as well as the information in the Teacher Resources on pages 25-31 of this packet, prior to beginning the lesson. Bullet points within each step are provided as helpful scripted talking points and background information to share with your students as you progress through each day of the lesson. Should you have any questions, please contact education@mainehistory.org – our educators are happy to help you.

Steps:

I. **Day 1: Introduction and Reading**
   a. Acknowledgement and Introduction
      i. *(If your classroom/school has a land acknowledgement, MHS recommends beginning this lesson with a land/water acknowledgement. More information in Teacher Resources on page 30 of this packet.)*
      ii. The goal of this lesson plan is to inform students and help them learn about the views and traditions of the Indigenous peoples who have been living in this region since long before settlers/colonizers/immigrants. Native and non-Native people are neighbors, and we live on unceded Wabanaki Homelands. It is important to know that there are always more questions to ask, more things to understand, and more learning to do. Some knowledge may be prioritized only for Native peoples; this lesson plan will address information that anyone can learn, and which can give non-Native Maine students tools to use to become allies, active listeners, and conscientious stewards of local ecosystems.
   b. Addressing stereotypes
      i. "Wabanaki" translates into English as "Dawnland," and Wabanaki people are the "people of the Dawnland."
         1. Why do you think this part of the continent might be called "Dawnland?"
            a. This is the first part of the continent to see the sun rise in the morning.
      ii. "Wabanaki" is an overarching term for many Indigenous peoples of a large area of this part of the continent. We will discuss the idea of borders and territories another day, but it is important to know today that what is now called Maine is part of Wabanaki Homelands. Wabanaki people live here and have been living here for more than 13,000 years.
      iii. Wabanaki people do not live only in Maine, and not all Native people living in Maine are Wabanaki. There are many Wabanaki people who live in Canada, other States, and other countries around the world, just as people living in Maine might be Dine, Mohawk, Anishinaabe, or from any other Native Nation. What we know today as the Canadian Maritimes north and northeast of Maine (New Brunswick, Nova Scotia, Prince Edward Island) are also Wabanaki Homelands, and the Homelands of other Indigenous First Nations peoples.
      iv. There are four federally-recognized Wabanaki Tribes/Nations with reservation lands in Maine: the Houlton Band of Maliseets, the Aroostook Band of Micmacs, the Passamaquoddy Tribe at Motahkomikuk (Indian Township) and Sipyaik (Pleasant Point), and the Penobscot Nation.
         1. Discuss: Do you recognize any of these names?
         2. Look at the five locations on a map of Maine. (On a map of Maine, look for Houlton, Presque Isle, Indian Township, Pleasant Point, and Indian Island near Old Town and the land and water surrounding these areas.)

3. We will talk more about these groups when we talk about the new concepts of borders and territories that were established by Euro-Americans.

v. It is important to remember that Wabanaki people living in Maine and Maine citizens who are not Wabanaki are neighbors today. Wabanaki people, just like citizens of Maine who are not Wabanaki, live in homes, drive, have many different kinds of jobs, vote, make art, scroll the Internet on their cell phones, and go to school. While it is important that many traditions that have survived for hundreds or even thousands of years are preserved and taught by Wabanaki people today, members of the community who are Wabanaki do not dress in traditional regalia in their daily lives and do not live in tipis. Indigenous people in what is now known as the United States wear the same types of clothing and live in the same types of houses that non-Indigenous people do.

1. There are also Wabanaki people working in high fashion and everyday fashion. Fashion designers Jason Brown (Penobscot) and Donna Decontie Brown (Penobscot/Algonquin), who both grew up on Indian Island in the Penobscot Nation, create clothing and accessories that are contemporary and futuristic, drawing inspiration from traditional Wabanaki motifs, materials, and designs.
    a. Read about Decontie & Brown in their own words on Maine Memory Network: https://www.mainememory.net/sitebuilder/site/2735/page/4356/display?popup=1
    b. View a dress from Decontie & Brown's *Dawnland Couture* collection (featured in *Vogue Magazine's* coverage of the 2019 Santa Fe Indian Market): https://www.mainememory.net/artifact/105623
        i. Jason Brown's statement about Decontie & Brown's fashion design: "Exposes people to what's ancient about who we are as Indigenous people through our creativity, and we do it in a way that seems futuristic. It subliminally says, 'We're not going anywhere, we're going to remember who we are.' It's ok to evolve, but we'll still hold on to our culture and heritage."

vi. Wabanaki artists living today create art utilizing techniques that have been passed down through multiple generations, and utilizing traditional materials and motifs that are significant to Wabanaki people and culture. Today, we're going to learn about a contemporary Wabanaki artist, David Moses Bridges (Passamaquoddy), who sadly passed away in 2017. We will learn more about the art he created and the work he did in Maine in a couple days, but today we're first going to learn about him by reading this book, *The Canoe Maker. The Canoe Maker* was written by Donald Soctomah (Passamaquoddy) and Jean Flahive.

c. Read *The Canoe Maker* aloud. Read aloud the information about David Moses Bridges and Tobias Francis at the end.
    i. *Note:* The Canoe Maker *includes an excellent pronunciation guide at the end of the book for the names of the birds mentioned in the story of the partridge. MHS recommends reviewing this guide prior to reading aloud.*
    ii. The Canoe Maker *takes about 25 minutes to read aloud. Allow for added time if students make observations or have questions.*
d. Reflection Discussion:
    i. There are many animals, trees, plants, and other natural resources mentioned throughout the book, and they all connect to each other in various ways.
    ii. Did you recognize any of the animals, plants, or other natural resources named in the book? What are their names? Where have you seen them before?
        1. *E.g. birch, spruce, sap, pine/pine needles, river, seashell, partridge…*
    iii. In the book, Tobias learns the history of his great-great-grandfather and his ancestors, while learning to gather materials, build a canoe, and acknowledge its spirit. Do Tobias and David think of the birch trees as "resources" or as "relatives?" How do you know?
    iv. Reinforce that David Moses Bridges created until his death in 2017, and Tobias still creates canoes using what he learned from his father today (and using his great-great-grandfather's knife).
    v. We are going to be learning more about Wabanaki artists, as well as ecological stewardship, over the next few days. Keep thinking about what you learned and noticed in this book – we'll read it again after we learn and think a little more.
e. Reflection Activity:
    i. Student Worksheet A: Response to *The Canoe Maker.*

II. Day 2: Thinking About the Environment

a. Discussion Part 1: "What is important about the environment around you?"
    i. Using a large sheet of paper or whiteboard/smartboard, record answers during discussion.
    ii. Ask students (write on paper/board as prompt), "What is important about the environment around you?" As discussion builds, ask students to think about specifics: What plants do you notice? What animals do you notice? What bodies of water do you notice? What is the weather like? Who lives here? Think specifically about the local ecosystem. Does it change during different seasons? Is there anything surprising that happens? How does each actor in the local ecosystem relate to others?
    iii. If possible, go outside for observations of what students see within the vicinity of the school. Think about plants, insects, animals, birds, people, trees, and any kinds of interactions students notice. (E.g., What kinds of insects do you notice on certain plants/trees? How are they interacting? Are there squirrels or birds interacting with trees or anything dropped from the trees? How are they interacting? Do you know why?)
b. Discussion Part 2: "What is an ecosystem?"
    i. What is an ecosystem?

ii. What happens to an ecosystem if a plant, animal, or water source is removed from it? Why?

iii. What happens to an ecosystem if a plant, animal, bird, or insect that does not normally live there is introduced? Why?

1. The ash tree is a significant resource, and important to Wabanaki livelihood, culture, history, and futures. Three different species of ash grow in Maine; the one most important to Wabanaki communities is the Brown Ash. In 2018, a bug called the Emerald Ash Borer (EAB) was discovered in Maine. The EAB is not from North America – it's from eastern Russia, Korea, and China, so there are no local animals, birds, or other insects that eat it. EAB are tiny bugs, smaller than a penny, but they have destroyed hundreds of millions of ash trees across North America since their discovery in Michigan in 2001; they eat the nutrients inside the trees' inner bark that keep the trees alive.
2. What happens to the ecosystem if EAB keep eating ash trees? What else does this affect? Who else does this affect?
    a. *If, at the end of this 2-week lesson plan, you would like to continue to go in-depth into the current EAB issue, MHS also offers a 2-week lesson plan focused on the ash tree, climigration, and the EAB Task Force called "Out of Ash." More about the EAB Task Force will be discussed later in this lesson plan (Day 4) as well.*

c. Keep a record of the day's discussion (keep large paper, or photographs of whiteboard/do not erase whiteboard) to refer to again throughout the unit.

III. Day 3: What is TEK? Day 1

a. Overview

i. In *The Canoe Maker,* we saw Tobias learning how to make a canoe with his father, David, by gathering materials and listening to David's stories and instructions about how each of the gatherings helps to create the canoe.

ii. Wabanaki knowledge, arts, history, and culture are all alive today and will continue to live in the future through passing down information from one generation to the next. *Oral tradition* reflects more than 13,000 years and counting of observations of the natural world and how Indigenous people reciprocate what they learn through stewardship of the environment. *Oral history* is the passing down of history from one generation to the next through telling, rather than writing down. It is only within the past 200+ years that Wabanaki observations and history have been written down and published in English.

iii. Traditional Ecological Knowledge (TEK) is a relatively contemporary term that encapsulates the ongoing body of knowledge and place-based understanding taught through oral tradition, observation, and action. TEK relates to the process of observation, reciprocity, and connection, and helps Indigenous people make informed decisions about sustainable practices. Oral tradition

teaches and affirms mutual responsibility and obligation between human and non-human relations.

1. Abenaki historian Lisa Brooks (Missisquoi and Pemigewasset) talks about the relative relations between Indigenous people and the land, and how TEK is inherent in the language – rather than asking, *"What is that?"* about an animal, plant, or river, a Wabanaki person asks, *"Who is that?"* Names and the Wabanaki language are dynamic and heavy in verbs, whether they apply to people, rivers, plants, animals, or laws. The dynamic nature of the language speaks to the Wabanaki view of life, and what can be observed in the natural world, as a process, rather than things that are static.
2. Deborah McGregor (Anishinaabe, Whitefish River First Nation) wrote in 2004: "There is a major dichotomy in the realm of TEK that needs to be understood: there is the Aboriginal view of TEK, which reflects an indigenous understanding of relationships to Creation, and there is the dominant Eurocentric view of TEK, which reflects colonial attitudes toward Aboriginal people and their knowledge. In my view, to understand where TEK comes from one must start with Indigenous people and our own understanding of the world… Indigenous knowledge is not simply a product (knowledge) or a commodity; it is a process as well… It is not appropriate to limit or constrain IK [Indigenous Knowledge] by defining it, as it should not and cannot be removed from the people or the land in which it is based… IK is also about the process of learning this knowledge and the personal development that occurs along with this process." *(For McGregor's full article, please see Teacher Resources at the end of this packet.)*
3. It is a common Eurocentric misconception that Indigenous people are inherently "one with the land." Knowledge that is passed down is knowledge that has been developed for thousands of years through observation, trial and error, and active learning and participation.
    a. "Eurocentric" refers to concepts and ideas that privilege a European or European-based world view. Because of the history of European colonizers and settlers in what is now known as the United States, people living in America today, many of whom are of white European ancestry, tend to grow up with Eurocentric histories and concepts all around them, often without even knowing about points of view and lived experiences that are not Eurocentric. We can challenge the prevalence of and privilege for Eurocentric concepts and histories by reading between the lines in historic documents, and listening to, lifting up, and privileging non-Euro-American voices today and tomorrow.

iv. Discussion:

1. You may have heard the phrase, "think globally, act locally." Think about your local environment – is it the same environment you would find everywhere? What are some other types of environments?
    a. Open discussion of different environments students may have observed or know about. Take notes on your paper/whiteboard. What kinds of animals and plants live there? What kinds of water sources exist there? Do humans live there? Do we see the same types of animals, plants, and other natural resources here? Why or why not?
        i. *"Why or why not" e.g.: Different climate, ocean/no ocean nearby, river/no river nearby, etc.*
2. When you think and act locally, that can have an impact globally! But there is no "one size fits all" approach to ecological stewardship, because ecosystems are not the same all over the world. When you pay close attention to the environment around you over a long period of time, you will start to notice patterns; the ways all actors work together over time.
    a. What can you do locally that can have a major impact?
        i. *E.g. recycling, planting **local** pollenating flowers for **local** bee/pollinator population (if you plant foreign/out-of-state flowers, that would have a major impact, too, but in a negative way, since foreign flowers could take over the soil and push out native plants, or change the local animals' diet!)*
3. Traditional Ecological Knowledge is as much philosophy as it is science, and just like any science, it is intended to evolve over time as more knowledge is gained through new generations. Knowledge is not a measurable end goal but an ongoing process.
4. Indigenous Knowledge and Indigenous philosophies can in some ways be closed to non-Indigenous peoples, but there are still several things that non-Indigenous people can learn about from Indigenous neighbors. If you are unsure about something, you can research and ask!

b. Reflection:
    i. Thinking about TEK as a reflection of an ongoing process of life, look again at your class notes you have taken so far about the environment and ecosystems. How do ecosystems interact? What is important about all actors in an ecosystem?
    ii. What is unique about the ecosystem near to where you live? Why?
    iii. In *The Canoe Maker,* how did Tobias learn about his gatherings, and about creating a canoe, from his father? He wasn't just listening, he wasn't taking notes, but he was actively taking part in gathering and building. How do you think observing, listening, and doing all at once helped Tobias learn?

IV. Day 4: What is TEK? Day 2

a. Review: Read back through the notes you have taken on paper or on the board as a class. What is important about the environment around us? What is unique about our local ecosystem? What kinds of trees, animals, birds, plants, and insects live here? What have we learned about TEK so far?
b. Place-based knowledge in Wabanaki Homelands
    i. TEK is a *place-based* knowledge system. It is a way of knowing that has evolved over hundreds and even thousands of years as generations of Wabanaki people observe, teach, and make necessary changes based on informed practice.
    ii. One of the major tenets of stewarding *local* natural resources is minimizing impact. Humans need animals and plants to eat and create things like medicine, trees and other natural resources to create places to live, and ways to travel. However, it is important not to take more from the environment than you need.
        1. When European colonists first arrived in what we now call Maine, they saw what they thought were endless resources: forests full of pine trees and rivers full of fish. But they took too many of those resources – they cut down thousands of trees in a short period of time, assuming they were in endless supply, to build ship masts; they over-fished from the rivers which decreased the fish population and therefore took away food from other people and animals that needed it, and changed the nature of the river.
            a. What else happens when you take more than you need?
                i. You might have too much and will create waste when you didn't need to.
        2. When you only utilize resources in moderation, you reduce waste and negative impact. When you take too much at once, it has a major impact not only on the local environment but on the global environment. In the 21st century, we are seeing a lot of the impact of colonial-era taking in terms of pollution and climate change. We will talk specifically about impact in rivers in a couple of days.
c. Ash, Birch, and Sweetgrass
    i. Today we're going to look at some of the natural resources that grow around us that are significant to Wabanaki communities and can be seen in many traditional Wabanaki arts today. We'll also hear some stories from Wabanaki artists and basketmakers about how their work, worldview, and ecological stewardship are linked.
    ii. In *The Canoe Maker,* David uses birch bark for the body of the canoe.
        1. Do you remember how he chose and cut the birch bark?
    iii. Birch bark is used in a number of different Wabanaki arts, including making canoes, baskets, illustrations, and even maps.
        1. There are five different kinds of birch trees that grow in Maine. The paper birch, or white birch, is also called canoe birch. It grows best in moist soil, so you will often see paper birch near bodies of fresh water. They grow all over Maine.

iv. Sweetgrass is another significant resource used in basketmaking and other Wabanaki arts. Sweetgrass is often braided and woven in along with ash and other woods for baskets.
    1. Sweetgrass grows in wetland areas like marshes and bogs, and grows alongside other grasses. Sweetgrass has a distinct sweet scent that can linger long after it has been dried. Sweetgrass is used in Wabanaki communities in ceremonies and medicines as well as arts.

v. Ash trees are also significant to Wabanaki culture and arts, and brown ash is one of the most common materials used to weave baskets.
    1. There are three different kinds of ash trees that grow in Maine. The brown ash tree is highly significant to Wabanaki communities; brown ash is used in basketry and other arts, and is an important part of Wabanaki creation history. Brown ash trees grow best in swampy, marshy areas and can be found throughout Maine.
    2. Unfortunately, ash trees across North America are in danger due to an invasive pest called the Emerald Ash Borer (EAB) which is not native to North America and therefore has no natural predators. EAB has already killed hundreds of millions of trees in the United States and Canada.
    3. Darren Ranco (Penobscot), a professor at the University of Maine, Orono, is the head of the EAB Task Force. The EAB Task Force, through Wabanaki leadership and partnership with the Maine Indian Basketmakers Alliance, has been identifying potential areas of ash trees at risk to EAB infestation and works with the Maine Department of Forestry, and the Forestry department at the University of Maine, Orono, to combat EAB. Jennifer Sapiel Neptune is also a key member of the EAB Task Force – we'll read a story from her today about the work she does. We'll learn more about MIBA tomorrow, too.
        a. Discuss: Why do you think Wabanaki basketmakers might be able to help identify potentially at-risk ash trees?
            i. *The ash tree is also known to Wabanaki communities as the basket tree. Wabanaki artists who gather what they need for baskets have learned through teaching, time, and experience what to look for in a healthy ash tree, as well as signs of unhealthy ash trees.*
        b. There are now several approaches to combatting EAB in Maine thanks to the efforts of the EAB Task Force, including a ban on bringing firewood from out of state (even from New Hampshire), since one of the easiest forms of travel for the insect is in cut firewood – the bug is so small, a person might not notice if EAB are infesting the firewood they cut or purchased. It is advised in Maine to buy local firewood and "burn it where you buy it," rather than carry it elsewhere, to stop the spread of EAB to other locations.

c. Another major effort involves Wabanaki youth, who are collecting seeds from ash trees to preserve them. Ash tree seeds can survive for up to 40 years before needing to be planted; if ash trees are lost today, they can be restored to their habitats in the future – ideally a future without the threat of EAB and other invasive species.

d. This is just one example of how non-Indigenous partners can work with Indigenous leaders and communities for the benefit of the local environment and everyone who lives there.

vi. Story: Jennifer Sapiel Neptune, Penobscot

1. Read this story from Jennifer Sapiel Neptune on Maine Memory Network: https://www.mainememory.net/sitebuilder/site/2970/page/4659/display.
2. Discuss as a class: How are basketmaking and environmental advocacy connected?

vii. Story: Suzanne Greenlaw, Maliseet

1. Read this story from Suzanne Greenlaw on Maine Memory Network: https://www.mainememory.net/sitebuilder/site/2978/page/4667/display.
2. Discuss as a class: What needs to change in Maine so that Wabanaki people can continue to harvest sweetgrass as they have always done?

d. Reflection:

i. Tomorrow, we will look at some Wabanaki art from the past and present. Think about what we learned today about birch, ash, and sweetgrass, and about Tobias and David collecting their gatherings in *The Canoe Maker.* What we'll look at tomorrow will be the finished artworks, the results of a process that involves learning through oral tradition, TEK, and change and practice over time.

V. Day 5: What is TEK? Day 3

a. Review: Take a look at the notes you have taken on your paper/board thus far. What have we learned about TEK so far? What have we learned from the stories by Jennifer Sapiel Neptune and Suzanne Greenlaw about the intersection of art and ecological stewardship?

b. Today we're going to read more stories from Wabanaki artists, and take a look at how traditions continue today, and how resources like ash, birch, and sweetgrass help to create culturally significant works of Wabanaki art.

c. Story: Theresa Secord (Penobscot)

i. Read this story on Maine Memory Network from Theresa Secord: https://www.mainememory.net/sitebuilder/site/2982/page/4671/display.

ii. Discuss as a class: How is basketmaking passed down through generations?

d. Story: Patricia Ayala Rocabado

i. Read this story on Maine Memory Network from Patricia Ayala Rocabado, David Moses Bridges's second wife: https://www.mainememory.net/sitebuilder/site/2950/page/4637/display.

- ii. Discuss as a class: This basket is a work of art made from birch bark and tells a story about David, Patricia, and their family. What do you notice in the pictures on the basket?

e. Video: Molly Neptune Parker
   - i. Watch this video from the Hudson Museum of master basketmaker Molly Neptune Parker (Penobscot): https://www.youtube.com/watch?v=2JmWIYX5LoI (Run time 7 minutes 3 seconds).
   - ii. Discuss as a class: How did Molly learn? What was something interesting that stood out to you in the video? How is her grandson learning?

f. Activity: Wabanaki Arts
   - i. As a class, look at the lesson plan slideshow of Wabanaki arts and basketmaking tools on Maine Memory Network. Discuss the materials used, craftspeople, and any observations students might have. What is the shape of this work of art? What is the story the artist told in this work of art? When was this work of art created? Where have you seen works of art like this before?
     1. *Refer to Associated Slideshow linked on the lesson plan landing page on Maine Memory Network for the full collection of images.*

g. Reflection activity: Student Worksheet B
   - i. Students draw three of the works of art they viewed today, and describe what they see and what information they can find about the artist.

VI. Day 6: What is TEK? Day 4

a. Review: Take some time to review your notes from Days 1-5 (previous week). What is important about the environment around you? What have we learned so far about TEK? What more can we learn? What questions do you still have? What are some interesting things you have learned from reading *The Canoe Maker,* looking at Wabanaki art, and hearing some stories from Wabanaki people about ecological stewardship? What is ecological stewardship?

b. Rivers as Highways
   - i. We've talked a lot about parts of nature like animals, plants, and trees, and today we're going to look at another significant part of the environment: rivers.
   - ii. Looking at a map of Maine, ask students to find rivers. Where do they lead? What are their names? Why do you think they have that name?
   - iii. Discussion:
     1. Rivers are important highways for Wabanaki peoples, and have been for thousands of years.
     2. Look at the image "Ancestral canoe journey, Motahkomikuk (Indian Township)" on Maine Memory Network (https://www.mainememory.net/artifact/105624?popup=1). What do you notice in this photo?
        a. This photo was taken during a two-day canoe journey in 2019. The trip happens every year. The description of the photo reads: "Each year, citizens of the Peskotomuhkat (Passamaquoddy) tribe at Motahkomikuk (Indian Township) and allies travel two days by canoe to Sipayik (Pleasant Point Community) to

reinforce familial and tribal obligations. Tribal Historic Preservation officer for the Passamaquoddy, Donald Soctomah, explained the process, 'The Chief of Motahkomikuk selects one from the group to deliver the wampum belt to the Chief of Sipayik. They bring along a message with them that is exchanged between the tribal leaders in this centuries-old ceremony of alliance. There is cultural strength in unity of the protection of Mother Earth.'"

    i. *Note: Donald Soctomah contributed the photograph to Maine Memory Network. Students might already recognize his name as one of the authors of* The Canoe Maker.

3. Wabanaki people have been creating canoes of many different sizes for thousands of years. The size is dependent on the actions the canoe will assist with – canoes like the ones you saw in the photo are designed for river journeys, while larger canoes are built for travel and hunting in larger and deeper bodies of water, like the Bay of Fundy. The Bay of Fundy is a traditional hunting area for Micmac/Mi'kmaq people.

c. Story: John Banks, Penobscot
    i. Read the story on Maine Memory Network by John Banks, from the Penobscot Nation: https://www.mainememory.net/sitebuilder/site/2971/page/4660/display
    ii. Penobscot River Restoration Project
        1. What are some things you learned from John's story about the Penobscot River Restoration Project? How are people helping to restore the river? What does the river provide? How can people continue to help the river?

d. Polin's Protest
    i. We've just learned about one of the many contemporary river restoration projects happening in Maine to help heal rivers that have been dammed and over-fished over the past 400+ years of European colonialism. What have we talked about so far, about what happens to an ecosystem when it gets drastically changed?
        1. By partnering with and listening to Wabanaki people and communities, non-Indigenous people and organizations in Maine can learn about how to best sustainably restore local rivers. TEK embodies Indigenous science and philosophy, involving place-based observation, learning, and reciprocity. Wabanaki people living in Maine today have grown up with the knowledge that has been passed down about the ways to care for rivers and how the rivers will care for them, and about which fish and other wildlife traditionally depend on certain rivers.
    ii. In 1739, Wabanaki leader Polin traveled by canoe to Boston from Maine, to protest the damming of the Presumpscot River. (Locate the Presumpscot river on a map.) He had to travel to Boston because at this time, according to

Europeans, Maine was part of Massachusetts, so Boston was the capital. Polin agreed to continue to share resources, within reason, with European settlers if Governor Jonathan Belcher would agree to allowing passage for the fish that depended on the Presumpscot River. Although Governor Belcher agreed, and ordered that the dam's builder, Colonel Thomas Westbrook, "leave open a significant passage for the fish… in the proper season," but Westbrook defied the order and built what he wanted to be the largest dam in Maine. Wabanaki people tried to protect the fish and the river for several years, but were routinely displaced.

iii. Since 1992, an organization called the Friends of the Presumpscot River have been working on river and fish restoration, advocating for fish passages to be built into dams, protecting indigenous fisheries, dam removal, and improvement of water quality. They have successfully removed Colonel Westbrook's dam. They dedicated a memorial to Chief Polin in 2018. Polin famously referred to the Presumpscot River as "the river to which I belong," and is known today as the "first advocate" of the Presumpscot.
    1. What are some similarities between what we have learned about restoration efforts for the Penobscot and Presumpscot Rivers? What was Chief Polin asking for in 1739, and how are we still seeing effects of what happened in the 2020s, almost 300 years later?

iv. Image: Kapahse (Sturgeon) Drum by James E. Francis, Sr. (Penobscot)
    1. https://www.mainememory.net/artifact/104988
    2. Look at the kapahse drum by James E. Francis, Sr. on Maine Memory Network and read the description: "Settlement, logging operations, mills, and dams have obstructed and interfered with the passage of anadromous fish—like sturgeon, salmon, and shad—that migrate up the Penobscot River from the ocean to spawn. Penobscot oral histories include stories about obligations to fish, but their migrations have been inhibited for over a century. With the removal of dams through the Penobscot River Restoration Project, the sturgeon, salmon, and shad are returning, along with language and cultural activities related to the fish. James E. Francis, Sr. (Penobscot), the Tribal Historian and Director of Cultural and Historic Preservation for the Penobscot Nation, created this drum with the word 'kapahse,' the Penobscot name for sturgeon, to reflect the return of the fish and the culture."
    3. What more does this drum help you learn about the process of restoring the Penobscot River?

e. Reflection: *Record answers, questions, and ideas as you discuss, adding to your paper/board.*
    i. Are there any rivers near to where you live? What do you know about them? How do other actors in the local ecosystem relate to the river?
    ii. How can Wabanaki oral histories and teachings of TEK help non-Indigenous Maine citizens work on preserving local rivers? How does restoring rivers help everyone in the local environment, humans and non-humans?

iii. What else have we learned? What questions do we still have?

f. Tomorrow we will look closer at some maps and talk about Indigenous and non-Indigenous senses of place.

VII. Day 7: Places and Peoples, Day 1

a. Review: Take a moment to review your notes from previous days. Looking at a map of Maine again, locate rivers as you did yesterday. Ask students to find the Penobscot and Presumpscot Rivers that you found yesterday. What have we learned about rivers?

b. Maps

i. We have learned about the importance of rivers to Wabanaki communities, as sources of life and as highways for travel. Over the past 400 years, though, Europeans and Euro-Americans have mapped this area in very different ways.

1. Look at "Map of New England, New York, ca. 1676" on Maine Memory Network (https://www.mainememory.net/artifact/7494).
2. What do you notice on this map?
3. This map is attributed to cartographer John Speed, who was British. The map isn't perfect – do you recognize any parts of it? *(E.g. maybe the tip of Cape Cod…)* European mapmakers like John Speed didn't have the same knowledge of the land around them that Indigenous peoples did, because it was new to them, but they were clearly aware of certain natural resources. Illustrated on this map are several different kinds of animals, including a bear, fox, caribou, and beaver. All of these animals were important to the Europeans in the fur trade, which began in the 1500s as a trading system between Europeans and Indigenous peoples in what we now know of as New England. Europeans would pay Wabanaki people to hunt these animals, with payment including guns, gunpowder, silver trade brooches, and glass beads. Europeans would then use the animals for meat, leather, fur, and in some cases oil, which they would sell back in Europe. Beaver fur hats were especially popular, which led to the over-hunting of beavers and therefore an impact in beavers' habitats.
4. The map also places English names for large swaths of land (like "New Scotland," aka "Nova Scotia") over Wabanaki names describing rivers, such as "Kennebeka" ("Kennebec").

ii. Europeans and later Euro-Americans relied on Wabanaki people to learn the names of rivers, mountains, and many other places. We learned a few days ago that Wabanaki languages are very dynamic – most place names refer to an *action,* or something that happens in a particular place. (The Presumpscot River, for example, that we learned about yesterday, has a name that comes from Abenaki words that translate into English as "many falls/rough places.") Some Wabanaki names have remained over time, often changing somewhat to reflect what Europeans heard or wrote down, but some places have been given different names (in English, French, or other non-Algonquian languages) on European and Euro-American maps.

iii. One place where we can look at different ways of mapping and understanding is the St. John River. (Locate the St. John River on a map of Maine.) "St. John River" is the name given to the river by Europeans; the Maliseets/Wolastoqey know the river as Wolastoq. This river is today known as a continental divide between Maine and the Canadian Provinces of Quebec and New Brunswick, which was formally decided between the United States and Canada/British North America in 1862. Maliseet/Wolastoqey and Micmac/Mi'kmaq peoples' Homelands stretch across what we know today as the border between Maine and Maritime Canada. As the result of forced displacement by Europeans for hundreds of years, their families and friends reside in what we know today as two different countries.

1. Look at a map of Maine and the Canadian Maritimes.
2. Compare to the map at https://native-land.ca/
    a. What is unique about these maps compared to the other maps we've looked at?
        i. The Native Land map shows overlapping territories; there are no concretely defined borders. Borders charted and imposed by Europeans, Euro-Americans, and Euro-Canadians show a Eurocentric view of land *ownership,* rather than *reciprocity.* If you look at treaties between Europeans and Wabanaki peoples, you'll see a lot of discussion about Europeans purchasing land from Wabanakis. There was a lot of misunderstanding that went on during the drafting of these early treaties. Europeans assumed that the treaties meant that they had possession of the land/ "property" in question, while the Wabanakis understood the treaties to mean a sharing of land and resources with the Europeans. Wabanaki people were then surprised and betrayed when European settlers told them they were not allowed on land that the Europeans now "owned."
        ii. This is still a problem today – remember what we read in Suzanne Greenlaw's story? Things are starting to improve, but have a long way to go.

c. Tribes/Nations

i. "Tribe" is a term introduced by European colonizers; it was not a word originally used by the Indigenous peoples of what we know today as North America. Indigenous Nations are *sovereign* nations, which means they are self-governing. The names that the Wabanaki Nations in Maine use to describe themselves are rooted in their unique languages. Wabanaki languages are part of the Algonquian language group.

1. Maliseet/Wolastoqey translates into English as "people of the beautiful river."

2. Micmac/Mi'kmaq translates into English as "my kin-friends."
3. Passamaquoddy/Peskotomuhkatiyik translates into English as "people who spear pollock."
4. Penobscot/Panawahpsketwtəkʷ translates into English as "river of white rocks opening or spreading out."
5. Wabanaki comes from Passamaquoddy root words meaning "white" or "things that are light in color," and translates into English as "Dawnland."
6. There are five Wabanaki tribal groups in Maine today – the four we've learned about so far are federally recognized (have a political relationship with the US government and have federal reservations with places like community centers, schools, and government buildings, as well as trust land that reflects treaties and acts of the federal government). The fifth are the Abenaki, who are not federally recognized. Not all Indigenous Nations in the US seek federal recognition. Abenaki comes from similar root words to Wabanaki, but the names are not interchangeable. Abenaki Homelands extend into what we know as New Hampshire, Vermont, and into Quebec.
7. Discussion: Remembering that Wabanaki languages are very dynamic/active, what do these names tell you? What do you still wonder?

d. Mali Agat (Molly Ockett)

i. We've read a lot of personal stories from contemporary Wabanaki artists, leaders, and ecologists. Today we're going to look back at an historical figure, and think more about names and the presence of borders.

ii. A famous Wabanaki person who lived in the area we now know as Fryeburg was a woman named Mali Agat, or Molly Ockett (Pigwacket, ca. 1740-1816). Mali Agat was the Abenaki pronunciation of the French Marie Agathe – Mali was baptized Catholic by French missionaries. Some Europeans came to this region for land, and others came to convert Native people to Christian religions. A lot of Wabanai people were given French or English names, or names from the Bible, like Marie and Joseph. Many of these names continued to be given within Wabanaki communities over time. Mali lived through the American Revolution – after this time, more Europeans – now Euro-Americans – moved into Wabanaki Homelands. Mali's family and friends were *displaced* – they had to move around, or live with other, larger tribal groups; Americans who saw land *ownership* as their right removed Wabanaki people from their Homelands through force or violence. Mali was captured and worked as a servant in a white household, learning English but holding onto her own language. When she returned to her home, she used her knowledge of the local plants in the area where she grew up to offer services as a healer. She was a doctor for both Native and non-Native people.

1. Why do you think Mali still offered to be a healer for people who removed her family from their Homelands?

- iii. How can we learn from history that has been erased by white people?
    1. Of the more than 20 Wabanaki tribal groups that have lived in this region for thousands of years, only five remain today, and four are federally recognized (have a political relationship with the US government). Like Mali's family, many surviving members of smaller tribal groups moved to live with larger groups.
    2. Mali agreed to take on a white man, Henry Tufts, as an apprentice at one point. From his journals, we can learn that Mali taught him certain known properties of plants, but did not teach him everything she knew. We don't have journals written by Mali herself, but what historians can do is read between what hasn't been written for a fuller picture of life during this time.
    3. Another thing that everyone can do is look at the names of everything around us to learn the Wabanaki history of the region.
    4. What else do you think everyone can do to learn more about the Wabanaki history of this region?

e. Activity:
- i. We're going to take some time to look at some Wabanaki place names in Maine. We'll all explore this map, and see what we can learn from it.
- ii. Go to the interactive map, "Wabanaki Place Names of Western Maine," at https://bates.maps.arcgis.com/apps/webappviewer/index.html?id=c6e578016e9541b988a12d4a0a912056.
- iii. Students explore the map and answer questions on Student Worksheet C. Use personal devices if possible, if working on Worksheet C in class; accessing the map and answering questions can also be homework. Students should take some time with this and will talk about their answers to the questions on Day 8.

VIII. Day 8: Places and People, Day 2

a. Review: Take some time to review all of the notes that you have taken as a class so far, and to talk about student responses to Worksheet C. What did they find? What questions do they have? What did they notice? How can names and language help us learn more about where we live? Were students surprised by anything? Do students have anything new to contribute to the discussion? Take more notes as you go, adding to your paper/board.

b. Learning Names
- i. People, places, plants, and animals
    1. Wabanaki place names can be found throughout Maine, as we saw on the map yesterday.
    2. Did you know that there are names of animals and plants that do not have an English translation, because English-speakers have always learned/used Wabanaki words and descriptors?
        - a. Look at Picture 1 with class (projection may be best).
        - b. Ask students: Do you recognize this animal? What do we call this animal in English?

c. Write on the board/paper: *mus* (Passamaquoddy-Maliseet), *mos* (Penobscot), *tia'm* (Mi'kmaw), *moose* (English).
d. There is always more to learn about animals and environments, and it can be helpful and useful to begin with names.

ii. Activity: Student Worksheet D
1. Students work individually or in groups on Worksheet D. Answers are open-ended but should reflect learning thus far.

c. Review:
i. What have we learned about TEK? How does knowing more about Wabanaki languages and practices help us learn about TEK?
ii. What can we learn about and from the environment around us?
iii. Take some time to talk about student answers to Worksheet D. What have we learned? What more can we learn? What do we wonder about?

d. Reflection
i. Tomorrow we are going to read *The Canoe Maker* again. Take a look back at Worksheet A and think about what else you might have learned that might add to how you hear the story again tomorrow. Add any questions you might still have, or add anything new you might have learned (use the back of the paper or a separate piece of paper if needed).

IX. Day 9: Reading and Reflection

a. Review
i. Take some time to review all of your class notes so far, and add anything new that students want to contribute to the notes from what has been learned between Days 1-8.

b. Re-read *The Canoe Maker* aloud.

c. Reflection
i. What have we learned about TEK so far over the past nine days?
ii. What questions do we still have?
iii. How do you see place-based learning taking place in *The Canoe Maker?*
iv. What are Wabanaki and non-Wabanaki people doing in Maine to promote ecological stewardship?
v. What more can be done? What would you like to do?

X. Day 10: Continuing the Discussion

a. Reflection discussion: "How can we keep the discussion going?"
i. What can adults do? What can kids do? What kinds of questions can we ask ourselves? What is important about the environment around us?

b. Take some time to create a new paper or board for ongoing notes. Each month, take some time to go back over your notes from Days 1-9, and ask students to observe nature with Worksheet E.
i. What changes each month? What surprises you? What is unique about the local environment? Have you learned anything new this month?
ii. At the end of the year, students can compare their observations from each month.

Student Worksheet A: Response to *The Canoe Maker*

What is **something interesting that you learned or noticed** while reading *The Canoe Maker?*

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What are **some things that you still wonder about** after reading *The Canoe Maker?* Think about the environment, Wabanaki art, canoe making tools, etc.

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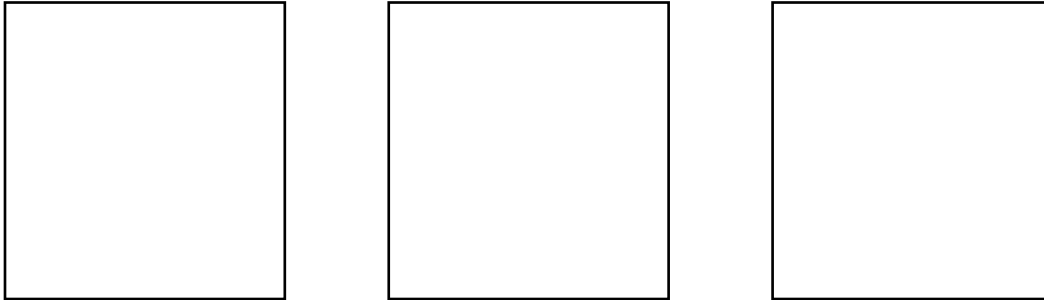
Student Worksheet B: Wabanaki Arts

Choose three of the works of art you looked at today to think about more. Which three did you choose? Describe and draw each work of art below:

1. ____

2. ____

3. ____



Who created each of these? If there isn't an artist named, which is the artist's Nation of origin?

1. ____

2. ____

3. ____

If there isn't an artist named, why is that? How has this changed in the past 100+ years? _____________

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____

What are the works of art made from? How are these resources important to Wabanaki people?

1. ____

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2. ____

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3. ____

____

Student Worksheet C: Wabanaki Place Names

Using the interactive map, find three places to write about below. Find at least one place name that you recognize from before starting this activity, or that is near a place you have visited before.

What are the three places you found? What are their names, as listed on the map?

1. ____

2. ____

3. ____

What did you find out about the meaning of the place's name, and/or the English translation?

1. ____

____

2. ____

____

3. ____

____

Of the place(s) you have visited before or recognized before, what is something new that you have learned about that place from this map?

____

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____

What do you still wonder about these places?

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Student Worksheet D: Names

1. In the English language, what do we call the mammal in this picture? ___________________________

2. What do you think you might know about this animal? ______________________________________

____

____

3. What do you still wonder about this animal? ____

____

____

4. What else do you notice in this picture? ____

____

____

5. How do you think all actors in this picture interact? _______________________________________

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6. What else would you like to learn about the environment in this picture? _______________________

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____

Student Worksheet E: Monthly Observations

Date: ______________________________

Take some time to observe the environment around you, like we did as a class. What do you notice? What kinds of plants, animals, birds, insects, and bodies of water do you see? You'll come back to this same place each month, and we'll think as a class about how things change.

What do you notice?

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Has anything changed since last month? How do you know?

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What else have you learned about the local environment recently?

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What questions do you still have?

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Teacher Resources: Image 1

Pixabay: https://pixabay.com/service/license/

Teacher Resources

Wabanaki Tribal Governments

Houlton Band of Maliseets Homepage: http://www.maliseets.com/index.htm

Aroostook Band of Micmacs Homepage: http://www.micmac-nsn.gov/index.html

Passamaquoddy Tribe Homepages: http://wabanaki.com/ and https://www.passamaquoddy.com/

Penobscot Nation Homepage: https://www.penobscotnation.org/

- Penobscot Nation Curriculum: http://www.penobscotculture.com/index.php/curriculum

Native Land Map: https://native-land.ca

- Online interactive map of Indigenous territories, languages, and treaties. Also available as an app for tablets. Recommended to use on laptop or desktop computers.

Online Resources

National Resources Council of Maine's Penobscot River Restoration Project Official Site: https://www.nrcm.org/projects/waters/penobscot-river-restoration-project/

Objects in Abbe Museum Collection by David Moses Bridges: https://abbemuseum.pastperfectonline.com/bycreator?keyword=David+Moses+Bridges

- *Educator's note: Bridges also served on the Abbe Museum's Board of Trustees, and did frequent educational programs and demonstrations through the museum.*

Abbe Museum Blog, "Wabanaki Antiques Expo," May 2015: https://www.abbemuseum.org/blog/2015/05/wabanaki-antiques-expo.html

- *Educator's note: An informative piece you may be interested in sharing with your students – in May 2015 four master Wabanaki artists led a program at the Abbe Museum with visitors to see whether an historic work of art was made by a Wabanaki person or not. Includes several photos of David Moses Bridges as one of the featured artists, as well as Jennifer Neptune, Richard Silliboy, and George Neptune.*

Maine Indian Basketmakers Alliance (MIBA) Official Facebook Page: https://www.facebook.com/MaineIndianBasketmakersAlliance/

UMaine Orono Bilingual Signage: https://umaine.edu/news/blog/2019/07/17/bilingual-signage-english-and-penobscot-now-at-umaine/

US Fish & Wildlife Services, *Traditional Ecological Knowledge for Application by Service Scientists:* https://www.fws.gov/nativeamerican/pdf/tek-fact-sheet.pdf

- *Educator's note: This fact sheet discusses some of the national-level integration of TEK and Euro-American scientific ways of knowing.*

Maine Department of Agriculture, Conservation, and Forestry, "The Important Distinctions" – pamphlet outlining different species of birch trees in Maine: https://www.maine.gov/dacf/mfs/publications/handbooks_guides/forest_trees/pdf/Birches.pdf

Native American Science Curriculum (nativeamericanscience.org): *What is Traditional Ecological Knowledge?* http://www.nativeamericanscience.org/courses/native-and-western-views-of-nature/what-is-traditional-ecological-knowledge

- *Educator's note: Contains an excellent presentation that takes a deep dive into TEK, worldviews, and the evolving process of learning and knowing. The curriculum resource itself is better suited for high school through adult learners (e.g. discussions of metaphysics, epistemology, Aristotelian ethics), but there is detailed important background information that may be of use to you as you prepare to teach this lesson.*

Mobilizing to Fight the Emerald Ash Borer, University of Maine: https://umaine.edu/mitchellcenter/road-to-solutions/mobilizing-to-fight-the-emerald-ash-borer/

Indigenous Environmental Network: https://www.ienearth.org/

- *From their website: **"IEN is an alliance of Indigenous peoples whose mission it is to protect the sacredness of Earth Mother from contamination and exploitation by strengthening, maintaining and respecting Indigenous teachings and natural laws.** Adopted in 1994 by the IEN National Council, Denver, Colorado."*

Books and Articles

Article: McGregor, Deborah. "Coming Full Circle: Indigenous Knowledge, Environment, and Our Future," from *American Indian Quarterly,* Vol. 28, No. 3/4, Summer-Autumn 2004

- *Free to read on JSTOR with an account (100 free articles per month with account, or your school or library may have access):* https://www.jstor.org/stable/4138924?seq=1

Article: Mitchell, Jennifer. "Wabanaki Basketmakers Want to Show that Harvesting Sweetgrass Can Be Sustainable." Maine Public, August 23, 2018. https://www.mainepublic.org/post/wabanaki-basketmakers-want-show-harvesting-sweetgrass-can-be-sustainable

- *An excellent quote from Suzanne Greenlaw in the article: "So Indigenous Knowledge is a collective knowledge, sort of **an action-oriented knowledge, where it's in the process of doing it,** does this knowledge get understood? And the language people use to teach is not a scientific language – that doesn't mean it's not science. There are different sorts of ways to know things." [Bolding added for emphasis.]*

Book: *Women of the Dawn,* Bunny McBride. Bison Books: University of Nebraska Press, 1999/2001.

- *Educator's note: This resource provides an account of Molly Ockett's life; it should be noted that the biographies in this book are recreations based on surviving oral history and written documentation.*

Book: *The Canoe Maker: David Moses Bridges, Passamaquoddy Birch Bark Artisan,* Jean Flahive and Donald Soctomah, illustrations by Mari Dieumegard. Thomaston, ME: Maine Authors Publishing, 2019.

Book: *Kunu's Basket: A Story from Indian Island,* Lee DeCora Francis, illustrations by Susan Drucker. Tilbury House Publishers, 2015.

- *Educator's note: Another excellent picture book suitable for grades 3-5,* Kunu's Basket *tells the story of a young Penobscot boy, Kunu, wanting to learn how to make a pack basket, but can't seem to get it right until he gets some help from his grandfather. I recommend including* Kunu's Basket *as a future read-aloud after you have read* The Canoe Maker, *as they both involve a similar theme of learning by creating with an older family member.*

Book: *The Thundermaker/Kaqtukowa'tekete'w,* written and illustrated by Alan Syliboy, translated by Lyndsay R. Marshall.

- *Editor's note: Another beautifully illustrated read-aloud.* The Thundermaker *is written in Mi'kmaw and English, and tells the story of a young boy, Little Thunder, learning about his responsibilities of making thunder from his father. Syliboy's artwork is reminiscent of and based upon Mi'kmaq petroglyphs.*

Additional Resources for Student Worksheet D:

In the Passamaquoddy-Maliseet language, the animal in the picture is *ahkiq*.

In the Mi'kmaw language, the animal in the picture is *waspu.*

In the Penobscot language, the animal in the picture is *àhkikʷ.*

For Question 5 and Question 6, if students are stuck, it can be helpful to scaffold with specifics:

- Do you notice any water in this picture?
- Do you notice any plants in this picture?
- Do you think there might be other animals or plants living in this environment that are not in the picture? Why?

Language Resources/Online Dictionaries

Passamaquoddy-Maliseet Language Portal (http://www.pmportal.org); Language Keepers and Passamaquoddy-Maliseet Dictionary Project.

Mi'kmaq Online: https://www.mikmaqonline.org/

Penobscot Dictionary: https://penobscot-dictionary.appspot.com/entry/

Educator's note: All online dictionaries linked above include pronunciation guides as well as audio pronunciations for words and phrases on each word page. If you choose to browse the sites for later learning, each site also includes additional resources, such as stories told aloud, videos, and in some cases learners' guides to verb forms.

Teacher Background Materials – Lesson Plan: Stewarding Natural Resources

Tips for Acknowledging Indigenous Land/Water: Acknowledgement is a relatively recent practice, and is ideally practiced as a respectful way to address the Indigenous inhabitants of what is now North America, acknowledge human and non-human relatives, address the ongoing effects of the structure of settler-colonialism, emphasize the importance of Indigenous sovereignty and self-governance, and help students be aware and conscientious of the fact that we are living on unceded Native Homelands. Land/water acknowledgements are best developed through meaningful connections; acknowledge with respect and use a format that lets you speak from the heart. Making connections with neighbors of a Nation near to where you live is one of the best places to start when creating a land acknowledgement from the heart. Talk with your school administrators and colleagues about creating a land acknowledgement at the institutional level.

A great online resource with more information can be found here: https://drive.google.com/file/d/0B_CAyH4WUfQXTXo3MjZHRC00ajg/view. For information about the Nations nearest where you live/teach, a good starting point is the map at: https://native-land.ca

What we know of as "Maine" today is part of the unceded Homelands of the Wabanaki peoples. "Wabanaki" translates into English as the "Dawnland," with the Wabanaki peoples being the People of the Dawnland, meaning those who see and greet the first light of the day. They share common oral histories and belong to Algonquian/Algonkian language groups, but have unique languages.

About the Wabanaki: We encourage you and your school to reach out to the tribal communities in Maine to expand your learning. More information about the four federally-recognized tribal communities in Maine can be found here:

- The Aroostook Band of Micmacs: http://www.micmac-nsn.gov/
  - Micmac Tribal Government: http://micmac-nsn.gov/html/tribal_government.html
- The Houlton Band of Maliseets: http://www.maliseets.com/index.htm
  - Maliseet Tribal Government: http://www.maliseets.com/government.htm
- The Penobscot Nation: https://www.penobscotnation.org/
  - Penobscot Tribal Government: http://www.penobscotculture.com/index.php/8-about/81-tribal-facts
- The Passamaquoddy Tribe
  - Indian Township (Motahkomikuk): https://www.passamaquoddy.com/
  - Pleasant Point (Sipayik): http://www.wabanaki.com/
  - Passamaquoddy Tribal Government: http://www.wabanaki.com/wabanaki_new/chief_council.html
  - Passamaquoddy Joint Tribal Council: http://www.wabanaki.com/wabanaki_new/joint_council.html

The Abenaki are the fifth Wabanaki tribe today; however, the Abenaki are not a federally-recognized tribe as of 2019. Not all Tribal Nations that exist in North America today have received federal recognition, and not all Native Nations seek federal recognition. There are no tribes in New Hampshire or Vermont that, as of 2019, have received federal recognition, but four tribes in Vermont have received state recognition. Federal recognition provides a federal relationship between Indigenous sovereign nations and the US government. Tribal Nations throughout North America are sovereign nations, and

actively work to maintain their self-governance. Federal recognition is not related to Tribal Nation sovereignty; it affords certain rights to Indigenous peoples within the laws of the United States.

It is important to recognize that not all Wabanaki people live in what is now Maine, and not all Indigenous peoples living in what is now Maine today are Wabanaki. Native and non-Native people alike live throughout Maine, the United States, Canada, and countries around the world. Maine as we know it today exists within unceded Wabanaki Homelands; the federally-recognized tribal communities in Maine own trust land throughout the state as presented through treaties.

About Sovereignty and Names/Terms

Read the Indigenous Environmental Network's (IEN) statement on Tribal Sovereignty and Indigenous Sovereignty: https://www.ienearth.org/what-is-indigenous-sovereignty-and-tribal-sovereignty/

It should be noted that "Indian" is a federal legal term in the United States. It is a word introduced and inscribed by settler-colonial societies and is used in varying ways by Indigenous people and federal entities today. When referring to Wabanaki people, it is best to refer to them as Wabanaki people, not as "Indians," and not as "Maine Native Americans." Please do not put humans or non-humans in possession of Maine, especially within the context of this lesson plan. Our educators and curators have consulted with Wabanaki partners during the development of this lesson plan, as well as for the creation of the MHS exhibit *Holding Up the Sky,* utilized throughout this lesson plan, and it is our intent and responsibility to incorporate their feedback, as well as to be mindful in our continued efforts to decolonize the work that we do. We intend for this lesson plan to be a living document, and to correct any of our own errors in as timely a manner as possible. Should you have any additional feedback or information with regard to this lesson plan, please reach out to us at education@mainehistory.org.

About Maine Historical Society: Maine Historical Society (MHS) is the third-oldest state historical society in the United States, following Massachusetts and New York, respectively. Founded in 1822, only two years after Maine separated from Massachusetts and became a free state as part of the Missouri Compromise, MHS today is headquartered at 489 Congress Street in Portland. The campus contains an office building and museum, the Brown Research Library (est. 1907), and the Wadsworth-Longfellow House, the childhood home of American poet Henry Wadsworth Longfellow. An enormous online database containing digitized images and objects from MHS's robust collection can be found online at Maine Memory Network: https://www.mainememory.net/ Teachers can create free accounts on Maine Memory Network to save images to albums for classroom use.

MHS's mission: "The Maine Historical Society preserves the heritage and history of Maine: the stories of Maine people, the traditions of Maine communities, and the record of Maine's place in a changing world. Because an understanding of the past is vital to a healthy and progressive society, we collect, care for, and exhibit historical treasures; facilitate research into family, local, state, and national history; provide education programs that make history meaningful, accessible and enjoyable; and empower others to preserve and interpret the history of their communities and our state."

Tips for non-Indigenous educators when discussing Traditional Ecological Knowledge (TEK) and Indigenous Knowledge (IK):

This lesson plan exists as an introduction and brief overview of a complex subject; it was created with respect, utilizing myriad points of reference. However, new understandings and permissions are always coming to light, and this document may be amended as needed in the future.

This lesson plan is not meant to present TEK/IK as any finite practice, but, rather, to introduce to students the significance of TEK/IK and practice of Western ecologists amplifying Native voices when it comes to environmental stewardship. This lesson plan encourages seeking understanding, asking clarifying questions, and being respectful when for any reason an answer cannot be given.

For more information about how TEK is being integrated into Western ecological projects, consider following this lesson plan with another Maine Historical Society lesson plan, "Out of Ash," which focuses specifically on the work being done to combat the Emerald Ash Borer and the Wabanaki leadership of the EAB Task Force.

- Elsewhere in North America, similar projects have been and are being mounted. For recent precedent, see the Alaskan Bidarki Project (2002-2006): http://aswc.seagrant.uaf.edu/grade-5/investigation-1/bidarki-story-background.html

About David Moses Bridges: David Moses Bridges (1962-2017) was a Passamaquoddy artist and activist. He served on the board at the Abbe Museum in Bar Harbor, where he also oversaw programming and gave live demonstrations of his artisanship, including canoe making. His art, which included basketry and traditional birch bark boxes, was nationally-recognized and award-winning; he worked on his art until his passing. His eldest son, Tobias Francis, upholds and continues his legacy today. More biographical information can be found at the end of *The Canoe Maker.*

About Mali Agat/Molly Ockett: Molly Ockett (ca. 1740-1816) was a citizen of the Pigwacket Tribe, who lived in what is now the Fryeburg area. While her birth name is not known, she was christened Marie Agathe by a French Jesuit mission that had been established by French missionaries in the area. The Fryeburg area was being colonized by European groups during Molly's lifetime, and was one of many areas around which the US government "gave away" land to Revolutionary War veterans to settle the "Maine Frontier" and promote European-style agriculture, which resulted in the often violent forced removal of Molly and her family from their home. (Despite "giving away" land to war veterans, the US government did not honor what they had promised to Wabanaki soldiers who fought with the Americans during the Revolutionary War.) Molly was among those who were captured, and she was taken by her captors to live as a servant in an English settler household when she was a child. Though she remained fluent in her own language, she was forced to learn and speak English in that house, and remained fluent throughout her life after she was brought home. She made a name for herself as an adult by utilizing her knowledge of native plants for medicinal purposes, and was a trusted doctor in the Fryeburg area. Molly's tribe, the Pigwackets, were driven from their Homeland by English settlers and are no longer a named tribe; during the difficult 18th-19th centuries, while facing disease, displacement, and genocide, peoples of smaller tribes would integrate into tribes with larger populations and resources, such as the Penobscots.

Strand and Standard Information:

- **Social Studies – Geography:** Students draw on concepts and processes from geography to understand issues involving people, places, and environments in the community, Maine, the United States, and the world.
    - **Grade 3, Geography 1:** *Students understand the geography of the community, Maine, the United States, and various regions of the world by explaining that geography includes the study of Earth's physical features including climate and the distribution of plant, animal, and human life.*
    - **Grade 3, Geography 2:** *Students understand geographic aspects of unity and diversity in the community and in Maine, including Maine Native American communities by collecting, evaluating, and organizing information about the impacts of geographic features on the daily life of various cultures, including Maine Native Americans and other cultures and communities.*
    - **Grade 4, Geography 1:** *Students understand the geography of the community, Maine, the United States and various regions of the world by communicating their findings by creating visual representations of the world, showing a basic understanding of the geographic grid, including the equator and prime meridian.*
    - **Grade 4, Geography 2:** *Students understand geographic aspects of unity and diversity in various regions of the United States and the world by describing impacts of geographic features on the daily life of various cultures in the United States and the world.*
    - **Grade 5, Geography 1:** *Students understand the geography of the community, Maine, the United States, and various regions of the world by identifying the Earth's major geographic features such as continents, oceans, major mountains, and rivers using a variety of geographic tools including digital mapping tools, and explaining examples of changes in the Earth's physical features and their impact on communities and regions.*
    - **Grade 5, Geography 2:** *Students understand geographic aspects of unity and diversity in the community, Maine, and regions of the United States and the world, including Maine Native American communities, by identifying examples through inquiry of how geographic features unify communities and regions as well as support diversity using print and non-print materials.*
- **Social Studies – History:** Students draw on concepts and processes using primary and secondary sources from history to develop historical perspective and understand issues of continuity and change in the community, Maine, the United States, and the world.
    - **Grade 3, History 1:** *Students understand various major eras in the history of the community, Maine, and the United States by explaining that history includes the study of past human experience based on available evidence from a variety of primary and secondary sources. Students make real or simulated decisions related to the local community or civic organizations by applying appropriate and relevant social studies knowledge and skills, including research skills, and other relevant information.*
    - **Grade 3, History 2:** *Students understand historical aspects of unity and diversity in the community, the state, Maine Native American communities, and the United States by identifying research questions, seeking multiple perspectives from varied sources, and escribing examples in the history of the United States of diverse and shared values and traditions.*

    - **Grade 4, History 2**: *Students understand historical aspects of unity and diversity in the community, the state, Maine Native American communities, and the United States by describing various cultural traditions and contributions of Maine Native Americans and various historical recent immigrant groups in the community and state.*
    - **Grade 5, History 2:** *Students understand historical aspects of unity and diversity in the community, the state, including Maine Native American communities, by describing various cultural traditions and contributions of Maine Native Americans and other cultural groups within the United States.*
- **Science and Engineering:**
    - **Grade 5, 5-ESS3-1**: *Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.*

Teacher Resources – Assessment Rubric:

Did the student meet the expectations of the lesson?

Task	1 – Did Not Meet	2 – Partially Met	3 – Met	4 – Exceeded	Notes
Student can describe what an ecosystem is.					
Student can name the four federally-recognized Wabanaki tribes in Maine.					
Student can discuss the importance of rivers to the ecosystem and to Wabanaki communities.					
Student gave thoughtful responses to Worksheets.					
Student participated respectfully in classroom discussion.					
Student can articulate what environmental stewardship is/how humans can help the local environment.					

Total Score and Notes: