Eating in Season: The Seasonal Round in Northern Maine

A Social Studies and Geography Mini-Unit for Grades 5-8
Developed by Allaire Diamond M.S., M.Ed. as part of the project People, Plants & Gathering in Northern Maine, a collaboration between the USDA Forest Service Northern Research Station and the University of Vermont, funded by the Northeastern States Research Cooperative. Principal project investigators: Dr. Marla Emery, USDA Forest Service, and Dr. Clare Ginger, University of Vermont.

Grade Level: 5-8
Discipline: Social Studies; Geography
Maine Learning Results Addressed: Social Studies D1. Students understand the geography of the community, Maine, the United States and various regions of the world and the geographic influences on life in the past, present and future.
Maine Learning Results Assessed:

- D1.a. Explain that geography includes the study of physical, environmental, and cultural features of the State, nation, and various regions of the world to identify consequences of geographic influences and make predictions.

- D1.b. Use the geographic grid and a variety of types of maps to gather geographic information.

Objectives

- Identify the times of year when food plants are gathered.
- Construct a seasonal round diagram showing the gathering times for 6 or more food plants in northern Maine.
- Describe the preservation techniques that extend the season for each food plant (as applicable).
- Represent the season extension effects of food preservation on the seasonal round.
• Interview a local community member or elder about his or her seasonal round.

**Background**
The seasonal round diagram is an ethnographic technique used by researchers, but also an intuitive way for people to represent how foods, food-gathering activities and eating habits, as well as other cultural traditions, change by season. When used in ethnographic research, these diagrams are frequently part of an in-depth conversation between the researcher and subject, and filled out together. The examples below show seasonal rounds for residents of the Appalachian Coal River region, West Virginia, Athabascan elders in Minto, Alaska, and the Umatilla, Walla Walla, and Cayuse Indians. Each is different but all three include twelve monthly divisions while also having a space around the outside for recording other ways of marking time – with words in a native language or alternate conceptions like ‘deer season’ or ‘harvest season’. The persistence of a food on a seasonal round could mean it is a staple or a consistent part of a person’s diet, while a delicacy only available at a certain time might be associated with a celebration like the many Ramp (wild leek) Festivals that occur each spring throughout the eastern United States. On the other hand, some seasonal foods, like fiddleheads, are only available fresh for a short time but are commonly frozen or canned to extend the time in which they can be eaten.

In this mini-unit, students will be introduced to the concept of a seasonal round as a way to mark time, create a seasonal round based on a class brainstorm session, develop their own personal/family seasonal rounds, and then apply the concept to analysis of information found in the **People, Plants & Gathering in Northern Maine** website. They will then interview a community member about plants that he or she gathers and uses throughout the year. Note that the days in this unit are not all consecutive and can be broken up in other ways based on the particulars of each classroom.

**Resources:**
*People, Plants & Gathering in Northern Maine.*
http://nrs.fs.fed.us/sustaining_forests/conserve_enhance/special_products/maine_ntfp

*Maliseet Moon calendars* are available from St. Thomas University and are a recommended teacher/classroom resource for showing a seasonal round localized to the northern Maine region. http://w3.stu.ca/stu/news.aspx?id=5866


Tending the Commons: Folklife and Landscape in Southern West Virginia. American Folklife Center project with excellent online documentation, including a seasonal round linked with project results. 
http://memory.loc.gov/ammem/collections/tending/index.html

Available online and in PDF form: http://www.loc.gov/folklife/fieldwork/index.html

Materials (See also materials list by day)
Chalkboard, white board, large piece of butcher paper, or overhead projector for showing the class’ seasonal round diagram
Large index cards or sticky notes
Double-sided blank seasonal round diagram for each student
Colored pencils – 2 colors per student
Computers with internet access to People, Plants & Gathering in Northern Maine: http://nrs.fs.fed.us/sustaining_forests/conserve_enhance/special_products/maine_ntfp
Assessment tool for seasonal round diagrams (not included)
Copies of Community Member Interview Guidelines for each student

Preparation for teaching

- 1-2 weeks before beginning this unit, send a letter home with students explaining that students will be interviewing community members as an independent project, and that parents should help them find people and organize the interview. Sample text:
  o Dear Parents, We are studying about plants that people gather for food throughout the year, such as fiddleheads, wild blueberries, or hazelnuts. To learn more about plants that are gathered in Maine [or your region], your student will be asked to interview someone you know about the details of the plants they gather and when they gather them. Though it would be ideal if your students interviewed someone who gathers wild plants, if this is not possible, your student could instead interview an experienced home gardener who grows native plants for food. Please help your student decide on a person to interview, call the person, set up the interview, make sure the interview proceeds, and write a thank you note to follow up. Students will be receiving more details about this project, including some specific guidelines, and they will be developing questions to ask in class. This project will proceed most smoothly if you review the interview guidelines yourself as well. Students will need to have their interviews completed by [Date]. Thank you very much. Sincerely,[your name/signature]
- Develop a list of several people in the community who might be willing to be interviewed for this project. You could suggest one of these people to students who have a hard time finding subjects or whose families are unable to help them.
- Prepare large blank seasonal round diagram on an overhead or butcher paper, make necessary copies, etc.
- Develop a rubric or checklist to assess the students’ final seasonal rounds and stories.
• Compile references for student research extensions, if you will be using these (see “A Seasonal Round for Northern Maine” worksheet).
• Make additional modifications for your particular class or grade level.

Activities

DAY 1 – Introduction of seasonal round

Materials
Chalkboard, white board, large piece of butcher paper, or overhead projector for showing the class’ seasonal round diagram
Large index cards or sticky notes
Double-sided blank seasonal round diagram for each student

1. **Preparatory discussion.** Ask students to imagine not having any calendars or not knowing the date. Without this information, how would they know the seasons were changing just by looking around them? What changes in the landscape mark seasonal change? Record students’ answers on large index cards or sticky notes (one brainstorm per card/note), and hang them on the board. Students may name natural events such as snowmelt, the first peepers, or leaves changing, first. Ask them to think about changes in behaviors in the people around them, such as the appearance of Halloween decorations, Christmas lights, or seeing people wearing shorts or riding bikes. Then ask them to think about how the foods they eat change throughout the year. Are certain foods connected with certain seasons/months/events/times of the year? Take note if any wild or locally-grown foods are mentioned.

2. **Introduce concept of seasonal round.** Project or hang up a large blank seasonal round diagram next to the brainstorm list. Explain that this kind of diagram is a type of calendar that shows changes like the ones the students brainstormed. Note that the circular diagram is split into twelve “pie slices” labeled by month, but you may wish to explain that there is also an outer ring for recording other ways that time can be measured. Examples of other ways include *deer season*, *mud season*, or *winter thaw*.

3. **Fill in seasonal round as a class.** Distribute all the brainstormed notes to student pairs so that each pair has 2-3 notes. Have pairs decide where on the seasonal round diagram their notes should go, and then come up and stick them to the diagram in the appropriate places.

4. **Review seasonal round.** Once students have created this large seasonal round diagram, review each event on the calendar and point out that students have as a group created a seasonal calendar that is local to their community and area. Some of what they have put there reflects natural events and some reflects human behaviors.

5. **Individual seasonal rounds.** Pass out blank seasonal round diagrams and instruct students to fill in their own individual diagrams based on their and their family’s activities throughout the year. Students should start this in class but finish it for homework, so that they have a chance to talk to family members about activities. Their seasonal rounds can include foods that they pick, grow, raise, or hunt, observations of the natural world, activities like cutting wood, sledding, or swimming, birthdays and other celebrations, and other seasonal events/activities. All students should include some events related to plants and the natural world, not just holidays, birthdays, sports seasons, etc. Collect these and assess them with a rubric or checklist (not included)
DAY 2 – Seasonal rounds from northern Maine

Materials
Students’ completed seasonal round homework assignment from Day 1
Computers with internet access to People, Plants & Gathering in Northern Maine: http://nrs.fs.fed.us/sustaining_forests/conserve_enhance/special_products/maine_ntfp
If possible: computer connected to projector in order to display web page
Copies of worksheet “A Seasonal Round for Northern Maine” for each student
References for students to use if they will be doing the research extensions on the worksheet
Assessment tool for seasonal round diagrams (not included)

1. **Connection to geography.** Ask students to compare the seasonal rounds they completed for homework. They should do this with a partner or in a small group, laying their diagrams side by side to compare. Were there any differences that are not due just to different behaviors (like one student plays baseball and the other basketball)? If so, what could cause these differences? Take note if there are any differences that seem to be due to local geography (such as one student’s family starting a garden before another’s because they live at a lower elevation). Ask students how their seasonal rounds might be different from those of a student 200 miles north (point out this location on a map), particularly concerning foods that are gathered or grown. Students should point out that warm seasons may be shorter, cold seasons longer, so certain foods may ripen later and not be available as long in the north.

2. **Website demonstration.** Now explain that students will be getting more experience with using the seasonal round diagram while also learning about seasonal food uses and people who depend on wild foods in northern Maine. If possible, project the site onto a screen and take a few minutes to demonstrate the layout of the website People, Plants & Gathering in Northern Maine. Show students how to access the People section of the site (through the homepage or right-hand navigation bar) and view the gatherer profiles, and then the Plants section to see the plant profiles. Note that there are frequently links to plant pages from the people pages. Tell them that they will be creating seasonal rounds from both the profiles of gatherers on the site and the profiles of the plants they use.

3. **Website exploration.** Students should be at computers either alone or with a partner. Make sure everyone has the website up and knows how to get to the People and Plants sections.

4. **Seasonal round for northern Maine.** Once students have completed the initial exploration, pass out the “Seasonal Round for Northern Maine” worksheet. When it is completed, have them pass it in.

DAY 3 – Preparation for community member interviews

Materials
Copies of “Community Member Interview Guidelines” for each student
Paper

1. **Introduce community member interviews.** Explain that each student will get to interview a community member about the plants that he or she gathers or grows and eats. Students’ families should have received a letter about this 1-2 weeks prior, and perhaps
students have already been talking with their parents about people to interview. The interview subject can be a family member, neighbor, family friend, or other person.

2. **Clarify guidelines.** Pass out the Community Member Interview Guidelines to each student. Go over each part of the guidelines. It might be helpful to role play parts of these guidelines, or split students into groups to act out different sections.

3. **Developing questions.** Students should work in pairs to develop some questions to ask their interview subject. Each pair should come up with at least 10 questions and then practice asking them to each other. Note that the Interview Guidelines has some information about developing questions. Also note that students may suggest that their subjects fill in a seasonal round diagram as part of the interview. Students can also fill in the diagram as the interview subject speaks.

4. As students are working on questions, visit each group and ask them to assess what they’ve come up with. For example: Are the questions clear and easy to understand? Do the questions give you the answers you are looking for?

5. **Sharing questions.** You may want to have students share some of their interview questions as a class, and develop a master list of question options. You could then either have each student ask all of the questions from the master list, or have them choose their own questions from the list.

6. **Additional interview preparation.** Make sure students have a blank seasonal round diagram to take with them to the interview. Spend the last part of class answering students’ other questions about the interview. Set a date by which interviews need to be completed (1-2 weeks out), and provide additional support over the next week or so as students work on this project outside of class. You may need to suggest interview subjects to students who have trouble finding people on their own.

**Day 5 – Interview recap**

**Materials**

Student notes from interview

1. **Discussion.** Lead a discussion about how the interviews went for each student. What went well? What would they do differently if they did this again? What did students learn? Etc.

2. **Seasonal round diagram for interview subject.** Students should redraw the seasonal round diagram that was made during the interview, making each part clear and neat and perhaps adding color or drawings to the diagram. This diagram is one of their final two assessments from this unit.

3. **Story of the interview subject.** The second final product of the unit is a brief (1-2 pages) story about the interview subject’s life, particularly involving the plants he or she gathers and uses. This could be assigned for homework or part of an additional class.

4. **Assessment.** Assess students’ work with a checklist or rubric (not included).
Examples of Seasonal Round Diagrams

Seasonal round on Coal River, West Virginia, based on interviews and field sketch by Mary Hufford. Graphic adapted from Suzuki Graphics. Source: Library of Congress American Memory collection, part of “Tending the Commons” site (see Resources): http://memory.loc.gov/ammem/collections/tending/season1.html
Athabascan seasonal round, information gathered from elders in Minto, Alaska.

Graphic courtesy of the Denali Foundation and the Alaska Native Knowledge Network, available online at [http://www.ankn.uaf.edu/curriculum/Athabascan/ObservingSnow/fourcorners.html](http://www.ankn.uaf.edu/curriculum/Athabascan/ObservingSnow/fourcorners.html), as part of the ANKN’s website ([http://ankn.uaf.edu/](http://ankn.uaf.edu/)), which is aimed at helping readers understand Alaska Native knowledge systems.
Seasonal Round of the Umatilla, Walla Walla, and Cayuse peoples
Image copyright Lynn Kitagawa, used with permission.

This image and detailed information about each item on it can be found at
Trailtribes.org is a website published by the University of Montana to educate readers about native history along the trails traveled by Lewis and Clark.
A Seasonal Round for Northern Maine
Name: ____________________________

You will need:
Blank seasonal round diagram
2 colors of colored pencil
Computer with internet access

1. On the website People, Plants and Gathering in Northern Maine (http://nrs.fs.fed.us/sustaining_forests/conserve_enhance/special_products/maine_ntfp), read about some of the gatherers who live in northern Maine (click on “People” or “Gatherer Profiles”) who rely on wild plants for food, as well as the detailed descriptions of the plants they gather (click on “Plants” or “Plant Profiles”). Below, jot down at least 6 or 7 foods that are gathered or grown for food in northern Maine, and the names of the gatherers who collect them.

2. For each of the foods you wrote down, read about the best time to gather it. If the information is not in the gatherer profile, check the plant profile.

3. Record this information on a blank seasonal round diagram. Use one colored pencil to record plant names and their gathering ‘seasons’. Be as specific as you can be when showing the time of year that a plant can be gathered. It is OK to record information from more than one gatherer on the diagram. You are trying to create a seasonal round for the whole region, not just for one person.

4. For students living in northern Maine: If you or your family members gather any wild plants for food or grow food in a vegetable garden, include your own information on the seasonal round also.

5. So far we’ve only been dealing with freshly-gathered plants and fruits. You’ve probably read about how some gatherers process foods to preserve them for later use. Freezing, canning, drying, jam-making, and wine-making are all examples of ways to preserve food and extend its ‘season’. Below, write the names of the plants that are preserved, and write the preservation method next to it. Maine students: If you or your family use other methods of preserving foods, include those as well.
Example: Blackberries – jam, freezing
6. Using your second color, show how preservation extends the season for the foods on your diagram.
7. If any gatherers use other ways of talking about the seasons than the names of the months, include this information on the outer ring of your diagram.
8. Answer the analysis questions.

**Analysis questions.** Answer in complete sentences.
1. How does the wild food diet in northern Maine change throughout the year?

2. Is it possible to gather wild foods and eat them fresh (not preserved) all year? _______
3. If your answer to the previous question was no, describe the times of year when a person’s diet could contain the most fresh wild foods.

4. Name and explain some reasons why the patterns you described in #3 might exist.

5. How do preservation methods such as drying, freezing, or jam-making help to ‘extend the season’ for wild foods? (If foods are canned, dried, frozen, or otherwise preserved, how does this change their presence in a person’s diet throughout the year?)

6. What are some potential benefits to eating wild foods?
7. What are some concerns people might have about eating wild foods?

8. Research extensions:
   a. **Nutrients in season.** Research the nutritional content of one or more of the wild foods you included on the seasonal round. What nutritional value does this food have? What food(s) typically bought at a store could this food replace in a well-balanced diet? The website Healthaliciousness (http://www.healthaliciousness.com/nutritionfacts/) is one of many that accesses the USDA database of nutrition information on thousands of foods, including wild foods.
   
   b. **Digging into food preservation.** Do research to compare food preservation techniques such as canning and freezing. Do they differ from each other in the nutritional content of the preserved food? For example, do canned fiddleheads have more nutrients than frozen fiddleheads? Explain. Your local university extension office or website is a good place to start learning about food preservation. Ask your teacher to help you locate this resource. Another good resource is the National Center for Home Food Preservation, whose website is at http://www.uga.edu/nchfp/.
   
   c. **Seasonal round comparisons.** Compare your seasonal round for northern Maine with a seasonal round from another region. Your teacher has seasonal rounds from southern West Virginia, interior Alaska, and Wyoming and Montana.
      i. How does your Maine seasonal round diagram differ from the diagram from another region? Be descriptive.

      ii. Research some basic climate and geographical information about that region as well as northern Maine. Write down your source for all of these statistics. Find out:
          1. ____Average temperature in January
          2. ____Average temperature in July
          3. ____Average annual rainfall
          4. ____Average annual snowfall
          5. ____Plant hardiness zone. To find this, go to http://www.usna.usda.gov/Hardzone/ushzmap.html
             What factors determine a plant's hardiness zone?

   6. **Ecoregion.** To find this, use the interactive map at http://www.nationalgeographic.com/wildworld/terrestrial.html
      Once you've located the place on the map where the seasonal round is from, click on it to get the name of the ecoregion and learn more details about it.
      Ecoregion name:___________________________
iii. How does this climate information help explain the differences in the two diagrams?

iv. Would you see the same regional differences if the people in these regions shopped at a supermarket instead of gathering wild foods? Explain.
Community Member Interview Guidelines

1. Find someone to interview.
Relatives and neighbors make good interview subjects. Or, they can help you find an interview subject. You could talk with someone who has gathered wild foods for many years, a farmer, an experienced gardener, or a naturalist. Other places to look for interview subjects are senior centers or retirement homes in your town. Ask your teacher for ideas if you have trouble thinking of someone to interview.

2. Contact your interview subject.
Once you’ve thought of a person to interview, contact them. Contact the person, in person if possible or by telephone, and explain your class project and that you’d like to interview them as part of it. Many people are honored to be asked to be interviewed, but some may be uncomfortable with this. If your potential subject does not want to be interviewed, thank them anyway and then try another person.

Once a person agrees to be interviewed, set a date, time, and place for the interview. Explain that interviews usually take 40 minutes to an hour. If you plan to record the interview, make sure this is OK with your subject. Also, digital cameras are great tools to photograph your subject, but make sure that this is OK as well.

3. Plan your questions
Before the interview, plan the questions you want to ask. Write questions that will require more than a Yes or No answer. Because you want to learn about plants and how and when your interview subject gathered them, you will want to ask questions about:

- The kinds of plants they gather or gathered
- The specific names of the plants
- What they used the plants for (food, medicine, crafts, or other uses)
- What time of year they gathered the plants. Find this out for each plant as specifically as possible – get the month and even details like “the first week of March” or “the end of September”.
- Any memories or stories about gathering any of these plants

Write your questions out on a sheet of paper and bring it to the interview so you can look at it. When your list of questions is complete, role play your interview questions with a classmate or family member. Are the questions clear and easy to understand? Do the questions give you the answers you are looking for?
4. Conduct the Interview

4a. Interview Manners. Here are some pointers for good interview manners:

- Be on time.
- Be prepared. Have your questions written down and your notebook out.
- Be polite. Say *please* and *thank you* and address people formally (using Mr., Mrs., Ms., Miss, and so on).
- Provide time for the person to answer questions. Be patient when answers take a long time.
- Do not argue with or correct the subject. Oral histories are not always accurate. But they do provide important information about feelings and impressions.
- Some subjects may not want to answer some questions – like about the specific location to find valuable mushrooms. Respect their wishes and secrecy and don’t push them to talk about topics they don’t wish to discuss.
- End your interview by thanking your subject.
- After the interview, send a thank you letter to the subject.

5b. Getting Started

1. Introduce yourself. Give your name, age, the class and school you attend. Describe the project that you are working on.
2. Begin the interview by asking where and when the interview subject was born.
3. If your subject strays from the topic, try to refocus by asking one of your prepared questions.

5c. Ask Follow-up Questions

Listen carefully while your subject is talking. Often, what a person says may suggest a follow-up question that will produce interesting information. For example, if your subject mentions going out after floods to gather a certain plant, you might ask: Why did you go out after floods? Why were the floods important? How often did you get floods? What river or stream was flooding? What time of year did the floods happen?

Write down follow-up questions as your interview subject speaks. That way, you can ask the follow-up questions at a pause in the interview, without interrupting your interview subject's train of thought.

5d. Seasonal Round Diagram

Bring a blank copy of the seasonal round diagram and a sharpened pencil with an eraser. At some point in the interview, give it to your interview subject if they want to fill it in. This can be a good way to get your subject talking if he or she has trouble coming up with plants at first, or it can also
be a good thing to do later in the interview. Ask them to explain any words they write that you do not understand or that you have trouble reading.

After the Interview

5. **Analyze the Interview**

Read over your interview notes. What did you learn? Did you get information about plants the subject gathers and when they gather them? Were there any interesting stories that you want to share with your classmates?

6. **Rewrite the seasonal round diagram**

Redraw the seasonal round diagram that your interview subject filled out. Make sure you add anything that they talked about but didn’t get to write down. Write neatly. You may want to add colors if that will help your diagram be more clear.

7. **Tell your subject’s story**

Write up a short summary that tells about your subject’s use of plants throughout the year. This is a good place to share interesting stories or other facts that make your subject “come to life.” You may get a chance to present this story to your classmates. Pass it in with the seasonal round.
Seasonal Round Diagram
Name:__________________________