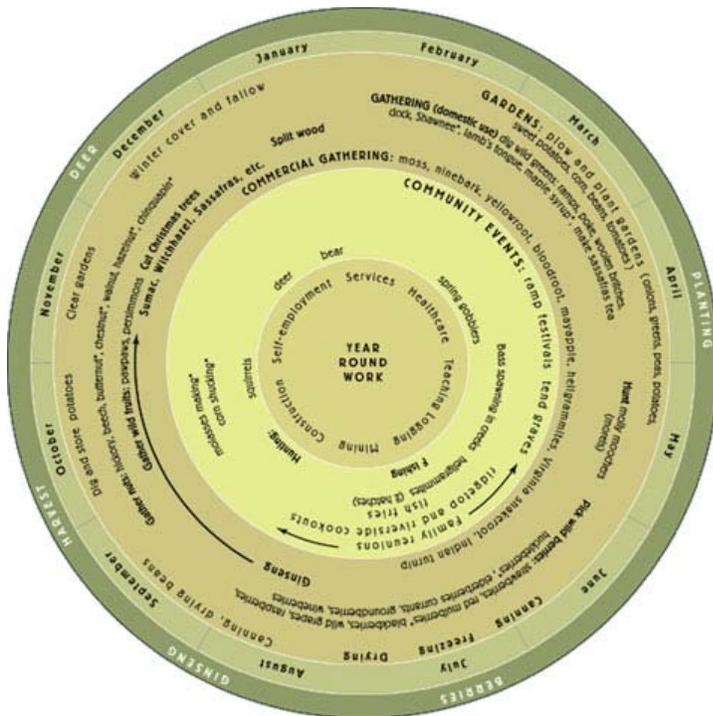


# Eating in Season: The Seasonal Round in Northern Maine

## A Social Studies and Geography Lesson for Grades 9-12

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:** 9-12

**Discipline:** Social Studies; Geography

**Maine Learning Results Addressed:** *Social Studies D1.* Students understand the geography of the United States and various regions of the world and the effect of geographic influences on decisions about the present and future.

**Maine Learning Results Assessed:**

- *D1.a.* Explain that geography includes the study of physical, environmental, and cultural features at the local, state, national, and global levels and helps people to better predict and evaluate consequences of geographic influences.
- *D1.c.* Analyze local, national, and global geographic data on physical, environmental, and cultural processes that shape and change places and regions.

### 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 food preservation/season extension on the seasonal round.

- Relate seasonal round to climate and other geographic factors.

## 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 activity, 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, and then apply the concept to analysis of information found in the **People, Plants & Gathering in Northern Maine** website. NOTE: Teachers interested in incorporating oral history through interviews of community members into this study should consult the lesson “Eating in Season” for grades 5-8, which could easily be adapted for older students.

## Resources:

*People, Plants & Gathering in Northern Maine.*

[http://nrs.fs.fed.us/sustaining\\_forests/conserv\\_e\\_enhance/special\\_products/maine\\_ntfp](http://nrs.fs.fed.us/sustaining_forests/conserv_e_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>

*The Wabanakis of Maine and the Maritimes: A resource book about Penobscot, Passamaquoddy, Maliseet, Micmac and Abenaki Indians with lesson plans for grades 4 through 8.* American Friends Service Committee, 1989.

This comprehensive 500+ page resource book is available for a free download from

[http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\\_nfpb=true&\\_ERICExtSearch\\_SearchValue\\_0=ED393621&ERICExtSearch\\_SearchType\\_0=no&accno=ED393621](http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED393621&ERICExtSearch_SearchType_0=no&accno=ED393621)

*The Micmac: How their ancestors lived five hundred years ago.* Ruth Holmes Whitehead and Harold McGee. Halifax, NS: Nimbus Publishing, 1983. An out-of-print but still available resource for Mi’kmaq seasonal rounds.

*Folklife resources for educators from the Library of Congress.* Searchable portal for all folklife topics.

<http://www.loc.gov/folklife/teachers/index.html>

*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>

*Folklife and Fieldwork: A Layman's Introduction to Field Techniques.* Peter Bartis. Washington, D.C.: Library of Congress, 2002.  
Available online and in PDF form: <http://www.loc.gov/folklife/fieldwork/index.html>

## Materials

Double-sided blank seasonal round diagram for each student  
Chalkboard, white board, large piece of butcher paper, or overhead projector for showing the class' seasonal round diagram  
Colored pencils – 2 colors per student  
Computers with internet access to **People, Plants & Gathering in Northern Maine:**  
[http://nrs.fs.fed.us/sustaining\\_forests/conserv\\_e\\_enhance/special\\_products/maine\\_ntfp](http://nrs.fs.fed.us/sustaining_forests/conserv_e_enhance/special_products/maine_ntfp)  
Assessment tool for seasonal round diagrams (not included)

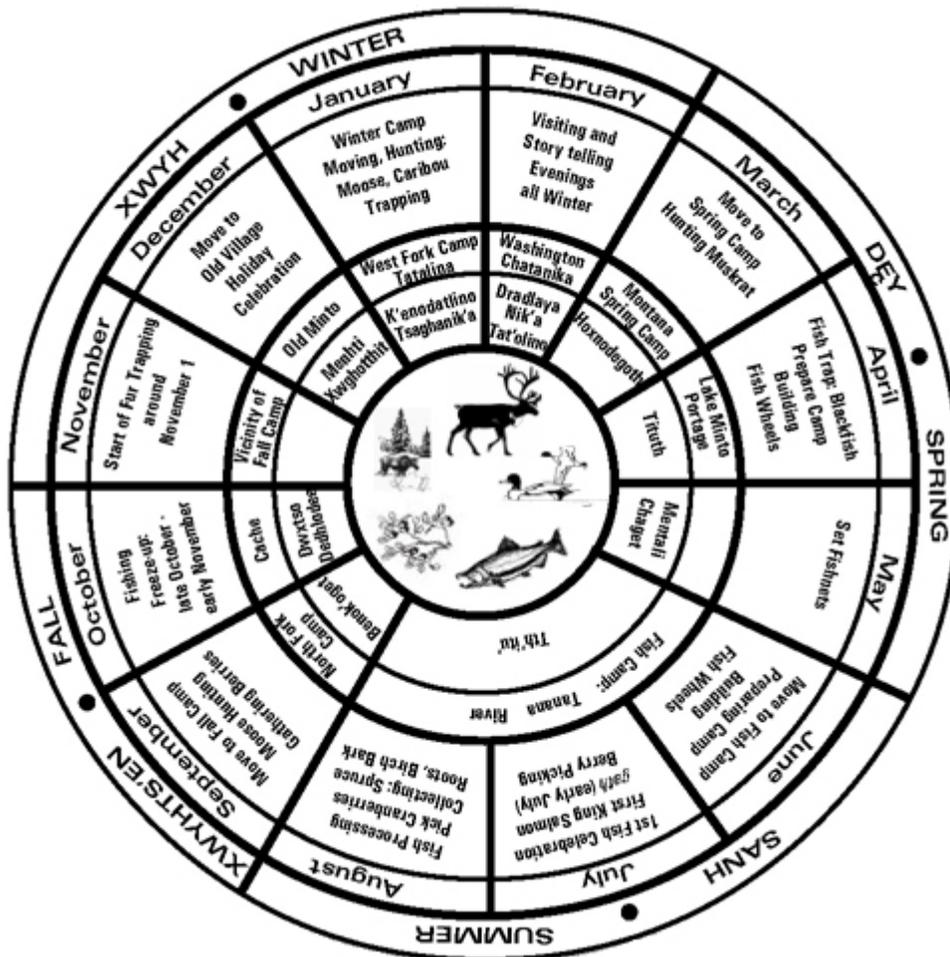
## Activities

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 a board or overhead. 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.** Show students a blank seasonal round diagram on a projector, white board, or piece of butcher paper. Explain that this is a visual tool that researchers use when they are trying to learn about how people spend their time and about what is important in their lives. It usually goes along with longer conversations that the researcher has with the person or group. Note that the circular diagram is split into twelve "pie slices" labeled by month, but 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* (students may be able to name these or others).
3. **Students fill in diagrams.** Pass out blank seasonal round diagrams to each student. Ask students to fill in their diagrams using items generated in the class brainstorm. They don't need to include everything on the board, just the items that mean something to them or that they know about.
4. **Connection to geography.** Once students have their initial seasonal round diagrams, have them share them with a partner and compare notes. Ask students if they noticed any differences, person to person. If so, what could cause these differences? After hearing their responses, emphasize that the seasonal round reflects human behaviors as much as natural events, so there are many 'correct' versions of when the same events occur even though dates may be shifted. Ask students how their seasonal rounds might be different from those of a student 200 miles north (point out this location on a map). Students should point out

that warm seasons may be shorter, cold seasons longer, so certain wild foods may ripen later and not be available as long in the north.

5. **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.
6. **Website exploration.** Make sure that each student is able to access the website and navigate to the **People** and **Plants** sections of the site. Give them about 5 minutes to explore it on their own.
7. **Seasonal round for northern Maine.** Pass out the worksheet “A Seasonal Round for Northern Maine”. When it is completed, have them attach it to their seasonal round diagrams to pass in.





Athabascan seasonal round, information gathered from elders in Minto, Alaska.

This is published at

<http://www.ankn.uaf.edu/curriculum/Athabascan/ObservingSnow/fourcorners.html>, as part of the Alaska Native Knowledge Network (<http://ankn.uaf.edu/>), a website aimed at helping readers understand Alaska Native knowledge systems.

THE PLATEAU SEASONAL ROUND

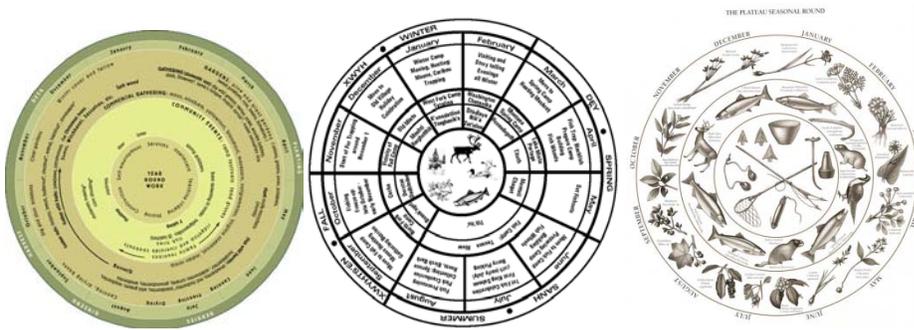


Seasonal Round of the Umatilla, Walla Walla, and Cayuse peoples  
 Image copyright Lynn Kitagawa, used with permission.

This image and detailed information about each item on it can be found at <http://www.trailtribes.org/umatilla/camp-life-and-seasonal-round.htm>  
 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/conserv\\_e\\_enhance/special\\_products/maine\\_ntfp](http://nrs.fs.fed.us/sustaining_forests/conserv_e_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*



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? Record answers on a separate sheet. 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 on a separate sheet. Your local university extension office or website is a good place to start learning about food preservation. Another online 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 Washington state.
    - 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 seasonal round 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.

**d. Ecoregion exploration.** (to accompany c.)

i. Read the following article about world ecoregions and the process of defining them.

[www.worldwildlife.org/science/ecoregions/WWFBinaryitem4809.pdf](http://www.worldwildlife.org/science/ecoregions/WWFBinaryitem4809.pdf)

ii. What factors are important when designating an ecoregion?

iii. Use the following website to learn about the ecoregion that includes northern Maine.

[http://atlas.2c1forest.org/maps.html?m=terrestrial\\_ecoregions&g=Ecoregional\\_Assessment%20-%20Biophysical\\_Patterns#infoArea](http://atlas.2c1forest.org/maps.html?m=terrestrial_ecoregions&g=Ecoregional_Assessment%20-%20Biophysical_Patterns#infoArea)

iv. What is the name of this ecoregion? Does it differ from the ecoregion name you found above?

v. Write down four facts about the ecoregion's climate, vegetation, geology, landforms, or wildlife.

vi. These two websites include information about subregions of the ecoregion that includes northern Maine:

[http://atlas.2c1forest.org/maps.html?m=terrestrial\\_ecoregion\\_subregions&g=Ecoregional\\_Assessment%20-%20Biophysical\\_Patterns](http://atlas.2c1forest.org/maps.html?m=terrestrial_ecoregion_subregions&g=Ecoregional_Assessment%20-%20Biophysical_Patterns)

<http://www.maine.gov/doc/mfs/biophysi.htm>

vii. Which subregion do the gatherers that you researched for your seasonal round diagram live in? (if more than one, list all)

viii. Describe four features of this subregion.

### Seasonal Round Diagram

Name: \_\_\_\_\_

Gatherer or region: \_\_\_\_\_

