

## Exploring the Blueberry Moon and its Offerings

### Moon 8: Zataikas – (Blueberry Moon)

Intended Grade Level: K -2, Extension Grade Level: 3-5

#### Greetings and an Invitation to Explore

##### **Kwai!** (qu -eye) **Hello, greetings! Bonjour, Hola!**

We are in the homelands of the Abenaki people, who have ongoing cultural and spiritual connections to this area. We acknowledge the land and the people who have stewarded it through the generations. The Abenaki people lived in the area that is now New Hampshire, Vermont, Maine, Massachusetts, New York, and Quebec, Canada long before Europeans came to North America. The Abenaki people called this area **N'Dakinna** (n-da-kee-na) or “our homeland”. Watch Anne Jennison, and Indigenous storyteller, describe the Map of **N'Dakinna** here:

<https://www.youtube.com/watch?v=3n8B5vvSWgU> (10:24 – 11:27)

#### Words to Understand:

- **Indigenous**- coming from a particular place.
- **Seasonal**- changes throughout the year or through time.
- **Preserve**-maintain (something) in its original or existing state

#### Abenaki Words to Know:

- **Zatal:** (zah-tall) Blueberries
- **Pebon:** (Pah-bon) Winter
- **Siguwan:** (Si-g-wan) Spring
- **Niben:** (Nee-ben) Summer
- **Tagw8go:** (Taag-wohn-go) Fall
- **Zataikas:** (Zaa-ta-ee-kass) Blueberry Moon
- **N'dakinna:** (n-da-kee-na) homeland
- **Pemmican:** dried berries mixture



### Lesson Affordances:

- The Abenaki people dried foods to survive during the winter.
- Students will make detailed observations verbally and in their notebooks about the dried and fresh blueberries.
- Students will be adventuring outside looking for wild trees and plants.
- Students will be drawing and taking pictures of the berries/grapes for their observation notes.
- Students will understand the purpose for the Abenaki practices of gathering and drying fruit.

### Background:

See the *13 Moons Calendar on a Turtle's Back, Indigenous New Hampshire Harvest Calendar*:

<https://drive.google.com/file/d/1Uf3PMYIHORBiOfjibeCkHcaY2KPCI964/view>

During **niben** (summer) the Abenaki people would gather and harvest foods to sustain them through the long **pebon** (winter). One of the indigenous fruits that the Abenaki would gather were **zatal** (blueberries). “Blueberries were a symbol of the warm seasons. They have their own month in the 13 Moons calendar. It is Moon 8, Zataikas (the blueberry maker moon).”(INHCC, Indigenous Harvest Calendar) They would preserve the **zatal** by drying them in the sun. Preserving and storing seasonal foods like **zatal** would help the Abenaki survive the long, cold **pebon** of their **N'dakinna** (homeland). The harvest season for **zatal** is in late **niben**. **Zatal** can't be harvested any other time of the year, they are only available seasonally. Other plants can be harvested at different times of the year. The Blueberry moon occurs during the warmer summer months since “blueberries are ready to harvest during the peak summer season, usually at the end of July to early August. The wild blueberry will be ripe and ready to pick when it is a deep blue.”(INHCC, Indigenous Harvest Calendar)

### Examples of other seasonal foods:

- Maple Syrup in **Siguan** (spring)
- Corn, Beans and Squash in **Tagw8go** (fall)





### Exploration One: What do we observe growing wild around us?

Go outside and observe! This should be in a park or wooded area where you are sure to find wild plants and trees. This is a fun time to use nature as a great learning opportunity to learn more about seasonal changes in the Northeast.

#### Materials:

- Observation Journal
- Pencils/colored pencils
- Digital Camera
- Bags for specimens

#### Directions:

1. Have students explore the environment.
2. Each student should choose three different plants to observe and document.
3. They can record their observations by drawing a picture of the plant or tree in an observation journal, taking a photo of the plant or tree, or collecting a specimen from the plant if it's possible to without harming the plant or tree.
4. For example, you could collect a blueberry, a pinecone, or a leaf.
5. Ask your adult before you collect a specimen!
6. We talked about **zatal** (blueberries). Can they grow here all year?
7. If we came to look for blueberries in the **pebon** (winter) or **tagw8go** (fall) would we find them?

#### Ask/Discuss:

- What season is it now? (During the exploration.)
- Are there plants in season now?
- What plants do you see?
- The Abenaki people lived on and with the land, taking care to use its resources well.
- What are some native plants the Abenaki people might have used?
- How do you think they might have used them?

#### Connect:

1. From this exploration, students will gain experience observing and writing down detailed data and notes, which they will also be doing in exploration two.
2. With the information they gain from their exploration, students will be able to understand what happens to preserved fruit in the drying process because of the observations they made about the plants and trees in exploration one.





- The Abenaki people used dried foods in order to survive through the harsh New England winters. Because of its very few ingredients, the Abenaki would often make a dried food known as Pemmican. This food could consist of dried fruits or dried meats. See extension below to see Pemmican being made.

### Exploration Two: Why did the Abenaki people dry fruit?

This is a simple experiment to observe what happens to fruit that has been preserved through drying compared to fresh fruit over time. What changes do we observe in the fruit?

#### Materials:

- Observation journal
- Pencils/colored pencils
- Digital camera
- Dried blueberries and fresh blueberries **OR** raisins and grapes

#### Directions:

- Students will leave a container of fresh berries and a container of dried berries out at room temperature.
- Have students observe and record the changes to both the fresh and dried berries.
- Note smell, texture, and appearance in an observation notebook.
- Draw or photograph the berries or grapes at each observation.
- Continue your observations once every other day for two weeks.

#### Ask/Discuss:

- What changes did you record in the dried berries or raisins?
- What changes did you record in the fresh berries or grapes?
- After looking at your observations, explain why you need to preserve food.

#### Background for Educators

This lesson is to teach students the importance of how the Abenaki people used the land and its resources to survive the long northeastern winters. It introduces an early knowledge of food preservation that was important then and today using blueberries, raisins, or grapes. This resource provides background for explains how the native people began cultivation of the blueberry Blakley, J. (2018, November 13). *Native Fruit, the Wild Blueberry*. *Smithsonian Libraries and Archives*.

<https://blog.library.si.edu/blog/2018/11/13/native-fruit-the-wild-blueberry/#.YT5lQy1h23V>





### Extension Grade Level: 3-5

**Making Pemmican: During Moon 9, the Temaskikos Moon, the Gathering and Harvesting Moon, the Abenaki people would use these dried fruits from the summer to make Pemmican. Here is a link to the video which provides some great visuals of the recipe:**

<https://www.youtube.com/watch?v=MBvw2AboSKk>

**As well as a slideshow to show more detailed pictures.**

[https://docs.google.com/presentation/d/1oFa6SIV8w\\_sDaIcY4fxC0biJGdDQwBewHX4IV\\_ubeZ4/edit?usp=sharing](https://docs.google.com/presentation/d/1oFa6SIV8w_sDaIcY4fxC0biJGdDQwBewHX4IV_ubeZ4/edit?usp=sharing)

**Check out this recipe for cornmeal blueberry mush:** Sautauting:Blueberries Served Before the Pilgrims. *North Carolina Blueberries.*

<https://northcarolinablueberries.com/385/a-blueberry-favorite-at-the-first-thanksgiving/>

#### **Directions:**

The Pemmican recipe and support video we will be looking at includes the use of dried fruits, vegetables, nuts, and seeds and will be made using a mortar and pestle. Below you can find the steps on how to make Pemmican:

1. Put a small, but equal amount of each ingredient into the mortar.
2. Using the pestle, break up the ingredients in the mortar until the oils from the nuts and seeds combine with the pulp from the fruit.
  - a. You will know it's broken down if the consistency looks sticky and pliable.
3. Scrape the mixture out of the mortar and place it on a piece of wax paper or plastic.
4. Using your hand, apply pressure and flatten the mixture into a granola looking bar and wrap it back in the wax paper.

#### **Ask/Discuss:**

- What is Pemmican?
- What is used to make Pemmican?
- Can Pemmican be made easily at home?
- What is Pemmican made in?
- What were the benefits of making and eating Pemmican?





## Standards Met Through This Lesson

### *ELA Common Core English Language Arts Standards*

**CCSS.ELA-LITERACY.W.2.8** Recall information from experiences or gather information from provided sources to answer a question.

See <http://www.corestandards.org/ELA-Literacy/>

### *C3 Framework Standards*

#### **Kindergarten-Grade 2 History**

**D2.His.2.K-2.** Compare life in the past to life today.

#### **Kindergarten-Grade 2 Geography**

**D2.Geo.8.K-2.** Compare how people in different types of communities use local and distant environments to meet their daily needs.

**D2.Geo.4.K-2.** Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.

See <https://www.socialstudies.org/sites/default/files/c3/C3-Framework-for-Social-Studies.pdf>

### *Next Generation Science Standards*

**2-LS2-1** Cause and Effect- Events have causes that generate observable patterns. See <https://www.nextgenscience.org/topic-arrangement/2interdependent-relationships-ecosystems>

**K-ESS3-3** Communicate solutions that will reduce the impact of humans on land, water, air, and/or other living things in the local environment. See <https://www.nextgenscience.org/topic-arrangement/kinterdependent-relationships-ecosystems-animals-plants-and-their-environment>





Indigenous New Hampshire's Collaborative Collective  
13 Moons Elementary Educator Guide:  
*Exploring the Year through Abenaki Histories and Lifeways*



**With Gratitude:**

- ❖ Cowasuck Band of the Pennacook-Abenaki People, see <https://www.cowasuck.org/>
- ❖ Original art by Edith Pucci Couchman
- ❖ University of New Hampshire preservice elementary educators for your logistical and creative designs and research.
- ❖ Indigenous New Hampshire Collaborative Collective Education Working Group

**References and Further Reading**

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