

## **GWOW: Wheels of Time and Place Lesson Plan**

Using Wheels of Time and Place is a way to visually explore and understand phenology, cycles, culture, and the interrelationship of life.

Images are the universal language and making art is a commonality that all cultures share. Art can be thought of as a form of visual communication, a way to express and document the various happenings and events that we observe in nature and our impressions of them. The act of drawing is natural and enjoyable to most children, but do not be fooled by its playful quality...it is a serious way to build observation skills and cement that learning in our memories.

Since 80% of the information that goes into the human brain comes through the eyes, we are all “visual learners”. Using drawing and art to enhance and express scientific and cultural knowledge about the life around us makes concepts and information come alive and can lead to new insights and observations. As they say, a picture is worth a thousand words...images have a unique kind of impact that goes directly to our hearts and minds and is immediately understandable.

The Wheels of Time and Place are based on a very simple concept...the Circle. Circles are everywhere in Nature, and time itself can be thought of as circular rather than linear. Completing a Wheel encourages us to see and think about time, life cycles, and interrelated species in a holistic, rather than linear and separated way. Seen as part of a whole system, we begin to understand how one thing affects everything else around it. We emerge with a feeling that we too are part of something bigger...our personal human cycles of days, months, seasons, and years are part of a larger cycle based in natural time and place.

### **Wheel of the Year: Life Cycles of a Single Species**

In understanding climate change, tracking the life cycles of an organism, the weather, and occurrences such as migration and bloom times of flowers gives us a sense of the changes that are occurring over time. By following a single species and illustrating its life cycle, we can start to hone our observation skills and deepen our awareness of another life form around us. Ultimately, following and understanding one species leads us to other species that it depends on for food and an awareness of the other factors in the environment that it needs to thrive. This lesson is best done as an ongoing activity throughout the course of a year, but could be adapted to a shorter time frame by using reference materials instead of or in addition to direct observation.

#### **Objectives:**

- Students will develop a deeper understanding of a species in the ecosystem
- Students will increase their observation skills
- Students will increase their artistic skills and their use of images to communicate information.

- Students will increase their knowledge of the life cycle of their chosen species and how it is affected by climate change

### **Materials:**

- Wheels of Time and Place blank journal template (download at [www.partnersinplace.com](http://www.partnersinplace.com))
- Art materials as desired; pencils, colored pencils, watercolors, markers, etc.
- Clipboards or drawing boards

### **Activity:**

Choose a plant, bird, or animal species that is native to your region; ideally one that you can directly observe in the outdoors at various stages of its life cycle. These could be species that are discussed in depth on the GWOW website such as sugar maple, birch, marten, etc. or choose one they are curious about. This Wheel of the Year is divided into thirteen sections, one section for each month of the lunar calendar, in keeping with traditional ways of marking time and natural events.

- If possible, go to a nearby outdoor site and choose a spot to make some observations. This should be a place that you can return to regularly.
- Having chosen a species to work with, begin by drawing at its life stage at that time of year...For example, in very early spring the sugar maple would have buds that were just beginning to swell.
- Make note of the date, the weather conditions, and what is happening both with the organism you're drawing and what is going on around it.
- Continue this monthly, ideally at the time of each full moon. By making these observations at regular intervals, a sense of the changes through the seasons will be seen and felt.
- If direct observation is not possible, or for parts of the life cycle that are impossible to observe directly (such as underground hibernation), do some research via websites and/or books and field guides to find images to work from.
- After completing the entire life cycle, "compare notes" by placing wheels together as a group, and talk about the different life cycles that were students depicted. What was similar? What was different? How do these species interact with each other?

### **Creating the Wheel: Making Images**

Many people are squeamish about drawing, and may lack confidence and experience in it. Usually this improves with practice, and emphasizing process over perfection. Think of it as "communication" rather than wall art and you may be pleasantly surprised at the results! There are also many ways to make images that carry across meaning:

- Do a rubbing of a leaf or texture
- Take a photo and print it; glue it on the wheel as a collage.
- Use colors and text as a design element
- Trace around objects such as leaves, branches, etc.

### **Drawing Tips and Techniques: Resources**

*The New Drawing on the Right Side of the Brain*, Dr. Betty Edwards

This book is the “bible” of drawing strategies that encourage whole brain thinking and are amazingly effective at improving skills.

*Illustrating Nature: Right Brain Art in a Left Brain World*, Irene Brady

Fantastic book on nature illustration, with an emphasis on accurate techniques and ways to depict different textures such as fur, feathers, etc.

Also many wonderful downloadable resources through her website:

<http://www.natureworkspress.com/>

*Keeping A Nature Journal*, Claire Walker Leslie

Many tools and techniques for keeping a traditional nature journal that can be adapted for use with the Wheels

## Wheel in Quarters: Ojibwe Lifeways

Wheels divided in quarters can also be used to visually represent the different Ojibwe Lifeways throughout the course of the year. There is extensive background information on the GWOW website about the plants, animals, and traditional seasonal activities in each of the four seasons of the year. Completing a Wheel based on this information will help to integrate and see the “big picture” of how the seasons fit together and flow throughout the year.

Some suggestions of imagery for each season could include:

### Spring

Draw the maple sugaring process, how sap rises in the maples, leaves unfolding at various stages, birch bark and twigs, traditional uses of birch.

### Summer

Fishing...Draw the various fish that live in the local rivers, streams and lakes. Follow a river from the headwaters all the way to its mouth and show the water’s journey. Draw an image of the fishes’ habitat and food it eats.

### Fall

#### Wild Rice

Draw the life cycle of the *manoomin*, rice waving in the sloughs, draw the plants and grains up close. Show the ricing process and grains of rice after harvest.

### Winter

#### Stories

Winter was the time for gathering, learning and stories...this was a time for doing indoor work and passing on knowledge. Learn about and listen to a story, one that might have personal meaning for you. Illustrate this story, using images and symbols. Even though it is cold outside, you can still, draw and paint the beauty of frost crystals, snowflakes, ice, and snow.

These are just a few of the suggestions for the Wheel in Quarters. This is a very good wheel to use when you have a shorter time frame than a year to work with, such as an experience in one place for a day that you might want to capture. Instead of observing phenology and happenings over time, you can experience a place in different ways:

- Sit in the center of a place, and draw what you see from each of the four directions in each section.
- Draw what you experience through five different senses...touch, taste, smell, sound, sight
- Draw the four different elements of a place...the water, earth, fire, and air.

### **Thirteen Moons Wheel:**

The Ojibwe in this region and tribes in other regions marked time by the cycles of the moon, and gave names to these cycles according to what was happening around them at that time of year in that region. There are thirteen full moons in the course of a year. Interestingly, this also corresponds to the number of sections on the shell of a turtle's back. Each moon cycle is 29.5 days from new to full, and back to new again. Just watching and the progression of the moon through this cycle fosters a level of awareness and calibrates our senses to natural time. The 12-month calendar we now use represents a more mathematical, rather than a natural division of time...although the English name "month" is derived from the word "moon". Some have adapted the thirteen moons of the year to fit the twelve month calendar cycle, so many resources only list twelve. The names of the thirteen moons vary from area to area, mostly depending on the climate and the times of the season when things occur. These are more than just a "name"; for people who live close to the land it is important to know what times of the year are right for traditional harvesting activities such as berry picking, ricing, fishing, and maple sugaring. Keeping a Thirteen Moons Wheel helps us to tune into the phenology and form deeper ties to the cultural traditions of our specific area.

### **Ojibwe Moons of the Year:**

**First Moon** – Gichi-manidoo-giizis, Great Spirit Moon

**Second Moon** – Namebini-giizis, Sucker Fish Moon

**Third Moon** – Onaabani-giizis, Hard Crust on the Snow Moon

**Fourth Moon** – Iskigamizige-giizis, MapleSap Boiling Moon

**Fifth Moon** – Waabigonigiizis, Flowering Moon

**Sixth Moon** – Ode'imigiizis, Strawberry Moon

**Seventh Moon** – Miskomini-giizis, Raspberry Moon

**Eight Moon** – Miini-giizis, Blueberry Moon

**Ninth Moon** – Manoominike-giizis, Ricing Moon

**Tenth Moon** – Waatebagaa-giizis, Leaves Changing Colors Moon

**Eleventh Moon** – Binaakwe-giizis, Falling Leaves Moon

**Twelfth Moon** – Gashkadino-giizis, Freezing Moon

**Thirteenth Moon** – Manidoo-giizis, Spirit Moon

### **Creating a Thirteen Moons Wheel :**

1. Do some research and find out when the moon is full in each month, and what time it rises and sets. If at all possible, go outside and look at the moon, experience its light.
2. Research what the traditional moon name is for your area (see resources). This may vary from region to region. For example, the maple Sugaring moon might come in March or April (3<sup>rd</sup> or 4<sup>th</sup> moon of the year) depending on local climate.
3. Observe what is going on in nature around you, ask yourself:
  - What season is it? Is it Cold? Warm? What is the weather like? Try to get a general “feel” for this particular moon, based on your own observations.
  - What plants, trees and flowers are blooming? What is growing, blooming, setting fruit and seeds, ready for harvest, or going dormant?
  - What animals, birds, fish, or insects do you see and hear? What are they doing?
  - What is happening with the rocks, the water, the soil...those things you might not typically think of as “living” ? Are they freezing, thawing, moving, cracking...what other life are they supporting?
4. Based on your observations and your research, create image(s) in one section of your wheel which represent that moon of the year. Be creative...draw, paint, use photos, collage, combine images and words. Use colors that express the “feel” of the experience.
5. Repeat next month until your entire Thirteen Moons Wheel is done. Take time to reflect on this as a whole, and share your wheel with others.

### **Resources:**

GLIFWC Moon Calendar

<http://www.glifwc.org/publications/pdf/2015Calendar.pdf>

Thirteen moons curriculum: Ontario Native Literacy Coalition

<http://onlc.ca/wp-content/uploads/2014/06/13-Moon-curriculum2.pdf>

13 Moons Program; Fond du Lac Tribal college

<https://giizis13.wordpress.com/about/>

