

Life Cycle Wheels: Recording Nature's Calender

Overview

Festival Make-n-Take Activity

Visitors will use a life cycle wheel to record seasonal observations of plants and animals.

Recommended Ages

Festival Make-n-Take

Ages 7 and up.

*Lower elementary age children should do this with their family. Family can record the observations and the kids can help observe and draw pictures.

Activity Time

Festival Make-n-Take 10-30 minute

Materials

- > Copies of the life cycle wheel
- > Examples of completed wheels
- > Coloring pencils and pencils
- Clip boards
- > Sit-upons

Activity in Action

Send us your pictures and comments on this activity to bday@birdday.org.

Introduction

The annual life cycle of our birds is linked with the seasonal changes in the habitats they depend on. The migration of birds in the spring is timed with the hatching of insects in the vast temperate forests of North America. The timing of insects is linked with the rebirth of plant life after winter. The rebirth of plant life is linked to increasing sunlight and warmth that comes with spring. Nature's calender is beautiful thing to observe. When the mountain ash are full of berries, I know the cedar waxwings will soon invade my yard. What life cycle connections have you noticed in your area?

Life Cycle Wheels: Keeping a Record

The reoccurrence of plant and animal life cycles in relation to seasons and climate is called phenology. Consider it nature's calender, and it is important for all plants and animals. For people, the regular timing of nature's cycles is important for many reasons like our health, agriculture, recreation, and monitoring weather events. Life cycle wheels are a unique way to keep a record in a non-linear fashion, revealing patterns and giving us a true sense of cyclic nature of our world.

Get Involved! Discover easy, fun ways to learn and connect with others while spreading bird conservation awareness—join the EFTA Flock at BirdDay.org

Find free educational materials (and much more) at BirdDay.org

Have you registered your IMBD event? It's quick, easy, free, and an important way to measure IMBD success each year. To register, go to birdday.orr or send your even information to bday@birdday.org.

Phenology & Climate Change

The warmer temperatures that are the result of climate change are causing many plants to flower earlier and insects to emerge sooner. While non-migratory birds may be able to adjust their activities to take advantage of changes in the availability of food resources, migratory birds must alter the timing of their long-distance journeys. If birds that winter in Mexico, the Caribbean, and Central and South America do not change the timing of their departure to breeding sites in the United States and Canada, they may miss the insects and other foods on which they depend to help them migrate and to nest and raise young. Scientists call this phenomenon "mis-timing". Already, researchers have learned that some bird species may need up to 35 years to shift the timing of their migrations, and that migratory species require more time.

Festival Make-N-Take Activity Preparation

Download and print the wheel, or order copies.

Download the wheel at http://www.birdday.org/birdday/themes/theme-2013/themes-2013-education. The wheel is 11" by 11" so you may need to take it to a copy center to print. You can also order copies through Environment for the Americas at www.birdday.org/shop. (\$1 per copy or \$11.95 for 30 copies). Consider your supply of wheels and decide how you will distribute the wheels. For example, will you give one for per family or one per visitor.

Print the two examples included with this activity for display.

Review how the information is recorded in the wheels referring to the examples and the diagram on page 3. These are good examples to use when explaining how to use the wheel to visitors.

Read through the activity then decide if this will be a self-guided experience or a staff-led activity.

If it is self-guided, choose a place(s) you think best for visitors to sit to make and record observations. Make sure the observation areas are safe and free of poison ivy, red ants, etc. Why choose to make this a staff-led activity? Staff could model and lead how to make observations and record them in the wheel. This option may be especially helpful for people new to your site and journaling.

Gather Materials.

Gather clip boards, pencils and colored pencils, and consider providing sit-upons, like carpet squares, to make visitors comfortable while observing and recording on their wheels.

EFTA Conserving Birds by Connecting People

Find free educational materials (and much more) at BirdDay.org

Presenting the Activity

1. Introduce the Life Cycle Wheels

Life cycle wheels are a unique way to look at the order of events. Rather than recording and viewing events in a traditional time line or calender format, the wheels capture annual reoccurring cycles, allowing us to more readily see patterns and connections. The wheels can be used to record many cycles in nature: birds, blooms, phases of the moon, seasons, and more. You can record as much detail of your observations as you choose through words, drawings, pictures, or a mix of all.

2. Explain how to use the wheel:

Show visitors the 2 examples of completed bird life cycle wheels included with this activity. Begin in by pointing out the center of the circle that shows the theme of wheel. The theme can be a particular bird, a specific tree, or place. Move to the next ring of months to show how this area can be filled, with pictures or description or both, to record their observations. Point out that to capture what is blooming, buzzing, and singing that time of year, the best observations come from using your senses: sight, sound, smell, and touch. Do you hear the buzz of hummingbird wings? Do you smell fragrant flowers? Are the mosquitoes or black flies biting? What colors do you see? The more details that are captured in the life cycle wheel, the more the changes over the months will stand out. Next, talk about the outermost ring and how it might be used to show seasons, or further details about the habitat or weather. Wrap-up by showing visitors a wheel you have started. Point out what you have recorded to give visitors some ideas of what they might observe at your site.

3. Give each visitor one wheel to cut out.

Suggest they put their name on the back of the wheel. Review the parts of their blank wheel if needed, starting with the center. You might give the visitors some ideas for a focus theme for their wheel (center of wheel), or suggest that they look for inspiration once they are sitting quietly observing.

4. Making and recording observations.

Give visitors the option to make their first observations at your site, or take it home. If visitors choose to make their first observation at your site, direct them to the areas you think best. You might even give them ideas of something they can observe--maybe its a nest box or berry laden bush that birds and bugs are frequenting, or a pond. If you choose, offer sit-upons, pencils, and clip boards. Give them 10 minutes, or long if they prefer, then give visitors the option to come back to your activity center to color their drawings and/or share their wheels. Discuss how they can continue to fill in the wheel either returning to your site monthly, or choosing a particular place in their own yard.

If visitors choose to take it home, discuss ideas for how to use it home--recording flowers blooming, insects, birds, and more in their backyards.

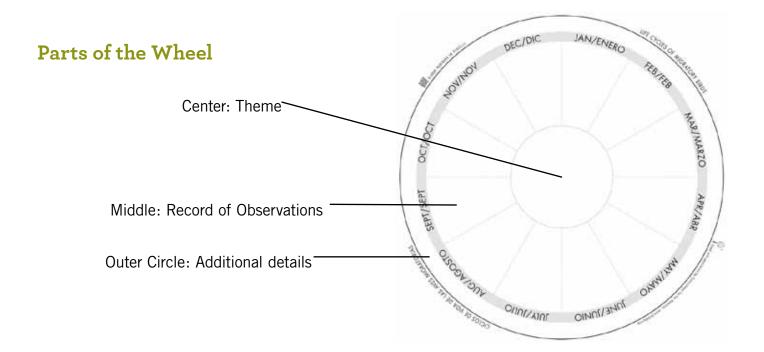
EFTA Conserving Birds by Connecting People

Find free educational materials (and much more) at BirdDay.org

Activity Directions Continued

5. Extensions

Print the mural of the life cycle wheel. Visitors could help fill in the wheel at your site over the course of the year or staff can fill in the life cycle wheel so visitors can see what is going on at your site. You could use the life cycle murals to highlight different cycles at your site such as what's in bloom, what birds are present & what they are doing, weather, sunlight, moon phases, insects, mammals, amphibians, etc.



Sample Life Cycle Wheels

Sample wheels are provided by Partners in Place. See their web site for more ideas, www.partnersinplace.com.



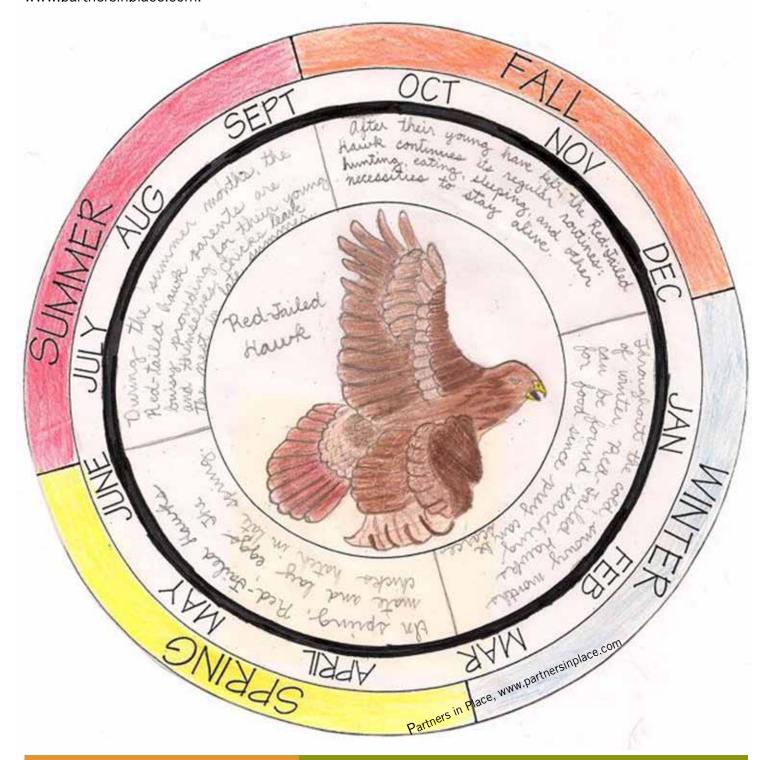
EFTA Conserving Birds by Connecting People

Find free educational materials (and much more) at BirdDay.org

Get Involved! Discover easy, fun ways to learn and connect with others while spreading bird conservation awareness—join the EFTA Flock at BirdDay.org

Sample Life Cycle Wheels

Sample wheels are provided by Partners in Place. See their web site for more ideas, www.partnersinplace.com.



EFTA Conserving Birds by Connecting People

Find free educational materials (and much more) at BirdDay.org

Get Involved! Discover easy, fun ways to learn and connect with others while spreading bird conservation awareness—join the EFTA Flock at BirdDay.org