

Phenology Journal

Phenology is the study of the changing seasons. When the aspen trees change their colors, when the first snowflakes start to fall, when the osprey return to their nest, and when the flowers begin to bloom each year are all examples of seasonal changes. These changes are all around us. They can be studied by anyone, no matter how old you are or where you live.

Scientists around the world study phenology to learn more about plants and animals—as well as the land, air, and sea we all share. Phenology is also important for scientists that study the Earth’s climate and how it changes over time.

How To Use This Journal


1. The first thing you will need to do is set up a short phenology walk somewhere close to your home. **You will repeat this same walk every week to keep track of changes in nature.**
 - a. You can make this walk as long or as short as you want - it could be just a few steps outside your door.
 - b. On your walk, find up to three plants and one mountain to observe. Choose different kinds of plants and make sure you will be able to find the exact same plants again. **You’ll come back to these plants and the view of your mountain every time you do your phenology walk.**
 - c. If you can, identify your plants. What species of plants are they? Bring a ruler so that you can measure buds, leaves, etc.
 - d. Choose one living branch from each of your plants that you will observe on all of your phenology walks. You can put a keychain on the branches, a twist tie, a piece of yarn or something else to help you find them each time.
2. Decide how you want to adapt this journal so that it works best for you. You can make a copy of this Google Doc, use a spreadsheet, print these pages and put them in a 3-ring binder, or use your own notebook or nature journal. Find a way that works best for you!
3. Each time you start your phenology walk, write the date and time at the top of a journal page. Make general observations using all of your senses: What does it feel/smell/sound like outside? For each of your plants and the mountain, write and/or draw specific observations. If you see an animal, make notes in the Animal section. [Click here to see an example journal page.](#)
4. We have included some journal prompts in the following pages as well as a phenology walk template (at the end) you can use. Find more phenology resources at aspennature.org/aces-phenology-resources.

Phenology Walk #:


Date:

Time:

Weather (circle one):

Sunny 

Partly Cloudy 

Cloudy 

Foggy 

Rainy 

Snowy 

Journal Questions (write and/or draw):

1. What is one thing you noticed that you might not have if you hadn't stopped and looked?

2. How did it feel to sit quietly and observe nature? List five words.


<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Phenology Walk #:


Date:

Time:

Weather (circle one):

Sunny 

Partly Cloudy 

Cloudy 

Foggy 

Rainy 

Snowy 

Journal Questions (write and/or draw):

1. Close your eyes and pay attention to all the sounds. What did you hear?

2. What is one thing in nature you are grateful for today?

<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Phenology Walk #:


Date:

Time:

Weather (circle one):

Sunny 

Partly Cloudy 

Cloudy 

Foggy 

Rainy 

Snowy 

Journal Questions (write and/or draw):

1. What animal(s) have you seen that are different than last season?

2. If you could choose to be a plant that lived in your area, which would you choose and why?

<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Phenology Walk #:


Date:

Time:

Weather (circle one):

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Snowy 

Journal Questions (write and/or draw):

1. Pretend to have the sense of smell of a bear.
What things would you smell even if they were miles away from you?

2. Where do you like to spend summer days outside? Why?

<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Phenology Walk #:


Date:

Time:

Weather (circle one):

Sunny 

Partly Cloudy 

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Foggy 

Rainy 

Snowy 

Journal Questions (write and/or draw):

1. What is one thing you noticed today that is different from your last phenology walk?

2. Find three rocks and try to balance them on top of each other. What are three things in your life that you're trying to balance?

<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Phenology Walk #:


Date:

Time:

Weather (circle one):

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Rainy 

Snowy 

Journal Questions (write and/or draw):

1. What is one thing you noticed today that you expect to be different on your next phenology walk?
2. Find a place to sit with your back leaning against a tree. Then look up. If you were in your tree's highest branches, what do you think you would see?


<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Phenology Walk #:


Date:

Time:

Weather (circle one):

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Snowy 

Journal Questions (write and/or draw):

1. Look closely at the leaves or buds on a plant.
What questions do you have?

<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	


2. What is something about plants that you are grateful for?

Phenology Walk #:


Date:

Time:

Weather (circle one):

Sunny 

Partly Cloudy 

Cloudy 

Foggy 

Rainy 

Snowy 

<u>Plant #1</u> Observations:	
<u>Plant #2</u> Observations:	
<u>Plant #3</u> Observations:	
<u>Animal</u> Observations:	
<u>Mountain</u> Observations:	

Extra Journal Prompts

Here are some extra questions and prompts that you can consider during your phenology walks.

- Think about an old tree near your house. What do you think it has seen during its life? Write a story as if you are the tree, and talk about growing up from a seed, all the way to now.
- If you could teach a friend one outdoor skill that you are really good at, what would it be and why?
- When was a time that you went outside and did something difficult that you were proud of doing? This could be a big hike or skiing down something a bit scary.
- Did you know that ants can carry ten times their body weight? What would you do with that kind of strength?
- Ants are strong, spiders can weave webs, and butterflies can fly. If you could become an insect for one day what would it be and why?
- Write a story from the perspective of a small snail. What would life be like for you?
- If someone asked you what makes nature important, what would you tell them?
- Think about your favorite place in nature. What is it like? How does it change from season to season? Describe it in as much detail as you can!
- Spend some time observing an animal near your home, and try to remember everything it does (or take notes). Then, write a story as if you were that animal.
- Take a moment to sketch something you can see far away, something big enough to stand on, something you can hold, and something you can fit on your fingertip.

Additional Resources

Online Resources

- [About Phenology](#) (Budburst - Chicago Botanic Garden)
 - This is a fantastic resource that discusses what phenology is, why it is important (especially how it relates to climate research), and the history of phenological records from around the world.
- [Nature's Notebook Phenology Activity Book](#) (USA National Phenology Network)
 - If this phenology journal wasn't enough, and you want to continue exploring phenology near your home, consider becoming a community science contributor (see next section), or use this excellent activity book created by the USGS and USA National Phenology Network.

Contribute to Community (Citizen) Science!

- [Budburst](#) (Chicago Botanic Garden)
 - Budburst compiles citizens' observations into a national database to be used by scientists. There are also [family activities](#) for different grade levels.
- [Nature's Notebook](#) (USA National Phenology Network)
 - This citizen science project is a bit more technical. By participating in one of the regional campaigns you can help researchers answer key questions.