



# BECOME A NEIGHBORHOOD NATURALIST!

## A Winter Backyard Challenge

Without blooms or bright leaves, winter may seem like the duller of seasons. Pay attention, though, and you'll notice more than the arrival of ice and snow outside your door. The study of these seasonal changes is called **phenology**. Think of it as nature's calendar, and you're helping mark down all of the important events. Whether you live in the city or out in the woods, this challenge will test your ability to tune your senses to the signs of winter. Grab your friends and family, and let's get started!

**GUIDELINES:** Complete challenges to earn badges using your backyard or nearby green space. The more you complete, the more badges you earn. Can you become a neighborhood naturalist?

## LEVEL UP!

Complete more challenges to move up to the next level. Compete with friends and family for even more fun!



**1-4 CHALLENGES  
FLEDGLING  
PHENOLOGIST**



**5-7 CHALLENGES  
EAGLE-EYED  
ECOLOGIST**



**8 CHALLENGES  
NEIGHBORHOOD  
NATURALIST**

## WINTER BACKYARD CHALLENGES

### Identify three types of snowflakes.

Is it true that no two snowflakes are alike? Winter is the right time to find out. When it's snowing, collect a few falling flakes on a dark piece of paper or fabric. What shapes do you see? Use the following guides to learn more about snowflake formation and type.

- **NOAA SciJinks — How Do Snowflakes Form?**  
<https://scijinks.gov/snowflakes/>
- **Guide to Snowflakes**  
<http://www.its.caltech.edu/~atomic/snowcrystals/class/class-old.htm>

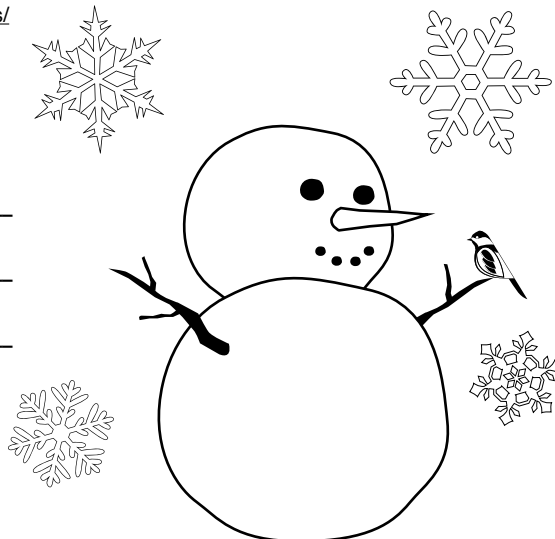
### List three different snowflake types

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### Learn about frost.

Extension Natural Resources Educator Michelle Scarpace can help you see the crystal clear differences between frost, hoar frost and rime ice.

- **From the Desk of Extension: Rime Ice**  
[https://www.wiscnews.com/columbusjournal/announcements/community/from-the-desk-of-extension-rime-ice-creating-the-winter-wonderland-of-2021/article\\_678998b7-4a01-5913-9431-f8fbc3cf1aa7.html](https://www.wiscnews.com/columbusjournal/announcements/community/from-the-desk-of-extension-rime-ice-creating-the-winter-wonderland-of-2021/article_678998b7-4a01-5913-9431-f8fbc3cf1aa7.html)



### Feed the birds.

While many animals hunker down for the winter, birds remain active and on the hunt for fatty, high-energy foods like nuts and seeds. Help a bird out and fix up a snack! You can make a simple bird feeder using a pine cone, peanut butter or shortening, and birdseed. Hang it near a window and see who shows up.

- **Environmental Education for Kids— Pine Cone Bird Feeder**  
<https://www.eekwi.org/activities/arts-crafts/pine-cone-bird-feeder-and-suet-feeder>
- **Cornell Lab of Ornithology Online Bird Guide**  
<https://www.allaboutbirds.org/guide/search>
- **Cornell Lab of Ornithology Merlin Bird ID App**  
<https://merlin.allaboutbirds.org/>

### List three different birds

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

# BECOME A NEIGHBORHOOD NATURALIST!

## A Winter Backyard Challenge

Become a night owl.



Hoot, hoot, who is that you hear when the sun goes down? Winter is the breeding season for owls, so they are especially talkative this time of year. Get help identifying owl calls using this guide from Wisconsin Public Radio.

• **WPR— How to Identify Five Owls Around Wisconsin**

<https://www.wpr.org/how-identify-5-owls-around-wisconsin>

Identify three evergreens.

While many trees lose their leaves in winter, some keep their leaves year-round. These trees are known as evergreens. Identify three in your neighborhood. (Hint: needles are leaves!)



• **Environmental Education for Kids — Forever Green**

<https://www.eekwi.org/plants/forever-green>

• **Arbor Day Foundation Tree Identification Guide**

<https://www.arborday.org/trees/whattree/>

List three different evergreens

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Spend time with the stars.

Although the days of winter are short, the long nights provide the perfect backdrop for stargazing. The three stars that form the belt of Orion the Hunter (of Greek astronomy) or Biboonkeonini the Wintermaker (of Ojibwe astronomy) are especially visible this time of year; look to the southwestern sky for three stars in a line. Check out the following resources to learn more about Orion and Biboonkeonini.

• **Society for Popular Astronomy — How to Find Orion**

[https://www.popastro.com/main\\_spa1/how-to-find-orion/](https://www.popastro.com/main_spa1/how-to-find-orion/)

• **Native Skywatchers — Biboonkeonini-Wintermaker**

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

Find some snow fleas.

Before you feel phantom itches on your arms and legs, you should know that these critters are not the fleas that make your cat or dog scratch! Snow fleas are tiny arthropods that help decompose plant material, and you can often find them peppering the snow beneath trees. How do they survive the cold temperatures? Listen to Extension bug expert P.J. Liesch as he discusses how snow fleas make their own antifreeze (and jump with their “pogo-stick” tails).

• **WXPR—What Are Snow Fleas?**

<https://www.wxpr.org/post/what-are-snow-fleas#stream/0>

• **Environmental Education for Kids — Snow Fleas**

<https://www.eekwi.org/animals/insects/snow-fleas>

Track an animal.



Snow makes it easy to see who is coming and going. Determine who is hanging around your neighborhood by sleuthing for footprints in the snow. Use the following guides to identify the tracks of some common and less common animals that may live in your area.

• **My Wisconsin Woods — Opossum, Raccoon, and Skunk, Oh My!**

<https://mywisconsinwoods.org/2018/02/06/opossum-raccoon-and-skunk-oh-my/>

• **WDNR Mammal Tracks of Wisconsin**

<https://dnr.wi.gov/topic/trap/documents/mtracks.pdf>

Draw the animal tracks you see.



Extension  
UNIVERSITY OF WISCONSIN-MADISON

Content developed in partnership with

WISCONSIN  
Master Naturalist

