

## EDUCATOR GUIDE

### BOG MYRTLE

Written and illustrated by Sid Sharp  
Educator Guide by Jessie Cowe

**GENRE:** Early reader graphic novel, children's fiction

**THEMES:** environmental activist, ethical manufacturing, forest, knitting, labor rights, painted, strike, unionization, unions, workers' rights, etc., comic, conservation, environment, early reader, elementary school, protest, quirky, sisters, social justice, spiders, spooky, sustainability, fairy tales, folklore, legends & mythology, insects, humorous

**SUITABLE FOR:** Grades 1–6, Ages 6–11

**GUIDED READING LEVEL:** Fountas and Pinnell TBD

**LEXILE:** TBD

**COMMON CORE STANDARDS:** TBD

#### SUMMARY:

*Bog Myrtle* is a witty modern folktale that touches on themes of capitalism, environmentalism, labor rights, and being a nice person.

Two sisters, one stubbornly cheerful (Beatrice) and one relentlessly grumpy (Magnolia), live in a drafty old house with a family of helpful spiders. When Beatrice is gifted magic yarn from a giant forest spider monster obsessed with sustainability named Bog Myrtle, she and the spiders set to work knitting up a perfectly warm sweater.

But greedy Magnolia sees only the opportunity for profit, and quickly converts the old house into a magic sweater factory. The exhausted spiders are driven to strike, and Bog Myrtle is not pleased when Magnolia tries to get more magic silk . . .

Sid Sharp is an artist from Toronto, Ontario who makes drawings, paintings, and comics. Sid's interests include folklore, scary stories, mysterious and unknowable things, and finding good sticks for their stick collection.

Jessie Cowe is a nature educator living in Toronto. She enjoys native plant gardens, convivial dinner parties, and stopping to look at every bee and lichen on a hiking trail.

Please remember that the suggested questions and activities within this educator guide are meant to serve as a starting point. Educators are encouraged to select items from each part of the guided inquiry process that work best for their style of teaching and will help them meet their goals when covering the topics in this book. Activities and prompts should be tweaked and/or reformatted to best fit your students, context, and community to ensure equity and inclusion.

## BEFORE READING THE BOOK



These activities build the context, introduce the topic of the book, and establish prior knowledge and interest. These activities are designed to facilitate learning and play in nature, empathy and listening, awareness of our connection to each other and our place as part of nature, and a sense of belonging and connection to nature which are precursors to environmental ethics.

1. Explore early memories of connecting with nature as a group: Go outside to the schoolyard, a local green space, or a nearby ecosystem. Ask learners to sit down and settle into a comfortable position. Lead a sense meditation, inviting learners to close their eyes, take some breaths from the belly, feel their body touching the ground, and tune in to the sensation of the air meeting the skin. Ask learners: What can you smell, hear, taste, sense? With their eyes still closed, invite learners to think back as far as they can to a memory about being in nature when they were younger. Spend some time there, remembering. Offer prompts: how do you feel in this place? What can you hear, smell, and see? What other creatures from nature are there with you? Are there any trees, animals, water, or plants? What time of year is it? What is the weather doing?

Look around on the trail for a piece of dead organic matter such as a conifer cone, a beautiful branch, an insect exoskeleton, or a leaf. Use this as your sharing object and form a circle. Take turns sharing nature names (a thing that you love in nature + your name) and your memories, providing further prompts to draw out details, as desired. Consider modeling this by sharing your own memory first. When you are finished, thank the object and give it back to nature. (This activity is in reference to page 32 of *Bog Myrtle*.)





## 2. Think-Pair-Share

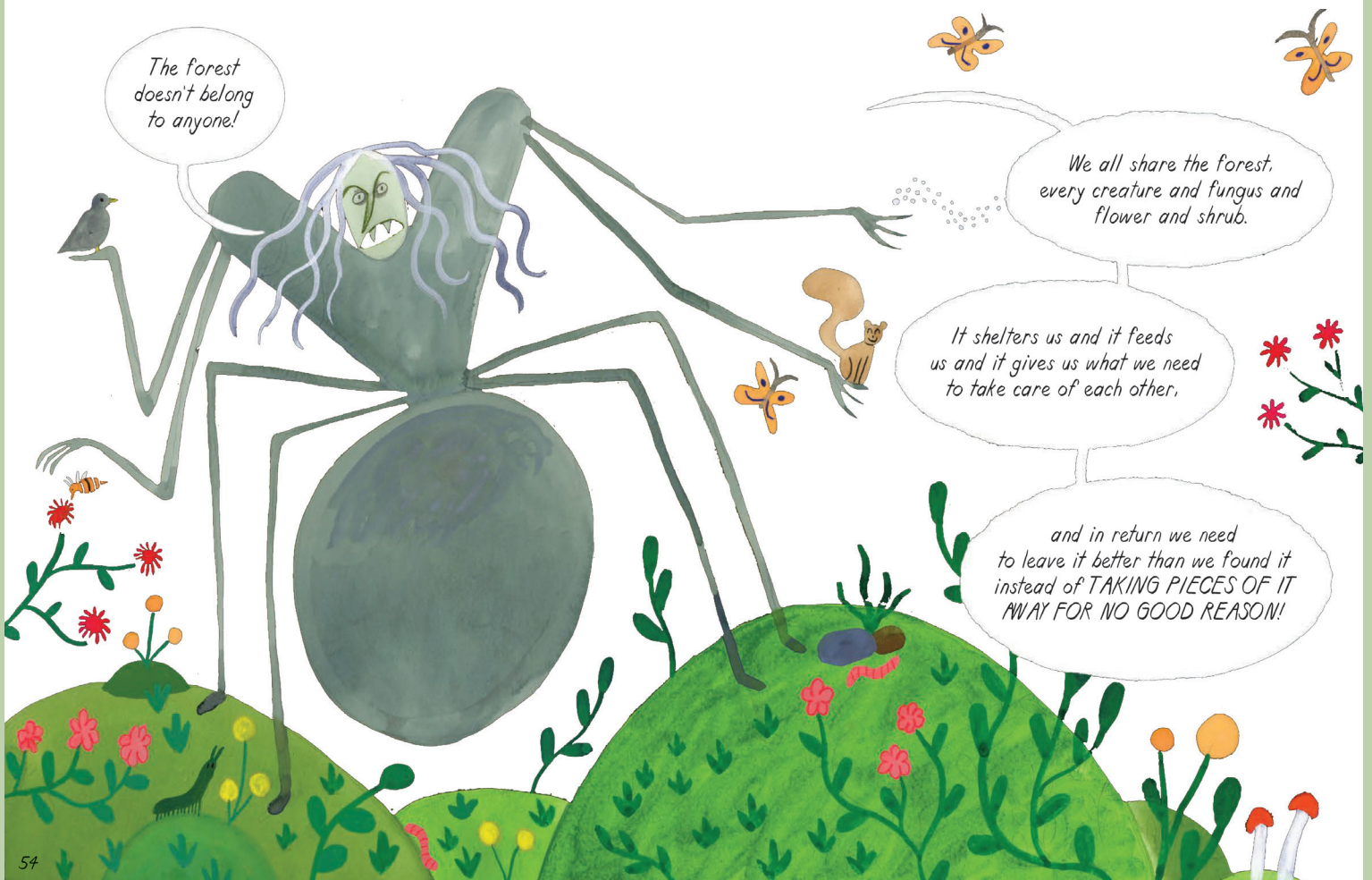
Reflect upon your relationships with your siblings, or cousins, or friends. Sometimes relationships are fun, easy, and we feel understood and loved. Other times relationships are challenging, frustrating, and we feel misunderstood and sad.

What are some of the things that help your relationships to feel good, easy, and loving? An example might be an action like listening when others are talking.

What are some of the things that can make relationships feel frustrating, hard, and unkind? An example might be an action like not sharing.

Invite learners to reflect on this individually, then to pair up with someone to discuss further. Come back together and ask if anyone wants to share anything, popcorn style.

3. Invite learners to consider what it means to leave a space in nature better than you found it. Give an example such as going on a class field trip to eat lunch in a local park. What actions can you take as a class and as individuals to tread gently and have as little negative impact as possible on the park space and the creatures who live there? What does it look like to leave it better than when you found it? Discuss. (This discussion point is in reference to page 55 of *Bog Myrtle*.)





#### 4. Let's get pumped about SPIDERS!

This activity is designed to build curiosity, amazement, and even empathy with spiders. Fear of spiders is very common in humans. Researchers have hypothesized it could be due to their unpredictable leggy movements, having a memorable experience of feeling afraid of spiders as a young child, or even an evolutionary adaptive response! As teachers or caregivers, you may also have complicated relationships with spiders and this is an opportunity to learn and open your minds alongside younger learners.

##### **Part A**

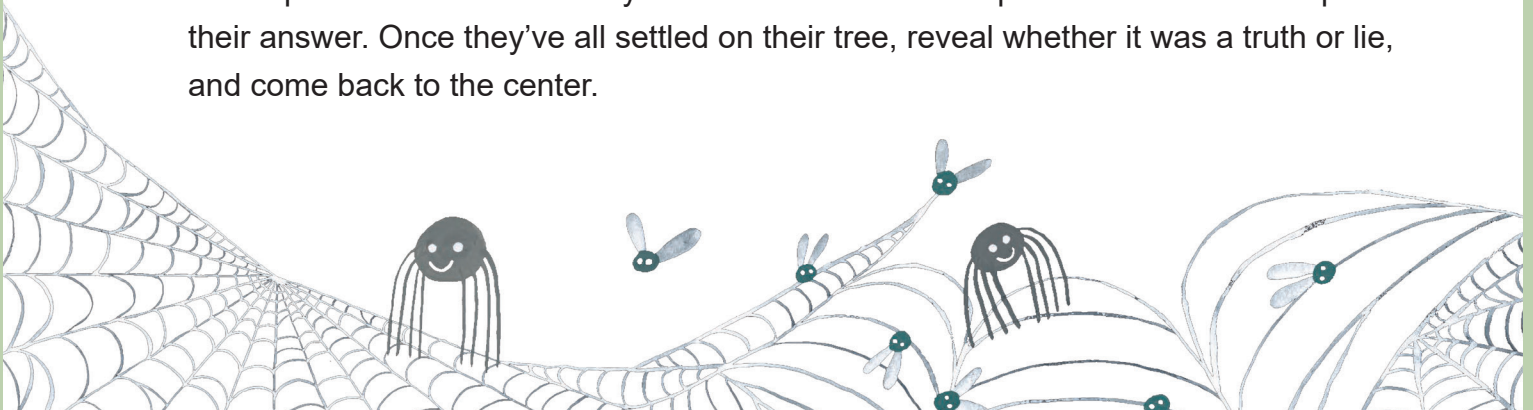
Rate how people feel about spiders on a scale of 1–10, 1 being “why do spiders even exist, they are the worst” and 10 being “spiders are the coolest and I want to be an arachnologist when I grow up.”

Find the average rating of the group: Write down everyone’s votes, add them up and divide them by the number of participants to get an average. You can do this as a class, or assign groups to work on this.

##### **Part B**

Discuss the value of spiders. What functions do they serve in the environment and why are they so cool?

- Spiders are an important part of ecosystem balance. Define “ecosystem” and brainstorm briefly what it means for ecosystems to be in balance vs. out of balance. Consider making connections to the concept of biodiversity, or the variety of life on earth. Ask learners: How are spiders connected to other living beings? Harvest ideas.
- Below are a list of amazing facts followed by a list of amazing lies about spiders. Use these to play a game of “True or False” outdoors if possible. Mix up the list, offering some truths and some lies.
- Go outside to the schoolyard or nearby green space and select two trees or features of the landscape. Proclaim that one is the “tree of truth” and the other the “tree of lies.” Get your learners to stand in a group in the center of the tree/features. Explain that you’ll read out a spider truth or lie and they will walk or move like a spider to the tree that represents their answer. Once they’ve all settled on their tree, reveal whether it was a truth or lie, and come back to the center.





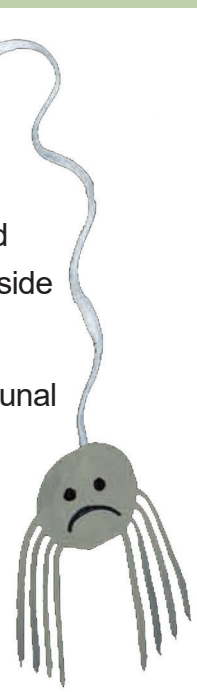
# SPIDER TRUTHS

- Spiders provide biological pest control, preying upon insects such as flies, gnats, mosquitoes, cockroaches, mayflies, and earwigs. This spider “service” means less annoying insect bites and stings for humans and other animals, less insects in our homes, and importantly—worldwide disease control!
- When we let spiders roam free in our home or outside spaces, letting them create their habitats undisturbed, we’re in a relationship with them as roommates! They provide pest control and we support them by providing habitat. Another fancy way of saying this is “interspecies domestic cooperation.” (In reference to page 14 in *Bog Myrtle*.)
- Spiders are an important part of the food web, providing food for birds, centipedes, praying mantises, other spiders, tarantula hawk wasps(!), lizards, and many more amazing creatures.
- Spiders are used in medical research. Scientists are investigating spider venom from particular spiders for its painkilling properties, in stroke and cancer research, and spider silk is known for its antibacterial properties which makes it an excellent bandage for wounds.
- Spider silk is so strong that if it was designed to catch human-sized prey it would be stronger than steel and “tough enough to snag a jetliner” (source).
- Ruby-throated hummingbirds use spider silk as glue in nest building, collecting it on their beaks and using it to bind together moss and lichen and other materials. The spider silk forms strong and resilient walls which stretch and grow along her hummingbird babies!
- Pedipalps are appendages that both male and female spiders have growing out from their cephalothorax (their head and thorax which is fused together), but only males have swollen bulbs on the end of them which look like boxing gloves!
- Spiders are mostly blind and their webs are an extension of their senses. By plucking or drumming on the web, spiders receive information such as where prey are located on the web and when a friend or mate comes to call. Webs act like a multi-stringed instrument and occasionally require tuning. When a web is out of tune due to environmental factors or being broken, spiders adjust the tension of the silk and fix it up to allow vibrations to be carried across the web.



# SPIDER LIES

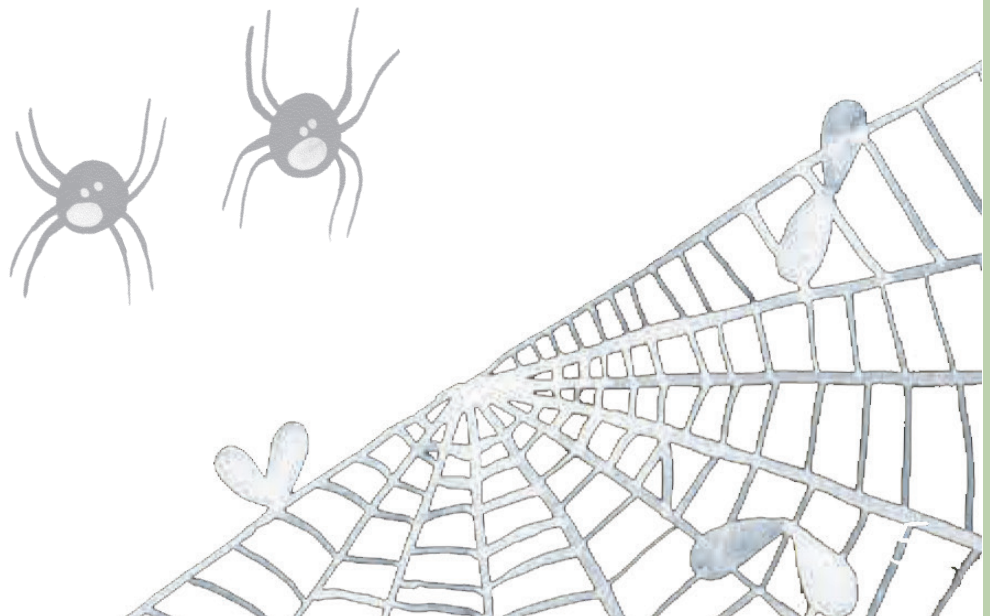
- A spindlar is a spider's tool that is made out of dead insects and spider silk and used as a spinning wheel to make silk rope. The rope is used by spiders to fasten the outside of their webs to their surfaces.
- A Mygalomorphic orchestra occurs when multiple spiders come together at a communal web and pluck and drum on different silk strings at the same time. The resulting vibrations attract insects and offer a communal meal. This bizarre cooperative act only occurs when food sources are low.
- Instead of making sounds, most spiders communicate by blinking to one another.
- Sericulture is the art of collecting spider webs to make silk clothing.
- Myrtle swamp spiders have a symbiotic relationship with carnivorous pitcher plants, which means that they help each other out. Carnivorous plants have evolved to catch flies in their sticky pitfall traps and to digest them. Myrtle swamp spiders take advantage of this free fly snack bar and get valuable energy, and give back to the plant by massaging its roots and stem that helps with the production of digestive juices in the plant.



## Part C

Follow up this activity by repeating the 1–10 rating scale with the class.

Discuss: Has the rating average changed? Why might that be? What can this teach us about how we can face our fears?





## WHILE READING THE BOOK



These activities check on comprehension, stimulate interest, involve readers in reflection as they read, and encourage consideration of other readers' reactions.

### SUGGESTION TO PAUSE AFTER READING PAGE 16 IN CHAPTER ONE

Beatrice and Magnolia have very different personalities, or ways of being in the world.

Define *personality*: A unique blend of feelings, behaviors, and thoughts that we each have as individual humans which may change over time.

#### Discussion & Brainstorm Activities:

As a class, use adjectives to describe Beatrice's personality, then do the same for Magnolia's personality.

When somebody is grumpy or not being friendly, it can feel hard to be around them, uncomfortable, and stressful. Sometimes people are grumpy because they are having a bad day, or things are happening in their lives that we can't see. Maybe they had a bad sleep, are hungry, or feeling unwell. It's important to remember that emotions are complicated and to think about how we can communicate our needs with words when things feel hard. What are some things that we can do if we're around someone who is feeling grumpy or being unfriendly? Brainstorm as a group.

Now that we have an idea of Beatrice's and Magnolia's personalities and how different they are from one another, how do you think their personalities might impact the story?

### SUGGESTION TO PAUSE ON PAGE 23 IN CHAPTER TWO

Beatrice is doing some creative problem-solving and thinking about ways that she can pay for yarn to knit a sweater for her sister and keep her warm (and maybe less grumpy?!). Beatrice thinks nature is amazing, and sees value in special found objects, such as shiny stones, crunchy conifer cones, skulls, and exoskeletons (the molt of a bug). She hopes that others find value in these things too, and will want to trade her yarn in return for special nature objects.

Have you ever found a special object in nature? What was it? Share stories.



### Thought experiment:

Imagine a world where instead of using money to pay for goods like shoes and services like taking the bus, we used objects we found in nature to pay for them. We'd use beautiful bird feathers, shiny stones, cicada exoskeletons, dead leaves, and funky branches.

If we kept taking these things from nature, would this have an impact on nature over time? What other-than-human creatures use these objects? What does decomposition mean, and is this important? Discuss.



### Prompts & cool facts:

Decomposers like bugs and fungi eat and break down dead organic matter and, through their poop, soil is created. Without soil, plants don't have what they need to live, which impacts photosynthesis and the plant's ability to produce oxygen and food—both requirements for living things on earth!

Bugs, bacteria, and fungi break down dead organic matter and share the benefits with other creatures, such as trees and plants, as well as with creatures that are higher on the food chain who eat them.

If bugs, fungi, bacteria, and other decomposers didn't exist, we'd live in a very smelly world indeed. Everywhere we looked there would be piles stinking, rotting organic matter that would no longer be broken down and cycled into nutrients and soil. P.U.

### SUGGESTION TO PAUSE ON PAGE 48 OF CHAPTER THREE

Economics is the study of resources—or things which are thought to have “value,” the different types of resources, how they are made, and used. It also looks at the role of money in buying resources. There are three types of resources:

- Natural resources: things which come from nature, like wood, sunshine, and apples
- Human resources: the energy of people that goes into making things, like bakers, inventors, teachers, farmers, and scientists
- Capital resources: Tools like school buses, diggers, machines, and information to support goods and services to be made available

### Activity:

Print and cut out a few different examples of each (e.g. a waterfall, a shopkeeper, and a pencil) and draw three columns onto a white board, or onto a piece of paper, or in sidewalk chalk if you're gathering outdoors. Hold up images one by one, and ask learners to guess which category they belong to.

To go further with more advanced learners, consider adding on a question and discussion about which items could be considered renewable resources vs. nonrenewable resources.





## SUGGESTION TO PAUSE AFTER READING PAGE 73 IN CHAPTER FOUR

Have you ever put “all your kindness and care” into something that you’ve made for somebody? (In reference to page 72 in *Bog Myrtle*.)

### Activity:

Think-pair-share: share your story with a partner then invite learners to share as a group.

## SUGGESTION TO PAUSE AFTER READING PAGE 105 IN CHAPTER FIVE

### Discussion:

The spiders are feeling overworked, tired, and fed up with grumpy Magnolia and have decided to take action by striking. What are some actions Magnolia could take as a spider employer to be nicer to them?

Examples:

- Give them breaks and holidays
- Pay them well
- Share some of her wealth with the spiders
- Be nice to them!
- Ask them what they need to be happy in their jobs
- Thank them
- Not step on them and allow their webs to do their jobs of catching flies!



These activities inspire continued reflection and response to the text, bring conclusion to the experience of reading this particular text, and stimulate further extensions.

### Nature Journaling

Go outside with a journal and pen and find a comfortable place in nature. Spend some time sitting quietly and noticing how you feel, and tuning into what’s happening around you in nature. Spend some time reflecting on *Bog Myrtle* and take some notes. Was Bog Myrtle a villain, a hero, or something else? What was your favorite part of the book? Were there any new lessons, such as words or ideas that the book gave you? What do you wonder more about?

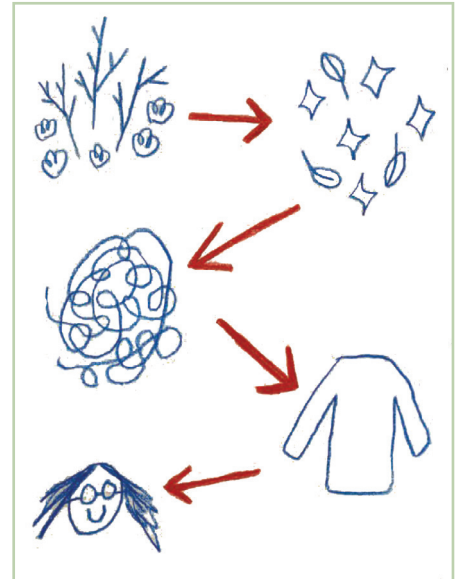


## Create a Economic Model that Gives Back to Nature

### Activity:

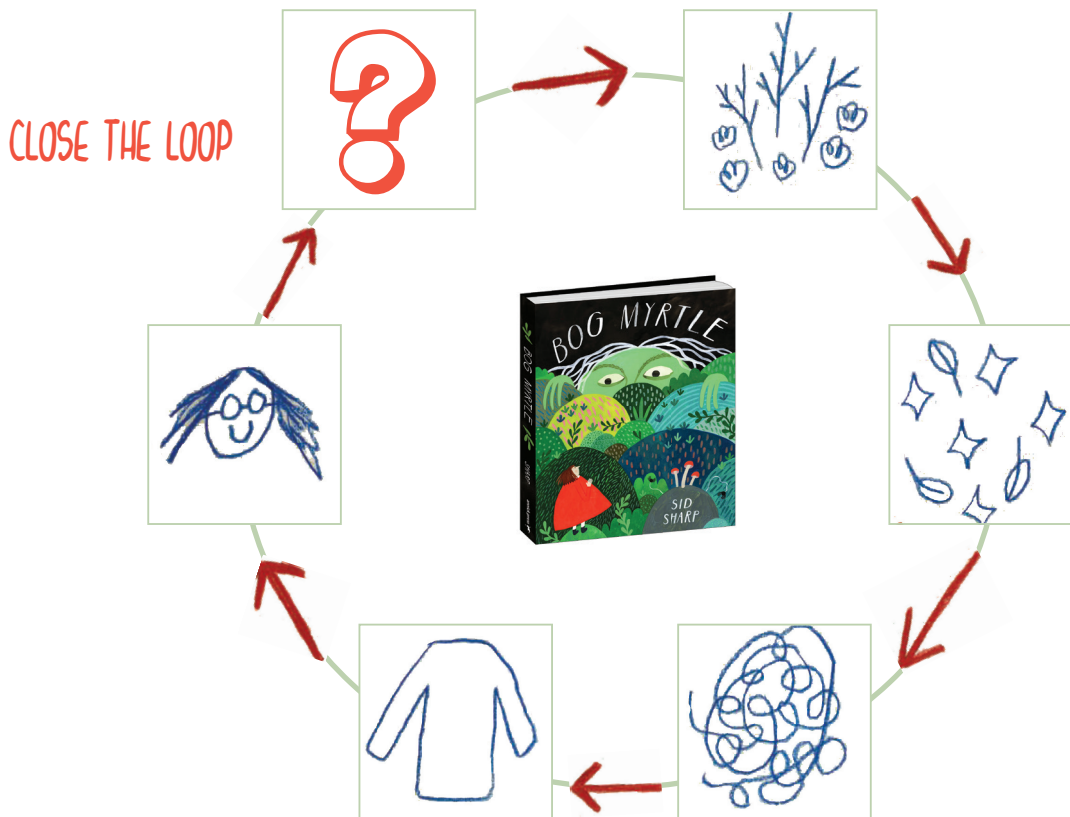
Review Magnolia's flowchart on page 61 that explains her plan of going to the forest, finding excellent treasures, purchasing yarn with these treasures, and knitting her sister a sweater to keep her warm.

Work in groups to think about ways that you could close the loop by adding a step or two that in some way gives back to the forest. Start with a sketch, then when you're satisfied with your plan, you can move to using a more permanent medium, like marker, paint, or collage.



Start by drawing a large circle. Starting at the top of the circle, draw the different stages of the plan, as illustrated by Sid Sharp. Consider coming up with your own art style and way of representing each stage. Make sure to leave room after the picture of Magnolia for more stages, as this is where you'll add 1–2 more that close the loop and in some way, give back to the forest. When you've drawn all the stages, add arrows in between them.

Present your flow chart economic model to your class/group.



## Web of Life Game

(adapted from the American Museum of Natural History website: <https://www.amnh.org/explore/ology/biodiversity/web-of-life/activity-instructions>)

### Activity:

What You'll Need: index cards, marker or pen, a ball of twine, list of connections

The Connections:

- tree
- sun
- bumblebee
- mushroom
- rock
- grass
- mouse
- earthworm
- ant
- spider
- river
- woodpecker
- rain
- dead leaf
- butterfly
- flower
- snake
- frog
- snail
- living leaf
- owl
- squirrel
- soil
- deer

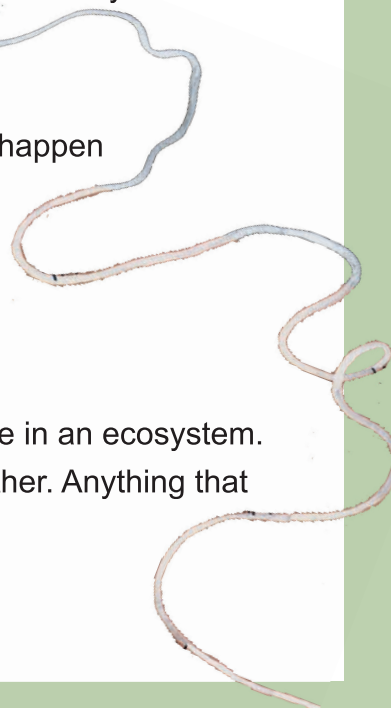


### What to do:

1. Write the names of each organism from the list of connections on an index card.
2. Sit in a circle. Each player takes a card from a pile in the middle and holds it up so that everyone can see the name of the organism on the card.
3. The person with the tree card starts off the game by tossing the ball of twine to someone else in the circle.
4. The person who catches the ball tries to explain how the organism on his or her card interacts with the tree. Anyone in the group can join in to help out.
5. Next, the person who caught the ball holds onto the string and tosses the ball to a third person. The third person explains how the organism on his or her card interacts with the second person's organism. If the player gets stuck, anyone in the game can make a guess.
6. The game continues until everyone has had a turn at catching the twine. The twine is now complex and tangled—everyone in the group is connected to everyone else. Players can also talk about how their organisms are connected to others that came up earlier in the game.
7. Choose one of the organisms in the game. Can anyone predict what would happen if it was removed from the web? Which other organisms would be affected? What would happen if you cut the twine with scissors? What effect would this have on the ecosystem?

### What's going on here?

The tangled ball of twine has formed a web, just like the complicated web of life in an ecosystem. The web shows how closely organisms in an ecosystem interact with one another. Anything that happens to part of the web has an effect on the whole system.





## EXTENSION ACTIVITIES

These activities are only a start. They are designed to support the goal of helping students explore the story and their own creativity.

### Visual Art Activity

Sid Sharp and Rachel Nam created the font used in the book, “Bogfont.” Come up with your own font design, creating an alphabetic chart that holds upper and lower case versions of each letter.

### Weekly Sit Spot Challenge

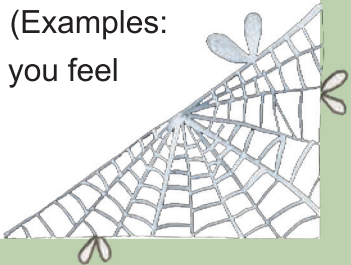
A sit spot is a practice of sitting in nature. Over time, this experience can provide deeper connections to nature and develop our learning habits (the ways in which we learn about things).

The idea is simple: find an outdoor location which has a view of nature, or is immersed in nature that is easy for you to access. It could be in a yard, a nearby park, a balcony, a perch near a public garden or under a tree, for example. Take some time to choose your spot, for this will become your own special “home” in nature, over time. Spend 10–20 minutes sitting in this spot regularly (start with once per week). While you are there try to slow down, relax, tune into your senses, and observe the many life-forms around you. Be curious, ask and collect questions in your mind, and notice any changes, patterns, and abnormalities as you sit among the plants, bugs, insects, and animals (including humans). Notice how all of these things interact with each other. You might also observe weather patterns over time (how much sun/shade/wind is your spot exposed to?) After a few weeks, this spot may start to feel intimate and private and you’ll begin to form deeper relationships with the plants and animals in your area.

Your challenge is to choose a sit spot and experience your first “sit.” Bring a piece of paper or a notebook and a pen or pencil, and spend 10–20 minutes in your spot. During this time choose one plant that you are going to pay special attention to this season and draw a quick sketch of it (don’t worry about what it looks like). After your sit spot, fill out the reflection form below:

Reflect upon your experience choosing your sit spot? Was it easy, difficult, fun? Why?

What are some observations that you made during your first sit spot experience? (Examples: Did you see animals, plants, insects, or bugs? Is it a busy or quiet spot? How did you feel sitting there?)



## The Value of Forests/The Gifts of Trees

Create an art, music, or writing assignment that invites learners to celebrate the gifts of trees.

Here are a few of their gifts for discussion & inspiration:

- Earth's lungs, the site for photosynthesis: supports our most basic function—breathing oxygen!
- Habitats for millions of species
- Food sources for millions of species, including millions of humans
- Nature's pharmacy
- Wood wide web
- Supports food and soil cycling
- Prevents soil erosion
- Improves/filters water
- Provide flood protection
- Temperature control
- Acts as a carbon sink
- Site for learning, slowing down, and paying attention
- Sites for experiencing and facilitating beauty, appreciation, wonder and awe, curiosity, gratitude
- Provides mental, physical, spiritual well-being through engagement
- Quiet spaces for nature connection
- Expands nature awareness
- How can we move in baseline with the forest, instead of behaving like tourists?
- Site for slowing down and practicing sit spots
- Sites for learning/life-long education
- Sacred spaces

