

Wonderful Wetlands

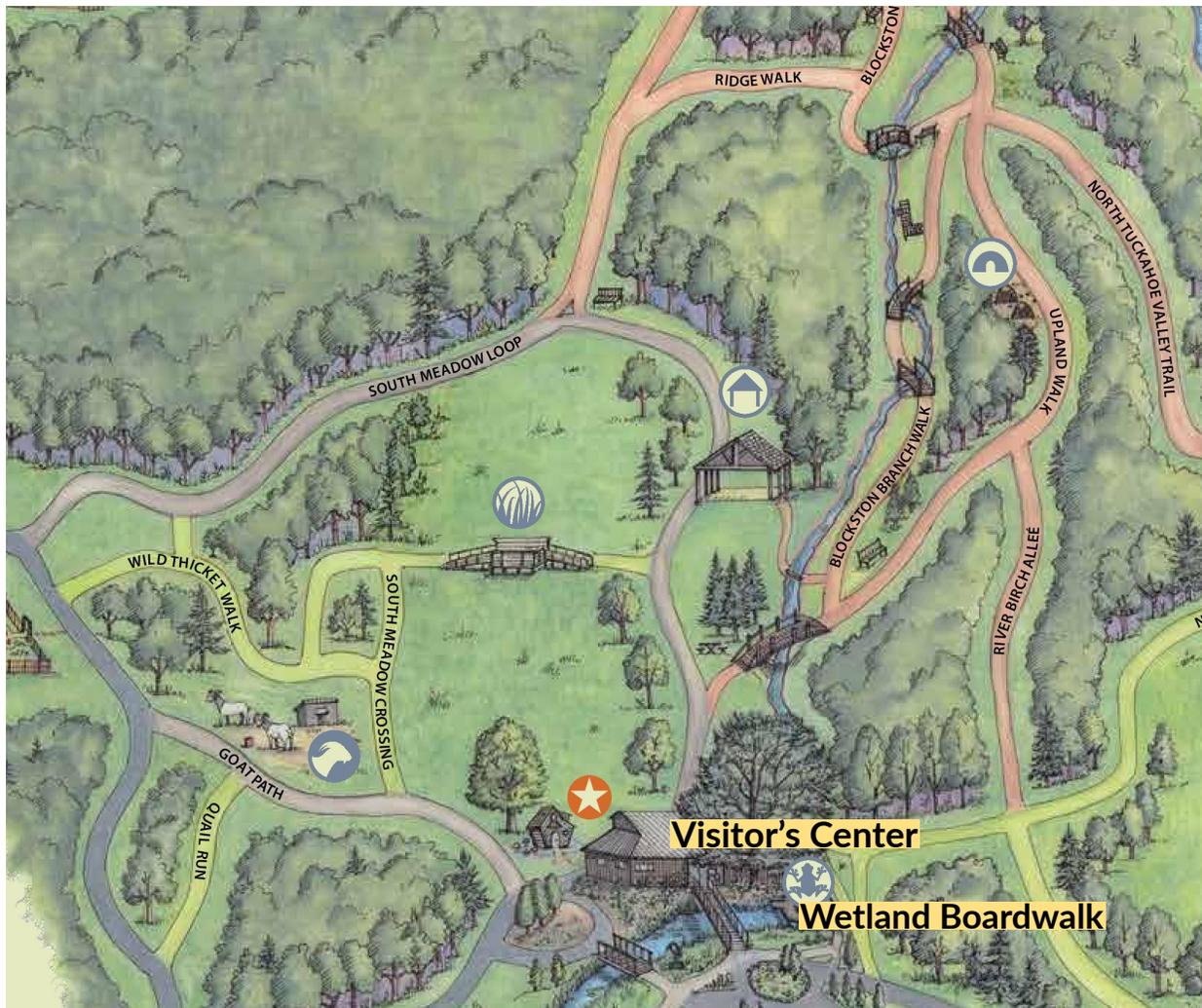
A Self-Guided Field Trip for Grades K--2

Welcome to Adkins Arboretum! The Arboretum is a 400-acre native garden and plant preserve. Native plants have been evolving here since the last polar ice age, 10,000 years ago. Animals depend on native plants for food and shelter.

Self-guided field trips **MUST** be scheduled in advance. To schedule yours, email Madison Palmer at mpalmer@adkinsarboretum.org. Fee: \$5/student. Groups will receive access to nets and buckets when they check in at the Visitor's Center.



ADKINS ARBORETUM



This program is aligned with:

- **Next Generation Science Standard LS2-1 Ecosystems: Interactions, Energy, and Dynamics**
- **Next Generation Science Standard LS4-1 Biological Evolution: Unity and Diversity**
- **Maryland Environmental Literacy Standard 2: Human Dependence on Earth Systems and Natural Resources.**

Lesson Plan

1. Walk students to the wetland boardwalk. Ask them to sit. “Welcome to the wetland! What is a wetland?” Guide students to this answer: a wetland is a place where land and water meet. Ask students to close their eyes. Every time they hear a nature sound, they should raise their hand.
2. After about 2 minutes, have students open their eyes. “What did you hear?” Allow time for students to respond. “Wetlands are full of life! In fact, more plants and animals depend on wetlands for food and shelter than any other habitat in the world except tropical rain forests. What animals do you think live in the wetland?”
3. Hold up an image of a frog. “This is one animal you’re certain to see or hear on a warm day in the wetland! Frogs are amphibians. That means they spend part of their lives on land and part in the water. But frogs don’t start out their lives looking like this.” Review frog life cycle with visuals. “When animals completely change the way they look at different stages of their life cycle, it’s called metamorphosis.”

**MANY WETLAND INSECTS UNDERGO METAMORPHOSIS!
YOU MAY FIND THE NYMPHS OF DRAGONFLIES,
MAYFLIES, AND OTHER INSECTS IN YOUR NETS TODAY.**



**Programs and Events
at Adkins Arboretum.**

4. “Would you like to look for frogs, pollywogs, tadpoles and other creatures in the wetland?” Demonstrate how to use nets and buckets. (You will be able to access these when you check in at the front desk. It’s a good idea to pre-fill the buckets with water by lowering them into the wetland with a rope.) Share the tips below:

Tips for Using Nets

- Kneel inside the boardwalk rim, not on it.
- Be aware of students around you so that you don’t accidentally hit someone.
- You may move around the boardwalk, but leave the buckets where they are.
- Try not to get mud in the buckets.
- Handle creatures gently and put them in the buckets as soon as possible.

5. Give students about 15 minutes to collect wetland organisms. After that time, invite them to take a “bucket walk” around the boardwalk so that they can look in each bucket. Then gather students in a whole group and discuss what they found. Use the identification guide to help you. “Wetlands are wonderful places! They provide shelter and food for animals. Wetland plants absorb pollution and keep sediment (soil and rocks) from muddying up our waterways. We need wetlands!”



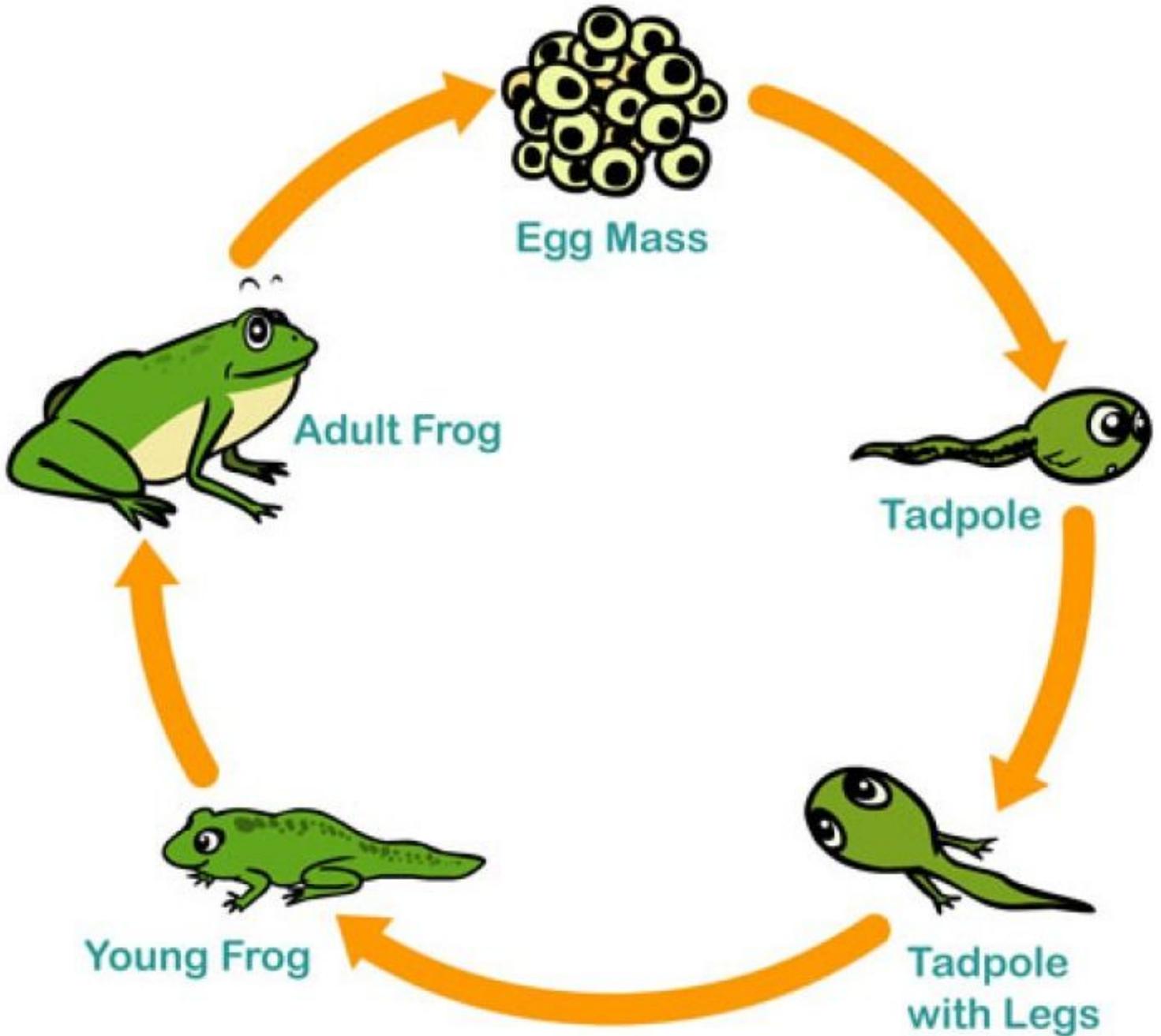
**DON'T FORGET TO RETURN NETS AND BUCKETS TO THE BIN AND LOCK IT!
THANK YOU!**

Additional Activities:

- Read a book about wetlands, frogs, or other wetland creatures. Recommended: *The Big Wide-Mouthed Frog* by Ana Larrañaga.
- Play a game of “Frog, Frog, Pollywog” (like “Duck, Duck, Goose”) in the meadow, or play “Frog Says” (like “Simon Says.”)
- Sing “There Was a Little Turtle” with hand motions.
- Take a stream walk to look for more frogs.



Frog Life Cycle



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DID YOU KNOW?

Bull frogs are the largest frogs in our wetland. They make this sound: ba-room, ba-room, ba-room. Green frogs are slightly smaller than bullfrogs. They make a twanging sound like someone is plucking the string of a banjo. You can also identify green frogs by the presence of a dorsolateral ridge.



SOURCE:
VIRGINIAHERPETOLOGICASOCIETY.COM



AQUATIC ANIMALS



WETLAND PLANTS

