Into the Field

Environmental Education
Distance Learning Resources
Issue 6: At Home and Family Activities



This issue is cycling back to activities that students and families can do at home, generally without needing access to the internet. We've done our best to find quality resources that folks can access with few tools. The activities presented here are starting points for teachers to incorporate in their lessons -- either as defined activities or encouraged family time. Regardless of the mode of implementation, the goal is for students to get outside and learn!

We've grouped activities by age, but in general these are suggested guidelines. Many of the activities could be easily adjusted to work with a different age-group, so double-check before you skip a section!

ALL AGES OR FAMILY ACTIVITIES

Adopt a Drain

Everyone knows that trash is no good for lakes and rivers, but many people unwittingly contribute to water pollution because they do not understand that "natural" debris—leaves, grass clippings, fertilizer, and pet waste—becomes pollution when it hits the water. When these natural pollutants break down, they become food for algae, causing it to grow out of control. Families, individuals, or groups can sign up to adopt a drain. Cleaning a drain doesn't require special tools or skills, and you can do it on your walks around the neighborhood. In fact, this is an activity you can do, whether or not the storm drains in your area are listed on the website! Before signing up or heading out, take a look at the information and safety reminders on the website.

Youth Explorer Button Series

These activities should be completed in the presence of a parent or guardian.

This series is great for families who want to feel more comfortable getting outside! The Button Series is comprised of 8 different activities designed for youth ages 5-11.

Complete each component in the series to earn a button. Complete all activities to earn a Venture Outdoors special prize. In this series, each component contains:

- 5 minute discussion geared towards youth
- Handouts
- 10-15 minute activity
- Additional resources



EARLY LEARNERS

Bug hunt

If you and your early learners can go outside, you can do a bug hunt. If you're able, bring along a piece of paper, something to write with, and a hard surface. This way, as you and your early learner/s spot different bugs, you can write or draw them and record how many of each you find. This activity can be short and sweet, or could be a regular activity, comparing bug finds in different types of habitats, weather, or times of day.

Looking at Leaves

The next time you are in an area with several trees, have children collect leaves of various shapes, sizes, and colors from the ground. Conduct a comparison investigation by asking:

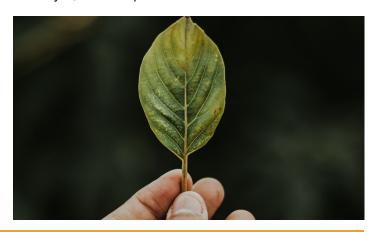
- What differences and similarities can you see?
- What do the leaves feel like? Do they have hairs? Or teeth?
- Can you find the tree that each leaf came from?
- Explain that leaves can be used to identify trees.

Further investigations or activities--like a leaf rub drawing--are outlined in the link to this Project Learning Tree activity.

Rainy Day Puddle Fun

This activity is from the Jeffers Foundation "Go Outdoors" Cards, and can be modified to fit most situations or ages. Take a hike during a gentle rain to follow water that runs off your roof. Ask: Where does it go in your yard? Where are puddles? Where does it leave your yard/parking lot/area? Where does the water runoff go to next?

Later, consider using a paper or digital map to look for the nearest creek or wetland. If you've been there-tell stories about what you remember of that place, or better yet, make a plan for another visit.



GRADES 3-5

Tree Cookie

One way to learn about tree growth is to look at annual rings. Tree rings show patterns of change in a tree's life as well as changes in the area where it grows. In this activity, you can trace environmental and historical changes using a cross section of a tree, or "tree cookie." Every growth season, a tree adds a new layer of wood to its trunk and limbs. This means you can determine the age of a tree by counting its layers, or rings. Have children learn more about a tree's life by examining a tree cookie (maybe a stump they find in the neighborhood, or a picture you supply) and asking:

- · How old was this part of the tree when the tree cookie was cut?
- Can you see different markings? Evidence of scars or narrow, misshapen rings?
- What might have happened to the tree to cause these different markings?

Use a hand lens to get a closer look at the tree cookie's texture. Can you see any holes or channels that might allow water and nutrients to travel up the tree? Finally, ask children to draw a tree cookie the same age as themselves. What can they do to show when important events in their lives took place?

STEM: Have Seeds, Will Travel

Instruct students to gather a collection of seeds from a wooded area, nearby park, or flowerbed. They can drag an old blanket or fuzzy cloth behind them on the ground. They can place a large, old, wool sock over hands or shoes to see what they can pick up. Or they can wear bracelets made of masking tape (sticky side out), to hold the seeds they find. Have children examine their seed collections and invent a system for sorting or classifying them. Explain that plants have developed many different methods of seed dispersal, to ensure the success of their species. Follow the link to the Project Learning Tree activity page for guiding questions and concepts for further instructional framing.

GRADES 6-8

Exhibition Catalogue

The premise of this activity is simple: search for items in nature, then prepare a piece to be displayed in an environmental art gallery. Using this one page pdf as a launching point, create parameters or guiding questions that pair subjects or encourage critical thinking according to your students' learning needs. You can create a virtual, environmental art gallery online to be shared with the rest of the school! View some of the work by Andy Goldsworthy for inspiration with nature-based art. This activity can be kept basic or expanded as desired.

DIY Birdfeeder: Recycled Materials

Homemade birdfeeders will help your students engage their creativity in this engineering and design challenge! Materials can be whatever you have on hand at this time. How can you design an avian eatery to keep away the rain...and the squirrels?! What colors and materials attract the birds in your community? Don't have a milk carton on hand? What other structures could you use as the base to your birdfeeder? The sky's the limit!

HIGH SCHOOL

Hennepin County Zero Waste Challenge

Anyone is welcome to join residents of Hennepin County in this zero waste challenge! Ever wonder how you create so much trash at home? Reducing waste is a great way to lower your impact on the environment and reduce the amount of stuff you have to deal with, but it can be hard to figure out what actions to take and how to fit them into your life.

This challenge will help you identify the best solutions and give you resources and support to take those actions. Remember that developing low-waste habits is a gradual process. Start by browsing the actions within each category, and select actions that make sense for you and your family. In this challenge, you can select up to five daily actions and five one-time actions.

Big Tree Registry

The MN DNR has instructions for how to measure trees that might be candidates for the Big Tree Registry. This activity is a hands-on way to introduce themes related to forestry and urban forestry. Not only does it encourage students to get out and practice different methods of measuring, but it can act as a foundation for learning about subjects like: MN native trees, MN biomes, the environmental benefits of forests, the impacts of human development on forests, and the organizations/careers dedicated to their study and protection.

You can reach us with your comments and questions at admin@auduboncharterschools.org

