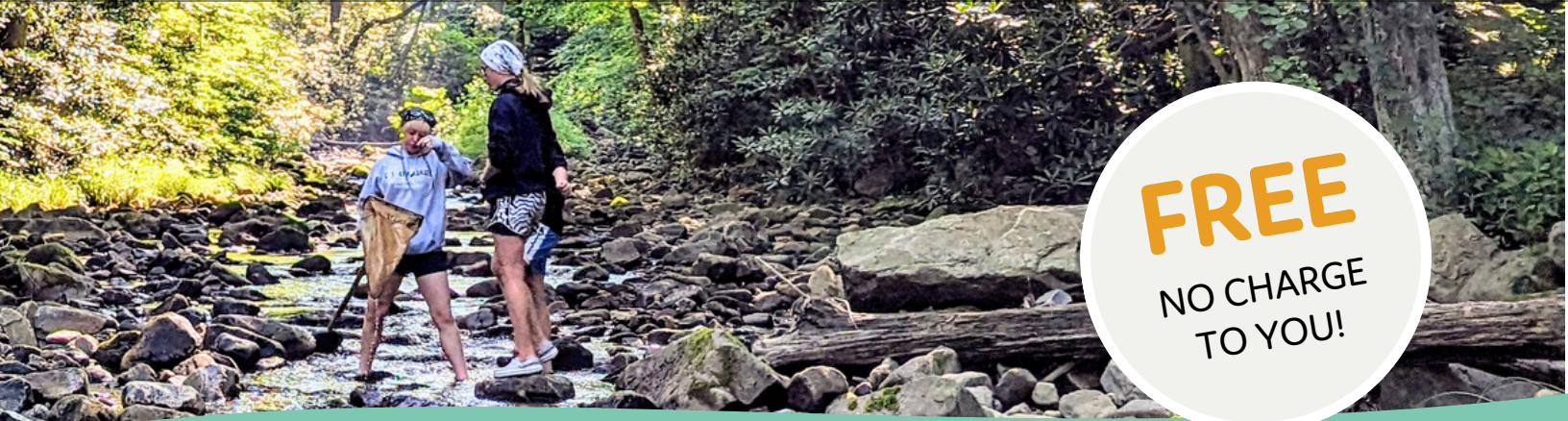




# HANDS-ON, IMMERSIVE OUTDOOR EDUCATION



**FREE**  
NO CHARGE  
TO YOU!

## 2024-2025 SCHOOL YEAR

### WE OFFER:

- In-School
- Afterschool
- Homeschool
- Field Trips
- Service Learning



### ABOUT OUR SERVICES

With generous support from the PA Fish and Boat Commission's R3 Grant, the PA Department of Environmental Protection's Environmental Education Grant, and the Grable Foundation - educational programs, rentable supplies, and immersive experiences are accessible to you with no charge.



# QUICK GUIDE

## AVAILABLE PROGRAM TOPICS

### ANIMALS

Birds, Insects, Mammals, Bats, Owls,  
Beavers, Reptiles and Amphibians

### ECOSYSTEMS

Food Web, Life Cycles, Tracks and Scat,  
Life of a Stream, Habitat Interactions

### PLANTS

Identification of Invasive Species, Trees,  
and Wildflowers

### OUTDOOR RECREATION

Boating, Fishing, Guided Hikes, Leave No Trace  
Ethics, Orienteering,

### SERVICE LEARNING

Blend volunteering and education on the river  
or the trail.

### BECOME A WATER GUARDIAN

Specifically designed for after-school programs,  
pick your topics, and your students get a Water  
Guardian badge!

## LENDING LIBRARY

We created a library of outdoor gear and educational resources available to the public! The Lending Library is located in MWA's office, and items are available to be checked out during our office hours.

### EQUIPMENT

### NATURE GUIDES

### KIDS' EXPLORATION PACKS

### EDUCATOR RESOURCES

Visit our website for a complete list of equipment and materials:

[mtwatershed.com/outdoor-lending-library/](http://mtwatershed.com/outdoor-lending-library/)

### TO SCHEDULE:

Contact MWA's Education Coordinator,  
Lindsey Waugaman (lindsey@mtwatershed.com)

724-455-4200 ext 4#





## About Us

MWA's mission is to protect and restore the Youghiogheny River watershed through conservation, recreation, education, and advocacy. We believe in grassroots empowerment, environmental justice, and collaboration with diverse communities.

In the face of climate change and environmental degradation, we believe that every member of our community deserves equitable environmental protections. MWA's strategies to protect communities include water quality restoration, community organizing, and education.

## Our Mission in Education

Our aim is to provide fun and interactive nature education for all ages and walks of life. By demystifying the natural world, we hope to cultivate love and respect for the ecosystems in which we live.

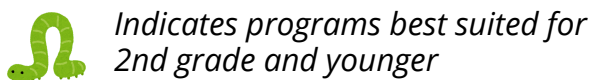
Each lesson, project, and program are rooted in: STEM education, social and civil studies, place-based learning, and play-based learning. We adapt the topics and activities to engage all age groups and learning styles.

## We adapt programs to fit your needs!

- ✓ K-12
- ✓ Homeschool Groups
- ✓ Scout Troops
- ✓ Afterschool
- ✓ Community Events
- ✓ Summer Camp



## Each lesson fits with all ages unless specifically marked!



Indicates programs best suited for 2nd grade and younger



Indicates programs best suited for 3rd grade and older.

### Things to Note:

- Educators are encouraged to borrow equipment, curriculum, and supplies (for free!) from MWA's Outdoor Lending Library for a period of two (2) weeks.
- MWA's educators will teach lessons in-person free of charge. A teacher and/or responsible adult must be present during our activities to assist with group management. We are able to offer four (4) programs per year per group.
- MWA staff can host larger groups through a round robin or station rotation, please reach out for more information.

# Birds



## BIRDS OF PREY



**Learn about the different predators of the sky of our area and compare and contrast the different birds, their habitats and habits.**

Materials from the Lending Library:  
Activity guide, owl skull (barn, barred or great horned), eagle skull, red-tailed hawk skull)

## BIRDS AND BEAKS



**Discover which birds' beaks are adapted for grasping, ripping, or building.**

Materials from the Lending Library:  
Activity guide, mock beaks, and skulls (owl, eagle, American robin, woodpecker, wood duck)

## OWLS OF OUR AREA



**Learn about the adaptations that make owls voracious nocturnal hunters.**

Materials from the Lending Library:  
Activity guide, owl pellet dissection guide and display, owl skulls (barred owl, barn owl, great-horned owl)  
*Reach out, we may be able to provide owl pellets for dissection.*



# Mammals



## BATS OF OUR AREA

**Learn why bats are important nocturnal predators.**

Materials from the Lending Library:  
Activity guide, bat skeleton, bat fossil, little brown bat skull)

## AQUATIC MAMMALS

**Learn about aquatic mammals, their habitats, and needs. Touch real pelts and skulls!**

Materials from the Lending Library:  
Activity guide, pelts and skulls (raccoon, otter, beaver, muskrat, skunk, opossum)

## BUILD A BEAVER DAM

**Learn about the busy North American Beaver and then use clay, sticks and rocks to test your dam-building skills.**

Materials from the Lending Library:  
Activity guide, clay, sticks, rocks, trays, beaver pelt and skull, beaver photos, beaver dam photos





# Reptiles & Amphibians

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## ALL ABOUT REPTILES

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**Skinks, snakes, turtles, oh my! Learn about the habitats and habits of our local reptiles**

Materials from the Lending Library:  
Activity guide, snake skeletons, snapping turtle skull and shell, identification guides

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## SNAKES!

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**Learn about our native and local snakes and why we don't need to be afraid of them!**

Materials from the Lending Library:  
Activity guide, snake skeletons, identification guides

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## AMAZING AMPHIBIANS

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**Learn about the different salamanders, frogs, and toads in the watershed, their life cycles, and techniques they use to survive.**

Materials from the Lending Library:  
Activity guide, hellbender skeleton, American toad skeleton



# Insects

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## POLLINATION STATION

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**Learn about the interactions between flowers and their pollinators. Play a game to get out of your seats and moving.**

Materials from the Lending Library:  
Insect displays, identification guides, pollinator relay materials

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## STREAM BUGS

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**Search for and identify the bugs that call streams and rivers their home and discover their importance in the food web.**

Materials from the Lending Library:  
Activity guide, aquatic bug kit, macro mania, kick net, dichotomous identification key, macroinvertebrates display kit

# Fish



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## BACKYARD BASS

**Learn the habitats of our native PA fish and learn to cast indoors or outdoors with our “backyard bass” casting set.**

Materials from the Lending Library:  
Activity guide, backyard bass kit, fishing rods

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## GYOTAKU: FISH PRINTING

**Learn the habitats of our native PA fish and make a colorful print of a local fish to take home afterwards!**

Materials from the Lending Library:  
Activity guide, paint, paint brushes, paper, silicon fish replicas

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## CAST A FLY, CATCH A STUDENT

**“Cast A Fly, Catch A Student” is the fly fishing program of National Fishing in Schools Program. Generally, it is suited to a little older student in the K-12 school.**

The program includes everything an educator needs to instruct students: equipment, training and curriculum/lesson plans.

*\*Please note, we do not instruct this program, simply supply materials\**



# Watershed Education

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## SOIL AS A FILTER

**Learn how rain gardens work and create a mini-filtration system. Test its effectiveness with food-coloring dyed water.**

Materials from the Lending Library:  
Activity guide, “Understanding Groundwater” kit, soil, rocks, sand, containers

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## WHAT’S A WATERSHED?!

**Using our Enviroscape activity, learn about how a local watershed might impact the environment.**

Materials from the Lending Library:  
Activity guide, “Understanding Groundwater” kit, soil, rocks, sand, containers, Enviroscape

# Plants

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## INVASIVE SPECIES IMPACTS



**Learn how to identify the plant species that are not native to our area and why they are a detriment to our ecosystems.**

Materials from the Lending Library:  
Activity guide, plant identification guide, plant life displays



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## WILDFLOWERS OF PA



**Learn about native wildflowers in Pennsylvania, why they grow so early in the spring, and what life they support.**

Materials from the Lending Library:  
Activity guide, flower identification guides (North Woods - Wildflowers, PA Trees & Wildflowers Pocket Guide)



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## FORESTS AND TREES



**Learn to identify the trees throughout the forest, how to age them, and what wildlife they might be supporting.**

Materials from the Lending Library:  
Activity guide, Treecology activity book, PA Trees & Wildflowers Pocket Guide (2), North Woods - Trees, leaf replicas, tree ring analysis kit



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## HABITATS



**Learn about the different communities of plants and animals you might find throughout habitats in Pennsylvania.**

Materials from the Lending Library:  
Display cases for birds, mammals, leaves, and bugs



# Ecosystems

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## FOOD WEBS

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**Learn about trophic levels and why they're important for sustainable ecosystems!**

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## ANIMAL SIGNS

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**Learn the signs native animals leave behind and what it might tell us. Track animals through an interactive scavenger hunt and decorate your own animal track.**

Materials from the Lending Library:  
Activity guide, Nature Circles: Tracks, Tracks and Scat ID guides, silicon track molds

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## LIFE CYCLES

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**Learn about the differing life cycles mammals, amphibians, and insects from hatching or birth to adulthood.**

Materials from the Lending Library:  
Life cycle figurines, animal display cases at each stage

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## HABITAT INTERACTIONS

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**Learn about how animal behaviors alter their habitats. Some examples covered are: Borers and trees, beavers and wetlands, snails and detritus.**

Materials from the Lending Library:  
Display cases of insect emergence, beaver chews, and identification guides.

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## LIFE OF A STREAM

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**Learn about the characteristics of a healthy waterway and which animals and plants rely on it healthy streams.**

Materials from the Lending Library:  
Activity guide, modeling stream erosion and deposition kit.





# Outdoor Recreation

**These programs are intended to be led by MWA staff.**

*Please reach out if interested, we can adapt these programs to fit your specific needs as well as varying locations.*

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## CANOEING

**Learn how to canoe on a calm section of river or on a lake while learning about the local ecosystem with our staff!**



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## FISHING

**Borrow our fishing equipment and learn to bait, cast, and catch fish! Ask about fishing programs hosted by our staff!**

*Please note: State law requires that a fishing license is needed for persons over the age of 15.*



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## LEAVE NO TRACE ETHICS

**Join our educators to learn about Leave No Trace ethics while you're recreating and what exactly that entails.**

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## NATURALIST LED HIKES

**Hike with our educator and learn about the ecosystems where you're hiking.**

Materials from the Lending Library: Binoculars, identification guides, Purple Lizard maps



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## LEARN TO USE A COMPASS

**Learn how to use a compass while participating in a scavenger hunt hosted by our educator.**

Materials from the Lending Library: Compasses, orienteering flags



# Service Learning

Service-learning is an educational approach that combines learning objectives with community service in order to provide an immersive experience. It is an important way for students to connect what they are learning in the classroom to positive impacts in their communities.

\*Please reach out if interested, we may be able to help with transportation costs!\*

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## WATER-BASED CLEANUPS



We supply the canoes, life jackets, paddles, clean up supplies, and a few staff members. We clean up the river from canoes! Prepare to get dirty and wet!



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## LAND-BASED CLEANUPS



We go on a nature walk and carefully pick up garbage along our pre-determined route. We'll supply the garbage pickers, trash bags, and wagon to haul trash back.



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## INVASIVE PLANT REMOVAL



Help us support biodiversity by removing invasive plants along the Indian Creek Valley Trail! We'll supply the identification knowledge, work gloves, bags, and wagon for hauling.

