Green Valleys Watershed Association’s Environmental Education Programs offer multidisciplinary learning for students in Pre K through 12th grades. Programs are designed to supplement school curricula and correlate to many of the PA Standards for Science and Technology and Environment and Ecology; and include hands-on environmental study using plant and animal biofacts, exploration, and science demonstrations (grade level dependent).

### Program Topics

#### Grades Pre K–1

**Seasonal Sensory Walk** 1 hour
Children discover the seasons while exploring habitats and wild plants and animals using their senses and participating in activities.

**Water Sense** 1 hour
While investigating a pond or stream, children discover the living and non-living things of these watery habitats through collection and examination of the plants and animals.

**Amazing Animals** 45 minutes to 1 hour Indoors – great for winter!
Customize your own animal features program! Provide us with your preferred topic/focus, and we will design a program that includes puppets, a story and bio facts to touch and examine.

#### Grades 2–5

**Exploring Ecosystems** 1 to 1.5 hours
Students learn more about the components of ecosystems and the needs and roles of the wildlife living in various habitats. Activities will further their understanding of food webs and what happens to living organisms when their habitats change.
Standards: S&T - 3.1.2, 3.1.3, 3.1.4, 3.1.5 / E&E - 4.1.2, 4.2.2, 4.1.3, 4.2.3, 4.1.4, 4.2.4, 4.1.5, 4.2.5

**Amazing Adaptations** 1 to 1.5 hours
Searching for local wildlife, and studying various animal biofacts, students will learn about the complexity of plant and animal survival techniques, including coloration, behaviors, and mimicry. Older students will learn about other types of behavioral, physiological and structural adaptations.
Standards: S&T - 3.1.2, 3.1.3, 3.1.4, 3.1.5 / E&E - 4.1.2, 4.1.3, 4.2.3, 4.1.4, 4.2.4
Program Topics (continued)

**Grades 2-12**

**Pond Community Study**  *1.5 to 1.75 hours*
During an investigation of one of our ponds, students will learn about diversity and how to measure the health of a pond. Students will collect and study small aquatic plants and animals, record their findings, and search for other important inhabitants such as beavers, turtles and herons. Older students will also perform chemical analysis of the water.

**Stream Study**  *1.5 to 1.75 hours*
Students explore the stream to discover the variety of living things living there, as well as how these animals depend on clean water for survival. Through assessment of the habitat and collection and examination of aquatic insects, students will determine the health of the stream, discuss the different causes of water pollution, and learn how they can help prevent pollution of our local waterways. Older students will also perform chemical analysis of the water.

Standards - Pond and Stream Study programs: S&T – 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 3.1.8, 4.1.2, 4.2.2, 4.5.2, 4.1.3, 4.2.3, 4.5.3, 4.1.4, 4.2.4, 4.5.4, 4.1.5, 4.2.5, 4.5.5, 4.2.6, 4.1.7, 4.2.7

**Grades 3-12**

**Working Watersheds**  *1 hour  Can also be combined with an outdoor walk to a stream or pond.*
Using the Enviroscape, a unique, interactive model, students learn the origins of common point and non-point sources of water pollution. Students will use the model to demonstrate how a watershed works, how pollution occurs, and what can be done to prevent land and water pollution. Standards: E&E - 4.2.3, 4.5.3, 4.2.4, 4.5.4, 4.2.5, 4.5.5, 4.2.6, 4.2.7, 4.5.7

Scheduling

Programs are scheduled by request, by contacting Dawn White, Education Programs Coordinator, at 610-469-8646 or dwhite@greenvalleys.org. At least 2 weeks’ notice is required. Many programs are offered year-round. However, no programming is offered during the summer season.

**2019-2020 Program Fees**

**Outreach Programs**
- Maximum 25 students, minimum 10 students per program
- 1-hour program = $100 / Additional, consecutive same-day program = $65 each

**On-site Programs**
- Maximum 60 students, minimum 10 students
- Fees: 1 hour = $7.00/student ($70 minimum) 1.25 hours = $7.25/student ($72.50 min.) 1.5 hours = $7.50/student ($75 min.) 2 hours = $8.00/student ($80 min.)
- 2 teachers free
- Extra chaperones = 1 free per 10 students

Customized Programs Available

With advanced notice, we can develop programs on Plants, Insects, Microhabitats and other topics; as well as modify some of the listed programs, to fit the needs of your group. Please contact us to inquire how we may accommodate you.

Program Location Options

**Outreach Programs** involve outdoor study in your schoolyard, or hands-on programs in your classroom. Note: Some of our programs cannot be adapted to your location. Please inquire about your program options based on your schoolyard design.

**On-Site Programs** are held at Green Valleys’ headquarters, Welkinweir, a 224-acre nature sanctuary that includes a 55-acre arboretum, ecologically diverse forest, meadow, pond and stream habitats, and demonstrations of sustainable practices.