

## Masonville Cove Environmental Education Campus Field Trip Offerings SY 2022-2023

### **Full Day Programs:**

Who Killed Rocky Rockfish?: During this murder mystery trip students will use their observation and critical thinking skills to investigate the suspects: Solute Sally, Hot Water Harry, Lindsay Litter, Oscar Osprey, and Food Chain Frank and help the detectives at Masonville Cove solve the mystery of Who Killed Rocky Rockfish. While investigating students will learn about water quality and how humans impact the health of the Chesapeake Bay and the plants and animals that inhabit it. Suggested for Grades 1 to 5. Available as a full day program.

### **Full or Half Day Programs:**

Exploring the Chesapeake Bay Watershed: Discover your connection to the Chesapeake Bay and learn about this unique ecosystem through hands-on investigations and interactive activities. Students are introduced to the concept of Watershed and how our actions on land impact the health of our local waterways and the Chesapeake Bay. Adaptable to all grades, available as a full or half day program.

Birdy Bonanza: Spend a fun-filled day exploring and learning about our feathered friends. Through a variety of hands-on activities students explore different bird adaptations that help them survive such as their beaks, feathers, and how they construct their nests. On our beautiful nature trails, your young ornithologists will hone their skills of species identification and how birds interact in our ecosystem. No birding day is complete at Masonville Cove without learning about our resident Eagles! Take a walk in their shoes and find out the challenges and conservation efforts that have impacted eagles over the years. Suggested for Grades 2-5. Available as a full or half day program.

Stream Study: Baltimore's Water Quality: Dip your toes in the water of Stream Ecology while investigating the water quality of Masonville Cove's stream. Participants will learn about the Patapsco River's Health by conducting abiotic water quality tests such as Dissolved Oxygen, pH, Salinity, and Turbidity. Learn from the stream's macroinvertebrates by completing a biotic index and discover how much these little critters can tell us about the health of our local waterways! Suggested for Grades 5 and up. Available as a full or half day program.

Terrapin Tales: Calling all herpetologists! Learn how scientists study Diamondback Terrapin populations by examining nests, measuring eggs, and determining survival of hatchlings from simulated terrapin nests. Consider threats such as predation and human impacts and gain understanding of how you can help save Diamondback Terrapins. After your data is collected in the lab, take a break with our resident Terrapins, Topaz and Pearl as they show off their unique adaptations that make them so special! Suggested for Grades 3 and up. Available as a full or half day program.

Custom Program: Don't see a program that fits quite right for your students? Have our education team develop a custom program tailored to your students' learning goals and objectives! Mix and match from a menu of available lessons, experiments, and activities to design a day that's sure to make lasting memories.

### **Half Day Programs:**

Insect Encounters: Students will experience what it's like to be an insect at Masonville Cove! First students will embark on a journey through the Monarch's life cycle, overcome obstacles and hopefully get some help along the way as they journey to Mexico for Fall migration. As a Mason Bee students will learn about the important social structures and groups that bees form to help them survive and thrive in their environments. Students then head out on one of our many nature trails on a Bug Hunt classifying the creepy crawlies found along the way as insect or non-insect by identifying characteristics of an insect. Suggested for Grades K-3. Available as a half day program.

Tracks and Scat: You may not see them, but we know they were there! Nature leaves us clues all around telling us who has visited an area. Learning how to identify tracks, scats, and other clues left behind from various animals can help us know a lot about the habitat around us. Put your observation skills to work and see if you can solve nature's mysteries! Suggested for Grades 1 to 5. Available as a half day program

Hidden Hibernators: Now you see them, now you don't! Where did they go? Learn about the mysteries of hibernation and the magic of camouflage in these hands-on explorations. Students will try to successfully prepare for winter and hide in plain sight as they learn about our hidden hibernators. Suggested for Grades K to 2. Available as a half day program.

Budding Botanists: This day is All About Plants! Students will explore Masonville's Nature trails and learn how to identify different native plants and test their skills at identifying the different plant parts in nature. In the lab, students will learn about plant anatomy beginning with a seed dissection and then get up close and personal- viewing leaves, roots, stems, and flowers through a microscope. But plants aren't just on land! Discover how aquatic plants adapt in our watery environments by modeling adaptation in this hands-on lab. Suggested for Grades 2 to 5. Available as a half day program.

Island Fever: Students are introduced to the concept of urban heat islands and investigate temperatures of different surfaces when exposed to heat/light with infrared thermometers. Combined with hands-on experiments that investigate how plants help cool the hearth and engineering design challenges to address the problem of Urban Heat Island, students will gain an understanding of why urban areas tend to be hotter than rural, more natural areas. Suggested for Grades 3 to 8. Available as a half day program.

Wonders of Wildlife: This program will take you on a journey to explore and engage with the Wonders of Wildlife! Hands-on activities will help students grow or deepen their understanding of different forms of wildlife communication, how some wildlife can seem invisible when in plain sight, and how to use clues in nature to determine what wildlife has been nearby. Students will get the opportunity interact with different animal artifacts and meet one of Masonville Cove's animal ambassadors! Suggested for Grades 2 to 5. Available as a half day program.

Erosion, Weathering, and Landslides Oh My!: In this half day field trip students will discover if water has the power to create canyons, test their engineering skills while they try to prevent a landslide and look for signs of erosion in the field during a nature walk on our beautiful waterfront property! Suggested for Grades 2-4. Available as a half day program.