

Field Trip Programs

Hart-Miller Island

Length: 3 hours

Limited to 20 participants including teachers and chaperones.

Not ADA accessible. Boat Travel Required.

This tour starts at Maryland Environmental Service land base located in eastern Baltimore County. Our crew boat will transport the tour to and from Hart-Miller Island. Once on site, students learn about the history of the island and the dredging process through interactive felt board stories. Next, they board the tour bus and take a driving tour of the island to learn about different points of interest. Students can explore the island first-hand during a short hike (approximately 0.5 miles) in one of the habitat restoration areas and then scavenge the beach at the Hart-Miller Island State Park. Arrangements can be made to have lunch on the island. If time allows, a seining activity at the state park beach or a geocaching activity can be included.

Cox Creek and Swan Creek Wetlands (Northern Anne Arundel County) or Masonville (Southern Baltimore City)

Recommended Age: All Ages

Length: 4 hours

Recommended for large groups. Students rotate through learning stations. Extensive walking (approx. 1 mile) on a rocky path.

These sites can accommodate large groups. Students will receive an overview of the Dredged Material Containment Facility (either Cox Creek or Masonville) and then split into groups to participate in rotating learning stations in neighboring restoration sites (Swan Creek Wetland or Masonville Cove). The groups then come back together for lunch and a group activity.

Choose any 4 of the following stations:

Birding: Students are provided with binoculars and observe birds such as bald eagles, osprey, and great egrets that are using our restoration areas as habitat.

Curriculum Topics Covered: Science

Grade 1: 6.B.1.

Grade 2: 3.F.1, 6.B.1.a

Grade 4: 6.B.1.

Grade 5: 6.B.1.b., 6.B.2.

Grade 6: 6.B.1.c.

Grade 7: 6.B.1.

Grade 8: 6.B.1.a.

Grades 9: 3.5.2.

Grade 10: 3.5.2.

Grade 11: 3.5.2.

Grade 12: 3.5.2.

Mitigation: In this activity students learn about the history of the DMCF construction and the associated mitigation projects through an interactive felt board activity.

Curriculum Topics Covered: Science

Grade 2: 3.F.1.b., 6.B.1.a.

Grade 4: 2.A.2.

Grade 9: 3.5.3.

Grade 10: 3.5.3.

Grade 11: 3.5.3.

Grade 12: 3.5.3

Macroinvertebrate Mayhem: Students learn about water quality by becoming a macroinvertebrate and playing in a survival game.

Curriculum Topics Covered: Science

Grade 2: 3.F.1.b., 6.B.1.a.

Grade 4: 6.B.1.

Grade 5: 6.B.1.b., 6.B.2.

Grade 6: 6.B.1.c.

Grade 7: 6.B.1.

Grade 8: 6.B.1.

Hot Commodities: This activity combines the concepts of international trade and habitat restoration in Maryland. Students sort import products by participating in a relay race.

Curriculum Topics Covered: Science

Grade 4: 3.C.1.b.d.

Osprey Odyssey: Students race around a life-sized board game as they learn about the life cycle of the Osprey.

Curriculum Topics Covered: Science

Grade 2: 3.F.1.b., 6.B.1.a.

Grade 5: 6.B.1.a.2.b.c.

Grade 6: 6.B.1.c.

Grade 7: 6.B.1.b.

Grade 8: B.1.b.

Terrapin Travels: Students race around a life-sized board game as they learn about the life cycle of the diamondback terrapin.

Curriculum Topics Covered: Science

Grade 2: 3.F.1.b., 6.B.1.a.

Grade 5: 6.B.1.a.2.b.c.

Grade 6: 6.B.1.c.

Grade 7: 6.B.1.b.

Grade 8: B.1.b.

Fishing (Cox Creek/Swan Creek only): In this hands-on activity students learn about the different fish that live in and around the restored reef ball habitat in Swan Creek Wetland. MES educators will pull a seine net through the Patapsco River and students will remove the fish from the net once it returns to the beach.

Curriculum Topics Covered: Science
Grade 2: 3.F.1.b., 6.B.1.a.

Water Quality: Students use LaMotte test kits to determine water quality of Swan Creek wetland or Masonville Cove by testing parameters such as salinity, pH, dissolved oxygen, and turbidity.

Curriculum Topics Covered: Science
Grade 2: 3.F.1.b., 6.B.1.a.
Grades 9: 3.5.2.
Grade 10: 3.5.2.
Grade 11: 3.5.2.
Grade 12: 3.5.2.

Who Polluted? Human interactions within the watershed are discussed in this hands-on program as students see how everyday actions such as washing a car or dropping a piece of litter affect Swan Creek Wetland or Masonville Cove.

Curriculum Topics Covered: Science
Grade 2: 3.F.1.b., 6.B.1.a.
Grade 5: 6.B.1.a.2.b.c.
Grade 6: 6.B.1.c.
Grade 7: 6.B.1.b.
Grade 8: B.1.

Mad Libs: Students will practice identifying nouns, verbs and adjectives as we tell silly stories about the wildlife at Swan Creek Wetland or Masonville Cove.

Nature Journaling: In this activity students will construct a nature journal and spend time observing and reflecting on their experiences at Swan Creek Wetland or Masonville Cove.

Scavenger Hunt: Scour the beach in search of shells, signs of animal homes, and other treasures.

Fancy Plants: Students will explore the wetlands and learn about the highly specialized plants that live there.

Curriculum Topics Covered: Science
Grade 4: 6.B.1.
Grade 5: 6.B.1.b., 6.B.2.
Grade 6: 6.B.1.c.
Grade 7: 6.B.1.
Grade 8: 6B.1.a.

Geocaching: In groups, students will use handheld GPS units to search the wetland for hidden containers. They collect clues and put together a puzzle that will review what they've learned on the field trip.

Curriculum Topics Covered: Technology
Grade 3: 3.A.1.a.

Grade 4: 3.A.1.a., 3.B.1.a.

Grade 5: 3.A.1.a.

Grade 6: 3.A.1.a.

Grade 7: 3.A.1.a.

Grade 8: 3.A.1.a.

Trash cleanup (Cox Creek/Swan Creek only): In groups, students participate in an action project that improves the health of the Swan Creek Wetland by picking up trash along Kembo road.

**Maryland Environmental Service
Educational Programs
Alignment with Maryland State Curriculum Grades K-12**

How the Port of Baltimore is Helping the Diamondback Terrapin

GRADE LEVELS: 3 and up

Reading/English/ Language Arts	Social Studies	Science	Mathematics
None	Grade 3: 3.A.1.c., 3.C.1., 4.B.1.b.	Grade 3: 1.D.1. Grade 4: 1.D.1., 2.A.2., 3.F.1., 6.B. Grade 5: 1.D.1., 3.A.1.a.b., 6.B.2.b. Grade 6: 3.F.1., 6.B. Grade 7: 6.B. Grade 8: 6.B. Grade 9: 3.5.3., 6.3.2.3. Grade 10: 3.5.3., 6.3.2.3. Grade 11: 3.5.3., 6.3.2.3. Grade 12: 3.5.3., 6.3.2.3.	None

Hands-On Time with the Terrapins

GRADE LEVELS: 3 and up

Reading/English/ Language Arts	Social Studies	Science	Mathematics
None	None	None	Grade 3: 3.A.1.d., 3.B.1.a.c., 4.A.1.b. Grade 4: 3.A.1.a.b., 3.B.1.a. Grade 5: 3.A.1.a., 3.B.1.a. Grade 6: 3.B.1.a.

Felt Board Storytelling: Dredging and Habitat Restoration

GRADE LEVELS: K-2

**Reading/English/
Language Arts**

Social Studies

Science

Mathematics

Grade K: 6.B.1.
Grade 1: 6.B.1.
Grade 2: 3.F.b.

Design a Diamondback

GRADE LEVELS: K-2

**Reading/English/
Language Arts**

Social Studies

Science

Mathematics

Grade K: 1.D.2., 2.A.1.b., 6.A.1.a., 6.A.2.C.e.,
7.A.1.a., 7.A.2.a.b.
Grade 1: 1.D.2., 2.A.1.a., 6.A.1., 6.A.2.a.
Grade 2: 1.D.1., 6.A.1.

Grade
K: 1.D.1.c., 1.D.2.c., 3.A.1.
Grade 1: 1.D.1.c., 1.D.2.c., 3.A.1., 6.B.1.
Grade 2: 1.D.1.c., 1.D.2.c., 6.B.1.

Terrapin Show and Tell

GRADE LEVELS: K-2

**Reading/English/ Language
Arts**

**Social
Studies**

Science

Mathematics

Grade K: 1.A.1.a.b.
Grade 1: 1.A.1.a.b., 6.B.1.c.
Grade 2: 1.A.1.a.b.

Terrapin Travels

GRADE LEVELS: 3-5

**Reading/English/ Language
Arts**

Social Studies

Science

Mathematics

Grade 4: 3.F.
Grade 5: 6.B.1., 6.B.2.a.b.

Poplar Island Pop Up Book

GRADE LEVELS: PreK-K

Reading/English/ Language Arts

Social Studies

Science

Mathematics

Grade Pre-K: 3.A.1.c.d.
Grade K: 3.A.1.a.c.d., 3.F.1.