

## Lesson: Field Games

**Topic/Essential Question:** How have humans affected the Chesapeake Bay and its watershed?

**Unit/Lesson Sequence:** This lesson is part of the “School Choice” module based at Arlington Echo Outdoor Education Center.



### Content Standards:

- **Environmental Literacy**
  - 5.A.1. Analyze the effects on human activities on earth’s natural processes
  - 1.A.5.f. Make recommendations supported by data to help address or resolve the issue.
  - 8.F.1.b. Identify actions that can be taken as individuals and those that require the involvement of other people, organizations and government.
- **Science**
  - 4.F.1.a Identify and describe the interactions of organisms in an environment.
  - 6.B.1 Recognize and describe that people n Maryland depend on, change and are affected by the environment.
  - MSDE 3.0 Life Science the students will use scientific skills and processes to explain the dynamic nature of living things, their interactions, and the results from the interactions that occur over time.
- **Physical Education**
  - 3.B.1.a Interpret errors in personal skill performance based on corrective feedback.
  - 6.E.1.a Practice a series of activities within a specified amount of time.
  - 1.A.1.a Use non-locomotor and locomotor skills while varying the movement conditions such as: speed, force, pathways, directions, levels and space in authentic situations.
  - 6.A.1.a Demonstrate safe practices for self in physical activity settings.

**Length of Lesson:** 35 minutes

**Student Learning Outcome:** The students will participate in outside environmental field games where they will work together as a group to problem solve. Through these games students will determine various human impacts on the natural environment.

### Knowledge of the Learner:

- Prerequisite knowledge, skills, and processes: Students must have a basic understand of what makes a healthy and stable habitat, and a basic understating of the humans impact on these habitats. Students should be able to listen to and follow instructions as given.
- Differentiated: This lesson will appeal to different types of learners. Kinesthetic and naturalist learners should do well with the physical aspects of the different games. Interpersonal learners will benefit from the team dynamic required for completing the

activities. Logical/mathematical learners will be able to utilize their problem solving skills. All fourth grade students should be able to comment on the impact of humans on the environment.

**Knowledge of the Content:**

Content knowledge for instructor: Provided in the Lesson Plan and Supplements

**Vocabulary:**

Habitat	Pervious
Pollution	Impervious
Runoff	Erosion

**Materials:**

Square wooden boards	Two Ropes
Hula Hoops	Blindfold
Small wooden boards	Four Cones
Jenga Boards	

**Supplements:**

- A: Pass the Energy
- B: Bats and Moths
- C: Oh Deer!
- D: Habitat Crossing
- E: All Aboard
- F: Restoration Exchange
- G: Environmental Jenga
- H: Crab Tag

**Lesson setup:**

All materials should be out on the field for use.

Set up two hula hoops about 15-20 feet apart, and place the amazon boards next to one hoop. Lie two ropes across from each other on a section of the field separated by 30 feet of open space.

Set up the traffic jam boards in a horse shoe shape.

Set up Jenga blocks either on the picnic tables or on an amazon board on the ground.

**Instructional Delivery**

Pre-Assessment/Warm-Up

1. Students will come to the field for this activity.

2. Introduce yourself and let the students know that they will be participating in field games in order to gain a better understanding of their impact on the environment
3. Ask the students what the components of a good habitat are (food, water, shelter, space).
4. Discuss the relationship between teamwork and being a “Chesapeake Bay Steward”.

**Procedures:**

5. Briefly discuss with the students ways to play games safely while still having fun.
6. The games available are suggested activities, and not all must be completed during the length of the lesson. The amount of games you will complete is dependent on how long the group spends on each game.
7. See Supplements A-G for game procedures

**Assessment**

8. Discuss What types of negative impacts affect the health of a habitat
  - a. Excess impervious surfaces leading to increased runoff
  - b. Destruction of native fauna
  - c. Pollution from over fertilization, pesticide use, and animal waste
  - d. Erosion from construction and farming
  - e. Natural disaster destroys a habitat
9. Ask the students, as Chesapeake Stewards, “What can you do to help protect habitats?”
  - a. Plant native trees and plants
  - b. Install rain barrels to minimize runoff
  - c. Pick up pet waste
  - d. Help plant buffer zones in coastal areas
  - e. Pick up trash/litter that may get carried in streams
  - f. Reduce, reuse and recycle so natural resources are not depleted

**Notes for Cleanup**

Please collect, organize and return the lesson materials to the I&C closet (in the Main Pavilion) at the end of each day of instruction. The locations for all the game materials are labeled in the closet. Please inform the Arlington Echo staff if you need assistance or if any materials are damaged or destroyed.

**Notes for morning set up:**

Please set up your materials prior to the morning’s activities. If you do not spend the night, please check in with an AE fourth grade staff member and be at your teaching location by 8:40 a.m. This may require you to leave breakfast a few minutes early.