



Family Fun Activities and Investigations

The following are sites where families can participate in programs or interact with exhibits to learn more about ecology and the environment. Please contact the sites specifically to learn about their current exhibits and calendar of events.

Anita C. Leight Estuary Center

(410-612-1688) <http://www.otterpointcreek.org>

Assateague Island National Seashore

(410-641-1443 ext.232) <http://www.nps.gov/asis/>

Blackwater National Wildlife Refuge

(410-228-2677) <http://blackwater.fws.gov>

Irvine Nature Center

(410-484-2413) <http://www.explorenature.org/>

Marshy Point Nature Center

(410-887-2817)

<http://www.co.ba.md.us/Agencies/recreation/countyparks/marshypoint/index.html>

Northpoint State Park

(410-592-2897)

<http://www.dnr.state.md.us/publiclands/central/northpoint.html>

Oregon Ridge Nature Center

(410-887-1815)

<http://www.co.ba.md.us/Agencies/recreation/countyparks/oregonridgelodge/index.html>

Career Connections



Take a few minutes to discuss with your child these different career opportunities for people interested in ecology.

Biologist

A scientist that deals with the origin, history, characteristics, habits, etc. of plants and animals

Botanist

A scientist that deals with plants and plant life

Forester

A scientist that plants and takes care of forests

Marine Scientist

A scientist who studies plants and animals that live in the ocean

Museum Curator

A person in charge of a museum

Naturalist

A scientist who studies and observes plants and animals in their habitat

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A Parent's Informational Guide to:

ECO- SCOUTS



Grade 4



Eco-Scouts

Eco-Scouts is a unit of study in which students will investigate two different habitats, the forest and meadow. The unit is designed to be taught using both the inside and outside classroom. Throughout this unit, students utilize a variety of scientific and mathematical skills to extend their understanding of ecology. The Baltimore County Public Schools' curriculum which is built upon the indicators of the Maryland Voluntary State Curriculum that are addressed in this unit are listed below.

Indicator: D. Evolution

1. Explain that individuals of the same kind differ in their characteristics, and sometimes the differences give individuals an advantage in surviving and reproducing.
 - A. Describe ways in which organisms in one habitat differ from those in another habitat and consider how these differences help them survive and reproduce.
 - B. Explain that the characteristics of an organism affect its ability to survive and reproduce.
 - C. Examine individuals in a group of the same kind of animals or plants to identify differences in characteristics, such as hearing ability in rabbits or keenness of vision in hawks that might give those individuals an advantage in surviving and reproducing.

Indicator: F. Ecology

1. Explain ways that individuals and groups of organisms interact with each other and their environment.
 - A. Identify and describe the interactions of organisms present in a habitat.
 - Competition for space, food, and water
 - Beneficial interactions: nesting, pollination, seed dispersal, oysters filtering as in the Chesapeake Bay, etc.
 - Roles within food chains and webs: scavengers, decomposers, producers, consumers
 - B. Explain that changes in an organism's habitat are sometimes beneficial to it and sometimes harmful.

Indicator: B. Environmental Issues

1. Recognize and describe that people in Maryland depend on, change, and are affected by the environment.
 - A. Identify and describe that human activities in a community or region are affected by environmental factors.
 - presence and quality of water
 - soil type
 - temperature
 - precipitation



Unit Vocabulary

Encourage your children to use the vocabulary listed below when telling you about what they are learning during this science unit.

adaptation—changes in the traits or behavior of an organism over a long period of time in order to survive

competition—the struggle among different organisms for energy (food), water, and space

consumer—an organism (animal) that eats plants and/or animals for food

decomposer—an organism that is able to break down dead plants and animals into very small materials in the soil

ecosystem—the living, once living, and non-living factors of an area that interact with each other

food chain—the order in which organisms pass on energy from one organism to another

habitat—a place where a plant or animal lives which provides the resources for energy (food), water, and space

organism—a living thing (producer, consumer, decomposer)

predator—an animal that hunts and eats other animals

prey—an animal that is hunted and eaten by other animals

producer—an organism (plant) that makes its own food using sunlight

scavenger—an animal that feeds on dead animals that they did not kill themselves



Books to Read

Take some time to read a few books about ecology with your child. Books about organisms and habitats can be found in the non-fiction section of the library (call numbers 577-599). The non-fiction section of your school and public library also has books on this topic. To find books in the catalogue, use the search terms: organisms, food chains, food webs, and/ or habitat. Possible books are listed below:

All Kinds of Habitats, Sally Hewitt

Human Impact on the Environment, Elizabeth Rose

Food Chains, Peter D. Riley

Food Chains in a Backyard Habitat, Donald Silver

Internet Sites



Go to onLINE website at www.bcps.org/offices/lis. Select "Databases" link to open the Database Portal. Use the following login protocols for databases you wish to use.

SIRS Discoverer/ SIRS Discoverer WebFind
User Name: bcps
Password: sirs

BrainPop
User Name: bcps
Password: brainpop