

**Disappearing Maryland
Teacher's Guide
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Objectives:

In this lesson, students will:

- read to be informed
- distinguish between cause and effect
- decide whether Maryland's Bay islands and the residents' way of life are disappearing

MSPAP Program Outcomes and Indicators

Social Studies Grades 4-5

Geography

- Locate places and natural features by interpreting and constructing maps using directions, legends, grid systems, boundary lines, and scales.
- Examine the impact of geography on the industrial growth and economic prosperity of communities in the state, nation, and world.

Political Systems:

- Analyze historical examples in which individuals and groups brought about civic improvement.

Peoples of the Nation & World:

- Examine decisions made by citizens of Maryland and the U.S. in terms of consequences for other peoples of the world, and vice versa.

Social Studies Skills and Processes:

- Obtain, interpret, organize, and use information from reading, asking questions, observing, and listening.
- Define and clarify problems drawn from history and the social sciences, identify resources, and prepare solutions based on available data.

Reading/Language Arts, Grades K-8

Reading

- Students will demonstrate their ability to read to be informed.

Student Worksheet

- Disappearing Islands Worksheet

Materials

- pencils
- Internet access

Web Sites

Reading #1 (Tilghman Island)

(<http://internetconnection.com/talbot/tilghman.htm>)

Map of Talbot Country Today:

(<http://www.sos.state.md.us/sos/kids/html/tamap2.html>)

Map of Somerset County.

(http://www.skipjack.net/le_shore/maps/som_map.html)

Map of Talbot County in 1895:

(<http://www.sos.state.md.us/sos/kids/html/tamap.html>)

Map of Somerset County in 1895:

(<http://www.sos.state.md.us/sos/kids/html/somap.html>)

Map of Somerset County (U.S. Census Tiger Map Server)

(http://mapping.usgs.gov:8888/gnis/owa/MapServer?f_name=Smith+Island&f_state=MD&f_latlong=375829N0760122W&f_ht=.5&server=TIGER)

Island of Somerset County:

(http://www.skipjack.net/le_shore/maps/som_map.html)

Buried Treasure:

(<http://www.intercom.net/npo/smithisland/dize.html>)

Mrs. Kitching, the Grand Lady of Smith Island

(<http://www.intercom.net/npo/smithisland/kitching.html>)

Poplar Island restoration map:

(<http://www.mde.state.md.us/environment/dredge/images/map1.jpg>)

Teacher Background

Many islands in the Chesapeake Bay face economic problems that are related to the environment. The erosion of land is an important problem for all Marylanders, but even more so for people who live in the fragile environment of the islands of the Chesapeake. Every year, acres of land area wash into the bay. Large islands or lands previously connected to the mainland of Talbot County have been divided into small islands or totally covered by the Bay waters. Farms, businesses, and wildlife habits disappear with the eroded soil.

This *Maryland Exploration* introduces students to the concept that while parts of Maryland seem to be disappearing, people are working to save these fragile places and ways of life. Students read about four islands in Chesapeake Bay: Poplar,

Tilghman, Sharp's and Smith Islands, and the efforts that people are making to restore the islands or the residents' way of life. At the completion of this *Maryland Exploration*, students decide whether they think Maryland is really disappearing, and they will write a letter to the editor of the Bay Journal sharing their opinion, and the reasons for their opinion.

When soil washes into the bay, more than land area is lost. The muddy water blocks light from the underwater grasses which provide oxygen and shelter for animals in the water. Silt kills the microscopic animals that form the basis for the Bay's food chain. When main economic resources such as crabs, fish and oysters die, the residents of the islands find their very way of life threatened. Most people there depend on "working the water" as the economic basis of their communities.

Along with the forces of nature, such as storms and wind which wash soil into the bay, some islanders must deal with a rapidly expanding influx of tourists and vacationers who build homes there, jet ski and power boat about. Those activities stir up more soil in the water as well as contributing to other issues that strain the environment. There is resentment toward visitors who come and take away crabs and other resources while throwing trash into the waters and disturbing the habitats of wildlife. More air traffic in the area is disturbing nesting birds. While visitors improve some aspects of the economy, such as the sale of gasoline and food on the islands, most residents see it a very mixed blessing.

Islanders fight a constant battle to maintain their shoreline, often at great personal or government cost. Riprap (obstacles such as large stones that take the force of waves) and seawalls are installed, grasses are planted, and no-mow zones are established to try to slow erosion. All of that costs time and money. Some islanders even throw debris such as old cars and boats or other scrap into the Bay to act as a breakwater. Environmentalists worry that these solutions will further injure the environment.

Introduction/Motivation

Before students complete this *Maryland Exploration* on the Internet, introduce this *Exploration* with the question: *Are we losing Maryland?* Begin a discussion with students about this question. Ask: How could we lose a state? What could this question mean? Tell students that they will be completing a *Maryland Exploration* about very special places in Maryland.

Learning Activities

In this *Maryland Exploration*, students read to be informed and collect information about how changes in the landscape, climate and way of life could lead us to conclude that Maryland is disappearing. But, they also collect information about how people are working hard to preserve Maryland's bay islands, through restoration and economic development.

Teaching Tips

Some students will need assistance comparing the boundaries of Smith and Tilghman Islands from 1895 to today using just the on-line maps. Since the ecological changes in the island are included in the later part of the *Exploration*, it is not necessary to stress the boundaries which are depicted in the maps.

This *Exploration* can be shortened (and require less time on-line) by dividing students into teams or assigning partners to review the links on the four islands.

Teachers can create a unit focusing on the Chesapeake region by using this *Exploration* in conjunction with the Maryland's Watermen *Exploration* (http://www.intandem.com/NewPrideSite/MD/Lesson4/Lesson4_1.html) as well as The Chesapeake Bay: Great Basin of the East (http://www.intandem.com/NewPrideSite/MD/Lesson1/Lesson1_1.html) and the Wetlands and their Inhabitants *Exploration* (http://www.intandem.com/NewPrideSite/MD/Lesson17/Lesson17_1.html).

Evaluation /Thoughtful Application

At the completion of this *Exploration*, students will decide for themselves whether Maryland is disappearing. Students will write a letter to the editor of the *Bay Journal* to share their decision, reasons for their decision and suggestions for what individuals and the government could do about the problem.

The *Bay Journal* is published 10 times a year by the Alliance for the Chesapeake Bay Inc. to provide information to the public related to the state-federal Chesapeake Bay restoration effort. The editor is Karl Blankenship. You can read the newspaper on line, <http://www.bayjournal.com/> or contact the Bay Journal at:

619 Oakwood Drive
Seven Valleys, PA 17360- 9395
Phone: 717-428-2819. Fax: 717-428-0273

Rubric/Scoring Tool for Thoughtful Application:

	Excellent 3	Satisfactory 2	Needs improvement 1
Written in correct letter format			
Edited for capitalization, usage, punctuation (CUPS)			
Letter as a whole is persuasive			
Letter shares answer to the question “Is Maryland disappearing?”			
Reasons for answer are included in the letter			
Includes suggestions for what individuals and government can do about the problem.			

Lesson Extensions

1. You can also write a letter to the Governor or other state officials to share what you think. Here are some address:

Governor Parris N. Glendening
 State House
 Annapolis, MD 21401
 1-800-811-8336 (toll free, Maryland)
 e-mail: governor@gov.state.md.us

James J. White,
 Executive Director
 Maryland Port Administration
 World Trade Center Baltimore
 401 East Pratt St.
 Baltimore, MD 21202 - 3041
 1-800-867-3625 (toll free, Maryland)
 e-mail: mpa@access.digex.net
 web: www.mpa.state.md.us/

2. Read this interesting article about police life on Smith Island (<http://www.intercom.net/npo/smithisland/police.html>) to learn more about how the way of life for the people that live on Smith Island might be very different than how you live.
3. One of the most interesting things about life on a Bay island is what happens during the winter. Read this article about ice/winter on Smith Island (link: <http://www.intercom.net/npo/smithisland/bayfrez.html>)
4. Was there anything that you read about in this lesson that you would like to see preserved for the future of Maryland? If you're really interested in Disappearing Treasures of Maryland, you might want to create a poster, skit, advertisement or Hyperstudio stack to inform others about something that could disappear from Maryland. Be sure to tell what the problem is and suggest a way that your audience can be a part of the solution. Remember, part of the solution is just letting people know that there is a problem!
5. What does the Environmental Protection Agency say about this part of Chesapeake Bay's watershed? Visit these web sites to see how healthy this part of Chesapeake Bay is:
 - <http://www.epa.gov/iwi/hucs/02060001/indicators/indindex.html>
 - <http://www.epa.gov/iwi/hucs/02060001/indicators/indindex.html>
6. Learn more about these and other things that are happening in and around the Chesapeake Bay by contacting the Chesapeake Bay Foundation at (<http://savethebay.cbf.org/>). They offer many opportunities for students to become actively involved in preservation programs such as wild celery or grass planting and oyster farming.
7. For more information on the restoration of Poplar Island:
 - Glendening's press release announcing the Poplar Island restoration: (<http://www.gov.state.md.us/gov/press/1998/may/html/popisl.html>)
 - Bay Journal article about the restoration: (<http://www.bayjournal.com/96-08/popular.htm>)
 - Bay Weekly Article about the restoration: http://www.bayweekly.com/year99/issue7_2/dock7_2.html

8. For more information on Smith Island visit these links:

- ABC News article on Smith Island
(<http://abcnews.go.com/sections/us/dailynews/smithisland981013.html>)
- Shore Source Guide to Smith Island
(<http://www.shore-source.com/guides/somerset/Communities/smith.html>)
- Crisfield & Smith Island Cultural Alliance, Inc.
(<http://www.intercom.net/npo/smithisland/>)