

Map Your Habitats

Grade Level: upper middle school/ high school

Duration: one 30-minute class period

Skills: vocabulary, discussion, observation, collecting and interpreting data, forming hypotheses

Subjects: social studies (geography) and science; language arts (with additional activity)

Concepts

- Habitat is the place where an organism lives because it is adapted to find food, water, shelter, and space there. Numerous habitats are located within an ecosystem.
- Shorebirds depend on at least three different places for habitat every year of their lives.
- Your local environment may provide important habitat for shorebirds.
- Your local environment is part of a natural ecosystem that we all depend on.

Vocabulary

Refer to the words highlighted in the *Habitat Readings*.

Overview

By examining maps of the states they live in, students discover the variety of habitats that local shorebirds might use.

Objectives

After this activity, students will be able to:

- List the different habitat types found within their home states.
- Identify, on a map of their home states, where these habitats are located.
- Describe three characteristics of each of these habitat types.
- Conclude where they might find shorebirds in their state.

Materials

- One copy of a blank outline of your state or province per student or team

- Copies of textbook maps or copies of topographical or state maps as research material for the students.

- Felt tip pens or colored pencils

- Copies of the *Habitat Readings* (found in the activity *Types of Habitats*)

Introduction

Given the migratory nature of shorebirds and the variety of habitats they use, chances are good that some representatives of this large group of birds can be found in your own “backyard.” The first step to observing shorebirds in the field is to identify suitable shorebird habitat within your community. For information on types of habitats shorebirds use, read *Shorebirds Depend on a Chain of Healthy Habitat* in the *Shorebird Primer* and the *Habitat Readings* found in the activity *Types of Habitats*.

Maps

Maps can be made by you or your students through numerous Internet resources:

National Geographic Map Machine
<http://plasma.nationalgeographic.com/mapmachine/index.html>

National Atlas of the United States
<http://www.atlas.usgs.gov>

Geography Network

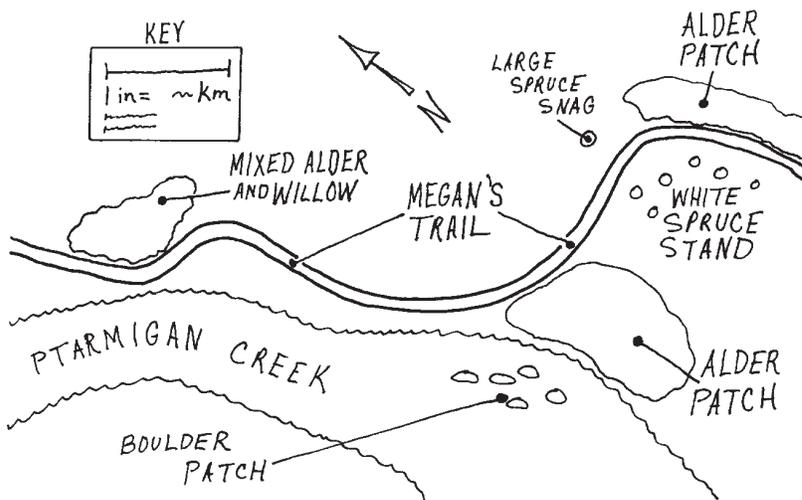
<http://www.geographynetwork.com>

MapQuest

<http://www.mapquest.com>

Procedure

1. Pass out copies of the *Habitat Readings*. Students, individually or in teams, should read each of the descriptions to become familiar with the shorebird habitat types.
2. Pass out one copy of the blank map to each student or team or have students make a local map using the Internet.
3. Have students locate as many shorebird habitat types as possible on the map(s). Ask them to draw and label these habitats on their blank maps.
4. Discuss the following questions:
 - What wildlife do you find in your state, community, or neighborhood?
 - Would your map look the same in winter? How would the habitat change?
 - Are all the habitats marked



on your map suitable for shorebirds? Why or why not?

- Where are good shorebird habitats in your state during the breeding season, during migration, and during winter?
- How many habitat terms can you find among the names on your state (or town) map? (Examples: “Shady Slough,” “Dandelion Meadow,” “Parker’s Knoll”)

Additional Activities



Cultural Connection

Ask students to research and map a habitat in an environment geographically distant from their own community. Ask that as part of the habitat mapping they include information about the cultural group that lives near that habitat.

Map Your Neighborhood

Have students draw a map of the local area where their school and home are located. Label roads, paths, buildings, and all areas of natural or human-made habitat. (Human-made habitat might include gravel beds, sewer lagoons, or dumps.)

Community Atlas Project

ESRI (Environmental Systems Research Institute) has a U.S. Community Atlas project that enables teachers and students to develop a community profile using GIS mapping tools. To learn how to participate, go to <http://www.esri.com>, click on “Education and Training”, scroll down and click “Community Atlas.”

Community Interviews

Have students interview local community members about how nearby natural areas have changed over the years. Has anything been lost to development? How have the populations of local wildlife changed? Have special areas been set aside for wildlife?

Explore the History of Your Local Parks

Have students research to find what state or federal parks, refuges, or nature preserves are in your state, province, or within 50 to 100 miles of your town. What animals, plants, or habitat types do these parks protect? In which ones do you find shorebirds?

Internet Resources include:

All public lands:

<http://www.recreation.gov>

National Wildlife Refuge Systems:

<http://refuges.fws.gov>

National Park Service:

<http://www.nps.gov>

USDA Forest Service:

<http://www.fs.fed.us>

Bureau of Land Management:

<http://www.blm.gov>

