

Creating a Wildlife Resource Map



OSU EXTENSION
4-H YOUTH DEVELOPMENT

Objectives

- Participants will be able to define habitat.
- Participants will be able to define what a map is and its parts.
- Participants will be able to create a wildlife resource map.

Introduction

Do you think you know all the kinds of wildlife in your area? You may think you do, but you may be in for a pleasant surprise! You need keen observation skills in order to make a wildlife resource map. This may lead you to discover wildlife in a particular area that you had not been aware of before.

You will find that making such a map is fun and educational. You may even choose to use the map as a basis for improving the **habitat** (a place where an animal lives) of the wildlife in a particular area. For instance, you may discover that there is not enough cover, water or food for the animals there—particularly in the winter. If you want to go beyond mapmaking and take steps toward providing for the needs of wildlife the first step toward improving habitat is to become more informed.

What is a Map?

A **map** is a representation of the whole or a part of an area. Maps are usually prepared on a flat surface, but globes are also maps in that they represent the entire earth. Although we think of maps as depicting geographical areas, they can also be used to represent other areas, such as the stars or parts of the human body. We therefore say that explorers map the earth, astronomers map the stars and geneticists map chromosomes. For this activity, we will consider a map a representation of a geographic area - a part or all of the earth's surface. That surface contains many things that the mapmaker wants us to see in one image, for example, roads, buildings and lakes. By using a map, we can show the relationship between one feature -- such as a mountain -- to others, such as rivers or cities. They may show natural encounters representing the physical environment, cultural encounters that show where two or more groups of people interact, political as two or more nations come in contact, or technological encounters such as transportation systems, agricultural areas and mining locations.

Materials:

- Handout
- Pencil
- Plain paper
- Ruler
- Large piece of cardboard to use as a drawing board

Life Skills:

- Communication
- Critical Thinking
- Keeping Records
- Learning to Learn
- Planning/
Organizing

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Wildlife Maps

A map of wildlife resources should show all the different types of wildlife and habitat present in the area you choose. You need to be observant and careful to check an area of land and to prepare an accurate and informative map that is close to scale.

You can map the forest, local park, part of a river or stream bank, pond, lake or fencerow. The area does not have to be large—about an acre is a good start. Once you have developed the necessary skills you can begin mapping larger areas. You will need plenty of time to develop a quality map. Visit the site you are mapping several times and at different times of the day. This will help to ensure that your wildlife survey is complete. You may wish to enlarge this project by mapping the same area during different seasons. You will be surprised to find the seasonal change in species or number of wildlife observed.

When you make your map, it is important that you draw the map to scale. **Scale** shows common measurements, such as feet or miles, in reference to the map. This is normally indicated as a ratio. An example would be indicating the map is drawn at 1:20,000 scale, meaning that one unit on the map (say, an inch) equals 20,000 of those same units (again, inches) in real life. Our map on the following page has a scale of 1:1,200 or 1 inch on the map is equal to 1,200 inches in real life.

Draw the map so that the top of the page indicates north. This is usually accomplished using a north arrow. Indicate on the map where you observed animals. It is also helpful to list the animals and where you observed them, as well as the habitats you saw them in (fencerows, rock pile, or pond). See sample map.

Use symbols that give as much information as possible. You may need to add new symbols in addition to the ones used on the following page. Be sure to include in the **legend** an explanation of all the symbols you have used.

Anatomy of a Map:

Mapped Area: the geographic subject of the map itself.

Inset: some maps feature not only the mapped area, but may also contain an inset which shows an enlargement of an important area.

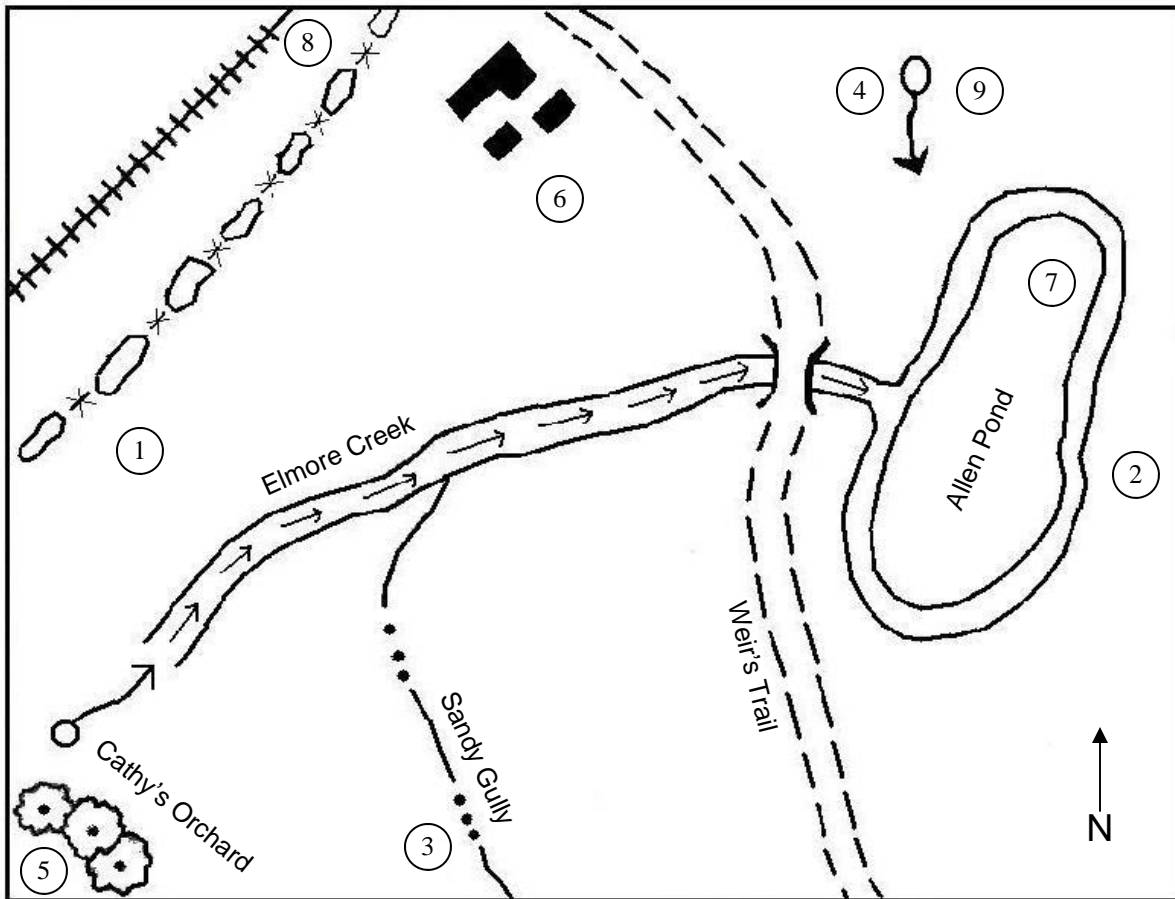
Commentaries: a written description of what is depicted on the map.

Compass Rose: this is a symbol, such as an arrow, that helps orient the map user to direction. Usually, north is at the top of the map.

Legend: this lists and explains the symbols used.

Scale: indicates the measurement used in reference to the map.

Coordinates - Maps may contain coordinates usually shown as measurements of latitude and longitude: These help the map user know where the area is in terms of the equator and other points east or west of another point.



SCALE (1" = 1,200")

- | | |
|---|--|
| <p>① Saw doe deer near fencerow shrubs in early morning.</p> <p>② Skunk tracks found near pond in early morning.</p> <p>③ Saw cottontail rabbit near gully in late morning.</p> <p>④ Rabbit seen near spring at dusk.</p> <p>⑤ Saw doe deer near orchard in late morning.</p> | <p>⑥ Saw hen turkey near old building in late morning.</p> <p>⑦ Two male mallards observed on pond in afternoon.</p> <p>⑧ Flushed covey of quail near fencerow in late afternoon.</p> <p>⑨ Mourning dove seen near spring at dusk.</p> |
|---|--|

Map Legend

	Map area edge
	Unpaved road
	Railroad
	Lake, pond or reservoir
	Spring
	Stream
	Bridge
	Gully
	Woodland
	Buildings
	Shrubs/trees in fencerow

Displaying Your Map(s)

You may mount your map on poster board or some other backing for display at a club meeting, fair, school or some other function. Be sure that the map is accompanied by all symbols and other necessary information. You may wish to add to your display with labeled drawings, painting, pictures, or photographs of the wildlife and habitat in the area. Use your imagination in making the display as attractive and informative as possible. For example, you might use different colors to illustrate specific habitats or food crops.

Additional Things to Do

1. Make a wildlife survey chart for a selected area. Visit the area a number of times and at different times of the day. You must make an effort in order to get a complete wildlife survey. Chart the name of the animal, its location, and any sound or sign made by the animal. If you see the animal itself, note the time of day seen.

Example:

Spring of the Year

<u>Animal</u>	<u>Location</u>	<u>Sound or Sign</u>	<u>Time of Day</u>
Bobwhite Quail	Near hedges	"bobwhite" call	8 a.m.
Mourning dove	Near spring	"coo"	5 p.m.

2. Make one or more wildlife resource maps as described in this lesson

References Cited

The information included in this lesson was revised and adapted from *Making A Wildlife Resource Map*. 4-H Wildlife Project , Habitat, SW 433. Southern Regional 4-H Wildlife Literature Committee.

University of Texas at Arlington. **Cartographic Connections: *What is a Map***. <http://libraries.uta.edu/ccon/whatis.shtm>. Accessed 9 September 2009.

University of Texas at Arlington. **Cartographic Connections: *Anatomy of a Map***. <http://libraries.uta.edu/ccon/anatomy.shtm>. Accessed 9 September 2009.

Selected Resources

Cartographic Connections. <http://libraries.uta.edu/ccon/>

Introduction to Topographic Maps. http://geology.isu.edu/geostac/Field_Exercise/topomaps/topo_map.htm

The USGS and Science Education. <http://education.usgs.gov/index.html>

Understanding Maps and Cartography. http://geography.about.com/od/understandmaps/Understand_Maps_and_Cartography.htm

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