



Prairie, Forests and Aquatic Habitats

Materials:

Activity One:

- ☆ Prairie, forest, and aquatic habitat poster and/or pictures of common plants and animals that occur in each area.
- ☆ Audio or video tapes that illustrate the sights and sounds of prairies, forests, and wetlands.
- ☆ Chart paper or chalk board.
- ☆ Books about each ecosystem such as *Arkansas and the Land* by Tom Foti (University of Arkansas Press), *Marshes and Swamps* by Gail Gibbons, (Holiday House Books), *Forest Life* by Barbara Taylor (D.K. Publishing) and *Meadow* by Barbara Taylor (D.K. Publishing).

Activity Two:

- ☆ Three hula-hoops or masking tape or large paper circles for a Venn diagram; map of Arkansas showing the six natural divisions.
- ☆ Books (or stories and diagrams) that show how various ecosystems interact with each other such as *Possum and the Peeper* by Anne Hunter (Houghton Mifflin).

Rationale

Students will learn how various plants and animals living in different natural communities in the same region illustrate the diversity of life forms in the landscape.

Objectives

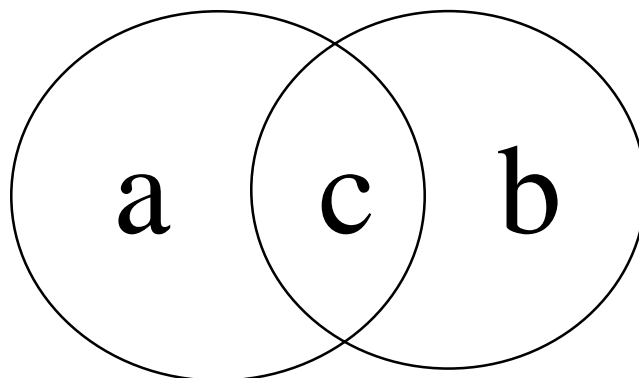
1. Students will compare and contrast the communities of the prairie, forest, and aquatic habitats in Arkansas.
2. Students will define the characteristics that make each natural community different from the others.
3. Students will explain how different natural communities are connected to one another through the use of a Venn Diagram.

Activity One:

What's It Like There?

PROCEDURE:

1. Hang posters, watch videos, read books, and/or listen to tapes about natural communities. Discuss each type of habitat displayed or discussed through these sources.
2. Using a map, have students point out where some of these communities (prairie, wetlands, Delta, coastal plain, forest) occur in Arkansas.
3. Create a Venn diagram using three intersecting hula-hoops on the floor. Ask students to identify and explain how each habitat type is the same, different from the others. Illustrate the findings by standing in the appropriate part of the Venn Diagram. Recreate the diagram on the chalkboard or chart paper. Record student observations as they share them with the class.



A Venn Diagram (right) is used in mathematics to show the relationships between sets. In the arts, they are useful in showing similarities and differences in characters, stories, poems, etc. They are often used in pre-writing to organize thoughts for a compare/contrast essay.

3. Conduct a teacher-led discussion on what the students learned from the Venn Diagram.
4. Ask students to write on a note which natural community he/she would most like to visit. Collect the notes and graph the choices on chart paper (you might want to use a different color note for each ecosystem). Ask students to explain why they made these particular choices.

Activity Two: Mix and Mingle

1. Read *Possum and the Peeper*.
2. Afterwards, mark off an area of the classroom to represent the forest, one to represent the prairie and one to represent wetlands, decorating each area appropriately if time allows. Assign students to be certain biotic factors of the habitat (animals, plants) or certain abiotic factors (water, soil) in each area. Each person should wear a name tag showing what he/she represents using both name and picture of the biotic or abiotic factor. Send students to their assigned habitat.
3. Allow students to illustrate the interdependence and the interconnectedness of the ecosystems by moving back and forth among them, stating the purpose for their movements (teachers will need to help younger students with their movements). See the following list for examples.
 - A raccoon might den in a forest tree, but visit the prairie for grasshoppers

and the wetland for crayfish.

- A hawk might nest in the forest but hunt mice in the prairie and the wetland.
- Water might overflow from the wetland into the forest and the prairie when it rains hard or you might have a stream extending through all three areas.
- Seeds from plants in one ecosystem will find their way into the other areas by wind, water or animals.
- The wind will blow across all three ecosystems.
- Soil may be carried by water from the wetland to the prairie or the forest. Grassroots may hold the prairie soil too tightly for it to move, and tree roots will hold that of the forest.
- Leaves from the forest will blow into the other two areas, thereby increasing the richness of their soil.

phibians, as well as small and large mammals common to each ecosystem. Combine various transparencies overlays to create tell a story about an ecosystem in Arkansas..

Extensions

1. Allow each student draw a picture of the natural community he/she would like to visit. Use these drawings to create a story about a trip to the different natural communities in Arkansas.
2. Create dioramas or wall murals illustrating what the students have learned about ecosystems in Arkansas..
3. Make overhead transparencies from black line masters of soil and rock, plants, insects, birds, reptiles and am-

Correlation to National Science Standards

Life Science
Science Inquiry

Correlation to Arkansas Frameworks

Science:
Social Studies: 4.1.1., 4.1.2.,
4.1.3., 4.1.4., 4.1.5.
Math: D.S.P.1.2, P.A.F.1.1
Language Arts: W.1.1, W.1.5,
R.1.16, R.2.1, L.S.V.1.8