Objectives:

Students will:

1. observe plants and wildlife in a wild and urban or suburban setting;
2. make comparisons between the wildlife seen at the two sites;
3. keep a record of observations;
4. analyze the results of the observations, and
5. draw conclusions about the differences in numbers and species of plants and animals observed in the two locations.

Teaching Materials:

- Handout “Survey Report Form” (Page 46)
- Field guides that include local organisms (wildflowers, trees, birds, reptiles, amphibians, insects, spiders, and mammals)
- Cameras
- Binoculars
- Notebooks
- Pencils

Getting Ready:

1. Arrange a field trip to a nearby wildlife area (e.g., Bayou Sauvage National Wildlife Refuge, Audubon Louisiana Nature Center, and LaCouterie Nature Trail in City Park in New Orleans or Northlake Nature Center and Fontainebleau State Park in Mandeville). If these areas are not easily accessed, consider a nearby park. Call the Lake Pontchartrain Basin Foundation to get A Guide to the Wetlands of the Lake Pontchartrain Basin.
2. Choose an area around your school that will make a good observation site. A walking field trip in the neighborhood may work well.
3. Discuss observation skills with your students prior to the trip. Stress the importance of being quiet and patient.
Procedure:

1. During the field trips (both neighborhood and wild), choose an appropriate time and location to direct the students in their observation exercise.

2. Divide the students into small groups. With a smaller class, they can work individually or in pairs.

3. In the groups, one student can be the recorder, another a “spotter,” and another the photographer. Other tasks may present themselves.

4. Give each group a small area in which to concentrate its observations. Tell the students to sit quietly for several minutes, watching for signs of wildlife. Tell them to record the types of plants they see, as well as animals and signs of animals’ presence (footprints, spider webs, droppings, etc.). A species name for plants is not essential. Encouraging a description of the size, shape of leaves, color of flowers, texture of bark, etc. gets the students to look closely. The photographer should record the site, capturing the plants, trees and signs of wildlife (footprints, droppings or animals themselves).

5. Rotate among the groups, helping them identify what they see.

6. Gauge your class’ attention span in this kind of activity. It will vary widely among groups. When you know your group is ready to move on, regroup the class and discuss their observations, calling on a group spokesperson to report on each small group’s discoveries. Encourage descriptions of organisms.

7. Discuss adaptations of the organisms to their environments.

Extensions:

After completing two observation trips, have the class compile a master list of plants and animals seen in the two places. Compare numbers of organisms and use the following questions to guide research and discussion, analyzing the differences between the two lists. Alternatively, these questions can be given as an individual research and writing assignment after a discussion in class.

- Which site contained a wider variety of organisms?
- What do numbers and types of organisms tell you about the health of the two ecosystems?
- What is the impact of human activity on the organisms in the two sites?
- What are the specific survival requirements of two of the organisms you observed in each of the two places?
- Do the organisms at one site have more specialized needs? Give examples.
- How do the organisms within one site compete with each other for basic survival needs?
- If you were a “wildlife habitat real estate agent,” how would you describe the two places in order to attract new residents?
This activity could be adapted to the observation of aquatic organisms in two contrasting bodies of water such as a bayou in a wildlife refuge and a city park pond. In this case, students can separate aquatic organisms into groups that are “more pollution intolerant, less pollution intolerant, and pollution tolerant.” For more information on the technique of macroinvertebrate sampling, see the Isaac Walton League of America’s web site: www.iwla.org.

### Assessment Procedures:

Assess the students according to their ability to participate successfully in the observation activity, their participation level in identifying and describing observed organisms, and their ability to answer the analysis questions and to draw conclusions about the comparisons made.

Use the following scale. A higher number denotes greater observation skills.

<table>
<thead>
<tr>
<th>Point Value</th>
<th>Observation of plants and animals in a wild setting:</th>
<th>Observation of plants and animals in an urban or suburban setting:</th>
<th>Completion of data form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bystander</td>
<td>Bystander</td>
<td>Very incomplete (did not report most sightings)</td>
</tr>
<tr>
<td>2</td>
<td>On-looker</td>
<td>On-looker</td>
<td>Incomplete (reported about 50% of sightings)</td>
</tr>
<tr>
<td>3</td>
<td>Good observer</td>
<td>Good observer</td>
<td>Complete reporting</td>
</tr>
<tr>
<td>4</td>
<td>Keen observer</td>
<td>Keen observer</td>
<td>Very well recorded observations</td>
</tr>
<tr>
<td>5</td>
<td>Trained observer</td>
<td>Trained observer</td>
<td>Outstanding record of field observations</td>
</tr>
</tbody>
</table>

Maximum points: 15
## Survey Report Form

Name(s) of observer(s)  

Date  Location  

<table>
<thead>
<tr>
<th>Plants</th>
<th>Birds</th>
<th>Mammals</th>
<th>Insects</th>
<th>Reptiles and Amphibians</th>
<th>Fish/Shellfish</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>