

E.T. - A LOCAL WAY OF LEARNING

Title: BIRD NEST HUNT

Author: Eulalie R. Rivera Elementary School
Environmental Education Team

Grade Level: 5-8

Concepts: 2. Ecosystem
3. Carrying Capacity

Disciplines: 1. Science
2. Mathematics

Objective:

Students will correctly identify nests as observed in a given upland area, using the information provided, and record their observations as called for in the suggested activities.

Rationale:

From birds' nests we can learn a lot about their inhabitants. We can learn about bird habits, nesting territories, materials used in nests and about eggs and mating habits. A shore and marsh bird nest hunt would need to record a different set of data.

Materials Needed:

Activity sheets, bird key, ruler in inches and centimeters, compass, hypsometer or clinometer.

Directions/Activity:

Divide the class into teams of four. Assign students to roles of leader, recorder, ornithologist (in charge of books or keys) and research scientist (measures the nests). Have the entire class follow a particular trail to help keep control over the activity. Each team is then responsible for locating as many nests as possible.

The teams do not have to stay close to each other but should be in the same general area. As they locate nests they should do the appropriate exercises. Read through the data sheet and explain the use of instruments and keys before you start the exercise.

The second part of exercise #4 is to be done as an entire class. Measurements from all the groups should be put on the charts. Answer the questions as a class.

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Team Members: Leader_____ Ornithologist_____

Recorder_____ Research Scientist_____

It's easiest to study nests when the leaves are off the trees. It's surprising to see the number of nests which hide in the foliage. We will not collect any nests.

Activity #1

Take a survey of where nests are found. Especially of interest here is finding out if birds have their nests on a particular side of a tree.

Stand next to the trunk of the tree, facing the nest. Use a compass to find out which direction the nest is in. Point the base of the compass towards the nest. Line up the red end of the floating arrow with the red cross-hatched arrow. Read the direction the nest is in on the compass where it says 'read bearing here'.

Write down the direction on a data sheet. For example:

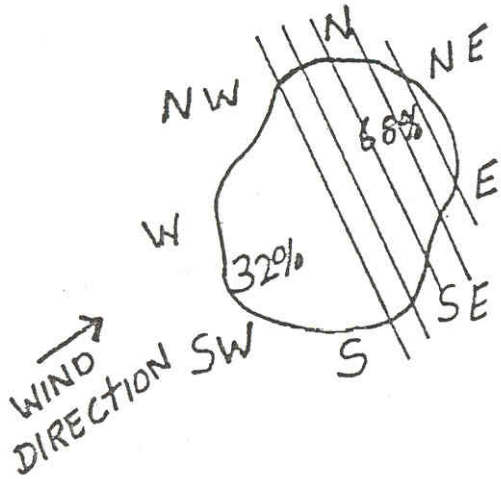
DATA SHEET FOR NEST SURVEY

No.	N	NE	E	SE	S	SW	W	NW
1	X							
2		X						
3			X					
4		X						

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Display your data in a picture graph, including the wind direction.

For example:



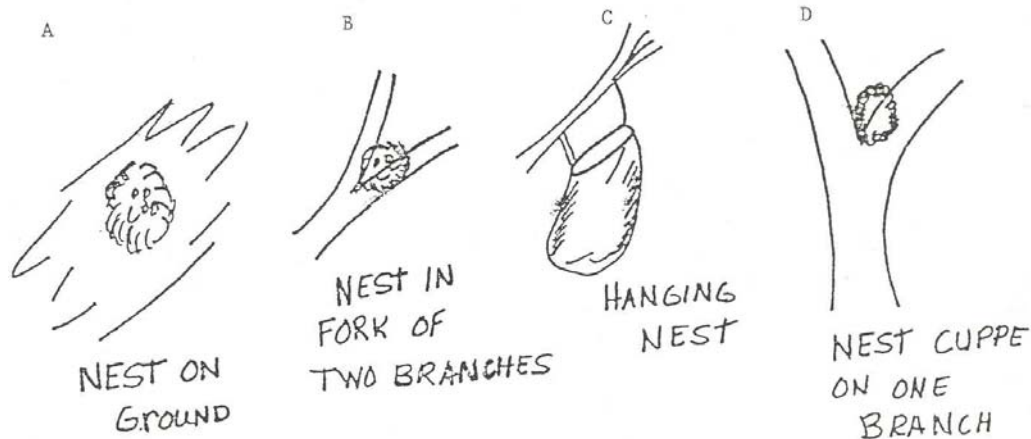
Activity #2 (to be done at the same time as Activity #1)

For each nest seen in Activity #1, determine the height from the ground. Use a hypsometer or a clinometer to determine the height. Your leader will explain how to use the instruments.

Activity #3

1. Nests come in all shapes and sizes. The nest may lie flat on the ground or it may be wedged between two branches or may hang like a pendulum from a branch.

Classify each nest you find as one of the following:



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Put a check for each nest found

A. Nest on ground

B. Nest in fork

C. Hanging nest

D. Cupped nest

2. What might be the advantage of one type of nest over another? Remember mongooses are egg eaters but can't climb trees.

3. Name three reasons why you can't find more nests.

A.

B.

C.

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Activity #4

1. Find one or two nests which you can observe carefully without harming it.
Do the following measurements and answer the questions.

a = inches

b = millimeters

	1a Yours	1b Others	2a	2b	3a	3b	4a	4b
Depth of Cup								
Outside Diameter								
Inside Diameter								
Circumference								
Other								

2. Add to your chart the measurements from other groups.
3. What was the difference in outside diameter from the largest nest to the smallest?
4. What was the difference in inside diameter from the largest nest to the smallest?
5. Why do you think there was a difference in size?
6. Why wasn't there a greater difference?
7. If you have a key to bird nests try to identify your nest.

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Activity #5

1. Take a close look at the nest you found in Activity #4. What was the nest made of?

2. Collect the same materials from the area. Make separate piles for each different material.

3. Now for the challenge, use those materials to try to build your own nest. If you are successful, you may take that nest home.

4. Compare your list of materials with other groups. Do all the bird nests contain the same type material?

5. How do they differ?

6. Were the materials found on the outside of the nest the same as those found on the inside?

7. What is the main reason birds build nests?

8. Name four things a bird would need to successfully lay eggs and raise its young.

A.

B.

C.

D.

Reference:

Birds of the Virgin Islands - Dea Murray, 1969