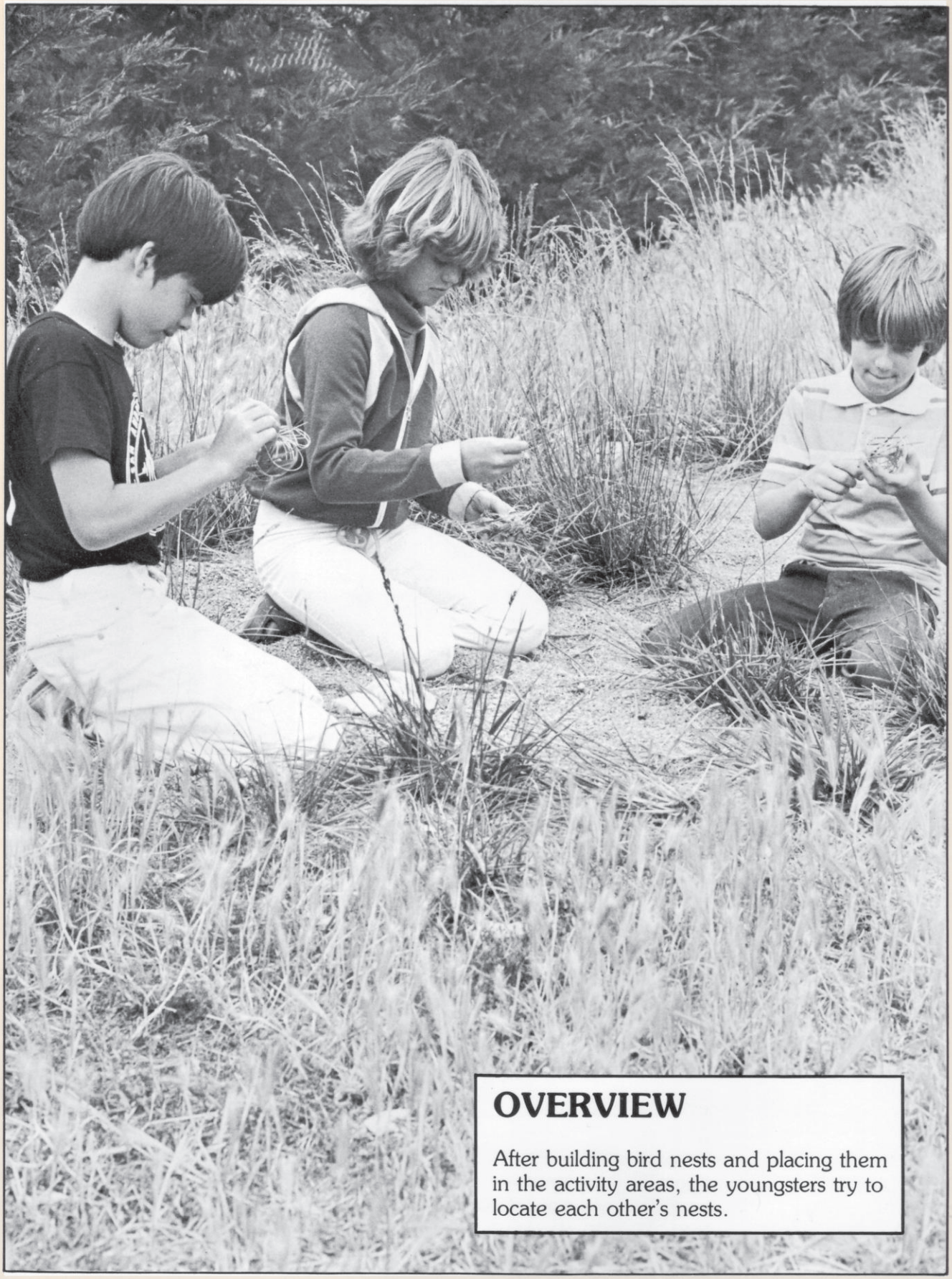
BIRD NESTS

BIO KEY

Simulation
Arts and Crafts
Naturalist Game



OVERVIEW

After building bird nests and placing them in the activity areas, the youngsters try to locate each other's nests.

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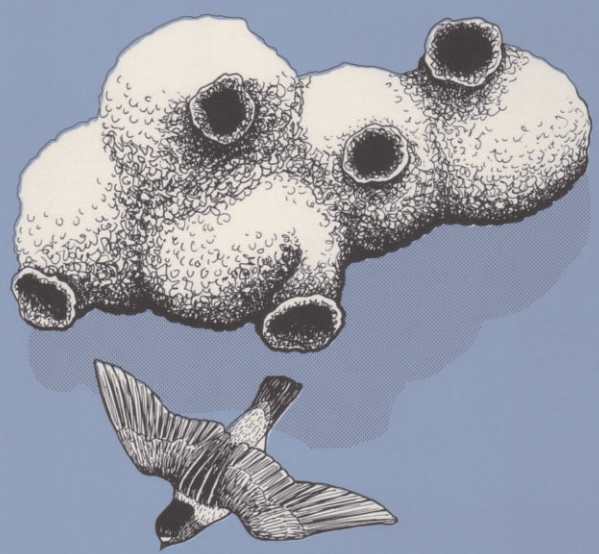
BACKGROUND

Many animals build nests, and birds are among the most industrious and expert nest builders. Nests not only hold the eggs and the young, but a nest's location, structure, and coloration provide protection from predators and adverse weather conditions. For example, woodpeckers chisel their nests deep into tree trunks, and orioles build finely woven nests that hang from branches where most predators can't reach them. Barn swallows tuck their cuplike nests of mud in the eaves of buildings, and juncos conceal their nests under low bushes. Even the killdeer's simple depression in the ground is often difficult to see because it blends in with the surroundings.

Besides nesting in a variety of locations, birds also use a variety of nesting materials. Sparrows use grasses and rootlets; hawks and eagles use twigs and branches; and warblers use bark, leaves, and shredded plant stems. Cliff swallows form gourd-shaped nests of mud and straw; and hummingbirds use lichens, cobwebs, moss, and sometimes flowers. Most birds line their nests with soft materials such as feathers, hair, and fine grass. Goldfinches use thistledown, and the chipping sparrow lines its nest with horsehair.



Some birds use the same nests year after year, some birds lay eggs in abandoned nests, and others may use materials from old nests to build new nests. *All* nests, whether occupied or not, are protected under federal law. No one should disturb nests in any way unless he has a special wildlife permit.

CHALLENGE: BUILD A NEST FOR AN IMAGINARY BIRD, AND PLACE IT IN YOUR ACTIVITY SITE.

MATERIALS

For each participant:
1 copy of "Nesting Notes"
1 pencil*
1 bird-nest frame* (See the "Bird-Nest Frame" Equipment Card.)
1 thin strip of flagging* (2 cm x 15 cm)

For the group:
1 data board*
1 marking pen*
1 "Bird-Nest Frame" Equipment Card*
1 "Nesting Notes" card*
colored flagging*
2 containers of water (for making mud)
scissors*

*Available from Delta Education.

PREPARATION

Group Size. This activity is suitable for any size group.

Time. Plan on fifty to sixty minutes for this activity. Spring and summer are the best times to conduct this activity.

Site. Choose a site that includes a variety of trees, shrubs, and grasses. Flag two activity areas (10 m x 10 m) that are situated in such a way that a team in one area cannot see the team in the other area. If necessary, obtain permission to gather plant materials.

BIRD NESTS

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Materials

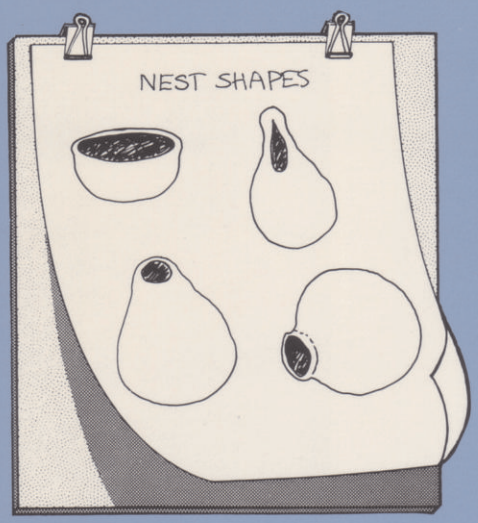
1. Make a wire frame for each participant. (See the "Bird-Nest Frame" Equipment Card.)

2. Make one copy of "Nesting Notes" for each youngster.

3. Make one bird nest utilizing materials from the activity site to keep in reserve in case you have an odd number of youngsters. (See the "Action" section.)

ACTION

1. Ask the group to describe some bird nests they have seen. Sketch the described shapes on a data board. In addition, ask the youngsters to discuss some of the places where birds build nests.



2. Challenge the group to go out in pairs and gather *small* samples of materials that a bird might use to build a nest. After a few minutes, call the group back. Ask the youngsters to spread out their samples. Emphasize the fact that birds build nests with all kinds of materials and in many different shapes.

3. Show the group how to shape wire frames over their knees. (See the equipment card.) Explain to the kids that they will use the frames to weave or mold the materials they collect into bird nests.

4. Tell the youngsters that they will split into two teams and that each team will work in a different site. Each participant will:

- use materials from the site and a wire frame to build a bird nest.
- find a suitable place for her nest in her team's site.
- place her nest in its spot *without covering or hiding the nest.* (Birds must be able to fly into and out of the nests.)
- fill out a "Nesting Notes" card.

5. Give each youngster a wire frame, a "Nesting Notes" card, and a pencil. Divide the youngsters into two equal teams. Give each team a container of water (for making mud to use in their nests), and send one team to each flagged site. Circulate among the youngsters as they work.

6. Allow twenty to thirty minutes for the kids to make and position their nests and to fill out their "Nesting Notes" cards. (Note: If the teams are not equal in number, you become a member of the "short" team. You should position the nest you made earlier and fill out a "Nesting Notes" card.)

7. Announce to the youngsters that they are now going to switch sites and play the roles of naturalists looking for bird nests. Tell the kids that as naturalists, they should not disturb the nests.

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8. Give each youngster a strip of flagging. Ask each youngster from one team to exchange "Nesting Notes" with a youngster from the other team. Then challenge the youngsters to find the nest described on their "Nesting Notes." Instruct each naturalist to tie a flag near the nest that most closely fits the description on his "Nesting Notes." Encourage team members to work together and share discoveries.

9. After the teams have had a chance to find and flag the nests, bring the whole group together in one of the activity sites. Let each nest builder pair up with the naturalist who has her "Nesting Notes." Each naturalist should read the card and then show which nest he matched with the card. The nest builder can verify the choice. Repeat this procedure at the other site.

10. Have the group collect the flagging and all the nests at the end of the activity.

BIRD CHIRPS

1. Which nests were the most difficult to find? Why?

2. Which locations would probably provide the greatest protection against predators? Against the weather? Why?

3. What problems did you have as naturalists in matching the nests with the "Nesting Notes"? How could the description on your "Nesting Notes" card be improved?

4. Which nests appear to be the sturdiest? What materials were used?

5. What do birds use instead of a wire frame to give support to their nests?

6. What problems did you have constructing your nests? How do you think birds deal with these problems?

BRANCHING OUT

1. Encourage the participants to take their nests home and place them securely in a tree or bush. Tell the youngsters to see if birds come to nest or, more likely, use some of the materials in their own nest building.

2. After this activity, the youngsters will be ready to look at real nests and to consider their locations, materials, and shapes. Bird nests are particularly easy to spot during the winter when trees are bare. Contact the local Audubon Society for some guidelines on finding and identifying bird nests.

Bird Nests
BIRD-NEST FRAME

Equipment Card

MATERIALS

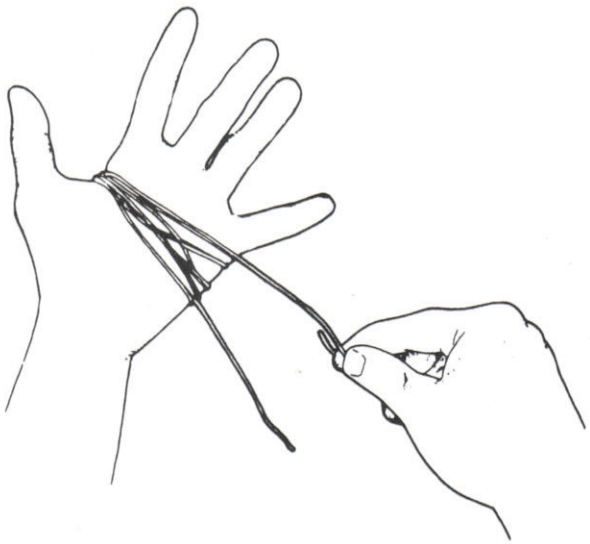
1 two-meter length of thin wire for each participant (aluminum wire works best)*
1 pair of scissors*

*Available from Delta Education.

MAKING THE FRAMES FOR THE YOUNGSTERS (INSTRUCTIONS FOR THE LEADER):

1. Cut 1 two-meter length of wire for each participant.

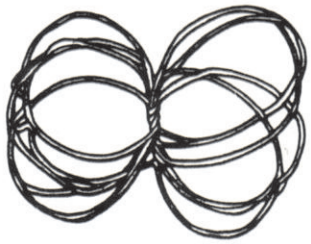
2. Coil each wire into a circle approximately seven centimeters in diameter. One way to make the circle is to coil the wire around your hand.



3. Take one loose end of the coiled wire and wrap it tightly around the coil three or four times.

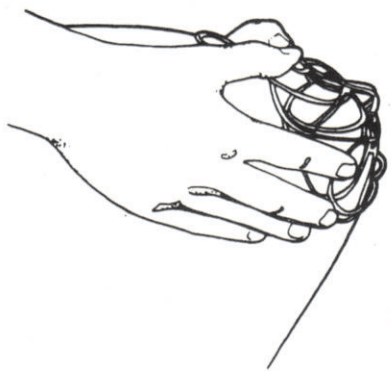
MOLDING THE FRAME (INSTRUCTIONS FOR THE PARTICIPANTS):

1. Separate the coil into two circles, forming a figure eight.



2. Spread the coils out into a flat flower shape.

3. The frame can then be molded into a nest shape by pressing it against a bent knee or the toe of a shoe.



4. Materials can now be woven into or molded on the frame.

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Bird Nests
Nesting Notes

NAME_____

MY BIRD NEST IS MADE OF:
(Circle all the materials you use.)

twigs	green grass
pine needles	dried grass
green leaves	hair or feathers
dried leaves	mud or dirt
bark	other:_____

AND IS LINED ON THE INSIDE WITH: _____

_____

MY BIRD BUILDS ITS NESTS:
(Circle one.)

on the ground	in a tree
in a clump of grass	in a bush

other: _____

Bird Nests
Nesting Notes

NAME_____

MY BIRD NEST IS MADE OF:
(Circle all the materials you use.)

twigs	green grass
pine needles	dried grass
green leaves	hair or feathers
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