

# SeaWorld/Busch Gardens Bird Biology

4-8 Classroom Activities

### Nests Under Construction

#### **OBJECTIVE**

Students will gain an understanding about how birds build nests.

#### **ACTION**

- 1. Divide class into girl/boy or same gender pairs (depending on maturity of class).
- 2. Explain that many birds pair up to build a nest for their young using all types of materials. This activity will explore some types of nests and how they are built.
- 3. Distribute a nest card to each pair. There will be three or four pairs making the same type of nest.
- 4. Lead students to the schoolyard. Explain the following rules and let them build their nests.

The rules are as follows:

- A. The pair must agree according to their info card, where they will build their nest (not all nests are built in trees).
- B. Each person must make one trip per piece of nest material. For example, the female or male student/bird goes to get a handful of grass, and then returns to the nest site. He or she cannot carry more then one handful of grass per trip (because birds can't).
- C. Any material found in the schoolyard (such as string, litter, etc.) can be used to build their nest because birds also use any available material.
- D. After the students have built their nests, let the class travel from site to site and learn about the different species. Each student should be able to answer the question(s) at the bottom of their card. (Answers are on the next page.)
- 6. Initiate a discussion about the importance of these things:
  - A. Keeping the environment clean. Some birds grab materials for their nests that may hurt them.

#### **ACTION** continued

- B. It's difficult to make a nest. Now image you didn't have hands to grip things with. We need to have a healthy respect for all species and the effort they put into making their homes
- C. Preserving habitats. If all of the trees from a certain area were cut down, there wouldn't be a spot for a nest. Many people clean bird nests from their rain gutters each year because the birds don't have any other place to build.

#### **MATERIALS**

#### Per student:

- access to schoolyard
- copies of nest cards below

#### **ANSWERS**

- 1. Great Weed Warblers' anchor their nests in the reeds by first finding a "forked" reed. They then bend another reed over the fork, using it as a prop for the bent reed. From there, the warbler begins to weave the materials into a nest.
- 2. Wrens usually build their nests close to the ground, on riverbanks, under tree roots, etc., so they are found in forested areas with seasonal changes. Most wrens migrate to avoid the cold snow falling on their shelter in the winter months.
- 3. Weaverbirds tend to build their nests by other weaverbirds, so there are many nests on one branch. If the weight gets to be too much for the branch, the nests could all come crashing to the ground.
- 4. Male hornbills spend the rest of the time flying back and forth with food for the female and their young when it has hatched. The male will provide food for the two birds until they are ready to emerge from the tree. Sometimes the male works so hard during this time that after the female and youngster emerge, he dies!
- 5. Tailorbirds use spider silk, cotton pieces, or bark fibers as thread to sew their nest shut!
- 6. Swiftlets' nests are built with saliva and some Asians countries consider their nests to be a delicacy!
- 7. Horned grebes keep their nests afloat by building their base from aquatic leaves and reeds. The hollow reeds float on top of the water. This allows the nest to rise and fall with the water level instead of flooding.
- 8. Bowerbirds use the dance floor to perform elaborate dances to attract a mate. The shells and other trinkets are used to attract attention. Once he has her attention, he picks each treasure up and shows them to her to impress her.
- 9. Ovenbirds only use their nest for a short time. By the time breeding season is over and the young have hatched and fledged, the tropical heat has begun to set in. The heat turns their little nest into a virtual oven, which would be impossible to survive in.

## Bird Nest Cards

The Great Reed Warbler builds its nest around the tall reeds (or sticks) growing in a pond. Using four reeds, it wraps a nest all the way around the reeds-similar to a house on stilts. To make the hollow in the nest for the eggs to be laid in, the warbler spins in circles inside the nest, stomping down the grass.

Question: How do you suppose the warbler is able to wrap the first few grasses in the reeds?

Wrens usually build their nests in bushes, next to river banks, or under exposed tree roots. Because they are close to the ground, the wrens build a side opening instead of a cup-like nest. The side opening leaves the nest with its own roof! The wren builds its nest from leaves, grass, and sticks.

Question: Based on what the wren uses to build its nest, what do you think its habitat is?

Weaverbirds build nests that hang from tree branches like fruits. They make their nests from any supplies they can find in the area such as grass or palm fronds. First, the male finds a twig that makes a Y-shape, then both male and female begin to build the nest together.

**Question:** What is the possible danger to the bird by building a nest like this?

Hornbills have a difficult task of finding a hollow tree in which to build their nest. The female builds the inside and the male builds the outside. They use mud to build a wall over the hole in the tree, leaving just a slit for the male to feed the female through.

Question: What do you think the male does once the female is trapped inside the tree with her young? Tailorbirds, relatives of the warbler, actually sew their nests! They find a branch with two large leaves close together. Using their feet, the push the leaves together and begin to sew. They sew the leaves together to make a pocket. They then line the inside with grass and other soft material for the eggs.

Question: What do you think the tailorbirds use as thread in the wild to sew the leaves together? Swiftlets, a close relative to the hummingbird, not the swallows, build their nests onto rock faces. While flying, they grab plant parts, seeds, flower petals, and dry grass to build their nest. To make all of the parts to stick together, they use their own saliva. They then use their saliva to make the nest stick to the side of a rock crevice.

**Question:** What do some people like about their nests?

Horned grebes are aquatic birds. They build nests that float, rising and falling with the water level. It's typically built in a shallow part of a pond among tall reeds. The nest, constructed from bits of reed and plants, is big enough for two birds and their young.

Question: What makes the nest float instead of sink, especially with a bird sitting in it?

Bower birds have many different kinds of nests, but the most common is found in medium height grasses. First, the male clears away the area, then begins to place straw or other stiff grasses in the ground to make a hallway of sorts. He also builds a dance floor at the front door. The dance floor is made of different (human) trinkets, feathers with bright colors, and shells.

**Question**: Why does he build a dance floor?

Ovenbirds create a two-room condo from clay! They find a tree branch and begin making a round hard structure for their young. It takes about 2,000 lumps of clay mixed with vegetable matter to build a sound structure. The nest is built in a mini-spiral, so the inside has one wall, resulting in two rooms-one for brooding, the other for breeding.

**Question**: Why are they called ovenbirds?