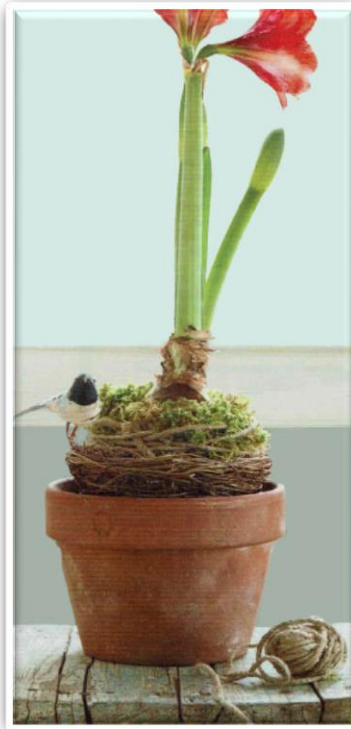


POTTED AMARYLLIS IN BIRD NEST



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OBJECTIVES:

EDUCATIONAL

There will be a discussion of participants' experiences with birds, problems birds face and how we can help them, and fun facts about birds.

ACTIVITY

Participants will plant an amaryllis bulb into a pot and add a the bird nest in it for the amaryllis to grow through.

TAKE AWAY

Participants will take their potted amaryllis with a bird nest back to their rooms. They will also take three handouts with them on caring for their plant, helping birds, and fun facts about bird nests.

MATERIALS:

(Plan for 8-10 patients. Eight is supposed to be the maximum, but sometimes we get 10.)

____ Pens

____ Markers

____ Dishpans for dirt (2 available in BRI supply cabinet)

LESSON PLAN: POTTED AMARYLLIS IN BIRD NEST

MATERIALS *(Continued)*

- _____ Watering cans (2 available in BRI supply cabinet) or individual watering bottles for patients to use
- _____ Name tags for patients (check BRI supply cabinet)
- _____ Example of completed project you're doing
- _____ A extra set of the patient-project materials listed below in order for you to demonstrate the project.
- _____ Completed presentation forms (1 to BRI and 1 mailed to ext. office)
- _____ Your clean receipts for materials purchased (give to BRI therapists)
- _____ Other

SPECIFIC ITEMS NEEDED for this project:

- Terra-cotta or plastic pots and saucers; *NOTE: There should be about a 1-inch clearance between the pot rim and the bulb. Since amaryllis will be top heavy, terra-cotta pots will provide more stability. If using plastic pots, consider weighing them with a stone in the bottom.*
- Coffee filters, if using plastic pots
- If using plain plastic pots, consider adding a decorative element to it, e.g. a burlap cloth, painting the pots, decorations, etc.
- Bird nests from a craft store that will fit inside the pot. *Optional: You may also make bird nests ahead of time.*
- Amaryllis bulb for each container
- Sheets of moss
- Potting soil
- Twine or some type of light-weight rope
- Artificial bird for each pot
- *Optional, recording of bird sounds and something to play it on.*

IS A POWERPOINT OR PREZI PRESENTATION AVAILABLE? NO

- HANDOUTS:**
- 1) *"Caring for Your Amaryllis Plant" (For patients)*
 - 2) *"How We Can Help Birds" (For patients)*
 - 3) *"Fun Facts about Bird Nests" (For patients)*
 - 4) *"DIY Bird Nests" (For MG preparing them.)*

BEFORE CLASS

1. *Optional, Paint pots or any other decoration that can't be done in class.*
2. Drill small, drainage holes in bottom of pots, if needed.

LESSON PLAN: POTTED AMARYLLIS IN BIRD NEST

BEFORE CLASS *(Continued)*

3. *Optional, Make bird nests if not buying them from a craft store. For instructions, see "Handout # 4, DIY Bird Nests."* **(NOTE: This handout is for you to know how to make the nests. It is not needed for patients.)**

DURING CLASS

Consider: Playing bird sounds before and/or after the class.

1. When participants introduce themselves, have them also talk about their experiences with birds and bird nests, and what they may do to help birds.
2. Before starting the project, discuss problems bird face, how we can help them, and fun facts about birds.
3. If using plastic containers, first put a coffee filter on the bottom of the pot with a stone on top of it for weight. *(Amaryllis will become top heavy once it grows.)*
4. Add potting mix to container until is half to three-quarters full.
5. Water potting mix.
6. Set nest on top of potting mix, and put a little potting mix inside the nest.
7. Wrap moss around the sides of the amaryllis bulb with moss. Use twine or some type of light-weight rope to hold it in place.
8. Fold roots of amaryllis bulb underneath bulb, and place on top of bird nest.
9. *Optional, decorate pots.*
10. Place in a sunny window and keep soil evenly moist.

MAINTENANCE: *See Handout #1, "Caring for Your Amaryllis Plant"*

INFORMATION/DESCRIPTION/FACTS:

TYPES OF BIRD NESTS



Adapted from Wikipedia

Cup Nest - Shaped like a bowl, and is most common. A lot of songbirds build cup nests. They use a lot of materials for sticky glue - mud, rotten wood, dung, spider webs, caterpillar silk, and sometimes even their own saliva mixed with food. Materials used for nests are twigs, grass, leaves, moss. Scratchy material is used on the outside for protection and camouflage, and soft material on the inside like moss, fur, feathers, and cotton.

The smallest cup nests are made by hummingbirds, and can be as tiny as a thimble with eggs the size of peas.

INFORMATION/DESCRIPTION/FACTS -Types of Bird Nests (*Continued*)



Adapted from Wikipedia

Adherent nests - Nests adhere to buildings, trees, cliffs or other vertical structures.

Bird saliva often is used for glue. Some species of male swiftlets regurgitates long, thin strands of saliva from glands under their tongues, and build their entire nests with the saliva. In China this is considered a tasty delicacy that is very tasty, and is put into a soup called, “Bird’s Nest Soup.”



Adapted from Wikipedia

Platform nests - Built mostly by birds that eat prey (like eagles and hawks). Nests are usually very high, like on sides of cliffs or high up in a big tree. It takes months and months to build these nests. They often return to the same nest year after year, and continue to build it. A Bald Eagle’s nest can weigh as much as a ton.

Some water birds (like grebes and loons) build platform nests right on the water, where they can float. The nests don’t move, as they are anchored to plants attached to the bottom of the water. These birds don’t walk well on land. They swim to their nests, and when the babies are ready, they simply jump into the water and begin their aquatic life.



Adapted from Wikipedia.

Earth-hole nests - Nests inside the earth. They are burrows on the ground or in sides of cliffs. They like using abandoned rabbit holes, too. The Burrowing Owl only uses already dug holes for its nest.

INFORMATION/DESCRIPTION/FACTS -Types of Bird Nests (*Continued*)



Adapted rom Wikipedia.

Ground and mound nests - Many birds nest right on the ground. They carve out a hold, and line the nest with grass or other materials. Geese even pick feathers from their breasts and make a nice down bed for their eggs.

Scrape nests - These nests are barely a nest at all - just a small depression in the ground or a pile of dead leaves to lay eggs on. These scrape-nesting birds usually have eggs that match the color of dead leaves or rocks.

BIRD POPULATIONS DECLINING DUE TO GLOBAL WARMING, HABITAT LOSS, WIND TURBINES, AND CATS

Increasingly both casual bird-watchers and ornithologists note a steady decline in numbers—not just of endangered species, but also of common birds not usually considered to be at risk. Study after study, survey after survey show a worrisome downward trend in populations.

A National Audubon Society report called "[Common Birds in Decline](#)," for instance, shows that some widespread species generally thought to be secure have decreased in number as much as 80 percent since 1967, and the 19 others in the report have lost half their populations. The figures reflect an array of threats faced by birds throughout North America.

Migrants return from Central America to find that the brushy field where they nested the previous year is now a strip mall.

Millions of songbirds annually suffer bloody death in the claws of domestic cats. Millions more collide with city skyscrapers or communications towers, or fly into the glass windows of suburban houses.

And climate change could degrade or even eliminate habitats in ways that scientists have only recently begun to study and try to forecast.

Threats to songbirds occasionally make splashy headlines, as when Smithsonian scientists released a report in January indicating that free-ranging domestic cats kill far

LESSON PLAN: POTTED AMARYLLIS IN BIRD NEST

INFORMATION/DESCRIPTION/FACTS - Declining Bird Population (*Continued*)

more birds than previously believed: between 1.4 and 3.7 billion birds annually in the lower 48 states.

Though it brings the subject of bird conservation to a wide audience, the attention-grabbing news about cat predation reflects only one of many dangers looming for the continent's bird life, some far more ominous.

Wind Farm Dangers

To conservationists, the gigantic blades of wind turbines represent double-edged swords. Though numbers are subject to debate, one biologist estimated in 2009 that 440,000 birds were dying each year through impact with wind turbines. Whatever the figure, it's bound to rise as more wind farms are constructed.

"We recognize and support the use of renewable energy to avoid climate change, which will impact everything," says Gary Langham, vice president and chief scientist for the National Audubon Society. "Obviously we're concerned about getting the siting done correctly, so there's minimal chance of killing a condor or a golden eagle."

The American Bird Conservancy and other groups support proposed regulations that would keep wind turbines away from migration routes, wetlands, wildlife refuges, and similar areas likely to be frequented by birds.

In a related move, a coalition that includes conservationists, the Federal Communications Commission, and the Federal Aviation Administration has been studying the design of communications towers to try to reduce the estimated six-million-plus birds killed each year in collisions with the towers and their guy wires (the heavy cables that anchor the masts to the ground).

The most recent findings show that the steadily glowing red lights seem to confuse flying birds, causing them to crash into towers or to fly in circles until they drop from exhaustion. Replacing these lights with flashing strobe lights could cut bird mortality by as much as 75 percent without compromising aircraft safety.

Tower owners have questioned the accuracy of bird-death figures, and resist the expense of converting lights on existing structures. Nonetheless, conservation groups continue to push for safer tower lights, and the FAA is studying proposed new regulations.

Acre by Acre, a Losing Battle

Meanwhile, many ornithologists, while regretting bird deaths caused by cats and towers and supporting efforts to reduce them, see those and similar issues as distractions from a far more important problem.

LESSON PLAN: POTTED AMARYLLIS IN BIRD NEST

INFORMATION/DESCRIPTION/FACTS - Declining Bird Population (*Continued*)

"To me, the top three threats to birds overall are habitat loss, habitat loss, and habitat loss," says Ken Rosenberg of the Cornell Lab of Ornithology. "We're losing the battle acre by acre."

HOW WE CAN HELP BIRDS

See "*Handout # 2: How We Can Help Birds.*" for more information.

SOURCES:

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Caring for Your Amaryllis Plant



©White Flower Farm

Place the pot indoors in a sunny window (the more sun the better) and keep the soil evenly moist. When the flower stalk begins to emerge, rotate the pot about one-half turn every few days so it will grow straight. If you provide your amaryllis with too little light, the flower stalk will grow excessively tall and may even fall over. Flowering generally occurs about six to eight weeks after planting the bulb. Some large bulbs will produce two flower stalks.

Sometime after the flower spike has emerged, leaves will grow from the top of the bulb. After the flowers have faded, cut the stalk at the point where it emerges from the bulb, but do not cut any foliage. Keep the plant inside and continue to provide plenty of light.

When April arrives, plant the bulbs into your garden. Amaryllises planted in the garden in the spring will get into a natural cycle and bloom in April the following years.

SOURCE

Gill, D. (2016, October 8). *What's the best pot for an amaryllis?* Dan Gill's mailbag. Retrieved April 25, 2018, from http://www.nola.com/homegarden/index.ssf/2016/10/whats_the_best_pot_for_an_amar.html

HOW WE CAN HELP THE BIRDS



© British Bird Lovers. (n.d.) *Helping Birds*. Retrieved April 25, 2018, from <https://www.britishbirdlovers.co.uk/helping-birds>

While we may not be able to solve all the global problems affecting our bird populations, there are many things we can do at home to help them out.

- 1) *Maintain a respectable distance from bird nests.* Birds are sensitive to disturbance, and if they feel threatened, they may even abandon their young or their incubating eggs.
- 2) *Erect bird and nectar feeders proper distances from windows or other places where birds could be ambushed by predators.* Use appropriate seed and other food.
- 3) *Limit use of lawn chemicals and pesticides in your garden.*
- 4) *Help keep birds from flying into your windows.* If you have a problem with birds striking your windows, use paint or opaque/translucent tape to create a pattern on the outside of the window glass (with vertical stripes spaced 4 inches or less and horizontal stripes 2 inches or less) - or put lightweight netting or screen several inches in front of the window.
- 5) *Plant native fruit and berry-bearing bushes and trees.* Also maintain ground vegetation and shrubs adjacent to water.
- 6) *Turn off lights in high-rise offices or apartments at night.* Thousands of migratory songbirds, which are attracted by lights, are killed each year by colliding with lighted buildings at night.
- 7) *When outdoors in recreational areas and sensitive natural areas, stay on trails and keep dogs on a leash.*
- 8) *Purchase shade-grown “bird-friendly” coffee.* Shade-grown coffee plantations support tremendously higher numbers of bird species than full sun (deforested) coffee plantations.

HANDOUT #2: HOW WE CAN HELP BIRDS

9) *Put up a bird house (with proper ventilation) in your yard.* As more habitat disappears every year, birds have fewer places to nest each spring.

10) *Put a bird bath in your yard to provide year-round clean drinking and bathing water.* Use a heater in winter where appropriate.

SOURCE

The Nature Conservancy. (n.d.) What you can do: Everyday ways you can help birds. Retrieved April 25, 2018, from <https://www.nature.org/newsfeatures/specialfeatures/animals/birds/migratorybirds/what-you-can-do/everyday-ways-you-can-help-birds.xml>

FUN FACTS ABOUT BIRD NESTS

1. In China they have an expensive delicacy considered quite tasty, called, “*Bird Nest Soup.*” It’s made from real nests from the swiftlet birds. Although some birds from different species use their saliva as glue to build nests, the male swiftlet builds its entire nest from saliva. It regurgitates long, thin strands of saliva from glands under its tongue to build its entire nest which is stuck to a cave wall.



2. The hummingbird’s nest can be as small as a thimble. It’s eggs are as tiny as peas.

3. A Bald Eagle’s nest can weigh as much as a ton. Birds of prey, like eagles and hawks build large platform nests. They are usually huge and very, very high up - on the sides of cliffs, maybe, or high up in a big tree. It takes months and months making these nests, adding branch by branch. They often return to the same nest year after year and continue to build it.

Bald and Golden Eagle nests are always protected even when unoccupied. Even if an unoccupied nest is being used for educational purposes, you must get a permit.

4. A few water birds build platform nests on the water and anchor them to plants attached to the bottom of the body of water.

These birds build nests on water because they don't walk well on land, so they find a shallow (not deep) part of the water to build their nests. Then, they do not *walk* to their nests - they swim to it. When the babies are ready, they simply jump into the water and begin their aquatic (water) life.

5. Birds may abandon their young if we get too close to their nests.

Always keep a respectful distance from bird nests, as birds are very sensitive to being disturbed, and may even abandon their young or their eggs during the incubation process.

6. Nests built by the Sociable Weavers can get up to 100 years old.



This massive structure may look like a hay bale, but it's actually a hive of nests. Like an apartment complex, it can house up to 400 Sociable Weavers. The thatched roof protects the birds in the South African or Namibian deserts by keeping the heat out by day and insulating from cold at night. Since the birds use the structure for generations, a nest can get up to 100 years old.

DIY BIRD NESTS

(NOTE: This handout is for the person preparing for the presentation. It is not needed for the patients.)



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Plan for 8-10 patients, an example, and an extra nest to do your demo.

MATERIALS:

- Sisal grass or raffia from the dollar store
- Optional, mix of tea and vinegar if you want to dye the grass or raffia darker
- Bowl(s)
- One of the containers being used in project for shaping nests
- Brown thread
- Needle
- Small branches/twigs
- Jute string
- Hair spray

1. Twist sisal grass or raffia into bird nest shapes that fit inside nicely inside your pots. Use inside of your pot, or a bowl to help shape them, if needed.

2. If a darker color is desired, dye the create a mix of tea and vinegar and put it in a bowl. Let the nest(s) soak in the mixture for awhile.



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HANDOUT #4: DIY BIRD NESTS

DIY BIRD NESTS *(Continued)*

3. Pull out nests and let dry.
4. Twist in small branches/twigs and jute string into nests.
5. Sew the branches/twigs and jute string in a bit to keep them in place.



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6. Spray hair spray on nests to make them less crumbly and keep bits from falling off.



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SOURCE

[Barb]. (2017, March 20). It's all for the birds. Retrieved April 25, 2018, from <https://www.madebybarb.com/2017/03/20/its-all-for-the-birds/>