growing ideas
Classroom Projects
national gardening association's
kidsgardening.com

March/April

Hooked on Hummingbirds

Invite the dynamos of the bird world into your schoolyard and curriculum

Their spectacular beauty, fearless nature, and astonishing powers of flight captivate our attention and make hummingbirds among the most beloved of all birds. Who wouldn't be awed by a creature weighing a mere six grams that, fueled by flower nectar and insects, can manage to fly nonstop for 600 miles? And *that's* just for starters.

Because they are found in every North American state (except Hawaii) and are relatively easy to attract, these remarkable birds can be an endless source of interest for students and teachers. Learning to entice hummingbirds to the schoolyard by fulfilling their basic needs is an ideal springboard for hooking students on science, math, geography, and other disciplines. As they engage with these hovering jewels up close and observe firsthand their interactions with one another, feeders, and garden and wild plants, your young scientists will be motivated to pursue a host of questions.

This month's Curriculum Connections offer a variety of ways to invite hummingbirds into your schoolyard and curriculum. It features two active games to introduce hummingbirds plus several ideas for creating inviting habitats and designing investigations. The Resources section describes Web sites featuring migration projects, native plant information, inquiry ideas, and interdisciplinary activities. *(Thanks to guest author Kim Bailey for this inspiring double issue!)*

Hummingbird Facts and Feats

Creating a Schoolyard Hummingbird Habitat

Materials

- hummingbird field guides (optional)
- computers with Internet connection
- flowers to attract hummingbirds (appropriate to your region and location)
- water source and garden hose
- hummingbird feeders
- sugar to make hummingbird nectar for feeders
- red ribbons
- bird misters or drippers (make your own using a bucket)
- observation journals

1. Getting Ready

Contents

To prepare for your first hummingbird visitors, teach students to use field guides or Internet resources to find out which species are found where you live. If ruby-throated or rufous hummingbirds migrate through your area, students can predict the first bird's arrival by checking the Journey North Web site to access current migration data or compare previous years' data. The Hummingbirds.net site maps the ruby-throated migration. Previous years' maps are also available for study and comparison. To find approximate arrival dates for other U.S. hummingbird species, click here.

Just before their spring migration, hummingbirds gorge themselves on nectar and insects. Some even double their body weight to store enough energy to make the journey north. When they arrive, they survive on insects, the nectar of early-blooming flowers, and even tree sap, which they lap from holes made by woodpeckers known as sapsuckers. During this critical time, you can provide food for hummingbirds — and maybe even entice a few to stay — by hanging feeders and planting early-blooming trees, shrubs, and wildflowers that are indigenous to your area.

2. Hanging Feeders

Ideally, feeders should be hung where students can observe them and where they are safe and accessible to hummingbirds. Have students survey the schoolyard to determine the most sheltered places for hummingbirds to feed that have good access (e.g., a corridor of trees or shrubs leading to the area). To help attract the birds' attention, hang red ribbons on the feeders and nearby shrubs. If you live in an area where mornings are chilly, use feeders without perches, as hummingbirds can become hypothermic if they drink very cold sugar water while perching. By hovering while feeding, they warm their bodies and avoid hypothermia. Check out these other Hummingbird Feeder Tips.

3. Planting Nectar Flowers

After the feeders are hung, students can learn more about hummingbirds, come up with additional questions, and plan other ways to make the schoolyard a better hummingbird habitat. They could, for instance, research flowers to grow to increase the food supply and help catch a hummer's eye. (See the Which Plants to Plant? activity. Flowering plants are especially important to sustain the hummingbird habitat over the summer if feeders will not maintained during that time.

4. Offering Shelter and Water

As in any schoolyard habitat for wildlife, in addition to food, you should provide shelter and water. Do you need more trees or shrubs to create cover, nesting places, or perching spots near feeders? (Hummingbirds spend about 80 percent of their time perching.) How will you provide water? In nature, hummingbirds prefer showers to baths and can often be observed streaking back and forth in the fine spray of a waterfall in order to clean their feathers. Commercial bird misters are available from birdwatchers' supply stores. Similar devices that attach to a garden hose are also sold as plant misters or poolside "personal cooling systems" and are often less expensive. All use a small amount of water and can be set to spray on a timer: the birds have even been known to learn a misting schedule and regularly appear just in time for their morning or afternoon shower. Hummingbirds will also bathe in flight by brushing against or sliding around on wet leaves. It's quite a site! To create this bathing alternative, simply make a small hole in the bottom of a bucket, fill the bucket with water, hang it above a leafy branch, and refill as needed.

Seasonal Tips

Hummingbird Inquiry Ideas

Pg. 3: Resources

Web Sites We Like

Hummer Books for Kids

Hummingbird Goods from the Gardening with Kids Store

Related Articles

Creating a Habitat

Gardens to Entice Feathered Friends

Flower Courtship

Although spring is an ideal time to start a hummer habitat project, you can integrate hummingbirds into your curriculum throughout the year. Why not start off the school year with observations of the peak of the southward migration in your area? Fall is the best time to plant many of the perennials, shrubs, trees, and vines that hummingbirds will seek out when they return. In winter, you can engage students in planning habitat areas or even propagating plants from seed indoors. No matter what time of year you start a hummingbird garden, be sure to avoid using pesticides. Chemicals sprayed on flowers could be ingested by the birds and could kill small insects that are an important source of food for hummingbirds.

Curriculum Connections

When the hummingbirds do arrive in your outdoor classroom, encourage students to make careful observations, keep records of all the hummer happenings, conduct investigations and inquiry projects (click here for inquiry ideas), continue to improve and expand habitats, and celebrate the hummingbirds in your schoolyard. Explore all the ways these avian jewels can naturally motivate learning and integrate all areas of the curriculum. Draw on the ideas, activities, and resources in this month's Curriculum Connections section to get started. If you and your class are lucky enough to attract an early arriving ruby-throated or rufous hummingbird, don't forget to report your sighting online at Journey North!

Guest Author

Kim Bailey gardens for hummingbirds and other wildlife on two wooded acres at her home in Georgia. As a Master Gardener and National Wildlife Federation Habitat Steward volunteer, she also helps schools develop outdoor classrooms and schoolyard wildlife habitats. Kim is the coordinator of the online clearinghouse for Environmental Education in Georgia, www.EEinGEORGIA.org. Educators can visit this Web site to access more lesson plans and resources for environmental education. Many of the images in this issue of *Classroom Projects News* reflect Kim's exemplary observation and photography skills!

Portions of this article and several of the activities were originally published in ***Green Teacher*** magazine (Spring 2002) and will also be included in Green Teacher's upcoming book ***Teaching Green: The Middle Years***.

Hummingbird Feeder Tips

- Use feeders designed to exclude wasps, bees, and ants.
- If spring mornings are cold where you live, use a feeder without perches. Hovering while feeding helps hummingbirds stay warm.
- To make nectar, use one part sugar to four parts water. Use ordinary granulated white table sugar. Do not use honey, artificial sweeteners, flavorings, or anything but 20 percent sugar water! Do not add food coloring to nectar.
- To slow the rate of spoilage, boil the nectar for up to two minutes. Cool the nectar before adding it to the feeder.
- Store unused nectar in the refrigerator for up to two weeks.
- To avoid waste and cue you to clean and refill the feeder, only put out a small amount of nectar at a time.
- Always keep feeders clean and nectar fresh!

Cleaning Feeders

When temperatures are over 60 F, it is best to clean feeders every two days. To clean, rinse the feeder with hot water. If you see fungus growing inside (usually black spots), use a bottle brush or pipe cleaner to remove all trace of the fungus. You can also try adding sand and water to the bottle and shaking vigorously to remove fungus. It is usually not necessary to use soaps or cleaners. If you do, be sure to rinse thoroughly.

Next Page