

Delicate in size, form and flight, hummingbirds have fascinated people for centuries. Native Americans adorned themselves with the hummingbirds' iridescent feathers, which, like precious jewels, partially reflect light in brilliant colors. Found only in South, Central and North America, the majority of the more than 330 species of hummingbirds occur at the equator, ranging in size from the smallest Cuban Bee hummer, only 2 1/4" long, to the Giant Hummingbird of South America, with a length of 8 1/2". Of the nineteen species in the United States and Canada, only one is regularly found East of the Mississippi—the Ruby-throated Hummingbird.

MIGRATION

The Ruby-throated departs its wintering grounds in Mexico and Central America in late April, arriving in Northern Ohio around the first of May. The male, which has the "ruby-red" throat patch, and a forked tail, always migrates first, in search of a suitable habitat for the female to lay eggs. As soon as a territory is established, the male begins his defense. Despite a carefree appearance and small size, hummingbirds are very aggressive, and will attack much larger birds, including jays, crows, and even small hawks.

NESTING

When the female arrives, with her greenish-white throat, slightly larger size, and more rounded tail, she builds a nest from tiny pieces of plant material and downy fibers, tied together with spider silk, and covered with lichens. Just large enough to fit the contours of the female's body, the nest is less than 2" across. For 14-16 days, the female broods 2 pea-sized eggs, which hatch during the second half of June. Initially smaller than a bumblebee, the tiny hummingbirds fledge from the nest by mid-July.

EATING HABITS

The metabolism of the hummingbird is the highest of all warm-blooded creatures, requiring at least 100,000 calories a day! Weighing only 3 grams, or 0.1 the weight of a first-class letter, the

Ruby-throated must consume half its weight in sugar a day! A long bill and tongue with trough-like tubes is good for licking nectar from long tubular flowers. Besides nectar, which is useful mainly for short-term energy, hummingbirds visit flowers or feeders every 10-15 minutes from dawn to dusk. In order to survive the remarkable 500 mile nonstop flight across the Gulf of Mexico during its fall migration, the Ruby-throated must increase its body weight by 50% so that energy is stored as fat and is available during the flight. Another important life-saving defense against starvation is the Ruby-throated's ability to move into a sleep-like condition called torpor during the night, when it is cold, or at other times when food reserves are low. During this period, which may last 8-14 hours, the resting heart rate drops from 250 beats per minute to only 50 beats per minute.

FLIGHT

The name "hummingbird" comes from the humming sound produced by movement of the tiny wings during flight. These "living helicopters" may fly forward, backward, upside-down, up and down and even hover in one area! Unlike many birds, hummers have bones that are permanently fixed and rigid, except at the shoulder, where wings move freely in all directions. A hummingbird's wing muscles, which make up 25-30% of its total body weight, enable it to gain speed quickly and move as fast as 60 mph!

HUMMINGBIRD CONSERVATION

Many areas in South and Central America that are home to these beautiful birds during all or part of every year are being cleared for agriculture, land development, and lumber. While conservation and reestablishment of these areas is vital to long-term sustainability of many species, hummingbirds have a special advantage since they are highly adaptable and able to expand their ranges to a growing supply of garden habitats. Gardeners can help to conserve this delightful family of birds and ensure that they will have a home for future generations.

**USE THE FOLLOWING GUIDELINES
TO CREATE YOUR OWN
HUMMINGBIRD HAVEN:**

- ◆ Plant with a mixture of sun and shade since hummingbird plants have different light requirements.
- ◆ Provide a variety of plants in many levels from nectar producing flowers to shrubs and trees for nesting and perching.
- ◆ Use clusters of brightly colored flowers because hummingbirds are especially attracted to brilliant red and orange colors.
- ◆ Use plants that bloom at different times so that you have continuous flower bloom and hummingbirds have a source for food throughout their breeding season, from early spring until fall migration.
- ◆ Don't forget to provide some form of water for drinking and bathing.
- ◆ You may also want to add a feeder to your yard, in a shady area near flowers, to supplement the hummingbirds' diet and provide enjoyment for you as you watch them hover and dart across the yard.

PLANTS FOR A HUMMINGBIRD GARDEN

Flowers

Bee balm*Monarda didyma*
Tall larkspur*Delphinium exaltatum*
Cardinal flower*Lobelia cardinalis* and cvs.
Columbines*Aquilegia spp.*
Fire Pink*Silene virginica* and *S. regia*
Foxglove*Digitalis purpurea*
Penstemons*Penstemon spp.*
Petunias*Petunia spp.*
Scarlet Sage*Salvia splendens*

Vines

Trumpet creeper*Campsis radicans*
Morning glory*Ipomea coccinea*
Trumpet honeysuckle.....*Lonicera sempervirens*

Shrubs

Azaleas*Rhododendron spp.*
Weigela.....*Weigela florida*

Trees

Horse chestnut.....*Aesculus spp.*
Red buckeye*Aesculus pavia*

To prepare hummingbird nectar:

Boil a mixture of 1 part sugar to 4 parts water for 1-2 minutes and cool before filling the feeder. Extra solution may be stored in the refrigerator for up to 2 weeks. Be sure to change feeder solution and clean feeders every 2-3 days.

HUMMINGBIRD RESOURCES

BOOKS

Johnsgard, Paul A. The Hummingbirds of North America. Washington, D.C.: Smithsonian Institution Press, 1983.

Kress, Stephen W. Hummingbird Gardens: Turning Your Yard into Hummingbird Heaven. Brooklyn, NY: Brooklyn Botanic Garden, 2000.

Stokes, Donald W. The Hummingbird Book: The Complete Guide to Attracting, Identifying, and Enjoying Hummingbirds. Boston: Little, Brown and Co., 1989.

Tekulsky, Mathew. The Hummingbird Garden: Turning Your Garden, Window Box, or Backyard into a Beautiful Home for Hummingbirds. New York: Crown Publishers, 1990.

PLANTS

Local garden centers or nurseries, or write the following agency for a list of suitable native plant nurseries:
Ohio Division of Natural Areas and Preserves, 1889 Fountain Square Court, Columbus, Ohio 43224
Phone: (614) 265-6453 Web site: <http://www.dnr.state.oh.us/dnap/default.htm>