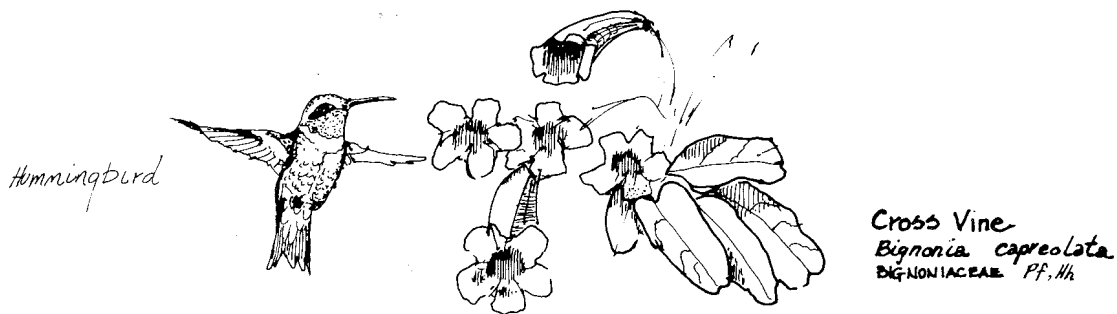


Gardening for Hummingbirds

by Mary Lou Norwood and Craig Huegel



Few birds attract more interest and excitement than hummingbirds. Famed artist and ornithologist John James Audubon called them "a glittering fragment of a rainbow," and all who see them marvel at their beauty and character.

There are about 320 species of hummingbirds in the world, all of them found in the Americas. Fifteen of these are found regularly in the United States. Eight species of hummers have been recorded in Florida. Five of these are winter visitors from western North America:

- Rufous is uncommon but regular throughout the state
- Buff-bellied is a rare visitor in the Panhandle and has twice occurred in Ft. Lauderdale
- Black-chinned is a rare visitor in north Florida and has also occurred in St. Petersburg and Dry Tortugas
- Anna's and Calliope have each been recorded one time in the Panhandle.

Two species, Bahama Woodstar and Cuban Emerald, are rare visitors from the Caribbean to south Florida at various times of the year.

Only the Ruby-throated Hummingbird nests in Florida.

Hummingbirds are the smallest of birds (the Ruby-throated Hummingbird weighs about one-quarter of an ounce), yet they have one of the largest appetites in the world of birds. Hummingbirds feed every 10 to 15 minutes from dawn til dusk. Each day, they eat more than half their weight in food and eight times their weight in water. To prevent starvation during the hours of darkness, their heart rate and body temperature drop to conserve energy. This is a condition known as torpidity.

Adult hummingbirds feed primarily on nectar. Young hummingbirds are fed small, nectar-eating insects by their

parents, but are switched to a mostly nectar diet by the time they leave the nest. Nectar is an energy-rich food that is rapidly metabolized, an important fact to remember when planning a hummingbird garden. One hummingbird requires the nectar of 1,000 fuschia blossoms every day to maintain its body weight. Therefore, a hummingbird gardener must be sure to plant plenty of nectar-rich flowering plants.

The ideal hummingbird plant has red, orange, or pink tubular flowers that are either large and solitary or hang in loose, drooping clusters. Generally, tubular flowers hold large amounts of nectar at their base. Scent is unimportant because hummingbirds depend on sight rather than smell, and red flowers stand out most among the various colors.

Young hummingbirds quickly learn to seek out these deep, tubular flowers, and the association of red with food gives them a lifetime attraction to this color. Therefore, red-colored objects will draw hummingbirds into your yard even when those objects are not food sources. This does not mean that they will not sip nectar from flowers of other colors, for they will use nearly any tubular-shaped bloom while they are feeding in an area. The red color (or shades of it) provides the initial attraction to the location.

Besides the color and shape of the flowers, other considerations are important. Blooming season is one of these. Hummingbirds are not year-round residents throughout Florida, so it is necessary to use plants that will be blooming when the birds are present. In north Florida, Ruby-throats arrive in the spring, and migrate south again in the fall, generally sometime in September. In south Florida, most Ruby-throats are absent in the spring and summer

months, although a very few remain there to nest. In winter they are uncommon but regular from Lake Okeechobee southward, and are quite common in the Keys. Your garden should reflect this seasonality and be planted so that the maximum number of blooms are available when the birds are apt to be present.

Plant height is important, as is the spacing of your flowers. Shorter plants should be used at the outer edges of the garden, with the tallest plants in the center or at the back. This provides the birds with a much easier access to all the blooms. They also need space between them to hover efficiently. If the flower stalks are too densely crowded, the birds will be able to feed only from the outer ones.

Garden design should include a variety of species of flowers, planted in mass. Don't scatter the plants in small groups around your property. Nesting hummingbirds, in particular, are very aggressive and territorial around their food source. If you have resident hummers, on the other hand, you may want to place hummingbird gardens in several areas of your yard, so more birds will be able to visit you.

Your garden also must not be placed too near a window. Reflective windows look like open sky to birds. Hummingbirds may travel at speeds of up to 30 miles per hour, and window plantings can cause collisions and death.

Another important design consideration is the use of plants that don't require applications of pesticides to keep them healthy. This is one of the best arguments for the use of native plants when planning your garden. Insecticides and other poisons are deadly to hummingbirds for two reasons. First of all, if the flowers themselves have been treated, there is

a great likelihood that the nectar inside the flower tube also has been contaminated. Feeding on this poisoned nectar will poison your birds. Secondly, hummingbirds feed extensively on small insects such as gnats, aphids, and spiders. Recent research has shown that this is an important part of the diet of adults as well as nestlings. If you wish to garden for hummingbirds, you

will need to do so in a pesticide-free landscape.

Your landscape for hummingbirds also may include considerations for other aspects of their habitat needs. Nests are built in a wide variety of situations, from just a few feet above the ground to at least 90 feet. In many cases, however, the sites chosen provide good concealment cover. are near

streams or other moving water, and are near the tips of slender branches. Willows (*Salix* spp.) and elms (*Ulmus* spp.) are frequently used for nest sites. Willows also provide "down" from their seeds for nest material. Hummingbird nests also are never far from a predictable and reliable food source.

Bathing sites can be important. Because they consume nectar, hummingbirds rarely need to drink water. They will bathe, however, and in a variety of locations, as long as the water is extremely shallow. Shallow bird baths, bromeliads, and even misting nozzles on a water sprinkler can be sufficient.

Craig Huegel is an urban wildlife biologist from Pinellas County, and is author of FNPS's publication, Butterfly Gardening with Florida's Native Plants. Mary Lou Norwood joined FNPS in 1991 as a member of the new Nature Coast Chapter in Pasco County.

Wes Biggs, state coordinator of Florida Audubon's Breeding Bird Atlas for six years and now owner of Florida Nature Tours (407/273-4400), and Richard Wunderlin, professor of botany at University of South Florida, also contributed their expertise to this article.

Native Nectar Plants

The plants listed below are hummingbird favorites. They also are all native to Florida. While hummingbirds will use a variety of non-natives, the backbone of any successful garden should be plants native to your section of the state and adapted to your site conditions. Such a garden will provide dependable food for your birds as they return each year, and the plants will prosper with a minimum of care.

No list can be totally complete, and this one certainly does not include every plant that hummingbirds could nectar from. Use this list as a guide to choosing the foundation of your garden and keep your eyes open for future possibilities. Some south Florida plants on this list, such as firebush (*Hamelia patens*), can be grown farther north as an annual. Blooming season given is approximate and will vary slightly from north to south.

Common name. Scientific Name	Zone	Bloom season
Trees		
Red Buckeye, <i>Aesculus pavia</i>	N,C	Sp
Geiger tree, <i>Cordia sebestena</i>	S	Sp-W
Shrubs		
Golden dewdrop, <i>Duranta repens</i>	C,S	Sp-W
Coral bean, <i>Erythrina herbacea</i>	N,C,S	Sp
Firebush, <i>Hamelia patens</i>	S,C	Sp-W
Pineland hibiscus, <i>Hibiscus aculeatus</i>	N	S-F
Red hibiscus, <i>H. coccineus</i>	N,C,S	Sp-F
Woolly hibiscus, <i>H. furcellatus</i>	C,S	Sp-W
Swamp hibiscus, <i>H. grandiflorus</i>	N,C,S	Sp-S
Marsh mallow, <i>H. moscheutos</i>	N,C	Sp-S
Mountain laurel, <i>Kalmia latifolia</i>	N	Sp
Salt marsh mallow, <i>Kosteletzkya virginica</i>	N,C,S	S-F
Common lantana, <i>Lantana camara</i>	N,C,S	Sp-W
Flame azalea, <i>Rhododendron austrinum</i>	N	Sp
Piedmont azalea, <i>R. canescens</i>	N	Sp
Swamp azalea, <i>R. viscosum</i>	N,C	S
Necklace pod, <i>Sophora tomentosa</i>	S,C	Sp-F
Blue porterweed, <i>Stachytarpheta jamaicensis</i>	C,S	Sp-W
Spanish bayonet, <i>Yucca aloifolia</i>	N,C,S	Sp-S
Bear grass, <i>Y. filamentosa</i>	N,C	Sp-S
Vines		
Cross vine, <i>Bignonia capreolata</i>	N,C	Sp-S
Trumpet vine, <i>Campsis radicans</i>	N,C	Sp-F
Scarlet morning glory, <i>Ipomoea hederifolia</i>	N,C,S	Sp-F
Cypress vine, <i>I. quamoclit</i>	N,C	Sp-F
Coral honeysuckle, <i>Lonicera sempervirens</i>	N,C	Sp-F
Herbaceous Plants		
Columbine, <i>Aquilegia canadensis</i>	N	Sp
Swamp milkweed, <i>Asclepias incarnata</i>	N,C,S	S-F
Scarlet milkweed, <i>A. lanceolata</i>	N,C,S	Sp-F
Butterfly milkweed, <i>A. tuberosa</i>	N,C,S	Sp-F
Red basil, <i>Calamintha coccinea</i>	N,C	Sp-F
Standing cypress, <i>Ipomopsis rubra</i>	N,C	F
Cardinal flower, <i>Lobelia cardinalis</i>	N,C	S-F
Dotted horsemint, <i>Monarda punctata</i>	N,C	S-F
Pink beardtongue, <i>Penstemon australis</i>	N,C	Sp-F
Pineland beardtongue, <i>P. multiflorus</i>	N,C	Sp-S
Woodland phlox, <i>Phlox pilosa</i>	N,C	Sp-S
Swamp obedient plant, <i>Physostegia purpurea</i>	N,C	Sp-S
Obedient plant, <i>P. virginiana</i>	N	Sp-S
Azure salvia, <i>Salvia azurea</i>	N	F
Red salvia, <i>S. coccinea</i>	N,C,S	Sp-W
Lyre-leaved sage, <i>S. lyrata</i>	N,C,S	Sp-S
Wild pine, <i>Tillandsia fasciculata</i>	N,C,S	S-F
Blue curls, <i>Trichostema dichotomum</i>	N,C,S	S-F

Hummingbird Feeders

Many people who wish to attract hummingbirds only invest in a hummingbird feeder. Such feeders are good for supplementing a hummingbird flower garden or for giving a meal to hummingbirds that are only "passing through", and can be life savers for those western species that wander into the Florida Panhandle in winter, but they should not be their sole source of food in your yard. The feeder's sugar solution may appeal to their "sweet tooth", but it provides little nourishment.

Nectar is much more than a solution of three parts water and one part granulated sugar. The water should be boiled, and the solution stored in the refrigerator. Honey should not be used; it sometimes harbors a deadly fungus. The best solution is a commercially prepared hummingbird food sold at most garden centers or wherever hummingbird feeders are sold.

It is also very important that feeders be cleaned thoroughly with a weak vinegar/water solution (not with detergent) and rinsed well every three or four days to prevent disease.