



The Return of the Hummingbirds

For those of us who impatiently observe every green shoot that emerges in the garden and listen intently for every new bird song at dawn, one of the most anticipated events of spring is the return of the ruby-throated hummingbird.

This tiny jewel is a winged marvel. Weighing less than a penny, this fighter pilot of a bird beats its wings 50 to 100 times per second and can dive up to 50 mph! Using a figure-eight wing pattern, hummingbirds can fly backwards, upside down, and even hover like helicopters for refueling. Ruby-throated hummingbirds are the only hummingbirds that breed in the eastern United States and each fall, they make a monumental 2,000-mile journey to their winter homes in Panama and Central America. Every spring, the iridescent-throated hummers fly back to where their lives began.

Hummingbird hearts beat about 1,200 times per minute and even faster when migrating. To support this high rate of metabolism, the tiny birds voraciously gorge on insects and nectar to increase their body weight by as much as 40% before heading north. They need to store energy as fat to support the arduous journey to the U.S. and Canada. They usually fly alone by day using the same flight path they have flown in the past. Incredulously, they fly nonstop across the 500-mile expanse of the Gulf of Mexico, having nowhere to rest until they reach the shores of Louisiana and Texas.

The first arrivals are the brilliant red throated males (below, left). They reach the gulf coast in late February and early March, exhausted and starving. Their continued migration north depends on getting enough high energy nectar from flowers and feeders when they land. The emerald-backed, silver-bellied females (below, right) follow behind the males, but essentially follow the same routes. Lack of blooming flowers, cold fronts, and spring storms can cause high mortality for both the males and females, especially for young birds making their first migration north.



Hummingbirds that survive and make it to the gulf coast hang out there for a few days to rest and refuel. After regaining some weight, most continue their journey north, sometimes covering up to 25 miles per day. Ruby-throated hummingbirds reach southern New Jersey in mid-April and we start to

catch glimpses of them at feeders in central Jersey by the third week in April. You can follow the northern migration of hummingbirds to see when they get to your area [here](#).

Feeding Hummingbirds

Upon their return, there are two basic ways to attract Ruby-throated hummingbirds to your own backyard. The easiest way is to hang nectar feeders from hooks and tree branches around your home. The second is to plant a garden with hummer-friendly flowers. Of course, it's best to do both, but for the rest of this post we will talk about feeders and save hummingbird gardening for a future article.

In New Jersey, if you are going to set out a feeder, then the time to do it is mid to late April. As soon as the birds return to their summer breeding grounds, they establish nesting and feeding territories. If you wait to hang a feeder till later in the season, they may not find it. Find more information [here](#).



Hummingbirds have incredible vision and are attracted to the color red. [Recent research](#) has shown that red flowers have sweeter nectar. The hummingbird feeder you choose should be easy to clean and have red parts to attract the birds by sight. An adult hummingbird eats about half its weight in sugar water each day and refuels at intervals of ten minutes or less all day long. Your feeder must be filled with a sugar solution that will provide enough energy to meet the demands of their high-speed metabolisms.

The solution you prepare to fill your feeder should be like nectar found in nature. When formulating your hummingbird mixture, remember that nectar in flowers is typically in the range of 12%-35% sugar (sucrose). To make your own hummingbird nectar, the usual recipe is 4 parts water to 1 part sugar or about 20% sugar. **That's ¼ cup sugar mixed in 1 cup of water.** Never use honey to make hummingbird food because bacteria and fungi thrive in honey water. Red food coloring or dyes should never be added to the nectar; it can be dangerous to the birds! Just table sugar and water are the best choice. During cold or rainy conditions when the birds need more energy, it is helpful to make the mixture with ⅓ cup of sugar per cup of water.

On cool days in spring when the birds are not draining the feeders daily, you can leave the nectar mix in the feeder for 4-5 days or until the mix starts to cloud up. **As the days get warmer, the nectar mix needs to be replaced every 1 to 2 days to prevent the sugary water from fermenting and turning to toxic alcohol. Your birds won't just get drunk, they will die if they drink it!**

It is also critically important to keep the feeders clean. When you refill, you should inspect each feeder, scrub with a brush or sponge and clean any parts where mold, ants and dirt may have accumulated. Be careful about where you hang your hummingbird feeders, as some cats have learned to lurk in the shadows waiting to snatch your precious jewels!

Hummingbird Gardening

There is so much to learn about planting a garden to feed hummingbirds. Stay tuned for a future post about how to grow a garden to attract these bejeweled beauties!

Make your own Hummingbird Feeder

If you don't have a feeder and don't want to purchase one, you can make one! If you are the handy sort there are many resources on the web to help you make your own feeder.

- [Here's a great example.](#)
- [Pinterest has a ton of DIY feeders to choose from.](#)
- [Here is one to make with kids.](#) They will need your help, but it's relatively easy to make out of recycled materials!

Then there are always the [hummingbird helmets](#)



Additional Resources: There are so many online resources to learn more about ruby-throated hummingbirds. Here are a few great ones:

- [Feeding Hummingbirds](#)
- [Hummingbird Nectar](#)
- [Red Food Coloring](#)
- [Hummingbird food](#)
- [Everything hummingbird](#)
- [All About Hummingbirds](#)
- [Watch a live hummingbird cam](#)

Note: All hummingbird photos courtesy of the Macaulay Library, Cornell Laboratory of Ornithology, Ithaca, N.Y.