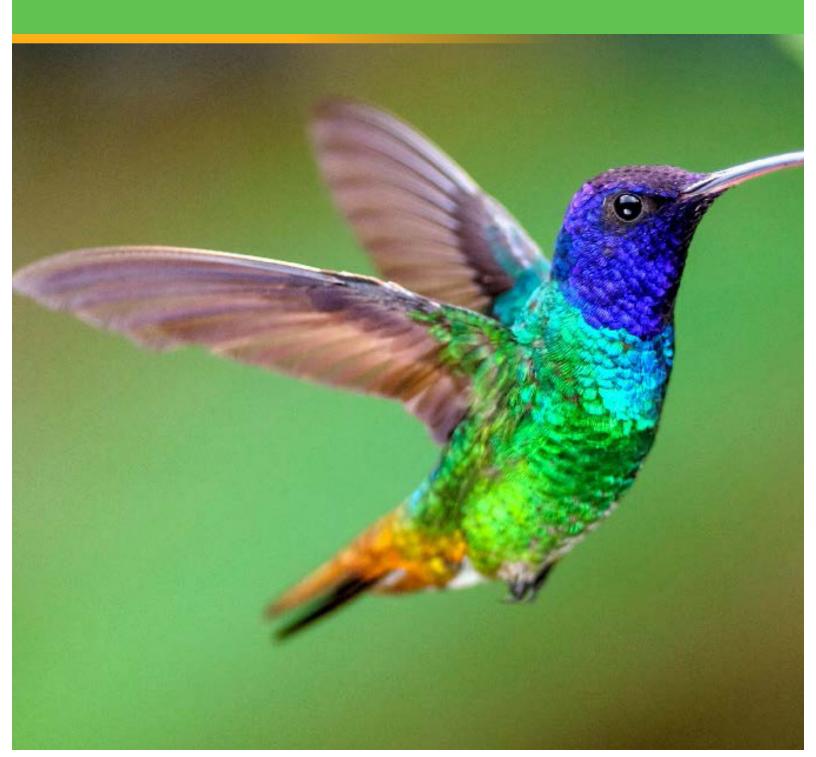


## POLLINATORS ISSUE The Hummingbird



## TABLE OF CONTENTS

Hummingbirds are Pollinators	02
Migration	03
Hummingbird Facts	04
Make your own Hummingbird Feeder	05
How to make Nectar	06
Hummingbird's Metabolism	07



# THESE FAST POLLINATING HUMMERS

## **FLYING HUMMINGBIRDS**

Have you ever heard a hummingbird fly by you? Their wings flap so quickly that they make a humming sound – and that's where the name hummingbird comes from, and they're also called hummers. They fly so fast that often all you see is a blur. Hummingbirds flap their wings at incredible speeds: On average, a hummingbird will flap its wings 50 times a second and can even flap as many as 200 times a second – **now that's fast!** That fast flapping can let a hummingbird fly over 30 MPH.

## **POLLINATORS**

Hummingbirds are pollinators. This means that they help plants reproduce by moving pollen from one flower to another. Hummingbirds love to drink the sweet nectar from the flowers by sticking their thin beaks into flowers, and then they move their tongue in and out up to 13 times per second to slurp up the liquid. When they do this, some of the pollen gets stuck to their beak. Then, when they fly to a neighboring flower, the pollen on their beak rubs off onto the pistil of that flower. About 8,000 flowers in North and South America depend on hummingbirds for pollinating.

## **DID YOU KNOW?**

There are over 340 species of hummingbirds, and they are found only in the Americas. Hummingbirds are the only birds that can fly backward, as well as hover, fly forward – and even upside down! A flock of hummingbirds can be referred to as a bouquet, a glittering, a hover, a shimmer, or a tune.







## **MIGRATORY PATTERNS**

Here is the migratory path of the ruby-throated hummingbird. Hummingbirds are the smallest bird that migrates, but unlike other birds they don't migrate in flocks. Instead, they migrate by themselves, and they can travel up to 500 miles at a time. Before they migrate they will eat 25-40 percent more food than usual to gather enough energy to sustain themselves through their journey. They visit hundreds of flowers a day and eat as much as their own body weight in nectar. This sweet nectar that fuels the hummingbird's body comes from flowers such as perennials like bee balms, columbines, daylilies, and lupines; biennials such as foxgloves and hollyhocks; and many annuals, including cleomes, impatiens, and petunias.



## HUMMINGBIRD FACTS



## A SMALL NEST

A hummer's nest is smaller than a half-dollar coin. They make their nests out of plant down, spider silk and other natural resources. The female hummer lays an average of two jelly bean-sized eggs per clutch. The average adult hummingbird weighs less than a nickel.





## THE BILL

A hummingbird's bill varies between species. Most have long, thin bills that let them reach deep into theflower's pistil to get out the nectar. They open theirbill slightly to allow their tongue, which is twice the length of their bill, to lap up that sweet liquid.



## **CONSERVING ENERGY**

A hummingbird uses a lot of energy to fly around. In order to conserve energy, they will perch most of the day on a tree branch and digest their food while observing their surroundings. At night they go into a hibernation-sleep state, called torpor, to save even more energy.







## COLORS ATTRACT

While hummingbirds don't have a sense of smell, they do have great vision. They love the colors red, yellow, orange, pink, and other bright colors. They prefer tubular types of flowers where they can insert their long bill inside to get out the nectar.

## MAKE YOUR OWN

## Hummingbir Feder

## **ABOUT THE ACTIVITY**

In this activity you will use materials you can find around the house – or at a local hardware or craft store – to make your very own hummingbird feeder.

## **MATERIALS**

- Recycled wine bottleremove label
- Several bright-colored puffy paints
- Cork stopper-sipper
- Decorative wire-12 gauge
- Disposable table covering



## STEP 1:

Prepare a disposable table covering under your project. Stand the bottle nose down, and begin to paint any design you choose. Set aside to dry.



## STEP 2:

Wrap the wire twice around the nose of the bottle. Then, move the wire up to the middle of the bottle and make two wraps. Then thread your end through the wraps and then make a loop at the top, then go back down the other side and back to the wraps and tie the wire off.



## STEP 3:

Fill the bottle with homemade nectar (recipe on pg. 6). Close with the stopper and hang in a semi-shaded area near bright colored flowers.

**Source:** https://www.thoughtco.com/fascinating-facts-about-butterflies-1968171



## Make Nectar

## **HOW TO ATTRACT HUMMERS**

There are many ways to attract hummingbirds to your location. One of the ways is to plant native flowers and plants. Another way is to set up feeders with a sugary nectar to provide them a food source. Try to position your feeders away from potential predators such as snakes, raccoons, and even praying mantises. Position feeders at least 15 feet away from windows to keep hummers from flying into them. Keep them away from the hot afternoon sun to keep the feeder contents from fermenting and getting spoiled. If you plan on having more than one feeder in your yard, keep them out of sight from each other since hummingbirds are territorial.

### **ACTIVITY STEPS**

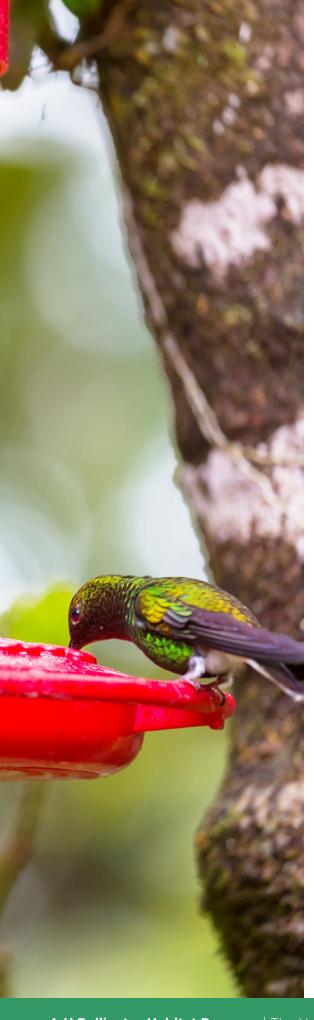
- Bring 1 cup of water to boil
- Add 1/4 cup of white granulated sugar
- Stir until dissolved
- Boil this mixture for 2 minutes (this will help keep the nectar from spoiling too quickly)
- Set aside to cool
- Pour into a clean hummingbird feeder.
- \*For larger recipes add 4 parts of water to 1 part of sugar.
- Nectar can be stored for up to two weeks in the fridge.

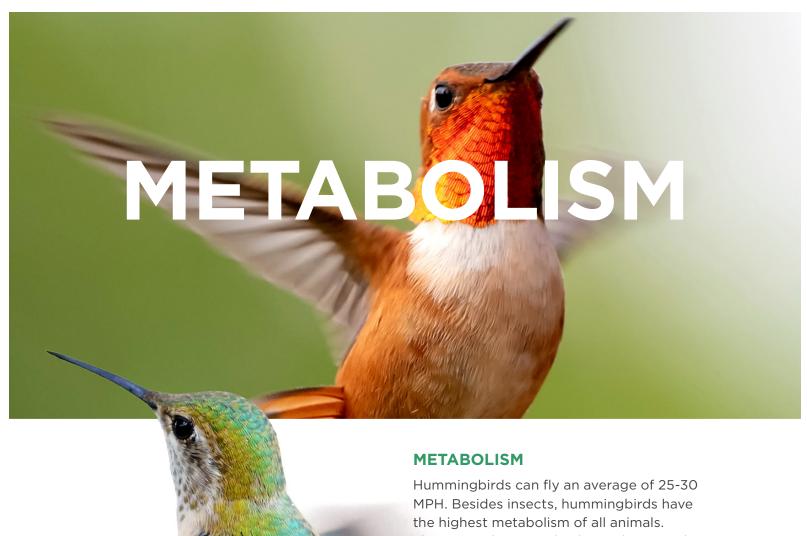
## **DO'S and DON'TS**

Do not use honey, as this can cause an infection to the hummers and make them sick. Don't use artificial sweeteners, since they have no nutritional value. Avoid red dyes most are unhealthy. Clean your feeder once a week. Dispose of unused nectar.

### WATER

Birds love moving water and need a year-round source of fresh water. The ideal depth is 1 to 3 inches for both drinking and bathing. A sloped, shallow water source with rocks and a rough surface to grip onto works best. Be sure to empty and refill this daily.





This means hummingbirds need to eat a lot in order to maintain their weight.

Their heart rates range from 420 to 1,260 beats per minute! A human's resting heart rate is about 60 to 100 beats per minute. 30 percent of a hummer's weight is located in its flight muscles, while a hummingbird's brain accounts for just over 4 percent of its body weight. This is the largest brain-to-body weight proportion in the entire bird kingdom.



Source: Kaytee.com, The Spruce- Fun Facts About Hummingbirds UC Davis- Hummingbird information All About Birds-Guide www.everythingbirds.com