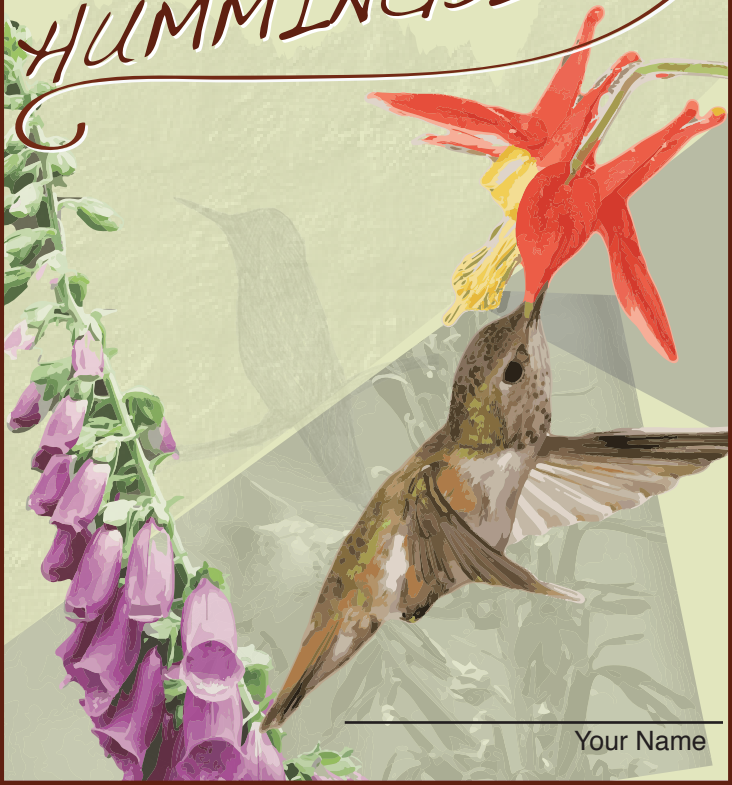
JUNIOR BIRDER

JOURNAL & ACTIVITY BOOK

ALL ABOUT HUMMINGBIRDS



Your Name

BIRDWATCHER'S CODE OF ETHICS

Birdwatchers must respect wildlife and their environment by following the Birdwatcher's Code of Ethics. When you sign your name below, you agree to observe birds in a way that will not harm them or their habitats.

1. **I will help to protect birds and their environment.**
   I will not disturb birds, their nests, feeding sites, or other places they need to survive.

2. **I will ask permission to view birds on private property.**

3. **I will check my birdfeeders and my yard to be sure they are safe for birds.**

4. **When I am outdoors with others, I will be a role model.**
   I will share my knowledge of birds and ask others to follow this Code of Ethics.

I PLEDGE TO FOLLOW THE
BIRDWATCHER'S CODE OF ETHICS

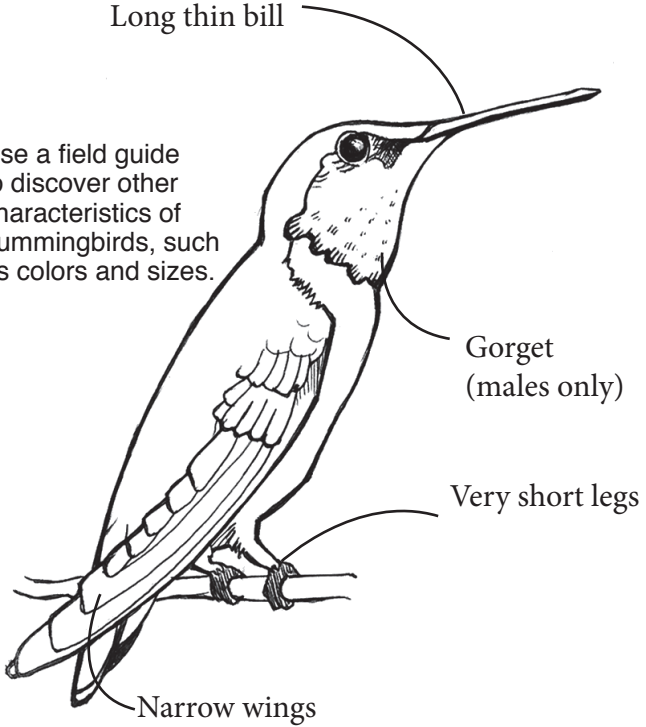
_____

Sign Your Name Here

_____

Date

What Makes a Hummingbird?



Your Observations

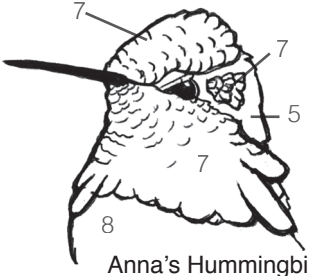
Look closely! What do you see? Your sketches will help you learn about birds.

Hummingbird Diversity

Calliope Hummingbird
USA, Canada, & Mexico

Bee Hummingbird
Cuba

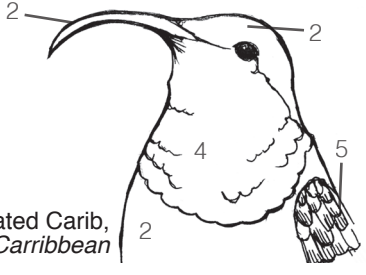
Costa's Hummingbird,
USA & Mexico



Anna's Hummingbird
USA, Canada, & Mexico

Color Guide

1. White
2. Black
3. Pink
4. Purple
5. Green
6. Blue
7. Red
8. Gray

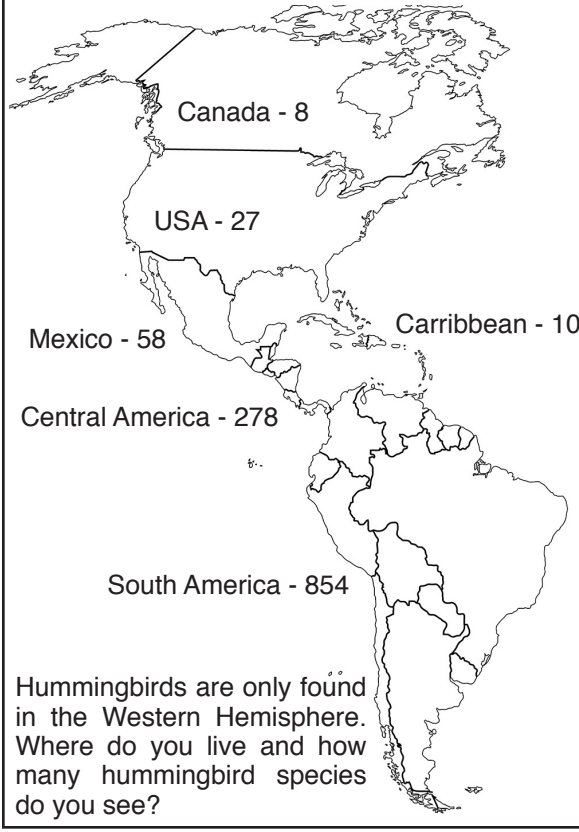


Purple-throated Carib,
Carribbean

Hummingbird Courtship

Male Rufous Hummingbirds work hard to impress females. They fly high into the air, then drop in a J-shaped flight at high speeds. Connect the dots to follow the flight path of a courting male hummingbird.

Where in the World?

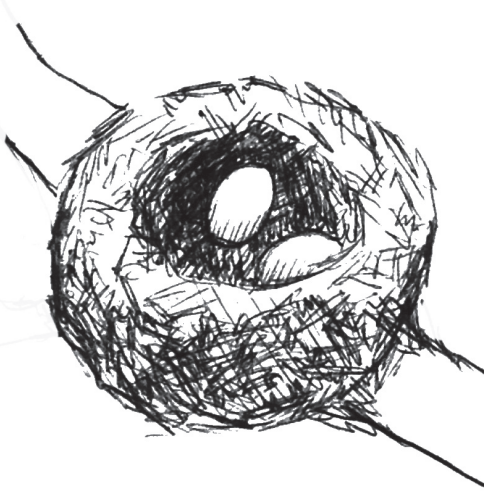


Hummingbirds are only found in the Western Hemisphere. Where do you live and how many hummingbird species do you see?

Nesting

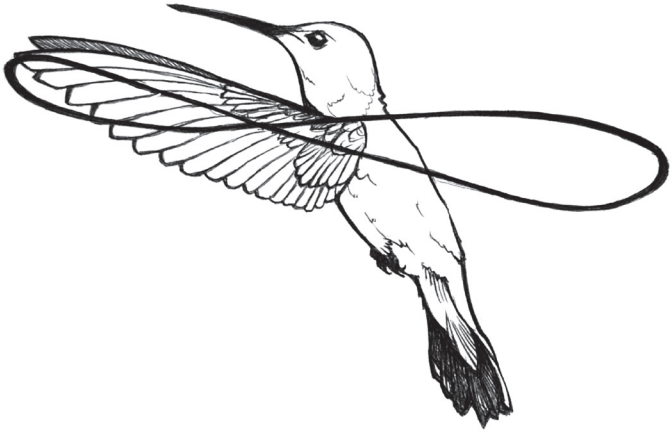
Hummingbirds build very small nests with even smaller eggs. The picture below is the actual size of one nest. Use a ruler to measure it and record its size.

Nest size _____



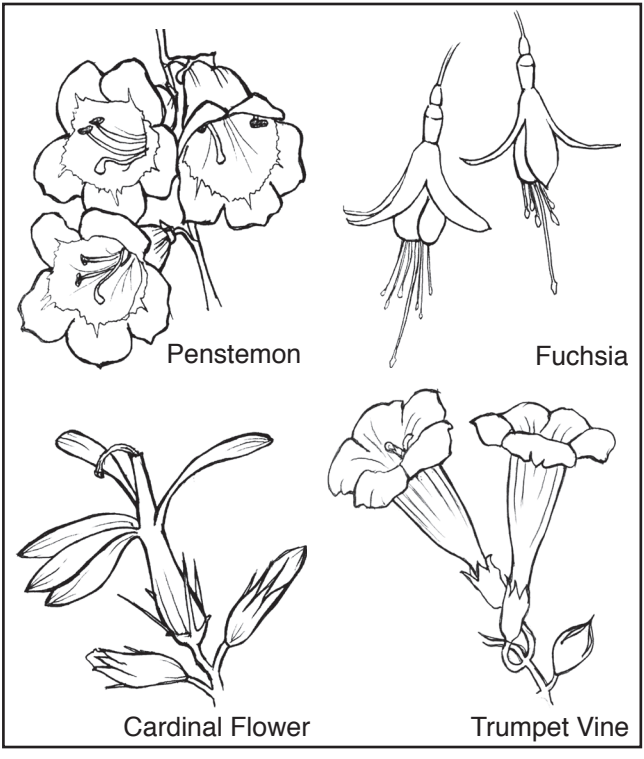
Rufous Hummingbird Nest

Fly Like a Hummingbird



Hummingbirds can fly forward, backward, sideways, and straight up.They can also hover. Unlike most other birds that flap their wings up and down, hummingbirds rotate their wings in the shape of the number 8. The smallest change to the angle of the wing can change the direction of flight.

Flower Power: Pollination



Data Sheet

Be a scientist! Observe hummingbirds to learn more about when they are near your home. When do they arrive? What plants are blooming to provide hummingbirds with food?

Date (month, day & year) _____

Location (where are you?) _____

_____

Hummingbird Species and Number Observed

Species 1 _____

Number Observed _____

Species 2 _____

Number Observed _____

Names of Flowers in Bloom _____

_____

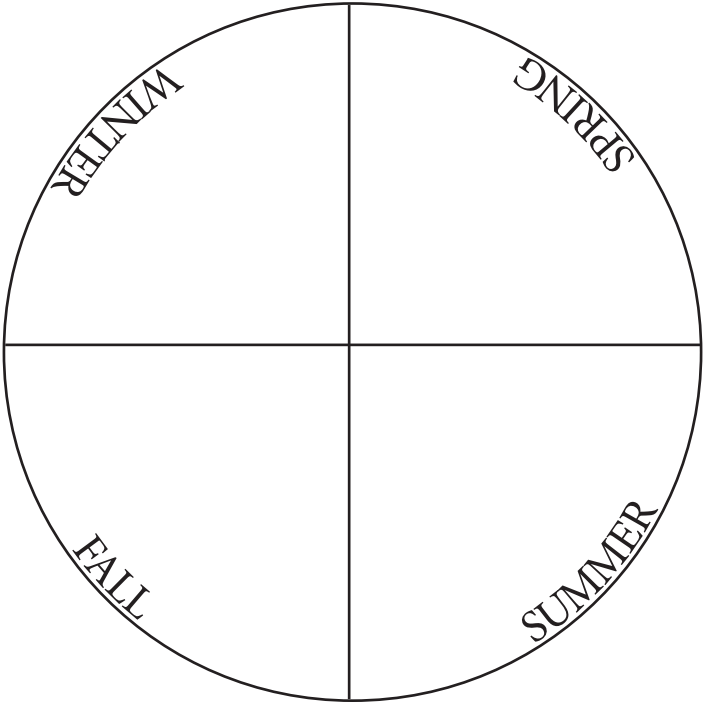
_____

Your Observations

Taking notes with your drawings will help you remember what you saw.

Phenology

Phenology is the study of the timing of natural events, such as the blooming of flowers and the migrations of hummingbirds. This phenology wheel can be a record of phenology where you live. Draw or write your observations each season.



Hummingbird SuperHeroes

Hummingbirds are exceptional birds in many ways, including:

...having the fastest wingbeat of any bird...

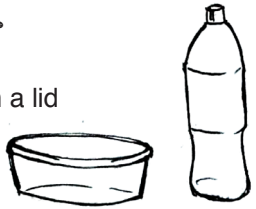
...the smallest size of any bird...

...the 2nd largest family of birds...

...the most feathers of any bird...

...and, a great memory too!

Nectar Feeder



What you'll need:

- One plastic tupperware with a lid
- One plastic bottle
- A red permanent marker
- Scissors
- String

❶Cut a hole in the middle of the tupperware lid the same size as the neck of the bottle.

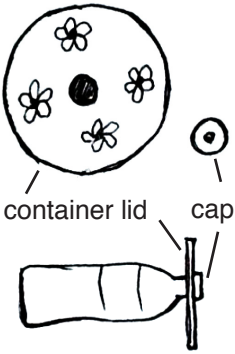
❷Cut a smaller hole in the bottle cap and punch 4 small holes in the tupperware lid for your "flowers".

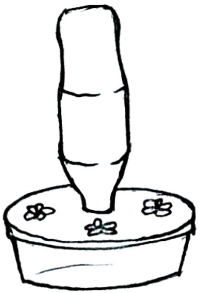
❸Draw flowers around the small holes with the red marker.

❹Put the bottleneck through the lid, and screw on the cap.

❺Fill the bottle with nectar (see recipe on page 16) and hang up your feeder for hummingbirds to enjoy.

❻Clean your feeder regularly. Dirty feeders may pass diseases.





Hummingbird Nectar Recipe

Always get an adult to help you use the stove!

1. Mix 4 parts water to 1 part sugar in a pot. Use regular table sugar (no brown sugar or artificial sweeteners).

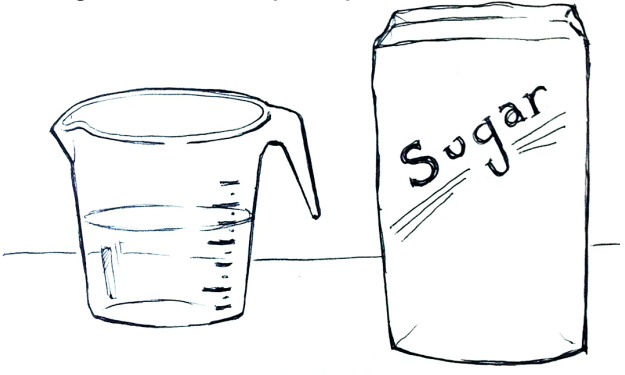
2. Bring the sugar and water to a boil, and then remove it from the heat.

3. Stir it while it is hot, until all of the sugar is dissolved.

4. Let it cool, and then put it in your feeder!

5. Store extra in the refrigerator in a clean bottle to refill the feeder every few days.

Did you know?? You do not need to add red dye to your nectar. The red color on the feeder is enough to attract hummingbirds, and the dye may be harmful.



Hummingbird Spinner

Cut out the circle below. Copy the image on page 17 and cut it out. Paste each onto a cardstock circle that is the same size. Glue the two circles together, so that one image is right side up, and the other upside down.

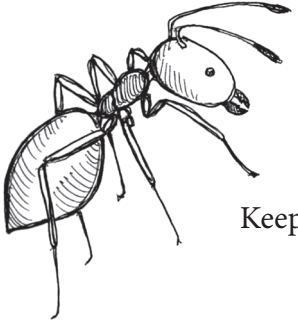
Punch holes through the small circles and tie a 24" looped piece of string through each.Wind each string tightly, then pull to watch the hummingbird fly!

Conservation Action: Clean Feeders

It is important to keep your feeder clean. Dirty feeders may attract pests, such as ants, or even grow mold. Diseases may also be passed from one bird to another at feeders.

In hot weather, you should replace the nectar often: every 3-4 days if the temperature is over 80° F (27° C), and every day or two if it is above 90° F (32° C).

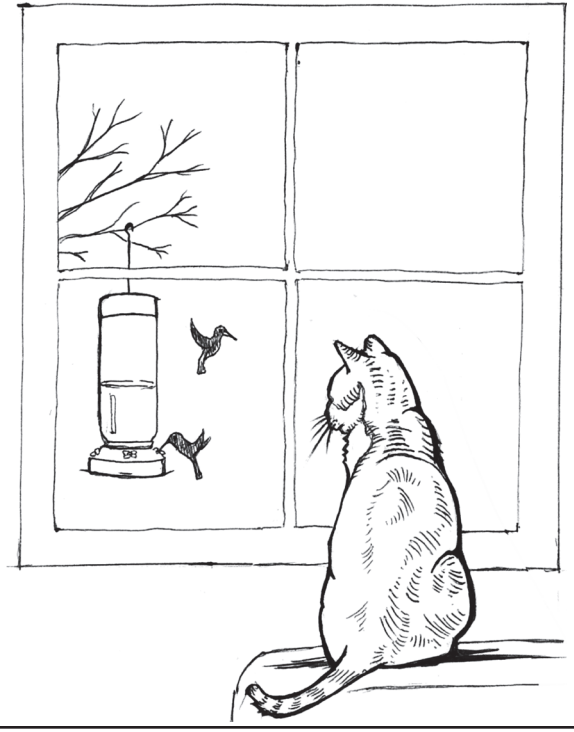
Flush hot water through the feeder every time you refill it. Avoid using soap, as it can be bad for the birds. If you need to, you can soak the bottle with a mixture of 2 parts water to 1 part vinegar (make sure to rinse well!) or use a bottle brush to clean hard to reach spaces.



Keep me away from your feeders!

Conservation Action: Cats

Cats are great pets, but they also hunt birds, killing hundreds of millions every year. If you own a cat, help protect birds by keeping your cat indoors. To give your cat some outdoor time, try using a cat leash or building an outdoor enclosure.



Your Observations

Look closely! What do you see?

Conservation Action: Plant Nectar Producing Plants

Plant a pollinator garden that will attract hummingbirds.

1. Use plants that flower at different times throughout the year.

2. Place your plants in clumps, rather than single plants, to attract pollinators.

3. Choose plants native to your area.They do not need as much water.

4. Avoid pesticide use, which can harm hummingbirds.

Draw your garden!

How is Your Memory?

How does your memory compare to a hummingbird's? Answer the questions below and show what you learned.

1. What pattern does a hummingbirds wing make when it is hovering?

_____

2. How often should you clean your Hummingbird feeders if it is above 80º F (27º C) outside?

_____

3. Are there more hummingbird species in North America or in South America?

_____

4. Describe one more thing that you learned about hummingbirds?

_____

_____

Environment for the Americas

WESTERN HUMMINGBIRD Partnership

The Junior Birder Journal & Activity book is a project of Environment for the Americas, home of International Migratory Bird Day. Support provided by Western Hummingbird Partnership.

www.BirdDay.org www.MigratoryBirdDay.org

Cover Photo: Jonathan Moran
Illustration, and Booklet Design: Djavan Nascimento
Text & Development: Susan Bonfield