

## LIFE IN THE FAST LANE

- **Size:** Hummingbirds are the smallest birds in the world! They are found only in the Americas.
- **Feet:** Hummingbirds belong to bird order Apodiformes which means “without feet”: hummingbirds and swifts have small, weak feet and legs. They can grip and perch but cannot walk or turn around.
- **Wings:** Hummingbird wings beat in a sideways “figure 8” which allows them to fly forward & backward, sideways, up & down, hover in place, and even upside down!
- **Torpor:** Hummingbirds lower their body temperature and heart rate to conserve energy when there is not enough food or temperatures are too cold. They reawaken in less than an hour.
- **Heartbeat:** Hummingbird hearts vary from 50 beats/minute during torpor to 250 beats/minute at rest and 1,250 beats/minute while flying!
- **Tongue:** Their tongue is long and grooved. It can extend beyond the bill tip and wraps around the base of the skull.
- **Flashing colors: Iridescence** on the tips of feathers on the throat (**gorget**) and crown of male hummingbirds create a flash of color when the bird, observer, and sun are properly aligned. Iridescence is formed not from pigments but physical characteristics within the feather that amplify certain wavelengths of light (purple, red, orange, etc).



## FORAGING FOR NECTAR

- Hummingbirds are mostly **nectivores (eat flower nectar)** but also eat any insect or spider it can swallow.
- **High metabolism** means they need to eat a lot; hummingbirds feed every 10-15 minutes.
- Hummingbirds lap up nectar instead of sucking. Capillary action moves nectar up the tongue’s grooves into its mouth.
- Hummingbird-pollinated plants have thick flowers with a tubular shape and no scent.
- Hummingbird-pollinated plants deposit pollen in a specific place on a hummingbird’s head to increase cross-pollination.
- **Trap-lining:** Hummingbirds visit flower patches in a certain sequence during their daily rounds. Nectar reforms between visits.
- They can visit 1,000-2,000 flowers per day.

## FORAGING FOR INSECTS

- Insects and spiders are an important part of a hummingbird’s diet.
- Catch insects by **hawking:** Hummingbirds perch and watch for flying insect, then fly out to capture the prey.
- Catch insects and spiders by **gleaning:** Hummingbirds hover and pick prey off plants.
- Anna’s Hummingbirds feed at sapsucker (a woodpecker) wells on sap and insects.

## THIS IS MY SPACE!

- Male hummingbirds defend territories that are rich in food sources.
- To defend territories, males use warning sounds, flash the iridescent feathers on their gorget and crown, and physically attack the intruder. These are feisty birds!
- The male’s display involves a steep climb upward and then rapid dive down towards the ground. The shape of dive is species-specific such as Anna’s “J- shape” dive and Black-chinned’s “U-shape” dive.
- The “pop” sound at the bottom of display is created by special shape of tail feathers. It is not a vocalization.
- Female hummingbirds select territories with good quality nesting sites.



## MIGRATION AND HAZARDS

- Many North American hummingbird species winter south of the USA-Mexican border. In Orange County, Anna’s and Allen’s are year-round residents.
- Dangers include collision with windows and outdoor cats. We can protect hummingbirds by preventing these hazards. For information about preventing window strikes, go to <https://www.allaboutbirds.org/news/why-birds-hit-windows-and-how-you-can-help-prevent-it/>

## ORANGE COUNTY SPECIES



### **Anna's Hummingbird:**

Abundant, year-round, breeder. Found in a diversity of habitats.



### **Allen's Hummingbird:**

Common, year-round, breeder. Found along the coast and inland areas.



### **Black-chinned Hummingbird:**

Common, summer, breeder. Found in woodlands.



### **Costa's Hummingbird:**

Common, summer, breeder. Found in coastal sage scrub and chaparral habitats.



### **Calliope Hummingbird:**

Rare spring migrant.



### **Broad-billed Hummingbird:**

Only a few county records in fall and winter.

## FEEDING HUMMINGBIRDS

To attract hummingbirds to your Orange County yard, plant locally native plants such as penstemons, hummingbird sage, manzanitas, California fuchsia, and island snapdragon. You may also use a sugar water feeder by mixing a ratio of one-part table sugar dissolved in four-parts water. Do not use food coloring and change it often (even daily in hot weather).



## SMALLEST NEST IN THE WORLD

- A hummingbird nest is the smallest nest in the world!
- The nest is cup-shaped on top of a thin branch and lined with soft material (e.g., sycamore leaf fuzz) and held together with spider webs. Lichen or bark may be used on the outside of the nest for camouflage.
- Some hummingbirds re-use nests while others recycle materials from old nests.
- Females do everything: nest-building, incubating eggs, and caring for the young.
- Females usually lay two white eggs.



# Hummingbirds of Orange County, CA



Explore the life of hummingbirds through the fun facts and photographs in this brochure. From torpor and stunning gorgets to trap-lining and hawking, these beautiful birds of the air have interesting adaptations and behaviors for their very fast lifestyle. How many have you seen? Have any hummingbirds nested in your yard? Happy hummingbird watching!

Prepared by Trude Hurd, Project Director of Education, Sea and Sage Audubon Society, 2021.

[www.seaandsageaudubon.org](http://www.seaandsageaudubon.org)

Photographs by Trude Hurd used with permission.