

## What Makes Hummingbirds Special?

By Celeste Silling

Hummingbirds have fascinated us for centuries, inspiring myths, art, and science. But what makes them so special? Hummingbirds have some of the most unique physical and behavioral features in the bird kingdom. Let's take a look at the most notable ones.

Did you know that hummingbirds are quite smart? They have a fantastic memory,

remembering where each flower is and how to get there. A hummingbird's brain is about 4.2% of their body weight, giving these birds the largest brain-to-body proportion of any bird.

Hummingbirds have a few other records to beat too. The average hummingbird has about 900 feathers. This is more feathers per square inch than any other bird. A hummingbird's heart is huge compared to the rest of their body. It can make up 2.5% of the total body weight. In comparison, the human heart is less than 1% of our total body weight. That ratio gives hummingbirds the largest heart in the animal kingdom (In proportion to body weight).

The hummingbird's heart might be heavy, but it beats at about 1,260 beats per minute when the bird is in flight. That's the fastest heart in the bird kingdom! The heart has to beat fast to keep up with those crazy wings! Hummingbird wings are incredible and unique. These wings allow hummingbirds to fly forward, backward, upside-down and hover. Some hummingbirds can flap their wings 200 times per second, giving them the record for most wing beats per minute of any bird.

Depending completely on their wings for transportation, hummingbirds can't walk. Their legs are so small that they just shuffle at best. Hummingbirds use their feet for perching, preening their feathers, and sometimes shaping their nests.

As for their senses, hummingbirds have better hearing than humans and are better able notice changes in tone. This can help them locate insects and hunt (insects are the main food of hummingbirds). They're also able to see more colors than us, picking up ultraviolet colors as



A Ruby-throated Hummingbird taking off from a perch. Photo by Mike Williams.

well as the ones on our spectrum. However, they do not, as far as we know, have a sense of smell.

Hummingbirds are not only famous for their size, but also for their long beak. They use this long beak to reach inside long tubular flowers and drink up the nectar inside. We used to think that the beak was used as a sort of straw to slurp up the liquid. In fact, hummingbirds actually use their very long tongues to lap up the nectar. The tongue can't pick up a lot of liquid per lick, but hummingbirds make up for this by lapping at a pace of about 13 licks per second.

Not all hummingbirds migrate, but some species do. The Ruby-throated Hummingbird, much beloved here in Texas, migrates from South and Central America up North each spring. These birds can fly straight across the entire Gulf of Mexico in less than a day. That's an amazing journey for a bird that weighs less than a penny.

We've always appreciated the beauty of these birds, but they're getting by on more than just their good looks! Next time you see a hummingbird, think about all of its record-breaking characteristics. What incredible birds!