

#### **Some Hummingbird Facts**

There are 338 species of hummingbird. They are only found in the Americas. In Africa & Southern Asia, sunbirds fill a similar niche (and also have iridescent throats) and in Australia, the honey eaters are the major nectar feeders – however only humming birds can hover. In all these birds, bill length (and shape) has co-evolved with flower structure to give many different species.

16 Hummingbird species breed in the USA (and 4 species reach Canada)

Hummingbirds have weak legs. They start flying while still holding on to their perch which gives the impression of instantaneous take off, unlike other birds which push off with their feet and then flap.

#### Hovering...

Hummingbirds are the only birds that truly hover in a sustained manner. Kestrels and kites need a slight breeze and can fly into the wind a zero net velocity.

## Flying...

Hummingbird unique figure of 8 wing stroke require muscles of equal size either side of the wing bone, whereas other birds have a larger muscle on the underside to make the down-stroke which gives them lift.

### Migration

The Ruby-throated hummingbird flies non-stop for 500 miles across the Gulf of Mexico in its migration from Mexico to the Eastern USA. It takes around 20 hours with an average speed of 25 m.p.h. and burns 2 grams of fat. The Hummers feed to increase their body weight by 50% before the flight.

### "Pop!"

The explosive "pop" of the Anna's hummingbird and "ricochet" of the Allen's hummingbird heard at the bottom of their display flights are made by <u>air vibrating their tail feathers</u>. It has long been known some other birds also make sounds from the tail feathers (e.g. snipe) by only recently confirmed for hummingbirds. It was eventually proven by experiments conducted in wind tunnels – or more simply by attaching the tail feathers to a fly-fishing line and casting.

# Nest's built with spider's webs

Females build nest using spider's webs which allow the nest to stretch as the two chicks grow (From Phyllis Norris, at last volunteer's meeting!) Each full grown chick is heavier than its mother.

Wing beat frequency is normally in the range of 20 to 50 beats per second (Hertz), but the "hum" can sound higher pitched (200 Hertz) because of overtones. Standard video cameras operate at 30 frames per second so the wings can appear to move slowly backward or forward in a movie (cf. the wagon-wheel effect seen in old Westerns, otherwise known as aliasing).

#### Color

Because the throat colors are produced by reflection and interference rather than a pigment, *the color seen depends on the angle of view*. At some angles the throat can appear black. The black-throated hummingbird is hard to identify since you have to view it from several angles to be sure!