



A RUBYTHROATED HUMMINGBIRD PRIOR TO RELEASE

Bird Banding

What is it? And what can we learn?

GULF COAST BIRD OBSERVATORY

Bird Banding

Bird banding is the attachment of a small, lightweight, and individually numbered metal band to the leg of a bird. Birds can be caught in nets, baited traps, or even as the nest as juveniles.

There's evidence that people were trying to mark and track wild birds as far back as 200 BC. Roman soldiers were recorded tying bits of thread onto ravens' legs when birds were young or injured.

In North America the famous ornithologist, James Audubon, tied silver threads onto the legs of his backyard birds to see if the same individuals would return to his farm the next year. This was way back in 1803 and you can imagine how difficult it would be to identify individual birds if all you are using to tell them apart is a bit of string!

By the early 1900s people had created small metal bands with numbers on them that they could close around a bird's leg. These bands were light enough not to affect the bird and the numbers meant that it was easy to track individuals when they were re-caught.

You can band almost any bird – from a huge Whooping Crane (5 feet tall) to a tiny hummingbird (weighing about as much as a nickel). Banders are certified and trained so they know exactly how to catch, hold, and

band birds without hurting them. There are special banding permits for harder to band species like hummingbirds because their feet are so tiny.

Most birds are caught in **mistnets**. These very fine mesh nets are almost impossible for the bird to see in the right conditions. Birds fly into the mistnet as they travel through their habitat and quickly become tangled. These nets work wonderfully for small/medium sized birds but can't be used for larger species.

Some bigger birds, like waterfowl (swans, gulls, etc) are caught by shooting a net from a net gun. Others like hummingbirds, which are too small for a mistnet, can be baited into specially designed traps by placing a feeder inside.



Bands

Bands are made of either stainless steel or aluminum. There are many sizes that fit different sized birds. They are closed around the leg by a pair of pliers.



Colored Bands

This Whooping crane is sporting colored bands on both legs. The color combination is unique to this bird and makes it easy to tell who's who from a distance.

Measurements

Banders also collect measurements in addition to putting a band on a bird. These measurements can tell us a lot about the condition of the birds and provide valuable information on behavior and migration.

Some of the more common measurements include:

Wing length

Fat scores

Tarsus (leg) length

Weight

Banders also make careful note of the sex of the bird, an educated guess about the age, and will sometimes check for molting feathers.



SPECIES	SEX	AGE	BAND NUMBER	WING CHORD	FAT SCORE FURCULAR	FAT SCORE BREAST	MOLT?



Migration Champions

Although they only weigh as much as a nickel, Ruby-throats can migrate straight over the Gulf of Mexico without stopping, powering past 500 miles of water in around 26 hours!



Game of Oystercatchers: A Song of Surf and Sun

Susan frequently describes her Oystercatchers breeding seasons as full of drama. Bands let her know who left who for someone else, who got usurped from a territory, and which pairs make the best parents.



The WOW of Banding

Bird banding is an easy and engaging way to educate people about science, birds, and conservation. Although they are everywhere most people have never held a wild bird in their hands before. Banding offers an opportunity to appreciate our feathered neighbors up close and personally!

What can we learn?

All banding data is required to go into a birding database called **Bandit**. This means that someone who catches an already banded bird can use the database to determine where that bird was first banded.

This is an effective way to collect data on:

Migration:

Where birds go and how far they travel are questions that can be answered by recapturing a banded bird along its migratory pathway. It's how we learned that Ruby-throated hummingbirds from the eastern US winter in Florida/Texas/Louisiana and even down into Central America.

Age:

Time between recaptures can help us age banded birds. The oldest wild hummingbird we know about was a female Ruby-throated hummingbird who, based on banding records, was at least 9 years old.

Behavior:

Banding lets us observe and identify birds in the wild as they go about their daily lives. By using both numbered and colored bands, GCBO's Conservation Biologist Susan Heath, can study breeding Oystercatchers on the coast. She can identify mated pairs, keep track of how well parents raise offspring, and collect data on changes to their habitat and nesting sites.

Population Trends:

Susan is also able to keep track of who returns to Texas safely after migration. Where Oystercatchers go in the winter is still debated but her banding data can tell her how many individuals make it back to breed in the spring.

Ecosystem Health:

Long term changes to birds' health and body conditions might be indicators that the quality of their habitat is declining.



