The Benefits of Bird Banding

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To many birders, spring and fall migration mean many hours spent in the field, rare bird alerts, and much more. But for some birders and researchers, the main focus of seasonal migration is bird banding. Banding is a way to study birds that involves placing an aluminum ring on a bird's leg; the ring, or band, bears an address and serial number that allows the bird to be easily identified if it is found again.

In order for a bird to be banded, it first has to be caught. The most common and effective (and virtually harmless) method of capturing birds is with mist nets, very thin and fine nets. "Mist nets are often used near foliage, where the netting is nearly invisible against the backdrop of leaves. Birds moving through the foliage can not see the mist netting until it is too late to avoid hitting it" (Lynch and Proctor 1993, p. 288). The entangled bird is then carefully removed by a bander, placed into a cloth bag to keep the bird safe, and taken to a nearby banding station where it will be studied and banded. "Before releasing the bird, the bander enters in a notebook: the species of bird, serial number of its band, place and date of banding, the bird's age, sex, whether a bird of the year or an adult, and perhaps other information like eye color, general health condition, or stage and condition of its molt" (Terres 1996, p. 56). It is then released unharmed.

The reason why bird banding is so beneficial and important for research is because birds can be studied as individuals. For example, a Yellow-rumped Warbler flitting in the trees is not just another "Myrtle" Warbler. It is a unique individual, with its own behaviors and life style. Bird banding is effective because it picks out individual birds and focuses on studying their lives more intensely. This opens a great variety of opportunities for birders and researchers to learn more about the lives of all birds.

Yellow-rumped Warbler, by the author

One of the most important aspects of birds' lives, studied in great detail through banding, is migration. Through banding, the routes taken by birds during migration and the specific times of these movements can be determined. The movements of an individual bird can be traced if it is captured and reported to a banding laboratory repeatedly. It was learned through banding, for instance, that the Arctic Tern makes an annual round trip of about 22,000 miles — the longest migration of any bird species in the world. Recaptures, too, help to locate wintering and breeding grounds for some species.

Banding also helps researchers study birds' life spans and survival rates. Banders can often estimate the age of a bird quite accurately based on its plumage, especially

if it is a bird in its first year of life. If a bird is banded today, and it is recaptured three years from now, researchers know that it is at least three years old. Banding has found that some songbirds can live ten years or longer and that Laysan Albatrosses can survive forty to fifty years. The survival rates of certain species can also be determined. For example, birds banded in their ideal environment and birds banded in an environment affected by pollution, oil spills, and other alterations can be compared and their survival rates determined. This information can be very valuable, since it brings awareness to people about the importance of protecting our environment and the wildlife in it.

The numerous behaviors that birds exhibit can be studied with the help of banding. By banding a bird on its breeding grounds with distinctive colored bands, in addition to the aluminum band, researchers can recognize individual birds and study them without handling them again and again. Territorial and reproductive behaviors, such as the ability to protect a territory, interaction with other birds, displays, attraction of mates, nest building, and the rearing of young are a few among the many important behaviors that can be studied and recorded. Such behaviors are essential to the survival of a species, and the study of these behaviors, with the help of banding, provides information that helps people learn how to better protect certain species. Migration, longevity, survival rates, and behaviors are only a few of the many important things that can be learned about the lives of birds through banding.

The wealth of data gathered through banding is also useful in studying the changing populations and productivity of birds. Various diseases and ailments that birds contract and spread can be identified and prevented. The ecosystems that birds inhabit and how they interact with these surroundings can be studied intensely with the help of banding. Hopefully, the great amount of information that is gained through the practice of banding will lead people to a greater awareness of the natural world and the need to protect the birds that inhabit our one and only Earth.

References

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