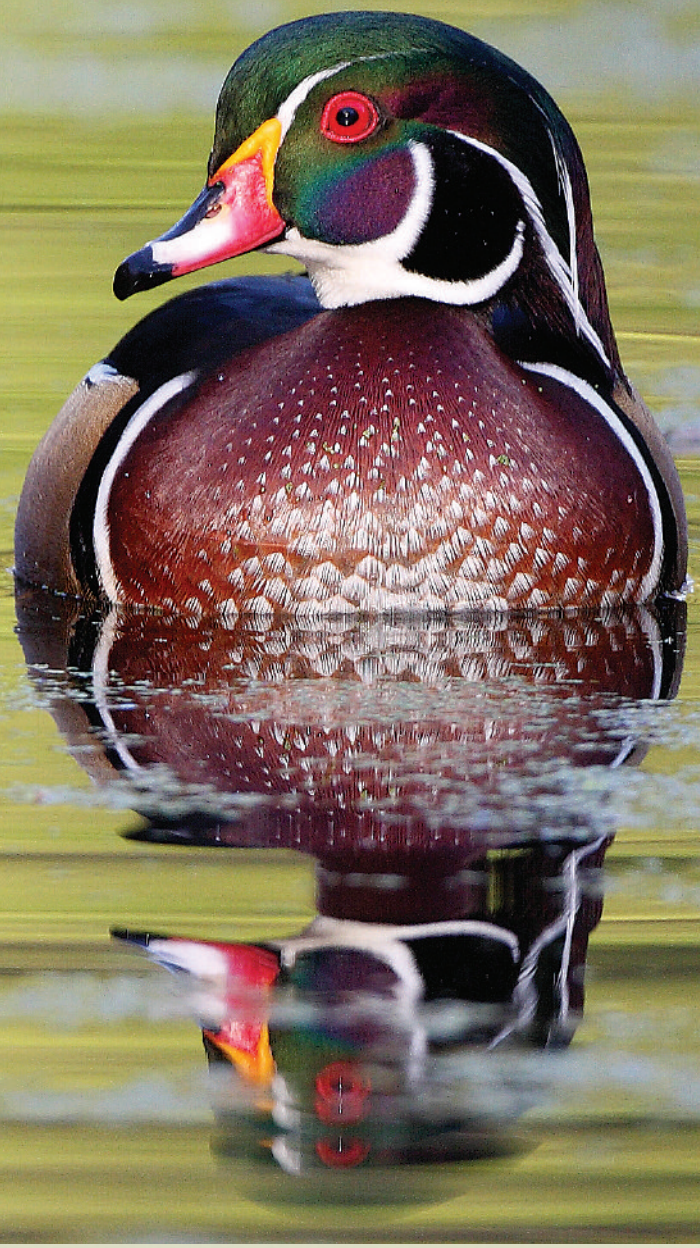
Each year, successful waterfowlers across North America discover metal leg bands on ducks and geese. Where do those bands originate?

The Rise and Fall of Waterfowl Bands



The wood duck is one of the species of waterfowl for which leg bands provide critical population and harvest data.

Story By Joe McFarland
Photos By Adele Hodde

It's a management success story that often ends with a bang: Each year, lucky waterfowl hunters in Illinois and elsewhere in North America retrieve a duck or goose they just shot and make a shiny discovery. Attached to the leg of those waterfowl will be a little aluminum band—two, in some cases—with a human story connected. Hunters who find these banded birds know that somewhere in North America, just a few months earlier (or, in rare cases, many years ago), another human briefly held that bird.

It's the North American waterfowl banding program, a 90-year-old monitoring system that tracks and evaluates the annual flocks of migratory waterfowl that wing their way around North America. The data is a critical assistant when it comes to estimating flock size and the establishment of hunting season regulations. It's a time-tested idea that continues to represent the best source of data for many of the critical decisions made by waterfowl managers everywhere. The aluminum bands, stamped with serial numbers and a phone number, are universal access

The banding process happens quickly, as wild birds are netted or trapped, banded and released in a matter of minutes.

(Photo courtesy Danny Brown, Missouri Department of Conservation.)

codes to the known history of that bird. Once in a while, those bands reveal incredible odysseys, such as birds flying thousands of miles beyond their usual flyway. Other times, they reveal astonishing coincidences. But more about that in a moment.

In Illinois, some 20 trained biologists throughout the state head to the water every summer to trap or net ducks and geese in the state's five regions. Each bird is documented by a few quick observations—age and sex—then a band is clamped on a leg, then it's set free. One of the most important species being banded is the wood duck (*Aix sponsa*), since information gathered from trapping and banding cannot be obtained any other way.

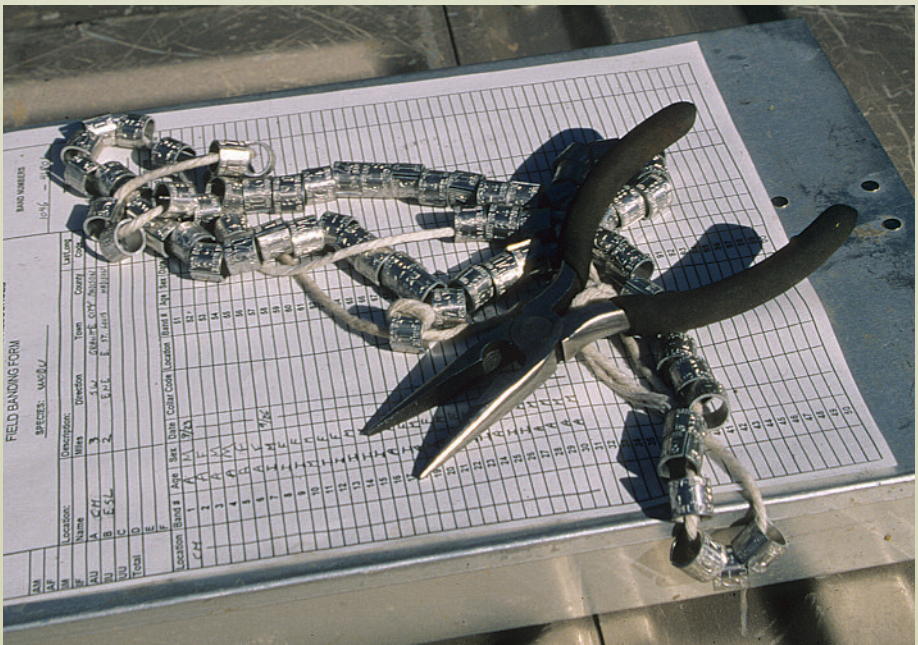
"Wood ducks are basically impossible to survey from the air," explained Department of Natural Resources biologist Rich Whitton, who's banded thousands of wood ducks over the years in southern Illinois. Whitton said the aerial surveys, where trained biologists fly over flocks and make count estimates, are useful only over open water and fields. "Since wood ducks hang out in the flooded timber, counting them while flying over a forest just isn't possible."

But what happens to all of those banded ducks? And how is the information hunters call in used to manage wood duck harvest?

Since its inception in 1920, the national migratory bird-banding program has been a network of cooperating states and agencies working together to band waterfowl and track where those bands show up. DNR waterfowl biologist Dan Holm said the data acquired while banding birds, as well as the number of bands reported by hunters, are critically important when establishing hunting-season quotas and dates nationwide. Unless wildlife officials have a scientifically sound estimate of the size and health of waterfowl flocks, establishing hunting seasons for those waterfowl would be difficult if not impossible.

"When it comes to wood ducks," Holm observed, "the banding program is our best and most reliable source of information."

Currently, Illinois bands wood ducks, Canada geese and doves during the summer banding season. Aerial surveys provide flock estimates for other migratory waterfowl species such as mallards and gadwalls. When hunting season arrives, the phones begin ringing in Laurel, Maryland. That's where all reports of recovered waterfowl bands are compiled by the U.S. Fish and Wildlife Service and fed into data banks where waterfowl managers can evaluate trends and modify hunting seasons as needed. A single band might not reveal significant information. But band-recovery trends might reveal, for example, when a group of wood ducks banded in Wisconsin show up in Arkansas. It's why waterfowl biologists band thousands of birds every summer, hoping for many dozens or hundreds of



Recording data is a key part of the waterfowl banding process. Biologists and their assistants work quickly to identify and age each trapped bird as they clip on a band and record the data.

One technique used to capture waterfowl for banding is the swim-in box trap. Biologists assemble the live traps in shallow water, add bait and then wait for arrivals.

reports from hunters. The more reports, the better the quality of data.

Unfortunately, over the years hunters developed a fondness for the bands themselves. As a symbol of rare success, hunters often kept the bands they found, opposed to sending them off to Maryland. Technically, hunters weren't required to send the actual bands to Maryland; sending a letter with the band information was all that was expected. But many hunters suspected otherwise. To remedy the collecting conundrum, USFWS officials set up a phone-reporting system and began offering hunters who sent in bands certificates containing the known life history of the bird they shot. Hunters are now allowed to keep the bands after they've called in their report. In some years, to test the reporting compliance rate, cash rewards were offered for some of the bands.

"By putting a cash reward on a small percentage of the bands in circulation we are able to estimate the percentage of bands that are not being reported by hunters," explained DNR biologist Dan Woolard, one of the Region 5 biologists who bands wood ducks.

And while the fate of the bands is more predictable today, the individual flight destinations of wood ducks and other migratory waterfowl can be all over the map. As expected, many of the birds banded in Illinois between July 1 and Sept. 30 head south and are harvested by hunters in states such as Louisiana.

"But then there are what we call 'migrational fallouts,'" Whitton pointed out. "A wood duck banded in Illinois in July might end up being shot by a hunter in Minnesota in November—so it migrated north instead of south as winter approached."

Other birds wander out of the Mississippi Flyway altogether and fall out of the sky in locations far and wide. Birds banded in Illinois have been shot by hunters in California and Colorado, as well as South Carolina and eastern Pennsylvania. Some birds defy the odds and evade predators for years, migrating up and down the flyway or anywhere on Earth and outliving their standard life expectancy. One wood duck banded in Illinois very well might have set a record for longevity and incredible coincidences at the same time. Biologist Woolard, who also loves to hunt for waterfowl, shot a wood duck in 1999 that puzzled the authorities in Maryland when he called to report the band number.

After a long wait on the phone, the clerk reported that the number was listed on a banding inventory sheet that was now 10 years old. Wood ducks typically live 2 ½ years in the wild. Thus, a 10-year-old wood duck is ancient. The bird Woolard shot, it turned out, had flown in the wilds of North America for 10 years after being banded by none other than Woolard himself.

"I've shot a few birds that I banded before," Woolard said. "But nothing will ever match this one."

(Photo by Joe McFarland.)

Strings of aluminum waterfowl bands—sizes for ducks as well as geese—await the call to service. Serial numbers stamped on each band identify the bird for life.