NEOTROPICAL MIGRANTS: A BANDER'S DELIGHT

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Each spring (March, April, May), the forests and fields of North America come alive with a rainbow of colours and ear-pleasing songs as Neotropical migrant birds move north to breed. More than 140 species of bird that winter south of the continental US and Canada arrive to search out suitable breeding habitat and to attract a mate. Among these are the tanagers, orioles, swallows, swifts, hawks, hummingbirds, flycatchers, thrushes, vireos, warblers and grosbeaks (Peterson 1980, Peterson 1990). Of the 113 species of warblers that occur in the new world, some 53 migrate or extend their range into North America to breed (Curson *et al.*, 1994). One of the great mysteries of the bird world is why these species bother to undertake this hazardous journey, while so many others do not. Those of us who have the privilege of handling and banding birds are glad they do. For a few weeks each spring, and for a longer period in the fall, the mist nets take on an entirely new look as these birds move through.

The movement south begins in late summer (July, August) and continues well into fall. This too, is an exciting time as the juvenile birds are caught as well as the adults. Identifications are much more difficult as many species have already begun to moult into their basic or winter plumage. Consequently, ageing and sexing these birds tests the mettle of the most experienced bander. Millions of these birds take a distinctly different route home. While in the spring they move north through Central America or cross the Gulf of Mexico, in the fall, many species head southeast to the North Atlantic Coast, then strike out across the North Atlantic for a non-stop flight to the West Indies and South America.

In the fall of last year during the attempt to raise the Titanic, my friend Skip, a professional video photographer, was there on one of the ships several hundred miles offshore from Newfoundland. He called me after his return to say that there were many birds around the ships at night. He wanted to know if these birds lived on the ships and came out at night to feed, or if something else was going on. I asked him what the birds looked like. He said they were small birds with black and yellow markings. I explained that he had witnessed a North Atlantic migration! The birds had been attracted to the ship's lights, and probably were disoriented. Later, I wondered if it would be worth while to put up a mistnet on the deck and study these birds during their migration. It certainly would be interesting data, but for birds on an already long hazardous journey where stored energy is at a premium, such interference could spell doom for the birds caught.

Last summer, while working on a project at the Indiana Dunes National Lakeshore, I caught two American Redstarts together in a net. One was a juvenile male, the other an adult female that I took to be the mommy. I was training a group of banders for the National Biological Survey, so worked on the young male first. I explained that the male retains a female-like plumage for the first year, and moults into its spectacular black and orange plumage the second year. I banded the young male and placed him on a branch in the bush by my shoulder. I suspected he would wait there until his mom was released. I then worked on the female, and sure enough, when I released her, the young male flew off with her. It was a touching scene for all of us.

The Indiana Dunes region is a fascinating place to band birds. In the fall, southward moving birds follow the east and west shorelines of Lake Michigan for several hundred miles, then concentrate at the south end of the lake before striking out overland across the midwest. This is known locally as the "funnel effect". Unfortunately, there is no systematic long term banding effort in this

area. This is the same area that Henry Chandler studied over a century ago and proposed the idea of ecological succession on the sand dunes.

Those of us in North America tend to refer to Neotropical migrants as "our birds". The truth is, these birds belong to the Neotropical Region that extends from Central Mexico south to Cape Horn. They only visit North America for a few weeks or months to breed, then they and their fledglings head home. There is much concern about these birds as the populations of many species continues to decline (Finch & Stangle 1983, Tangley 1996, Terborgh 1989). Habitat destruction on both the wintering and breeding grounds is certainly a factor. Changes in habitat at critical migratory stopover points is also a factor. Much needs to be learned if educational and regulatory efforts are to effectively and intelligently stem and reverse this decline.

While many banders have the opportunity to work with these birds in North America, relatively few experience the added privilege of working with these birds on their wintering grounds. The petite warblers are particularly challenging to work with. To many, these are the gemstones of the bird world. One species, the exquisite Magnolia Warbler is more variable in its plumages than any other warbler; there is so much overlap that, apart from adult males, many birds cannot be aged or sexed accurately in spring or autumn (Curson *et al.*, 1994 p.118).

If that isn't problem enough, hybrids of some species also occur, making identification even more challenging. The Blue-winged and Golden-winged Warblers often hybridise producing Brewster's Warbler, the more common dominant form, and Lawrence's Warbler, the rare recessive form. Interestingly enough, data shows that the Blue-winged Warbler, a more southerly breeder, is gradually extending its breeding range northwards, replacing the Golden-winged Warbler. The Golden-winged Warbler is a habitat specialist. Replacement is occurring as the brushy fields and shrubby borders of streams preferred by the Golden-winged Warbler become more overgrown, favouring the more adaptable Blue-winged Warbler (Curson *et al.*, 1994).

Warblers are a pleasure to work with. They migrate at night, usually following frontal systems, and drop in to the forests and fields in the early morning to feed and rest. During migration, each day brings a new group of birds, although banding shows that some may linger for a few days before moving on. They are easy to net, especially at migratory concentration points where thousands of exhausted birds may fill the trees and bushes. They usually remain quiet, and can be removed from the net with little struggle. Sometimes they are not tangled at all. They simply lie in the net bag and wait to be lifted out. This is a welcome contrast to handling wrens, who constantly struggle, and take special delight in developing novel methods to entangle themselves!

I just received a report from the Bird Banding Lab that an Ovenbird that I banded here in central Indiana as a juvenile last October as it moved south to spend the winter was recaptured in May 1997, near Lansing, Michigan on its first trip north to breed. These recoveries are very rewarding, and provide much needed data on movements, timing, physical changes in weight, ossification, plumage, moult, and feather wear.

I have had the opportunity to work with Neotropical migrants in the rainforests of Costa Rica, and in the mangrove forests of the Bahama Islands where Chipper Woods Bird Observatory operates a seasonal banding station. One of the most interesting birds in this group is the Kirtland's Warbler. This little gray and yellow gem nests only in a small region of Jack Pine forest in north central Michigan. It spends its winter mainly in the Bahama Islands, and is very seldom seen en route between these two areas. It is thought from rare sightings that it moves southeast from Michigan to the Atlantic Coast, then hops across the Florida Strait to the Bahama

Islands. There are only a thousand or so pairs left, and they virtually disappear in the Bahama Islands. I have not caught any myself, but one was caught a few miles north of my station and banded during the winter of 1985-1986. This individual was subsequently recaptured in Michigan in three consecutive summers! (Paul Sykes Jr., National Biological Service, pers. comm.). More recently, a Kirtland's Warbler was observed in 1996 in the Bahama's Abaco National Park (Lee 1996, Wardle 1996).

Earlier this year, I had the opportunity to manage a mist netting program in the tropical rainforests of Costa Rica. This was a real adventure. In addition to contending with the rain, heat and humidity, the mist-netter must contend with a plethora of things that bite, sting and scratch. When checking nets along the canals, one must keep an eye out for crocs, poison dart frogs, stinging ants including the large, solitary Bullet Ant, and lethal snakes including the Fer-de-Lance, coral and vine snakes. Not all snakes are on the ground. As I leaned over to adjust a net, my sharp-eyed assistant warned me to look to my right. I did slowly, and a well camouflaged vine snake was entwined in the leaves by my shoulder.

Another tree climber is the Eyelash Viper. This lethal little squirt coils itself on a leaf by the trail and just dares you to brush past it! We always worked in pairs in the forest, and learned to constantly watch out for each other. Losing an assistant would ruin a mist netting study, and would surely look bad on a resumé. For safety reasons, I found a long, well seasoned sugar cane stalk with a shepherd's crook on the end to adjust the nets and reach into vegetation. I carried this stick every day, and the villagers soon began calling me Moses. For anyone considering work in Neotropical regions, I highly recommend the book, *A Neotropical Companion* by John C. Kricher. This is a must read!

One of the interesting warblers frequently caught along the canals is the Prothonotary Warbler. This species prefers swampy habitat. Only 14 cm from beak to tail, this bird defies description, but I will try anyhow. The male has a brilliant golden-yellow head, throat and breast. The back is green, and the wings and tail are blue-gray. The black eyes appear large, and the black bill sets off the face. This bird is so spectacular that most people can easily recall their first encounter with it.

Joseph Kastner, in his excellent book *A World of Watchers*, recounts an interesting story related to the Prothonotary Warbler that occurred in the late 1940's. The FBI was attempting to verify Whittaker Chambers' testimony that he personally knew Alger Hiss, the alleged communist spy. Alger Hiss and his wife were ardent bird watchers, and Hiss had related to Chambers his excitement at seeing a Prothonotary Warbler. The truth of Chambers' testimony was clinched when Hiss innocently admitted under questioning that he had seen the warbler. Hiss's passion for bird watching even led the FBI to interview Roger Tory Peterson during the preparations for the trial.

There is no end to things to be learned from ringing birds. I had the chance to spend a month in Cape Town in 1990. I was a bird watcher then but not a bird bander. As I read the pages of SAFRING, I realise that there is much that I missed. Maybe someday I will have the opportunity to return. In the mean time, if any readers are planning a trip to the States, please take some time to assist at a banding station here.

Since the late 1980's, there has been a major effort to study Neotropical migrants. One program, run by the Institute for Bird Population Studies, is called Monitoring of Avian Productivity and Survivorship (MAPS). There are more than 400 MAPS stations operated across North America each summer.

In addition, there are other banding stations scattered across North America. Some are seasonal, and some operate all year. Here at Chipper Woods Bird Observatory, I band all year. Yes, even in the dead of winter when

temperatures drop well below zero, you can find my traps baited and ready. There is much to be learned about how birds spend their winters, and some species that summer in more northerly latitudes, such as the Tree Sparrows, White-throated Sparrows, and Dark-eyed Juncos, migrate to our area to spend the winter. These wintering birds will be the topic of another article.

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