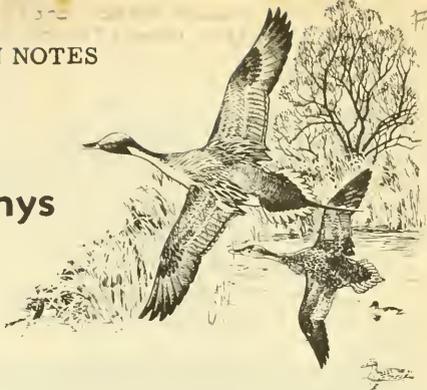


BIRD BANDING

The Hows and Whys



Three Pintail ducks from North America were shot in widely separated places in far distant parts of the world. One duck was taken near Cali, Colombia, South America; one on an island in the Pacific, and the third along the Dart River in England. The South American hunter learned that his duck had come from North Dakota. The weatherman in the Pacific discovered that his bird had been in northern California, more than 4,600 miles away, just 3 months before. The English sportsman found that his Pintail duck just 21 days before had been in Labrador, some 2,200 miles across the Atlantic. How did these men know that their ducks had come from North America?

It really isn't such a mystery as it might seem. On the leg of each duck the hunter had found a small aluminum

band. The band carried a number and a request that the finder of the band report to the Fish and Wildlife Service in Washington, D.C., U.S.A. Each hunter did exactly that. When their letters reached the Service in Washington they were sent to the Bird Banding Office. Records of the wild birds banded in North America are kept in this office. Here it is that the band number, species, date of banding, place of banding, and name of the bander are recorded. When some one sends in a band he has found, the record can be located quickly.

Coming back to the letters of the three hunters--workers soon found the three numbers among the 11 million banding records registered in the office. Then they sent each hunter a letter telling him the kind of bird he had taken, when and where it had been banded, and who banded it.



Banding information is recorded on punch cards. The large sorting machine (right background) locates a record quickly.



This building houses the Bird Banding Office.

UNITED STATES DEPARTMENT OF THE INTERIOR

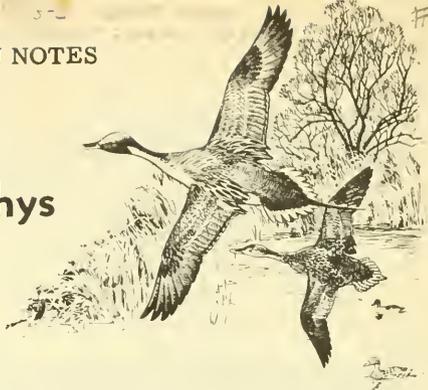
Stewart L. Udall, Secretary

FISH AND WILDLIFE SERVICE



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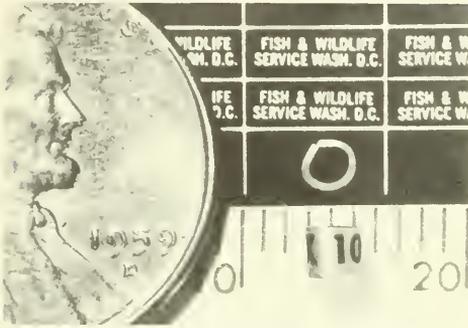
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Seven of the 15 different size bands used by bird banders.



This little band, less than 1/12 inch in diameter, is used to band Hummingbirds, the world's tiniest bird. The penny looks big even against the uncut, unrolled bands.

Since banders are interested in knowing what happens to the birds they band, a letter was sent to the bander of each Pintail duck to tell him who had recovered the banded bird and when and where it was found.

History of Bird Banding

As far as we know the first bird band ever to be recovered was found on a Gray Heron in Germany in 1710. The heron had been banded in Turkey several years before. Modern bird banding really had its beginning with Hans Christian Mortensen, a school-teacher of Viborg, Denmark. In 1899 he began putting metal bands on the legs of teals, pintails, storks, starlings, and 2 or 3 kinds of hawks. The bands had his name and address inscribed on them. As his banded birds began to appear in many places

in Europe other bird students became interested in bird "ringing," as they say in Europe. In a short time bird banding was "catching on" in America. As more and more bird students began to band birds in the United States they decided they could accomplish more if they worked as a group. Thus, in 1909, the American Bird Banding Association was formed. During World War I, however, banding lagged. Biologists in the Bureau of Biological Survey (now the Bureau of Sport Fisheries and Wildlife) were convinced that banding birds was most worthwhile. They felt it had much to tell us about the habits of birds, especially their migrations. So to further the banding of birds in America the Bureau and its Canadian counterpart, the Canadian Wildlife Service, offered to take over the work of the American Bird Banding Association. The offer was soon accepted and since 1920 banding of migratory birds in the United States and Canada has been under the joint direction of the Federal Governments of the two countries.

What Does Banding Tell Us?

Banding birds has shown us many things about the individual bird as well as the species or group to which it belongs. We know that many birds live as long as 10 years. Some live even longer; for example, the Red-winged Blackbird that was banded in New York and shot 14 years later in North Carolina; or the Black Duck banded on Cape Cod and taken by a hunter 17 years later in Newfoundland. The longest a North American bird has been known to live in the wild is 26 years. The holder of this record was a Caspian Tern. It was banded in Michigan in 1925 while still in the nest, and shot in Ohio in 1951.

When banded birds are recaptured at various places and released unharmed the banding information tells us the routes they were following. Thus, when large numbers of birds of a

migratory species such as the Bobolink, Scarlet Tanager, or Redstart, and various ducks and geese are banded, we can map the general route the species takes between its wintering and nesting grounds. From banding information we have learned that some birds, as the Atlantic Golden Plover, do not return south in the fall over the same route they took north in the spring.

How did we learn that the Arctic Tern makes the longest known migration flight of any living species? It was from bands returned from such faraway places as Nigeria, West Africa, and Natal and Cape Province, South Africa. It is now known that this bird makes an annual round-trip flight of about 25,000 miles. It nests near the Arctic Circle and winters in the Antarctic.

Many ducklings and goslings are banded each summer on their nesting grounds. When hunters return bands they find on these birds during the hunting season they may be helping to improve their own future hunting. From the bands turned in from hunting areas, wildlife workers can figure pretty closely just how numerous certain ducks will be along the various migration routes during the following hunting seasons. Knowing approximately how many Redheads or Canvasbacks or Mallards could possibly be in an area during the hunting season gives a pretty good basis for saying how large a bag limit should be established for the hunter. The game managers want to be sure that enough pairs of these birds escape the guns to provide the next season's breeding stock. Otherwise excessive shooting could seriously reduce the number of ducks.

How Birds Are Banded

Specially designed traps are used to catch the birds for banding. The bird bander must take extreme care in trapping and handling the birds to

avoid injuring them. The bander regularly visits his banding trap each day. If he has trapped a bird he removes it from the trap, and if he can identify it he carefully fits the aluminum band to its leg and releases it. Birds should not stay in the trap very long, so the bander visits the trap about every 2 or 3 hours on the days he operates the trap. The last trip is made at dusk--birds are never left in a trap overnight.

Authorized banders receive bands without charge from the Service's Bird Banding Office. That office also



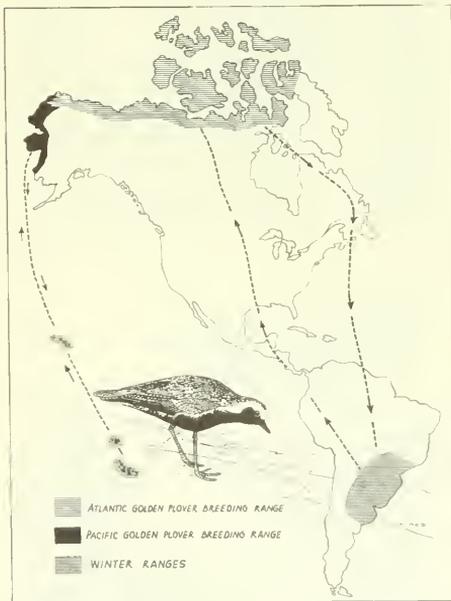
A young conservationist helps band a male Pintail Duck.



A close look at a band being put on a duck's leg.

keeps a record of the numbers on the bands it sends each bird bander. When a band is put on a bird's leg, the bander records the number on a form he receives from the Bird Banding Office. He also records the species, age, and sex of the bird and the place and date of banding. Later the bander returns the completed form to the Bird Banding Office.

Fifteen different sizes of aluminum bands are used in banding birds. Very small bands are needed for tiny birds such as the warblers, vireos, kinglets, and hummingbirds. Large bands are used on swans, geese, or eagles. Besides the serial number, each band bears the name and address of the Fish and Wildlife Service in Washington. Thus the finder of a band knows where to send it and the Bird Banding Office has a number to use in locating all the banding information on a particular bird.



From banding we learned the Atlantic Golden Plover returns north over a different route than the one it follows south to its wintering grounds.

Who Can Band Birds

Anyone who is at least 18 years old and knows how to identify all the common birds in their different seasonal plumages may apply for a banding permit from the Fish and Wildlife Service. The applicant must furnish the names of three well-known bird banders, bird students, or naturalists who can vouch for his fitness as a bird bander. Only those persons who are well qualified will be issued banding permits.

How We Can All Help

Not everyone can or wants to band birds. But we can all help the work of bird banding by sending in bands we find. In fact, this important study of American birds would fail were it not for the many people who send in bands they find. Banding is only one phase of the work--the bands must be found and returned.

Where are we most likely to find bands? Hunters should always look at the legs of ducks, geese, woodcock, and other game birds they shoot. Many of these birds carry bands. Dead birds along our highways and birds



Keeping accurate records is an important part of every bander's work.

washed up at the seashore may have bands on them. Fishermen sometimes catch banded birds in their nets and on their lines. Sometimes banded ducks are found in beaver and muskrat traps.

What To Do When You Find a Band

When you find a band, straighten it out and attach it securely to a piece of heavy writing paper. With the band send in the following information:

1. Your name and address (plainly printed)
2. All letters and numbers on the band
3. The date you found the band
4. The place where you found the band (nearest town, with County and State)
5. Tell how you found the band (on a bird found dead, shot, trapped, or some other way)

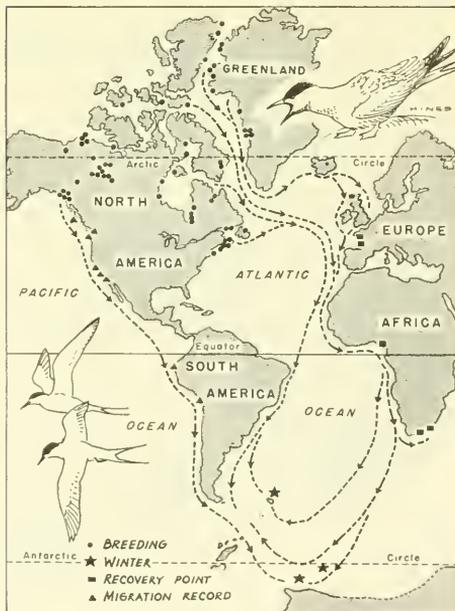


Goslings are banded on their northern nesting grounds. Where the birds go later is very important to wildlife managers.

6. Place in an envelope and send to the following address:

Bird Banding Office
 Patuxent Wildlife Research
 Center
 U.S. Fish and Wildlife
 Service
 Laurel, Maryland

What do you do if you find a live banded bird? *Do not* remove the band but read the number on the band, write it down, and release the bird carefully. We may learn more about where it goes or how long it lives. Send in all the information you can about finding the banded bird to the Bird Banding Office. If it is a tiny bird you will not see the name and address of the Service on the band; it will be on the inside of the band. There isn't room for it on the outside. And remember, *don't take the band off, you might injure the bird.* Later you



Banding gave us this picture of the Arctic Tern's long migration route.

will receive a letter from the Bird Banding Office telling you where the bird was banded, what kind it was, and who banded it. The person who banded it will also learn that you found the band. Each year more than 40,000 band recovery reports are processed and acknowledged in the Bird Banding Office.



This Carolina Chickadee was banded November 1956. It returned to the same trap where it was photographed January 1960.



Like most of our migrating birds, the American Redstart crosses international boundaries between nesting and wintering grounds and is protected by international treaties.

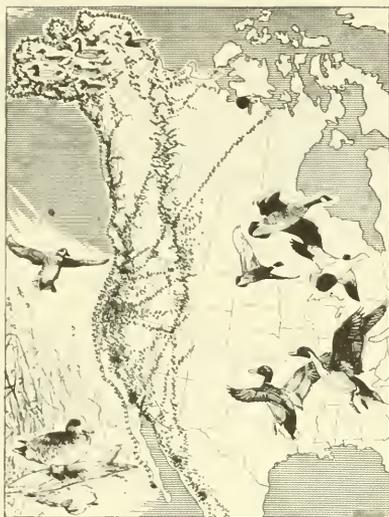
We Must Work Together

Birds pay no attention to State or National boundaries. From our banding work we have learned that many species of birds have long migration routes that carry them through or into a number of countries. A species may nest in Canada, migrate through the United States, and winter in Mexico or Central America. Some go on down into South America, others cross the Atlantic Ocean to Africa. For this reason, if bird banding is to be worthwhile, many groups must work together. The bird-banding work and study of bird migration and distribution are the particular responsibility of the Bureau of Sport Fisheries and Wildlife. But the Bureau must have the help of State conservation departments and of private groups and persons interested in conservation. People in Canada and Mexico as well as people in some South American Republics help us trace the movements of many far ranging birds.

As we have seen, some birds (very important to us, too) spend parts of each year in different countries. These birds need places to feed and rest safely wherever they go. Protecting and feeding them in one country is not enough. All the countries through which they pass must be interested in saving them. Bird conservation is not one country's problem; it is an international problem.



A female Purple Finch lies quietly in the bander's hand.



Pacific Flyway



Central Flyway



Mississippi Flyway



Atlantic Flyway

By returning bands they found on banded ducks and geese, thousands of people all over America helped wildlife biologists determine the routes or flyways used by our waterfowl between their northern nesting grounds and southern wintering areas.



Bird banding in North America is under the general direction of the Fish and Wildlife Service, U. S. Department of the Interior, and the Canadian Wildlife Service, Department of Northern Affairs and National Resources. To avoid confusion in band numbers, all bands used on migratory birds in North America are issued by the U.S. Fish and Wildlife Service.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
WASHINGTON 25, D. C.

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