

A Technique Modification for Color-marking Birds.—Color marking of birds for field recognition has been utilized by many persons during the past few years and several diverse methods for marking birds have been developed: wing or patagial markers were used on blackbirds and starlings (Hewitt and Austin-Smith, 1966); nasal discs on waterfowl (Bartonek and Dane, 1964); plastic adhesive tape on blackbirds and gulls (Fankhauser, 1964); plastic collars on geese (Helm, 1955); leg strips on red-winged blackbirds (Campbell, 1960); and leg streamers on boat-tailed grackles (Downing and Marshall, 1959).

The use of leg streamers is one method that allows the marking of large numbers of birds in a relatively short period of time. The slot-and-notch technique for fastening is most frequently used for these streamers. One major problem involved with this technique is the loss of streamers due to poor fitting on the legs of the birds. Guarino (1963) also employed leg streamers as markers, but used the band for attachment. This combination may bind the band to the leg of the bird, creating friction and possible wear to the leg. We needed a marker requiring minimum time for preparation and application, but with a reduced loss of streamers from the birds marked.

Leg streamers and wing streamers have been adopted for use in our blackbird program, but with a modification for fastening the marker to the leg or wing of a bird. The streamers are made of a plastic-coated nylon fabric (Trade mark "Saffag" Safety Flag Co., P. O. Box 1005, Pawtucket, Rhode Island). This material is available in an assortment of bright colors that are easily differentiated in the field. Brass eyelets, number 2 size (source: Bates Manufacturing Co., Orange, New Jersey) are used to fasten the streamers. Standard eyelet pliers are employed to apply the eyelets. Using these eyelets allows us to fit the streamers individually to the birds and reduces preparation time for the streamers approximately 50 per cent. The weight of these eyelets averages 17.1 gm/100, an insignificant addition to the total weight of the streamer. Aluminum eyelets that are available in fabric shops have been tested, but a very low percentage of the eyelets penetrate the Saffag streamers and we consider them unsatisfactory for fasteners. The eyelet-fastened marker does not bind on the leg and moves freely up and down the leg. Likewise, wing streamers fastened in this manner do not hinder freedom of movement by the bird.

The success of this method can be demonstrated by some preliminary results of our study. Approximately 2500 brown-headed cowbirds were banded and marked at or near College Station, Texas, over a five-month period of the 1969-70 winter. We made over 500 sightings of marked individuals and 27 cowbirds were recovered. In all recoveries the markers were in excellent condition with no visible wear on the legs of the birds. At least three other birds completed their spring migration with markers intact, as indicated by recoveries from Kentucky, Michigan and New York. The latter two individuals each covered more than 1300 miles in their travels.

Although the great-tailed grackle is difficult to mark with plastic leg-bands due to its strength and its habit of constantly pulling at such markers, we have achieved similar success with this species by using markers with eyelet fasteners. Numerous sightings and recaptures indicate that these markers are holding up well to attacks by these grackles. One adult female great-tail has been recaptured approximately one year after release with the wing marked still in good condition.

LITERATURE CITED

- BARTONEK, D. H. and C. W. DANE, 1964. Numbered nasal discs for waterfowl. *J. Wildl. Mgmt.*, **28**(4): 668-692.
- CAMPBELL, D. L. 1960. A colored leg strip for marking birds. *J. Wildl. Mgmt.*, **24**(4): 431.
- DOWNING, R. L. and C. M. MARSHALL. 1959. A new plastic tape marker for birds and mammals. *J. Wildl. Mgmt.*, **23**(2): 223-224.
- FANKHAUSER, D. 1964. Plastic adhesive tape for color-marking birds. *J. Wildl. Mgmt.*, **28**(3): 594.
- GUARINO, J. L. 1963. Blackbird and Starling movements traced by banding and color-marking. *Inland Bird Banding News*, **35**: 65.
- HELM, L. G. 1955. Plastic collars for marking geese. *J. Wildl. Mgmt.*, **19**(3): 316-317.

HEWITT, D. H. and P. J. AUSTIN-SMITH 1966. A simple wing tag for field-marking birds. *J. Wildl. Mgmt.*, **30**(3): 625-627.

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Sight Record in North Carolina of House Finch Banded in New York.

—While collecting data on the winter finch invasion of 1969-1970, Mrs. Elizabeth Teulings of Chapel Hill, North Carolina learned of a color-banded House Finch (*Carpodacus mexicanus*) sighted at the feeder of Mrs. Herbert Hampton in Gastonia, North Carolina, close to the South Carolina border. The bird, a female with a blue band on the left leg, aluminum band right, arrived there in the company of another female on November 17, 1969. Two males joined them in December and the maximum of seven House Finches was reached on February 17, 1970. No other member of the flock was banded and the color-banded female which apparently wintered in the area was last seen on March 26, 1970.

Mrs. Teulings traced the color-banded finch to our banding station in Atlantic Beach, Nassau County, New York, where since 1967 we have color-coded young House Finches according to year of hatch. In 1967 we used 400 red bands; in 1968 400 green prior to August 1 and 350 yellow after that date. In 1969 blue bands were used on the left leg of 726 young of the year prior to August 1, and 158 blue thereafter on the right leg.

With over 2,000 color-banded young House Finches and a total over 6,400 for this species we have had no recoveries further distant than the Washington, D. C. area. A direct flight from Atlantic Beach to Gastonia is 550 miles. The above record probably represents the longest documented flight of this new east coast migrant.—J. Richard and Shirlene Cohen, 133 Broome Avenue, Atlantic Beach, New York 11509.

Roseate Tern breeds during its third year.—On 16 June 1970 I captured a Roseate Tern (*Sterna dougallii*) off a nest containing three eggs, on Ram Island (413-0704), Plymouth County, Mattapoisett Massachusetts. This bird had been banded (983-16531) as a non-flying young on Great Gull Island (411-0720), Long Island New York, by Dr. D. M. Cooper on 19 August 1967.

Little about the breeding age of the Roseate Tern appears to have found its way into the literature. However, Austin (*Bird-Banding* **3**: 137, 1932) states that "Most Common Terns (*Sterna hirundo*) reach sexual maturity and breed for the first time when three years old, though a few breed when two years old. We now know that Common Terns may breed, though they very rarely do so, when only one year old," and it appears that the same may well be true of the Roseate Tern. Therefore I offer this as a comparison for future reference.—Richard A. Harlow, Jr., P. O. Box 244, Marion, Massachusetts. 02738.

Duck band found in Golden Eagle casting.—I collected and identified 595 prey species remains found at 60 active Golden Eagle nests during June 1966 and May-June 1967 during a study of the nesting ecology and breeding biology of the Golden Eagle (*Aquila chrysaetos canadensis*) in southwestern Idaho and southeastern Oregon. I found a duck band in a Golden Eagle casting collected on 22 June 1966 at a Golden Eagle nest near the east end of Harney Lake at the edge of the Malheur National Wildlife Refuge approximately 35 miles south of Burns, Oregon. The Bureau of Sport Fisheries and Wildlife's Bird Banding Laboratory at the Patuxent Wildlife Research Center reported the band came from a male American Widgeon banded on 6 February 1966 at the Salton Sea National Wildlife Refuge near Westmorland, Imperial County, in southern California. The duck band was carried from bander to eagle nest, a linear distance of 984 miles, in less than 5 months.—Gary L. Hickman, Division of River Basin Studies, Bureau of Sport Fisheries and Wildlife, 1031 Miracle Mile, Vero Beach, Florida 32960.