

feeding young on April 16 and by his band, proved to be M-42. However, he had abandoned his mate of the previous two seasons, his new mate when caught was found to wear band 39-7612 and was one of his own daughters of the 1943 brood. This mating was a success and six young were banded April 20 with bands 39-7673-39-7678 inclusive.

No further records were made of any individuals of the three family groups until December 14, 1944. At dusk on this evening I noticed a bird of this species apparently going to roost in a nesting box about 75 yards from the nesting sites of 1942 and 1943 mentioned above. I carefully closed the door on the box trapping the bird inside. Much to my surprise, instead of one bird being inside there were four. Of these four birds three of them wore bands. They were M-42 and his mate of 1942 and 1943, F-42 and 39-7677, either a son or daughter of M-42 by his 1944 wife. The unbanded bird was banded and all four were placed back in the box where they had presumably sought protection from the cold.

In the spring of 1945, a nest of this species was found in the same nesting box that the species used last year. I looked at the nest April 7, which was an unusually cold day for the season, and both parents were caught in the nesting box while brooding four newly hatched young and they proved to be M-42 and F-42, the third mating of these individuals in four years. When I went to band the nestlings a few days later, I found them gone, probably destroyed by some predatory animal.

Another observation was made of the nesting box May 6 and was found to contain another nest of the species with four eggs. May 18 I caught the parents while feeding the young and they proved to be M-42 and a new wife banded at my station February 8, 1945 with band 43-47541. The three nestlings were banded May 19 with bands 43-47556-43-47558 inclusive.

In conclusion, a banded male Brown-headed Nuthatch was found to be a parent of 27 young in four years. He mated with the same female for three years, two of them consecutive in a restricted area. In the third season he moved some distance away from this area and mated with his own daughter. The following winter the male was found roosting in a nesting box near the original nesting site with his original mate, an unbanded stranger and one of his own children of the 1944 mating. In the spring of 1945 the original pair was found nesting in the box used by the species last year. Upon the destruction of the four nestlings by some predatory animal, the male cast aside his original mate and mated with a female banded at my station last winter and successfully raised a brood of three.—RAYMOND J. FLEETWOOD, Fish and Wildlife Service, Round Oak, Georgia.

Trap Behavior of Bronzed Grackles.—In *Bird-Banding*, April, 1937, pp. 78 and 79, Mr. Geoffrey Gill reported on the trap behavior of Purple Grackles at his banding station at Huntington, Long Island, New York, which he judged to be very similar to those taken by Mr. Horace McCann at his station at Paoli, Pennsylvania, which McCann reported on in *Bird-Banding*, October, 1931. In this paper, I will give some notes on the trap behavior of the Bronzed Grackle (*Quiscalus quiscula aeneus*).

I began banding birds in early summer in the year 1924, and I have operated a station since that time, except from May 19, 1925, to July 31, 1927; and November 2, 1945, to December 16, 1945. To date I have banded 151 Bronzed Grackles, and all were banded near McMillan, Luce County, Michigan.

The first Bronzed Grackle that I trapped to band was on May 8, 1929. Since then, two years (1932 and 1945) slipped by with not a single grackle trapped

by me. Below is a table giving the number banded, repeats, returns, and also the number of recoveries received each year since the first capture was made.

| Year | Number Banded | Repeats | Returns | Recoveries |
|--------|---------------|---------|---------|------------|
| 1929 | 2 | — | — | — |
| 1930 | 15 | 2 | — | 1 |
| 1931 | 3 | — | — | 1 |
| 1932 | — | — | — | — |
| 1933 | 1 | — | — | — |
| 1934 | 1 | — | — | — |
| 1935 | 14 | 6 | — | — |
| 1936 | 22 | 2 | — | — |
| 1937 | 5 | — | — | 1 |
| 1938 | 7 | — | — | 1 |
| 1939 | 2 | 1 | — | — |
| 1940 | 42 | 2 | — | — |
| 1941 | 6 | — | 1 | 1 |
| 1942 | 4 | — | — | — |
| 1943 | 12 | 1 | — | 1 |
| 1944 | 15 | — | — | — |
| 1945 | — | — | — | — |
| Totals | 151 | 14 | 1 | 6 |

Two Bronzed Grackles that I banded October 20, 1930, were retaken on the same day, with No. A355404, my eighth grackle to band, giving me my first repeat record by being retaken fifty minutes before A355403 repeated. I got only 14 repeat records from the 151 that I banded, and these were from 11 birds. No. 34-308925 was the only bird that repeated more than once. It was banded April 15, 1935, and its four repeat records were on that same day. It repeated first in the same trap at the same place as of banding, and the other three times in my Glenhaven 4-cell trap and was taken from one of the cells once, and another cell twice. This was a female. Of the other ten birds that repeated only once each, five repeated on the same day they were banded; a male and three females not repeating at the location of banding, and a male that was retaken at the place of banding. The five grackles that repeated once, and not yet mentioned, were not trapped at the place of banding. These were: a female repeated two days after banding; a female three days later; a male four days later; a male 12 days later; and a male 31 days later.

My first and only return of the Bronzed Grackle came from the 59th bird of this species banded. It was ad. male No. 34-359045 banded April 19, 1937; return date, April 16, 1941; and not at the same location as on the date banded.

My first Bronzed Grackle recovery was from the second grackle that I banded. Below is a list of my recoveries. Band number, age, sex, date banded, date recovered, etc.

623805 ad. m. May 10, 1929. Nov. 15, 1929. Killed by S. Henderson at Round Lake, Illinois.

A355404 ad. m. Oct. 20, 1930. Dec. 19, 1930; shot by A. Briggs, at Holland, Missouri.

34-353755 ad. m. Apr. 18, 1936. Apr., 1937; taken in Menominee Co., Mich., by A. W. Clifford.

34-353756 ad. m. Apr. 18, 1936. Apr. 19, 1938. Killed at McMillan, Michigan, by Dean L. Young.

40-360701 ad. m. July 11, 1940. Oct. 2, 1940. Taken at McMillan, Michigan, by Merwin Monroe.

41-306614 ad. m. July 23, 1941. Oct. 27, 1942. Shot at Lena, Wis., by Mr. Mark Netzer.

Judging from the recoveries from outside Luce County, it appears that the migration route the species that frequent Luce County takes is around the north and west sides of Lake Michigan, then across the Straits of Mackinaw, or along the east side of Lake Huron.—OSCAR MCKINLEY BRYENS, 231 South Main Street, Three Rivers, Michigan.

Wanderings of the Mockingbird.—The Mockingbird is usually considered a sedentary species and the majority of the birds probably live throughout their existence within a short distance of the nest. Banding records indicate that some birds do wander to considerable distances, though there is no evidence of anything like definite migration. We would expect these wanderings to occur principally near the northern limit of the range, but, actually, the majority of the long-distance recoveries are in the sections where the species is an abundant "resident." It has become apparent that journeys up to 20 miles are by no means extraordinary, but those beyond 75 miles seem worth recording.

In the list of individuals that follows an asterisk before the number indicates that the bird was known to be a bird of the year when banded.

*38-210044, banded at Nashville, Tenn., April 16, 1938, by Mrs. F. C. Laskey, and "captured" about 80 miles away at Camden, Tenn.

A287272, banded at Fairhope, Alabama, August 18, 1931, by Mrs. W. H. Edwards, was "taken" about 90 miles away at Lower Peach Tree, Alabama.

B226502, banded at Haddonfield, New Jersey, November 25, 1932, by Edward W. Marshall, Jr., was found dead May 25, 1935, at Shadyside, Maryland, about 110 miles away. The bird had repeated daily for three months at the banding station.

*36-215357, banded at Nashville, Tenn., June 23, 1936, by Mrs. F. C. Laskey, was found dead in March, 1937, at Rising Fawn, Georgia, about 110 miles from the banding station.

*A297380, banded at Nashville, Tenn., June 6, 1932, by Mrs. Arch Cochran, was found entangled in a thicket and released unharmed, May 22, 1933, at Corinth, Mississippi. This was a flight of at least 128 miles.

604325, banded at Thomasville, Georgia, April 12, 1930, by J. F. L'Hommedieu, was "caught" October 6, 1930, at least 135 miles away at Gulf Hammock, Florida.

*34-224540, banded at Nashville, Tenn., May 26, 1934, by Mrs. F. C. Laskey, was killed January 29, 1936, at Fulton, Miss., a distance of 160 miles.

*B161839, banded at Winfield, Alabama, July 6, 1931, by J. S. Brindley, was found dead about March 20, 1932, more than 160 miles away at Leroy, Alabama.

*40-226245, banded at Nashville, Tenn., June 1, 1940, by Mrs. F. C. Laskey, was found dead in April, 1942, at Cumming, Georgia, 200 miles away.

A270337, banded at Summerville, South Carolina, March 7, 1931, by William P. Wharton, was captured and escaped unharmed, about February 18, 1932, at Plymouth, North Carolina, about 290 miles distant.

35-331179 (probably a bird of the year), banded at Collinsville, Illinois, September 8, 1939, by Percy H. Miller, was found dead January 14, 1940, at New Brighton, Beaver Co., Penn. This indicates an extraordinary flight of at least 500 miles. The band was sent to the bureau.—MAY THACHER COOKE, U. S. Fish and Wildlife Service, Washington, D. C.

Cardinal not always Sedentary.—One of the many surprises that have come to light as a result of birdbanding is that species that have been supposed to be entirely sedentary in their habits sometimes make fairly long journeys. The following records for the Cardinal are an example. In all probability most of the individuals of this species live out their entire existence within a mile or two of the nest, but banding has demonstrated that a few of them have been really adventuresome.