rough-winged swallows flew out of the same tunnel to the inside of a mist net near Union Lake, Oakland County, Michigan. This was a positive identification as I was still adjusting the net as the four birds flew out of a single tunnel and became pocketed.—Walter P. Nickell, Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Returns on Aged Cardinal.—On 17 April 1934 Mr. Victor H. Cahalane, director of the Cranbrook Institute of Science, banded a female Cardinal (*Richmondena cardinalis*) near the museum in Bloomfield Hills, Michigan. This bird returned to the same banding traps eight times in more than ten years. On three of these eight returns she was accompanied by three different unbanded males. On four occasions she was captured alone and on one, she was captured with the same male which had been her companion of about a year before. On her last appearance 15 November 1944, she was at least 11 1/2 years old. This may be the second oldest cardinal recorded. Frederick C. Lincoln in *Migration of American Birds*, 1939 (p. 138) lists a cardinal fully thirteen years old when last seen. Two others were ten and nine years old respectively.

Band Number: 34-206915

Date Banded: 17 April 1934

Date of Return	*With Male*	*Alone*
11 May 1937	36-210498	
30 April 1939		X
12 May 1939	37-164915	
11 April 1940	37-210450	
30 April 1941	37-210450	
26 December 1941		X
18 November 1943		X
15 November 1944		X

—Walter P. Nickell, Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Nine-year-old Chickadee.—On July 17, 1954, a Black-capped Chickadee (*Parus atricapillus*) was given band number 22-52697 at my station here in Groton, Mass. It has returned every year, except 1962, since then, the last date being October, 1963. Thus this little fellow must be at least nine years and four months old, which I think must be a pretty good age record for a chickadee.—William P. Wharton, Groton, Mass. *Ed. note*: this is the oldest bird of this species I know of. One which reached 9 years, 1 month and 14 days is reported in *The Ring*, **34**: 180; one of 8 years and 4 months in *EBBA News* for October, 1945; and one of 7 years and 8 months in *Bird-Banding*, **21**: 17. Has any reader an older Chickadee?

A Local Population of Blue Jays in Connecticut.—Miss Nunneley's paper (in this issue) has prompted a look at my own banding of Blue Jays in West Hartford, Conn. In the period from May, 1954, through March, 1963, 406 were banded. While this sample has the advantage of a longer time span than the Granby sample discussed by Miss Nunneley, the total number of birds is less. The birds also represent much more erratic banding, often with no jays banded for months on end. Most of my jay banding is a byproduct of something else, such as the banding of Evening Grosbeaks, Purple Finches and Common Grackles, with a large battery of single-cell traps. These traps are often idle from August to late fall, and at other times may be idle because of business or other trips, illness, or the pressure of other work. This illustrates how even at stations with fairly substantial numbers banded overall, it may be dangerous to use the fluctuations in even a fairly stable species as evidence of an actual fluctuation in the population. For reasons outlined by Miss Nunneley, the Blue Jay is not as simple a species to pin down status changes for as it may first appear. Any discussion of the problem, such as her division of records by season, necessarily involves some assumptions, and some rather arbitrary divisions. Trying to get around these problems completely by studying a small population intensively breaks

down on such points as the apparent tendency of the species to be in the immediate area without repeating frequently in traps. Trying to get around these problems by using a larger sample normally means lumping the data from several stations, without always knowing what fluctuations represent lapses in banding effort, or whether some stations are attractive to the species at one season but not another.

Any indications from my jays are thus a matter of opinion more than of statistical analysis. One striking parallel to the flight of May, 1962, does appear in my data: 54 birds banded here in May, 1954, almost all in the first half of the month (compare the next highest monthly total during these years, 20 jays). Of these 54 jays, only 5 returned to the station 3 months or more after banding. Of 77 jays (including these) banded in May, from 1954 through 1958, only 12 returned; this means that 9 out of the 23 banded in years other than 1954 returned. By comparison, of 14 birds banded in March, 1958, no less than 10 returned, mostly in later years. Out of 31 jays banded in March in the years 1956 through 1959, 16 returned; this means that 6 out of 17 banded in years other than 1958 returned. Looking at these figures as a whole, the greater number of returns for March birds compared to May is based on a comparison of March, 1958, with May, 1954, as if we take out these two years, jays banded in May actually show a slightly higher return ratio (on a small sample). If in Connecticut we experience any obvious flight of jays in spring, it comes in early May; birds banded during the peak of such a flight appear to be mostly migrants. The comparable southward flight is in September, at a time when I am rarely trapping. I believe that the jays banded in March, 1958 were mostly local residents, rather than arriving summer residents — the peak in that month is caused by a gap in banding previously, with no jays banded in December, 1957, or January and February, 1958, because of illness. I rather doubt that many jays which return to my station in a following year are migrants going through. The odds on such returns, under circumstances which don't force birds to concentrate in a few spots because of specialized habitat preferences, are extremely low (Blake, "On the Problem of the Return of Migratory Birds," *Bird-Banding*, **22**: 114-117, July 1951).—E. Alexander Bergstrom, 37 Old Brook Road, West Hartford, Conn.

Band Loss by Blue Jays.—For all but the shortest-lived passerines, it has long been apparent that band loss distorts survival data. Though a handful of cases may be known or suspected from plumage peculiarities if the loss occurs within a few days or weeks, any real attempt to check band losses requires the use of two numbered bands (on different legs, to avoid injury to the bird by "flanging" as the result of two bands rubbing together). Systematic rebanding has taken place on seabirds (such as the Common Terns banded by the Austins on Cape Cod), but to a very limited extent on passerines. It would appear of little value on the average small bird with an average expected life of only a year or two from the time of leaving the nest. I have rebanded most of my Blue Jays and Common Grackles three to four years after original banding, or whenever the bird was first retaken thereafter. These species average a somewhat longer life than the smaller passerines, and are not subject to extreme band wear.

My data are unfortunately quite fragmentary, despite the rebanding of many hundreds of birds. It would be far preferable to have enough data for statistical treatment. However, the size of the sample from my station will not increase radically, and the recent change in number 3 bands (greater hardness) will affect the rate of band loss appreciably, presumably for the better. The great lack of published data on passerines makes even limited information of some interest.

The time for rebanding was set rather arbitrarily, based on the retaking of many birds after about four years, with bands obviously far thinner than originally. Most of those rebanded had obviously thin bands, but rebanding took place even for those where wear was less extreme. No objective measurement was applied. The most exact measure of band wear would be the weight of the band on a delicate laboratory scale, but this cannot be determined without taking the band off. It would be impractical, and probably harmful to the bird, to try to put such a band back on the leg. The band is then thin enough to make smooth reforming most difficult, and even if this could be done, the band has been weakened by opening and reclosing (in general, removed bands should not be reused, even if the band is new — see Blake, "Reapplying Bands", *Bird-Banding*, **24**: 107, July 1953). Use of a feeler gauge for thickness might add accuracy, provided it can be assumed that the wear is quite even (as it normally is for the Blue Jay).