females lay fewer eggs than ASY's, SY adults occasionally do not feed frequently enough to maintain the normal growth pattern of the young, SY adults often build poorly constructed nests with little or no mud, overall nest success is lower in SY adults, adults do indeed return to the same colony (19.6%) box and/or compartment, sexes are balanced in a stable colony, males or females are sometimes in excess in a new colony, SY adults are predominate in a new colony, the limiting factor in colony size is most likely the number of boxes and/or compartments available for nesting and, finally, adults and young do indeed use the boxes for roosting after nesting and fledging is complete (even boxes not their own).

All of our results are tentative and subject to change after further study. Much additional study will be required before we can come up with conclusive answers to many of these questions about the Purple Martin.

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## Dark-eyed Junco with 13 rectrices

## Robert P. Yunick

An immature female (wing chord 73 mm, pale gray plumage) Dark-eyed Junco (Junco hyemalis) possessing 13 rectrices was captured during the summer of 1974 on its natal grounds at Jenny Lake, near Corinth, Saratoga County, New York. When first captured and banded (1300-68024) on 3 August, the bird was still in streaked juvenal plumage and appeared to possess a normal complement of 12 rectrices. The outer three right rectrices (RR-4, 5 and 6) were plucked routinely as part of an ongoing study to determine changes in tail patterns of subsequent plumages.

On 20 August the bird was recaptured and found to have replaced RR-4 through 6 to the extent of 35 mm or 53.0 percent of total tail length after 17 days. In addition, beyond RR-6 was a partially regrown seventh rectrix which measured 56 mm or 84.8 percent of total tail length. The body molt was well advanced to give fresh, pale-gray plumage; the head molt was about one-half completed; the lesser coverts had been replaced; and the middle and greater coverts were in sheaths. By 2 September, after 30 days of regrowth, RR-4 through 6 were 95.3-percent regrown. RR-7 was completely regrown; and the body, head and covert molt were complete.

Using other data on the rate of rectrix replacement in this species (see Yunick, R.P. Bird-Banding: in press), the following can be reconstructed. At an

average regrowth rate of 3.14 mm/day, RR-7 which measured 56 mm on 20 August would have had to break through the skin about 18 days previous to capture, or on 2 August, one day before the bird's initial capture. However, this rate is variable in individuals and this date could be accurate to within only  $\pm$  two days. It is unlikely that the removal of RR-4 through 6 provided any stimulus for this additional rectrix to grow. An artificially plucked rectrix requires four to nine days to show measureable regrowth. Furthermore, of the more than 500 tails that have been plucked, regrowth patterns of 110 have been recorded, and in no case has there been any indication of this removal causing added feather growth.

At the time of initial capture this immature could have been up to one month out of the nest but more than likely, judging from its plumage condition, was only about two weeks out of the nest. It is possible that this bird fledged with 13 rectrices and, prior to capture on 3 August, accidentally lost RR-7, and was in the process of regrowing it. One cannot rule out completely, however, the possibility that some unknown stimulus prompted growth of this thirteenth rectrix after fledging.

There were no further captures of this bird during the summer of 1975.

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