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An Evaluation of Techniques for Marking Cardinals.—From April through June in 1979, 1980, and 1981, we marked male Cardinals (*Cardinalis cardinalis*) near Nacogdoches, Texas for individual recognition by several methods. We report the results here.

In 1979 we placed colored plastic leg bands on one leg of each captured Cardinal. On the other leg we placed a U.S. Fish and Wildlife Service aluminum band. This technique proved unsatisfactory. Of 9 marked males we made positive identification only 17 times in 223 h of observation. The small colored bands were often shielded from view by birds' feathers or foliage, and it was difficult to distinguish colors at long distances.

In 1980 we marked Cardinals on their remiges, rectrices, and breast feathers with airplane dope (paint) in a variety of colors, but this also proved unsuccessful. Breast feathers matted after paint application, paint was preened out by the birds, and paint colors were difficult to distinguish. Marked male Cardinals often had a bedraggled appearance. Detections of painted birds, when adjusted for search time (218 h) and number of marked males (10) was only slightly higher (21) than for Cardinals only color-banded (17).

In 1981 we tried 2 additional techniques of marking Cardinals. We first cut the barbs from the rachis on the distal portion of a rectrix of each bird and applied color tape face-to-face on both sides of the rectrix trimming the tape to the same shape as other rectrices. This proved unsuccessful because subsequent captures of 3 birds marked in this manner showed that they had bitten off the taped portion of each taped rectrix.

The last technique we tried was to affix a different colored streamer (red, yellow, white, blue) around the colored leg bands of each bird. The streamers were strips of colored plastic tape 10 mm wide with adhesive material on one side taped face-to-face and trimmed to a length of 20 mm. Detections of male Cardinals marked with these streamers were approximately twice (41) detections with colored bands (17) or paint (21), when numbers of detections were adjusted for number of males marked and time of observation. A non-parametric chi-square test of number of sightings showed a highly significant difference ($P < .01$) among marking techniques.

Although Cardinals have been observed to mutilate (Young, *Wilson Bull.* 53:197-198, 1941) and remove bands (Lovell, *Bird-Banding* 19:71-72, 1948) we noticed little of this activity. In 3 years of banding 55 male and female Cardinals with 13 recaptures of 11 individuals, only 2 incidents showed recaptured Cardinals missing colored plastic bands. We recaptured no color-marked birds with missing aluminum bands, noticed no damaged aluminum bands, and assumed none was removed.

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Unusual Nest Attentiveness of An Eastern Phoebe.—On 15 April 1981 we noted an Eastern Phoebe (*Sayornis phoebe*) building a nest atop a shelf on the Muellers' patio about 8 km west of Chapel Hill, North Carolina. Nest building had probably begun a few days earlier because the rate of construction was slow when first observed and increased in the few days before completion on 23 April. The nest was 3 m from the front door and .5 m from a porch light, ideally situated for observation at all hours. The nest was checked a minimum of 4 times daily, from early morning until several hours after dark. The phoebe began spending the night on the nest on 23 April, the day the nest was completed, and was on the nest every night through 26 May. The phoebe tolerated the switching on-and-off of the porch light and the passage of people within 2 m of the nest.

The first egg was noted at 07:20 on 26 April. The phoebe was on the nest again at 18:20 and remained there for the night. At 08:20 on 27 April the bird left the nest as one of us left the front door. Two eggs were present and we marked them. The third egg was laid before 07:10 on 28 April, the fourth between 06:25 and 08:45 on 29 April, and the fifth after 08:00 on 30 April. Although the bird spent every night on the nest, our fragmentary observations suggest that regular diurnal incubation did not begin until 3 May. On 29 April the nest was checked at least every half hour between 08:45 and 12:00 and the bird was not on the nest. Observations resumed at 15:00 and no bird was seen through 18:00. The bird was back at 20:00. In five spot checks between 07:30 and 18:15 on 30 April, no bird was observed. On 1 May, the first day with a complete clutch, the bird was incubating from 06:50–08:40 and then was absent until at least 10:15. Observation resumed at 16:30 and the bird returned at 17:05. On 2 May, the nest was unattended from 07:00 through 10:10. Observation was not resumed until 15:30, and the bird returned at 15:45. After 2 May, no absences of more than ca. 30 min were noted until well after the eggs hatched.

One of the first two eggs laid had hatched by 08:00 on 15 May. The other "first" egg plus the third had hatched by 19:45. The fourth egg laid hatched before 11:30 on 16 May, and the fifth before 14:00. Two young were found on the patio floor below the nest at 11:30 on 16 May, one of them dead. The other, which appeared weak, was returned to the nest. We suspect it did not survive because only 3 young were found in the nest the next morning. The phoebe spent every night on the nest through 26 May, at which time the young were sufficiently large so that the adult scarcely touched the rim of the nest. The young disappeared during the night or early morning of 26–27 May. The nest was undisturbed, showing no signs of predation, but no young could be found in the vicinity. The young were only 11 to 12 days old at this time, and their physical development appeared insufficient for flight. We doubt that they fledged successfully. Adult phoebes, but no young, were seen and heard in the immediate vicinity through 29 May. Stoner (N.Y. State Mus. Circ. 22, 1939) found that Eastern Phoebes fledge at an age of 16 or 17 days.

Roosting in the nest has been noted in passerines that breed in holes or in covered nests. Some colonial non-passerines spend considerable time on the nest before egg-laying. However, we have been unable to find any account of a passerine spending the night on an open, cup-shaped nest before incubation begins. It is likely that few observers have looked for the possibility, but Nolan (Ornithol. Monogr. 26:203, 1978) found that Prairie Warblers (*Dendroica discolor*) did not begin sleeping on the nest until the night before