

**Indigo Bunting Nesting in Colorado.**—On August 5, 1953, Robert J. Niedrach and I observed a singing male Indigo Bunting (*Passerina cyanea*) east of Morrison, Jefferson County, Colorado. Nesting activity was suspected when the bird was again seen at the same place on August 7. The next morning, John W. Flavin and I located the nest in marginal weed growth of a dense roadside thicket. It contained four well-grown young and was placed two feet high in a thistle (*Cirsium lanceolatum*) associated with a heavy stand of ragweed (*Ambrosia trifida*) and cordgrass (*Spartina* sp.). As is often the case, the nest contained facial tissue and cigarette papers in the foundation; Angus cattle hairs were used in the lining.

A second male of this species was seen in the vicinity, as well as many of the Lazuli Bunting (*Passerina amoena*).

Returning early on August 9, we found only three young in the nest. Dr. Alfred M. Bailey secured stills and movies of the male feeding the nestlings (plate 24). The female did not come to the nest. Two young were banded, the third eluding capture. On August 10, we found the nest destroyed by mowing.

Though there are ten published records of the occurrence of *Passerina cyanea* in Colorado, this is the first established instance of breeding. The observations of Dearing and Dearing (Condor, 48: 139–140) on nesting activity near Flagstaff, Arizona, are apparently the only such record for the species west of central Colorado—A. LANG BAILY, *Denver Museum of Natural History, Denver, Colorado*.

**Phoebe Nests with Three Cowbird Eggs.**—Two Phoebe (*Sayornis phoebe*) nests, located on small cliffs near water in Seneca, Maryland, had each been victimized three times by Cowbirds (*Molothrus ater*) when first discovered on May 16, 1953. The first nest held three Cowbird eggs but none of the Phoebe. Since the three eggs differed markedly from one another in background color and in distribution of spots, they were presumably laid by different Cowbirds. On May 20, two newly-hatched young were present, but on May 23 the nest was empty. The second nest held two newly-hatched Cowbirds, one Cowbird egg, and three Phoebe eggs on May 16. On the following day the Cowbird egg hatched. The Phoebe eggs gradually disappeared in the course of the following week. On May 24 the young cowbirds were in the nest, but it was empty when visited late in the afternoon of May 25. This may have been the tenth day after hatching for two of the Cowbirds and the ninth day for the third, suggesting that the Phoebes had successfully fledged three young Cowbirds.—LAWRENCE KILHAM, *8302 Garfield St., Bethesda, Maryland*.

**Unusual Nesting Behavior of the Brown-headed Nuthatch.**—On the campus of Georgia Teachers College, Statesboro, Bulloch County, Georgia, during April and early May, 1951, two pairs of Brown-headed Nuthatches (*Sitta pusilla*) simultaneously nested in a single cavity. We spent at least one and sometimes as many as three hours at the nest each day from April 5 through May 1. A few observations were made prior and subsequent to these dates.

The nesting cavity was located in a dead stub of a pecan tree about seven feet above the ground. In addition to the nuthatches, a pair of Eastern Bluebirds (*Sialia sialis*) nested in the same stub about nine inches above the opening to the cavity used by the nuthatches. Why this particular stub was so populated is difficult to ascertain. Nearby there were many pecan trees with similar dead stubs seemingly as suitable as nesting sites.

The nuthatches did not molest the bluebirds nor attempt to interfere with their nesting. However, the bluebirds constantly attacked the nuthatches. In spite of this, the nuthatches seemed to have no fear of the bluebirds and frequently alighted



BAILY: INDIGO BUNTING NESTING IN COLORADO. PHOTOGRAPH BY A. M. BAILEY.

on the same branch with them. While the nuthatches were feeding young from outside the nesting cavity, the bluebirds often forced them to retreat within the cavity. The bluebirds, as far as we know, made no attempt to destroy the nest of the nuthatches.

At the start of our observations on this nest, we were not aware that two pairs of birds were using the same cavity for nesting. Therefore, we do not know if both pairs started work on the nest simultaneously. We do know that both pairs contributed in the construction of the nest, as we observed three of the adult birds carrying nesting material while the fourth adult was known to be in the nesting cavity. The nest itself was an excavated cavity about nine inches below the opening in the limb. The bottom of the cavity was lined with dry grass, strips of inner bark, and the "wings" of pine seeds.

The mating of at least one pair of the nuthatches was observed several times. On April 8 one nuthatch approached the nest with food in its mouth and called. He fed the female, who was on the nest, and then both flew to a nearby tree. The female started to vibrate her wings rapidly (as did any of the adults while feeding the young). The male then mated with her. Both flew from the branch. While in flight they came together for a short time and then broke apart. These actions were repeated several times.

The number of eggs laid is not known nor is it known whether they were laid by one female or both. When we opened the nesting cavity for the first time we found seven young. All seven appeared to be approximately the same size which would indicate that all hatched about the same time. According to Bent, the average clutch-size for this species is about five or six eggs while the maximum reported is nine. Thus the young may have been the progeny of just one of the two pairs involved.

We know that both pairs of adults helped feed the young, as we observed all four adults carrying food at one time and awaiting their turn to feed the young. Also both pairs helped remove excreta from the nest. There seemed to be no conflict whatsoever between the two pairs of birds. Several times we observed a pair of birds approach the nest. One member of this pair would then feed the incubating bird (one of the other pair); then both members of the first pair would fly away together.

Sixteen days after the young left the nest, we observed seven young and two adults within two hundred yards of the nesting site. We assume that this was the same family group that we had been studying. The other pair of nuthatches apparently had abandoned the group sometime after the young left the nest.

There are several records in the literature of two females of the same species or of two full pairs of the same species sharing a common nest. Some of the species reported nesting in this manner have been Song Sparrows, Tree Swallows, Robins, Wood Ducks, and canaries. As far as we know this is the first report of this behavior in the Brown-headed Nuthatch. Some of the literature relating to this problem is summarized by Brackbill (*Auk*, 69: 302-307, 1952).

The authors gratefully acknowledge the help of Gibson Johnson, Jr. in making some of these observations.—WARREN J. HOUCK, *Humboldt State College, Arcata, California*, and JAMES H. OLIVER, *Florida State University, Tallahassee, Florida*.

**A Simple Method for Obtaining Attentive Data.**—The accumulation of data concerning the amount of time spent in incubation by a female bird requires either many hours of observation or some instrument (Kendeigh, *Illinois Biol. Monogr.*, 22[1-3]: 5-10, 1952). However in many cases because time or an instru-