GENERAL NOTES

A Trapping Technique for Burrowing Owls.—Most investigators of Burrowing Owl (*Speotyto cunicularia*) biology have not utilized numbers of marked birds. Brenckle (1936) reports banding 376 Burrowing Owls but does not detail his method. The habitat preference of Burrowing Owls makes mist nets unsatisfactory for reasons listed by S. G. Martin (1969). Mechanical spring traps as described by Lockley and Russel (1953) are usually inadequate for several reasons: 1. Struggling bait may trigger the trap prematurely: 2. Burrowing Owls may hit the bait in a stoop without stopping, spring the trap, and evade capture: 3. The foraging of Burrowing Owls is greatest at night when darkness hinders observations of the trap. The Bal-Chatri described by G. R. Austing (1964), modified for small raptors, is incompatible with the method used by the owls in capturing prey. The use of padded claw traps on artificial perches works, but may fracture the bird's leg. None of these methods captures nestlings.

I have used Havahart traps with great success. This involves modifying the first 30 inches or so of the burrow tunnel to accommodate a 7 x 25 inch Havahart. When inserting the trap into the tunnel care must be taken to insure all movable parts are free. Any animal entering or leaving the burrow thus must pass through the trap and over the triggering pan. Traps of this size can be inserted into a burrow with minimum excavation.

The most successful time to trap was early in the breeding cycle. At this time the owls have a strong attachment to the burrow and will not abandon it if it's disturbed. Traps set after the young fledged usually failed because the owls were independent of any particular burrow. Trapping success was greatest during the peak feeding periods: 1800 to 2400 and from 0400 to 0600.

LITERATURE CITED

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BRENCKLE, J. F. 1936. The migration of the western burrowing owl. *Bird-Banding* **7**: 166-168.

LOCKLEY, R. M. and R. RUSSEL. 1953. Bird-Ringing, Crosby Lockwood and son Ltd. London. 199pp.

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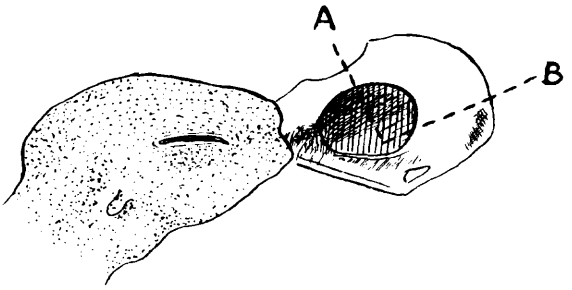
Sunflower seed carrying by Red-bellied Woodpeckers (*Centurus carolinus*). We first began feeding birds at our present home 5 miles west of Chapel Hill in November 1969. A pair of Red-bellied Woodpeckers rapidly became regular visitors to our feeder. The female of this pair was readily recognizable by a peculiar patch of black just anterior to the red on the nape. The birds fed on suet and millet, but a favored food was the seeds of the sunflower (*Helianthus annuus*). The seeds were carried one at a time to nearby trees, wedged into a suitable crevice, the seed coat broken by hammering with the beak, the meat broken to pieces by hammering and the bits were then consumed. This type of feeding behavior is commonly observed in woodpeckers of this genus. In early May, I noted seed-carrying behavior which I believe has not been described previously for woodpeckers. The birds picked up as many as 6 or 7 sunflower seeds at a visit, carefully maneuvering the seeds so that each was placed with the long axis across the beak with the ends protruding on each side of the beak. A bird spent as much as 80 or 90 seconds picking up seeds and maneuvering them into place. When the bird had a full load of seeds, its appearance was reminiscent of that of a Common Puffin (*Fratercula artica*) carrying a load of fish, and my wife and I referred to it as "puffin behavior." The birds carrying seeds invariably flew off to the west to an area in which I suspected they were nesting. I was unable to find the nest in the dense forest about our home. The seed-carrying behavior was observed only during an 11-day period. Three days after the last observation of seed-carrying, young woodpeckers appeared with our resident pair at our feeder and were fed suet, millet, and sunflower seeds by their parents. The sunflower

seeds were taken one at a time to a suitable crevice and the fragments of meat were fed to the young.—Helmut C. Mueller, Dept. of Zoology, 205 Wilson Hall, Univ. of North Carolina, Chapel Hill, N. C. 27514.

Removal of Cranium During Preparation of Study Skins for Later Ossification Studies. A knowledge of the degree of ossification of the cranium is essential when doing age criteria studies for many passerines. The cranium condition, if recorded, is usually marked on the specimen label but the degree of ossification is often unknown and the experience and accuracy of the preparator in judging skulls is often questionable. However, the fresh specimen can be prepared as a study skin in the normal manner with the cranium detached and tied to the legs beside the specimen tag for permanent reference.

Figure 1. Cuts made to remove cranium.



The bird is skinned in the usual manner with the skin inverted over the head. The ears, eyes, tongue, base of the skull, and the brain are removed in the normal manner. Now three cuts need to be made to remove the cranium. The first cut (see A in figure 1) is across the roof of the orbits (between the eyes) and the next two cuts (see B in Figure 1) are on a line parallel to the lower mandible through the squamosal bones. The cranium is now free from the skull and should be attached later to the legs of the specimen by pushing threaded needle gently through the side region (squamosal bone) and tying to the legs. While turning the skin right side out over the remaining parts of the skull, two balls of cotton should be held in the normal position of the eyes and a smaller ball of cotton held behind these to replace the cranium that was removed. With a little practice the study skin will turn out as well as one with the cranium intact.

Specimens prepared in this manner will greatly increase our knowledge of the ossification process in passerines and can be extended to other orders so that aging methods may be worked out in later studies.—Gilbert S. Grant, Rt. 1, Box 363, Sneeds Ferry, N. C. 28960.

Recovery of Foot-Pox Diseased Red-Winged Blackbird.—S. Prentis Baldwin (*Auk*, **39:** 219) reported that nearly 10% of the Chipping Sparrows (*Spizella passerina*) which he trapped in 1921 at his Thomasville, Georgia station were infected with foot-pox. T. E. Musselman (*Auk*, **45:** 137) reports that in 1922 L. R. Talbot, banding at Baldwin's station, found that nearly 25% of Chipping Sparrows he banded had foot-pox. The following year, 1923, Musselman (*ibid.*) banded 519 Chipping Sparrows and had 44 returns. Of these 563 sparrows, 23% were suffering from foot-pox and 19% showed evidence of the disease in previous years but had healed entirely. John B. May (*Auk*, **41:** 456) banding at the same station in 1924 found the Chipping Sparrows very scarce and almost none with active foot-pox disease but they did have evidence of healed old cases. He was unable to collect an active sample.

C. Brooke Worth (*Auk*, **73:** 230-234) found foot-pox occurring naturally in the Blue Jay (*Cyanocitta cristata*), Chimney Swift (*Chaetura pelagica*) and Slate-colored Junco (*Junco hyemalis*). He conducted experiments with "Junco Virus" taken from a foot-pox lesion and found it infected some but not other birds introduced artifically. Herman, Locke and Clark (*Bird-Banding*, **33:** 191-198)