

**Razorbill nesting at Matinicus Rock, Maine.**—Palmer (*Maine birds*, Cambridge, Massachusetts, Bull. Mus. Comp. Zool., vol. 102, 1949: p. 283) sums up the status of *Alca torda* as "In summer, a few present but not definitely known to breed at Machias Seal Island (Canadian territory), and rare non-breeder westward to Muscongus Bay." The species apparently nested on islands off the entrance to the Bay of Fundy during the 19th century, but the 20th century records compiled by Palmer are open to question.

My wife and I have spent a week or two on Matinicus Rock, Knox County, almost every summer since 1950. We saw Razorbills from time to time, but none under circumstances that suggested nesting until 1965, when on 12 July a young Coast Guardsman and I found a Razorbill egg under a large boulder; this egg had not hatched six weeks later.

In 1967 we arrived at Matinicus Rock on 11 July and daily saw from three to seven Razorbills at the northeastern end of the island. On 17 July we watched a bird carrying food as it circled the area five times and finally alighted behind a large boulder. Under this we soon found the nesting place and removed the single egg, which was in the process of hatching, long enough to photograph it. Copies of the photographs, showing the chick's bill and a Black Guillemot egg for comparison, are on file with the Portland (Maine) Museum of Natural History and the Patuxent Wildlife Research Station, Laurel, Maryland. With me at the time were my wife Harriet, Walter Kennedy, officer-in-charge of the U. S. Coast Guard station on the island, and two Coast Guard corpsmen.—CARL W. BUCHHEISTER, *Sharon, Connecticut*.

**Nest protection by the Brown-headed Cowbird (*Molothrus ater*).**—Numerous observations on the behavior of Brown-headed Cowbirds in natural situations have substantiated the report of Mayfield (*Auk*, 78: 162–166, 1961) that this species shows a vestigial proprietary interest in nests it parasitizes. Hormonal treatments on individuals of this species have failed to induce any behavioral patterns not performed by untreated birds (Selander and Yang, *Auk*, 83: 207–232, 1966). Possibly some behavioral patterns associated with nesting may be caused by appropriate stimuli under natural conditions. To our knowledge no reports of any behavioral patterns that could be termed nest protection have been published for the Brown-headed Cowbird. Both authors have independently observed what may be such behavior.

While censusing birds in a small riparian canyon in the San Francisco Mountains the junior author kept a pair of Lazuli Buntings (*Passerina amoena*) under close watch from the time nest building started. The female bunting laid one egg 26 June. While the author was making a routine check of the nest 27 June at 0600 hours, a feral house cat dashed from the nest site at the observer's approach. At the same instant a female Brown-headed Cowbird was seen within two feet of the bunting nest. She gave a series of loud, shrill calls as she spread her wings and tail and dipped her head in a very excited manner. She continued this behavior for about four minutes while moving in a small circle around the bunting nest. Inspection of the nest showed it contained one cowbird egg and two bunting eggs. During this inspection the female cowbird watched silently from high in a nearby pine. The feral cat may have precipitated this unusual behavior by approaching the nest while or shortly after the cowbird laid the egg.

While making a breeding-bird census in a deciduous forest in east-central Illinois, the senior author was searching an area of about 100 sq ft for a Kentucky Warbler (*Oporornis formosus*) nest. At 0640 hours an adult female cowbird ran into a small

opening in the undergrowth about 15 feet in front of him where she uttered low hoarse calls, fluttered her wings and tail, and moved in a zigzag path. She continued this behavior for some 30 seconds before flying off with a flock of passing cowbirds. The bird's actions were reminiscent of the diversionary behavior many species perform when a potential predator approaches their nest. This was the last time the pair of Kentucky Warblers was seen at this location. Three days later a destroyed ground nest containing one cowbird egg was found at the site. It is suspected that the observer may have disturbed the laying cowbird and triggered a behavioral response designed to conceal and protect the host's nest.

Friedmann (*The cowbirds*, Springfield, Illinois, Charles C. Thomas, 1929) considers the Brown-headed Cowbird the most advanced in the series of cowbird species in the western hemisphere that show progressive loss of normal nesting behavior. Our observations suggest that the Brown-headed Cowbird has retained the ability to perform certain behavioral patterns normally associated with concealment and protection of the host's nest, and which apparently are not performed unless the nest is threatened while the female is either on or close to the nest. At such times the female cowbird may call attention to the host's nest by her presence. We suggest that the potential to perform such acts may be very short-lived and appear only during a brief period of time when the cowbird is laying or performing some other act connected with it at the host's nest. The actual laying of an egg may be a releaser of this protective behavior. Natural selection may act to retain any such behavior that helps insure the success of the parasitized nest and thus contributes to the species' reproductive success.—RUSSELL P. BALDA, *Department of Zoology, University of Illinois, Urbana, Illinois*, and STEVE CAROTHERS, *Museum of Northern Arizona, Flagstaff, Arizona*. Present address of first author: *Department of Biological Sciences, Northern Arizona University, Flagstaff, Arizona*.

**Great Kiskadee parasitized by Shiny Cowbird in Surinam.**—On 3 June 1967 I received a nest of the Great Kiskadee (*Pitangus sulphuratus*) with three eggs of the flycatcher and one egg of the Shiny Cowbird (*Molothrus benariensis*) which was found at Marienburg, Surinam. Two of the eggs of the host measured  $26.4 \times 20.5$  and  $26.5 \times 20.4$  mm. The egg of the Shiny Cowbird measured  $20.2 \times 16.4$  mm. Friedmann (*Host relations of the parasitic cowbirds*, U. S. Natl. Mus., Bull. 233, 1963, see p. 199) does not mention the nominate race of *Pitangus sulphuratus* as a host of our local race *Molothrus bonariensis minimus*. See also Hoy and Ottow (*Auk*, 81: 186–203, 1964).—F. HAVERSCHMIDT, *P. O. Box 644, Paramaribo, Surinam*.

**Roseate Spoonbill chick attacked by ants.**—On 29 March 1967 a nest of a Roseate Spoonbill (*Ajaia ajaja*) was discovered on an island in Sabine Lake near Bridge City, Texas. This nest was built approximately five feet from the ground in the cane (*Arundinaria* sp.) which grows abundantly on the island; it contained two eggs measuring  $6.99 \text{ mm} \times 4.36 \text{ mm}$  and  $7.19 \text{ mm} \times 4.20 \text{ mm}$ .

On 21 April the nest contained four eggs, one of which was just hatching. The nest was invaded by ants, which were entering the piped hole and were noted biting the chick inside the egg. This experience apparently did not harm the young spoonbill, for on 28 April the nest contained three nestlings and an egg that did not hatch, and no sign of ants. The three chicks were healthy and showed no ill effects from ant attacks, and the egg was whole.—JED J. RAMSEY, *Biology Department, Lamar State College of Technology, Beaumont, Texas*.