Care of young.—Both parents usually are at the nest at time of hatching. At least 1 parent is at the nest from time of hatching until the nestling is about 1–2 weeks old. Thereafter, the parents come and go until, when the nestling is about 6-weeks old, a parent is at the nest only at feeding time. Both parents, nevertheless, appear to care for the young birds until they are about 8-weeks-old; no adult was seen carrying for any older young.

The very small young cormorants seem to be fed at regular intervals throughout the day, and each feeding sequence may last 45 min. Nestlings 3-weeks-old and older seem to be fed once every 24 h, most often 1 to 2 h before sunset but not uncommonly shortly after sunrise and at mid-day. Normally, feeding of young 3-weeks-old and older does not last long. Thus, 42 feeds by 6-weeks-old young ranged between 3.8 and 17.8 sec (av. 8.8 sec). However, the young bird may be fed at frequent intervals (one 3-week-old fed 7 times within ½ h with each feeding lasting about 10 sec) or the parent may remain with the young bird for several hours before feeding it (1 adult arrived at the nest but waited 2½ h before feeding a 4-week-old who begged during most of the period; another adult remained with a 4-week-old bird from 09:00–17:45, feeding it once at 15:30). During the warm mid-day temperatures, the parents fetch and give the nestlings water; this behavior will be described elsewhere.

The young birds remain close to the nest-site apparently awaiting the return of the adults. The nestling appears to recognize its parents; the adults seem to recognize and feed only their young. The young bird may fly or swim after an adult (its parent ?) when begging for food. When returning to the nest, the adult normally lands close to it. If the nestling is some distance from the nest, the parent does not appear to seek it out and eventually leaves the area without feeding it.

Parents seem to feed the most active and strongest siblings. A young bird, hatched later than its siblings, normally expires before reaching 2- to 3-weeks of age, due apparently to starvation or to accidentally being pushed out of the nest by its larger siblings. Young birds falling out of the nest in this manner and jumping out to avoid predators appear to be major causes of mortality at the colonies.

Predators.—Predators at the Shala and Abiata colonies include Marabous (*Leptoptilos crumeniferus*) taking eggs, nestlings and young cormorants nearly ready to fly; African Fish Eagles (*Haliaeetus vocifer*) who take eggs and nestlings to at least 3-weeks-old; and Black Kites (*Milvus migrans*) and Fan-tailed Ravens (*Corvus rhipidurus*) taking eggs and newly-hatched young. Egyptian Vultures (*Neophron percnopterus*) are uncommon at the colonies. Tawny Eagles (*Aquila rapax*), Marsh Harriers (*Circus aeruginosus*), Peregrine Falcons (*Falco peregrinus*), and other unidentified falcons were seen around the colonies but were not seen feeding on cormorant eggs or nestlings.

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American Woodcock hatched in Alabama killed in Michigan.—Since the winter of 1973–74 researchers at Auburn University have located numerous nests and broods of American Woodcock (*Philohela minor*) in Alabama between January and April. When

possible, the females and their broods were leg-banded to try to gain information about dispersal of these southern nesters and their offspring.

In late winter and early spring of 1976 we located 35 broods and nests and banded 49 chicks and 11 females in various regions of Alabama. On 3 March 1976, a day-old brood of 4 chicks was banded on Wheeler National Wildlife Refuge near Decatur, Alabama.

On 1 October 1976, 1 young woodcock from this brood was killed by a hunter in Midland County, Michigan, approximately 650 air miles north of the banding site. The band recovery was verified by the U.S. Fish and Wildlife Service's Bird Banding Laboratory.

This is a very unusual recovery and raises new questions about the biology of the woodcock. Do these females and their broods move toward the more traditional breeding grounds as soon as the chicks are capable of sustained flight? Might these females also produce second broods on the northern breeding grounds? A coordinated effort by researchers in the other southern states to band chicks and females on the wintering grounds is needed to answer these questions.

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Growth and age determination of nestling Brown-headed Cowbirds.—The purpose of this study was to determine daily growth of body parts and feather tracts of nestling Brown-headed Cowbirds (*Molothrus ater*). The study was conducted in Wood and Ottawa counties in northwestern Ohio during May and June 1975. Body parts and feather tracts studied are defined by Holcomb and Twiest (Wilson Bull. 82:294–303, 1970).

Each nest containing a cowbird egg or nestling was visited daily ±1 h of the last visit. Data were recorded only from nestlings that were first discovered as eggs. The day a nestling was first discovered to have hatched was considered day 1 for that bird; however, it is possible that a cowbird hatched after the daily visit and was actually some fraction of a day older than estimated. Body weight was measured to the nearest g using a Pesola Scale. Linear measurements were recorded to the nearest mm using dividers and a 15-cm ruler.

Twenty-three cowbird eggs were located in 17 nests from 16 May 1975 to 16 June 1975. Nine eggs hatched; the earliest hatching was 20 May and the latest hatching was 18 June. Five nestlings fledged, 3 at 10 days of age and 2 at 11 days of age.

Cowbird eggs were found in the nests of Yellow Warblers (*Dendroica petechia*), Red-winged Blackbirds (*Agelaius phoeniceus*), Cardinals (*Cardinalis cardinalis*), Indigo Buntings (*Passerina cyanea*), a Field Sparrow (*Spizella pusilla*), and Song Sparrows (*Melospiza melodia*). Cowbirds fledged from Yellow Warbler, Red-winged Blackbird, and Song Sparrow nests.

Means and SD of nestling cowbird measurements are presented in Table 1. All nestlings included in Table 1 either fledged or, presumably, were removed from the nest by predators. One nestling continued to lose weight from day 6 to day 10; on day 10 it died in the host Red-winged Blackbird's nest. This nestling was not included in the calculations for Table 1.