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Internest displacement of White Ibis eggs. — During a study of nesting success at a White Ibis (*Eudocimus albus*) colony (Shields and Parnell 1986), I observed five cases in which an egg laid in one nest was subsequently found in another nest in the same tree or shrub. The study was conducted during the 1983 and 1984 breeding seasons at Battery Island, North Carolina (33°54'N, 78°01'W), where White Ibises nested in a maritime shrub thicket (see Shields and Parnell 1986 for a complete description of the area). I marked 694 eggs in 1983, and 1213 eggs in 1984, with unique alpha-numeric codes. I visited nests 1–3 times per week from the onset of egglaying through hatching to record fates of eggs. I ruled out the possibility that I may have accidentally placed eggs in the wrong nests after marking them. I temporarily removed eggs from a nest for marking only on the date I first observed the eggs. Internest displacement of four eggs occurred several days after they were marked, and one case involved an unmarked egg.

I detected two instances of internest displacement of eggs in 1983, one involving a marked egg and one an unmarked egg. On 16 April, nests 96 and 97 contained three eggs each. On 21 April, nest 97 held three eggs, while only two eggs were present in nest 96; the third egg was found on the ground with one side punctured in the manner characteristic of crow predation (Rearden 1951). Fish Crows (*Corvus ossifragus*) were common in the colony, and crow predation on ibis eggs was high (Shields and Parnell 1986). On 28 April, I found another egg from 96 on the ground with a hole in its side; the remaining egg, which was slightly cracked, was discovered in nest 97. All four eggs in 97 hatched between 3–10 May.

Nest 59 held two eggs on 13 April and four eggs on 16, 21, and 28 April. On 3 May, the first egg had begun hatching, and a fifth egg was present. Three days later the nest held four chicks and one of the original four eggs, which hatched between 6–10 May. Because the

fifth egg was present in nest 59 no more than nine days prior to hatching, and because incubation in the White Ibis requires 21 days (Rudegeair 1975, Kushlan 1977), it could not have been laid in nest 59. Ibis nesting within a given tree or shrub was synchronous in 1983 (pers. obs.). Because the fifth egg was at approximately the same stage of incubation as the eggs in nest 59, it may have been displaced from one of the 5–10 unmarked nests in the same shrub.

Three cases of egg displacement in 1984 involved marked eggs. Nests 52 and 60 contained two eggs each on 11 April. Four days later, nest 52 held three eggs, while nest 60 contained two new eggs only. On 18 April, only two eggs were present in nest 52, and nest 60 contained its two eggs plus one egg from 52, which was cracked and dented. Both eggs in nest 52 subsequently hatched, but nest 60 failed.

On 15 April, nest 67 contained three eggs, and nest 135 contained two eggs. Three days later, I found one egg from 135 in nest 67 and the other on the ground with one side punctured. The four eggs in 67 were depredated by crows a week later.

Nests 91 and 92 held two eggs each on 15 and 18 April. On 25 April nest 92 was empty and one of its eggs was found in nest 91. All three eggs in 91 eventually hatched.

How were eggs displaced from one nest to another? I do not believe that eggs fell from donor to recipient nests (cf. Cannell and Harrington 1984) because of the relative positions of nests. Although nests 52 and 135 were 0.6 m and 0.4 m above the nests to which their eggs were displaced, lateral distances between donor and recipient nests were 0.3 and 0.2 m, respectively. Nest 92 was 0.1 m lower than and 0.5 m away from the nest to which its egg was displaced. I did not measure the distance between nests 96 and 97 in 1983.

Ibises may have moved eggs themselves, as has been reported in the Little Blue Heron (*Egretta caerulea*) (Rodgers 1978). It is unlikely, however, that owners of recipient nests would have intentionally added a foreign egg to their nests. Such behavior would not increase fitness of the recipient birds, and it would in fact reduce their fitness if they invested in a chick not their own at the expense of one or more of their own offspring. Owners of the donor nests, on the other hand, may increase their fitness by moving eggs to other nests (see Trost and Webb 1986). Brood reduction in the White Ibis, however, is severe (Kushlan 1977, Allen-Grimes 1982), and this type of brood parasitism would be a risky strategy, even though ibises apparently do not reject foreign eggs. Relocation of eggs may be an adaptive response to human disturbance of nests (Rodgers 1978, Trost and Webb 1986). If this were the case in the present study, ibises should not have moved their eggs to nests in the same tree or shrub, which were subject to the same level of investigator disturbance as the donor nests. Furthermore, my activities regularly disturbed large numbers of nesting ibises, yet internest displacement of eggs was apparently a very rare event.

During >150 h of general observation in the colony, I never observed ibises carrying eggs. I frequently saw Fish Crows, however, carrying off intact ibis eggs between their mandibles. In three of the four cases of displacement involving marked eggs, the appearance of an egg in the recipient nest coincided with the disappearance or depredation by crows of another egg in the donor nest. Crows typically carry off whole eggs and eat or cache them. They then return to the same nest to remove additional eggs (Tinbergen et al. 1967, Croze 1970, Montevecchi 1976). Fish Crows may have dropped or placed eggs in other ibis nests during aborted predation attempts.

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Distribution and status of Brown Pelicans in Venezuela in 1983.—The breeding distribution of the Brown Pelican (*Pelecanus occidentalis*) in the eastern portions of its range extends from North Carolina through the Gulf of Mexico and Caribbean to eastern Venezuela (Palmer 1962). Few data exist on locations and sizes of nesting colonies in the Caribbean region, especially in South America (van Halewyn and Norton 1984). Here we present such data for Venezuela.

One of us (HMG) surveyed the 2900-km coastline of Venezuela from Punta Castillete (11°51'N, 71°19'W) to Punta Playa (8°33'N, 60°00'W) and island regions (except Los Monjes, La Orchila, and Aves) from a fixed-wing aircraft (Cessna 170) flying at 100–300 m, and at speeds of 120–160 km/h, in January–February 1983. The flight path paralleled the coastline at approximately 0.1 km offshore and required 44 h. All sightings of birds and nesting colonies were recorded, and the total number of nests in each colony was estimated from near-vertical color photographs taken with a 35-mm camera and 50-mm lens. Numbers of isolated pelicans, whether flying or resting, were counted directly or from photographs.

Pelicans breed in Venezuela between November and June (Guzman, unpubl. data), a chronology similar to breeding pelicans in Florida (Schreiber 1980a). January–February is the peak of nesting, and our surveys thus show the distribution of present colonies. The total