

A KLEPTOPARASITIC ATTACK ON A DOUBLE-CRESTED CORMORANT BY A BROWN PELICAN

CARMINE A. LANCIANI

Department of Zoology, University of Florida, Gainesville, Florida 32611

Email: carmine@zoo.ufl.edu

Kleptoparasitism, or the stealing of resources, has been observed within and between many bird species (Brockmann and Barnard 1979, Furness and Monaghan 1987). Although the kleptoparasite sometimes steals food without aggression towards the host, the host may be threatened or even attacked (Brockmann and Barnard 1979). In this note, I report a case of kleptoparasitism in which the host was violently attacked.

I observed an attack by a Brown Pelican (*Pelecanus occidentalis*) on a Double-crested Cormorant (*Phalacrocorax auritus*) next to the public fishing pier at Cedar Key, Levy County, Florida, at 1450 EST on 16 January 2000. As I watched with 10× binoculars from approximately 15 m, the cormorant, foraging alone, surfaced with a 20 to 25 cm spotted seatrout (*Cynoscion nebulosus*) in its mouth. The posterior half of the fish protruded from the cormorant's mouth as the bird held its head vertically for 10 to 15 s, but the cormorant failed to swallow the fish. The pelican, which had been sitting on the pier with several others, suddenly dived onto the cormorant and engulfed the protruding fish and the cormorant's bill, head, and neck. The cormorant struggled to escape from the pelican's bill for approximately 10 s and finally broke free without the fish, briefly remaining within 1.5 m of the pelican. The cormorant shook its head side-to-side, dived, resurfaced nearby, and shook its head again, perhaps reacting to the effects of the attack. During the next several min, it swam slowly away from the pelican and repeatedly dived. After each return to the surface, the cormorant shook its head. Continuing this behavior of slow swimming, diving, and head shaking, the cormorant moved several hundred m from the pier in about 20 minutes, at which time my observations ended.

American White Pelicans (*Pelecanus erythrorhynchos*) are known to steal food from Double-crested Cormorants (Anderson 1991), sometimes after holding the cormorant's head underwater until the food is released (O'Malley and Evans 1983). Although the Brown Pelican is known to steal food from gulls (Sefton 1950), nothing approaching an outright attack by this species has been previously reported. However, Francis's (1981) discovery of a dead Brown Pelican with a dead Double-crested Cormorant in its pouch indicates a violent attack may have taken place.

LITERATURE CITED

- ANDERSON, J. G. T. 1991. Foraging behavior of the American White Pelican (*Pelecanus erythrorhynchos*) in western Nevada. *Colonial Waterbirds* 14:166-172.
- BROCKMANN, H. J., AND C. J. BARNARD. 1979. Kleptoparasitism in birds. *Animal Behaviour* 27:487-514.
- FRANCIS, T. L. 1981. Brown Pelican found dead with adult Double-crested Cormorant in pouch. *Florida Field Naturalist* 9:62-63.
- FURNESS, R. W., AND P. MONAGHAN. 1987. *Seabird ecology*. Chapman and Hall, New York.
- O'MALLEY, J. B. E., AND R. M. EVANS. 1983. Kleptoparasitism and associated foraging behaviors in American White Pelicans. *Colonial Waterbirds* 6:126-129.
- SEFTON, J. W. 1950. The Brown Pelican as a scavenger. *Condor* 52:136-137.