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Association of Great Egret and White Ibis.—Several wading birds use White Ibis (*Eudocimus albus*) as beaters when foraging. Courser and Dinsmore (1975) have described these one-way associations with the ibis for Snowy Egrets (*Egretta thula*) and for Louisiana Herons (*Hydranassa tricolor*). Kushlan (1978a) has recently described a true commensalism in which White Ibis and the Little Blue Heron (*Florida caerulea*) aid each other in foraging. I describe a two-way association in which Great Egrets (*Casmerodius albus*) were attracted to White Ibis as foraging associates and the ibis to the egrets, seemingly for the protective value of the larger birds acting as sentinels. That the association between the two species was a two-way attraction was repeatedly evident in the course of observations given below. These were made through 8 × 30 binoculars from a car parked close to a pond in Lake Placid, Florida.

On 10 February 1979, two Great Egrets were walking through shallow water at 0830. One became stationary after a few minutes with head pulled down and body close to the water, apparently resting. The other walked to the end of the pond and back in 15 min during which it struck at prey only once and caught nothing. The morning was cold (0°C) with a strong wind. Two immature White Ibis flying in at 0850 alighted close (60 cm) to the resting egret. When the ibis moved away probing into pond sediment, the egrets followed closely. Other immature ibis kept arriving, attaining a final number of 32. When a third Great Egret tried to alight, one of the original egrets leaped at it with bill open and wings out. The intruder plus the other egret flew off. Two other intrusions by Great Egrets were repelled in similar fashion. The remaining egret stayed close to the ibis. In some parts of the pond and along a roadside ditch where it walked with the ibis for 40 m, it struck at no prey. In other parts I noted it striking at prey 4 times in 5 min and 12 times in 10 min. When the ibis flew across an open stretch of water and later from the ditch to the pond, the egret flew also. When the ibis stopped to preen, the egret preened while standing among them. The ibis all left the pond at 1040, the egret flying with them to a second pond 200 m away.

In the two hours of observation, on three occasions the ibis seemed attracted to the egret. The two original ibis had landed close to the resting egret at the start of my observations. Later, when the combined flock came close to my car the egret shied away to rest in a hunched position on a sandy road. When six more ibis flew in, two landed on the road beside it. A third instance of attraction was noted after the birds had flown to the second pond. Here the egret seemed to lose interest in foraging with the ibis and moved away 8 m. Some ibis followed it immediately. The egret then flew across 10 m of open water to a highway embankment. Eight ibis flew to join it within seconds, four landing close to it. They seemed to find nothing to feed on and returned to the marsh. White Ibis feed with heads down when probing deeply (Kushlan, 1977a), with little looking

about. It is possible that attraction to the Great Egret, a taller as well as a more wary bird, could have survival value in acquiring a sentinel that would be particularly effective among weeds and grasses, the white color of the larger bird playing a significant role in the attraction (Kushlan, 1977b).

On the morning of 20 February, a warm, sunny day, I watched three Great Egrets feeding with about 40 White Ibis for 110 min. The egrets followed as the ibis moved back and forth along 35 m of shore. A tactic of the egrets was to keep a meter or two ahead, behind, or to the side of the advancing mass of ibis to strike at prey that fled from them. One egret made 28 strikes in 10 min. On the following day I saw four egrets following ibis in the same place. A question was why should the single egret watched on 10 February have been so territorial, driving away conspecifics, whereas three egrets tolerated each other 10 days later. This may have been a matter of water levels. With no rain of consequence in intervening days, many shallow ponds and ditches had dried up, giving the egrets fewer places to feed. Mock (1978) noted that although Great Egrets were highly territorial in Texas, they became more flexible as ponds dried up. The plasticity of foraging territories among wading birds was further discussed by Kushlan (1978b).

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Novel Use of an Unusual Food: American Robins Eating Parts of Fish.—American Robins (*Turdus migratorius*) have been reported to capture and swallow trout fry (Phillips, 1927; Michael, 1934; Kimball, 1944) which weigh <1.5 g and are <5 cm long. With the exception of Erickson (1978), most reports of robins capturing large prey such as garter snakes (Richmond, 1975; Davis, 1969) have not indicated if or how the bird ingested the prey. Here, I describe the techniques that American Robins used to eat parts of larger fish.

From 4 June to 4 August 1978, I observed the unusual feeding behavior of male and female robins at a freshwater salmon hatchery near Newport, Oregon. At the hatchery, salmon (*Oncorhynchus* spp.) smolts (5-15 g, 8-11 cm long) occasionally jumped out of the tanks. Robins used their bills to grasp the head of smolts (alive or dead) and quickly shook the smolt back and forth. When alive, the smolt would sometimes shake free. Then the robin either walked away and foraged for up to 18 min in grass before returning or immediately regrasped the smolt. It shook the fish until the head or parts of the head were broken from the body. First the head was eaten. Then the robin eviscerated the smolt by either pulling on the viscera attached to the head or by poking the bill into the body cavity where the head had been detached and pulling out the viscera. The viscera were then eaten, but the rest of the body was abandoned. The abandoned body weighed from 5.7-13.0 g (n = 23). Based on similar sized smolts, I estimated that the head and viscera would have weighed 2.0-2.7 g. Thus the largest part of the smolt was abandoned. Perhaps robins found the headless bodies too long (7.4-10.2 cm, n = 23) to swallow whole and too solid to break into pieces and swallowed as Erickson (1978) had observed a robin sever and swallow a garter snake.