

## Cattle Egrets Feeding at a Carcass

Although Cattle Egrets (*Bubulcus ibis*) have been recorded picking flies off live (Vincent 1947, Dawn 1959) and dead (Fogarty and Hetrick 1973) cattle and rotting fish (Reynolds 1965), no one has adequately described the feeding methods used. This note describes how Cattle Egrets feed on flies attracted to a dead cow.

On 13 February 1976, for approximately 15 minutes, I observed 2 Cattle Egrets feeding on the flies attracted to a recently killed cow in southern Pasco County, Florida. Three basic foraging techniques were noted. The actual time each was used was not determined, but it was apparent which method was used most often and which the least.

The most frequent foraging technique employed was the walk slowly (Meyerriecks 1960) behavior. An egret using this method crouched with the head and neck partially extended and slowly stalked around the carcass. When a fly was spotted, a quick strike was made. The strikes were almost invariably preceded by neck swaying (Blaker 1969, Siegfried 1971, Dinsmore 1973). The flies appeared to be picked directly off the carcass although some may have been captured just as they flew.

A less frequent method was the standing flycatching (Kushlan 1976) behavior. An egret using this technique stood in a crouched position with the length of its body parallel to and approximately 0.3 m from the carcass. With neck extended away from the dead cow, the bird waited until a fly was close at which time it began neck swaying. Without moving its body and while swaying the neck and head from side to side the bird followed the fly towards the cow and captured it with a quick strike. The capture usually occurred between 5 and 10 cm from the carcass though sometimes the fly landed before it was seized.

The least utilized method was a variation of the stand and wait (Meyerriecks 1960) behavior. Twice, the same egret jumped onto the carcass, paused a few seconds to allow the startled flies to alight, made 3 or 4 quick strikes in succession, and jumped down.

Blaker (1969) and Siegfried (1971) suggested Cattle Egrets may recognize fast prey and use the neck swaying behavior more often with these prey items that are likely to escape, implying that neck swaying increases foraging efficiency. Both Blaker (1969) and Dinsmore (1973) found Cattle Egrets were less successful in strikes preceded by neck swaying, though they did not differentiate between prey types. Siegfried (1971) reported a statistically significant difference in success rates between birds using neck swaying and

those not using it when feeding on flies, but failed to say which method was most efficient. Thus, it is not clear if there is an increase in efficiency with the utilization of neck swaying when foraging on fast prey. The inclusion of this behavior with almost every strike during this observation however, tends to support the idea that egrets use it most often on fast prey.

During a 2 minute timing one egret made 14 captures in 15 attempts while using the walk slowly and standing flycatching behaviors. Although a short time period, it indicates why egrets were feeding at the carcass. When feeding on prey larger than flies, a bird expends relatively the same amount of energy per strike while taking in more energy per capture. Therefore, a bird feeding on small prey (i.e. Diptera), in order to be as energetically efficient as an individual feeding on large prey (i.e. Odonata), would have to be more efficient in capturing prey. The carcass apparently increased the birds' foraging efficiency either by the massive congregation of flies itself, or because of the flies' involvement with egg laying.

Although this is a short note, I found it difficult to briefly and clearly relate the observation. I appreciate the reviews of William D. Courser, James J. Dinsmore, and Fred E. Lohrer whose suggestions made this worth printing.

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