



FIGURE 2. The vulture now has the live thrasher by the skin at the side of the head. A close examination will show the thrasher's open eye. Photo by B. G. 200 mm lens @ 1/250 sec.

from us. The vulture put the thrasher on the ground and put a foot on it, whereupon cries came from the thrasher. The vulture then used its bill somewhere about the thrasher's head, and the cries became louder. Next, amid loud cries, the vulture pulled off a wing, then deliberately pulled off its head. Some feathers were plucked off, and the bird pulled apart as it was eaten.

While this whole action was in rather slow motion, the enthusiasm of the turkey vulture seemed to build up as the "chase" went on. At first its actions were slow and tentative. Toward the end they were more purposeful and rapid. Other vultures seemed to observe what was going on, and gathered around, particularly at the time the thrasher was ingested. One grabbed a piece and fled. Whether or not the victim was somewhat injured or incapacitated before the thrasher battle, we cannot say. We also realize that what we observed was in a pen and may not accurately reflect a wild situation.

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## A MARSH HAWK ROOST IN TEXAS

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Meinertzhagen (*Ibis* 98:535, 1956) observed 160 Montagues (*Circus pygargus*) and Marsh Harriers (*Circus aeruginosus*) utilizing a roost about 25 mi. E of Gsiolo, Kenya, on 17 January 1956. A similar roost was observed by Gurr (*Ibis* 110:332, 1968) of an estimated 100 Australasian Harriers (*Circus approximans*) in New Zealand in 1966, while Weller et al. (*Wilson Bull.* 67:189, 1955) reported on a Marsh Hawk (*Circus cyaneus*) roost consisting of an estimated 80-90 birds in central Missouri in mid-February 1952.

On 20 December 1967 I observed a concentration of Marsh Hawks going to roost 12 mi. SSW of Friona, Parmer County, Texas. The site was a 30-acre playa lake covered with an extensive stand of smartweed (*Polygonum* spp.) and unidentified grasses. The

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## "FOOT-TREMBLING" FEEDING BEHAVIOR BY A KILLDEER

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On 2 May 1968 I observed a Killdeer (*Charadrius vociferus*) feeding in shallow water at the edge of Pit Lake, Adams County, Washington. The Killdeer stood on one foot and vibrated the other rapidly in the water. The periods of vibration were approximately 5 sec long and were followed by pauses during which the bird stood, peered into the water, and then often pecked sharply with its bill. This behavior continued

southern half of the lake was covered with 1-6 inches of water, while the northern half was dry. The hawks were roosting in the water-free area.

On 20 December 43 hawks were seen going into roost. A more complete count on 21 December totaled 66 birds. Subsequent observations included 30 on 26 December, and 31 on 27 December.

On 27 December the first hawk arrived at 15:39 C.S.T., but the majority of the flight did not arrive until about 17:00. Upon arrival, many birds landed in the surrounding fields within 0.5 mile of the roost and preened. Some remained in the fields for as long as 2 hr. Unlike Marsh Hawks in Missouri, those in Texas appeared to do little feeding in the roosting area. On 29 December the last bird went to roost at 18:01; 21 December, 18:08; 22 December, 18:09; and 27 December, 18:11.

On 22 December the first hawk to leave the site departed at 07:30, and by 08:02 all birds had left the roost. They left in all directions and were followed by vehicle for distances greater than 6 miles, but maximum dispersal ranges were not determined.

The hawks continued to use the area until mid-March when the lake vegetation was burned.

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for over 20 min. Several times while I watched, the Killdeer was apparently successful at stirring up food, as the bird was seen to swallow after pecking into the water.

K. E. L. Simmons (*British Birds* 54:34, 1961) reported that foot movements are used in feeding by six species of Old World plovers. It is interesting that one of these is the Lapwing (*Vanellus vanellus*), which is generally considered to be the Old World ecological counterpart of the Killdeer.

It is relatively rare to find a Killdeer feeding in water; possibly this is why this behavior has not been observed in this species more often. Although it appears to be widespread in European plovers, I have found no reference to such behavior in Killdeers.

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