

KILLDEER WITH A BROOD OF FIVE CHICKS

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On 1 June 1986, we stopped as we were leaving the campus of the Gulf Coast Research Laboratory in Ocean Springs, Jackson County, Mississippi, to observe an adult Killdeer (*Charadrius vociferus*) as it ran toward our slow-moving van giving a distraction display. We then noticed a second adult Killdeer a few meters away and observed that it was brooding chicks. We stopped and watched from the van and within a few minutes five chicks emerged from beneath the adult and began foraging in the closely mowed grass. Both adults attended from a distance of 5-10m. After 20 minutes of observation we captured all five chicks in order to band and weigh them. The chicks were downy with four elongate downy rectrices, but no emergent primary feathers, similar to the 8- or 9-day-old chick described by Bunni (1959). The chicks weighed 15.6, 19.0, 19.6, 19.7, and 22.3 g. By comparison, a brood of 4 Killdeer chicks which we banded at hatching on 8 May 1980 in Starkville, Oktibbeha County, Mississippi, weighed 18.4, 19.6, 20.1, and 21.7 g at the age of nine days. We saw no more than two adult Killdeer in the area.

Suitable habitat for Killdeer is very limited at the GCRL campus, such that we would not have expected to find nesting Killdeer in the area. The chicks and adults were foraging on the only large (ca 30m X 100m) expanse of close-mowed lawn at GCRL. Most of the small campus is wooded and the borders of the marsh and shore that nearly surround the campus are lined with *Spartina* and other tall vegetation, providing almost no open access to water.

Although we were not able to make further observations, the fact that the chicks were approximately 8 or 9 days post-hatching suggests that their parents could have successfully fledged such a large brood. Schardien

(1981) found that Killdeer chicks in north Mississippi could fly by about 30-31 days post-hatching.

Killdeer are among those species normally thought of as determinate layers, and clutches of four eggs are the norm. Reports of smaller clutches are suspect because of the potential for lost eggs. Although clutches of five eggs have been mentioned, we have found no details describing specific nesting efforts involving five eggs, nor have we found reports of more than four chicks in a Killdeer brood. Miller (1949) reported one clutch of five eggs among 200 clutches examined and no additional information was provided. Other reports of five eggs seem to be second hand (e.g., Stone 1965:383; Townsend 1919). Stone mentions that in a nest in New Jersey found by Julian Potter on 20 April 1919, "only three of the five eggs hatched." Considering the relatively large size of Killdeer eggs, a clutch of five eggs may be difficult to effectively incubate during cool weather. Hatching of this brood of five may have been possible only because of the warm May temperatures in coastal Mississippi.

Literature Cited

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