Present Status of the Cliftonville Heronry

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In this report I will discuss the development and present status of a large inland breeding colony of herons and egrets located in eastern Mississippi (32'N 87'W) about 8 km southeast of Cliftonville in Noxubee County (see Fig. 1). Situated in the blacklands, a region characterized by clay soils (Vanderford 1965), the surrounding area is primarily pasture land though, cotton and soybeans are common crops. This region is dotted with islands of deciduous forest and it is in one of these ecological islands where the herons nest.

In discussions with local landowners I learned that the site was first used for breeding by Little Blue Herons (Florida caerulea) in 1947. The heronry presently includes nesting Little Blue Herons, Cattle Egrets (Bubulcus ibis), Snowy Egrets (Leucophoyx thula), and Great Egrets (Casmerodius albus). White Ibis (Eudocimus albus), in adult plumage have been seen in the Cliftonville heronry since 1975 in groups of from 4 to 12 birds. All observations of ibis have been late in the season (late June into July). White Ibis breed in a heronry near Uniontown, Alabama (Werschkul, in press) and it appears to be a matter of time before they start breeding in central Mississippi. Whether or not Great Egrets or Snowy Egrets were originally present in the Cliftonville heronry is unknown, though it is certain that Cattle Egrets were not involved. The first breeding record for Mississippi, and for the Cliftonville heronry, was not until 1968 (Webster 1968), although it is likely that Cattle Egrets were breeding in the state earlier than 1968 but went unnoticed. Atkenson (1962) reports Cattle Egrets nesting in Alabama in 1962. While estimates of breeding numbers during the initial years are unreliable, local residents report that as many, if not more, birds used the Cliftonville heronry during its initiation year as were present during 1977. It appears that this heronry is a continuation of a pre-existing breeding colony and has probably seen only moderate changes in size, though composition has changed.

The choice of this site was no doubt influenced by a prior practice of using osage orange (Maclura pomifera) and other trees as a source of fence posts. The result of this pruning was a low overstory of trees with multiple-branched trunks. Today, 30 years later, the 3.07 ha site is characterized by osage orange, sugarberry (Celtis laevigata), green ash (Fraxinus sp.), various oaks (Quercus spp.), hickories (Carya spp.), and elms (Ulmus spp) with an understory dominated by giant ragweed (Ambrosia trifida). Changes in the overstory vegetation and the probable effects on the reproductive biology of the herons have been discussed elsewhere (Werschkul 1977).

In 1977 the heronry had an estimated 2200 breeding pairs, primarily Cattle Egrets and Little Blue Herons (see Table 1). This was approximately

TABLE 1. Composition of the Cliftonville heronry from the years 1975 to 1977

Species	Number of Breeding Pairs		
	1975	1976	1977
Little Blue Heron	1750	2050	950
Cattle Egret	1500	450	1250
Snowy Egret	3	2	2
Great Egret	12	10	3

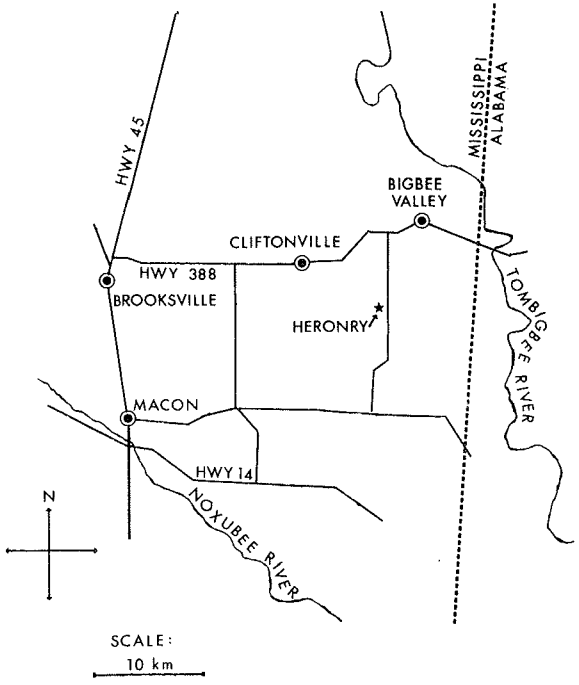

Figure 1. Location of the Cliftonville heronry in 1977.

1000 fewer than in 1975, but about the same total as recorded by Summerour (1971) for 1970. Lack of data for some years, coupled with the difficulty of obtaining accurate counts, prohibit a detailed analysis of population trends, though for the years 1975-77 a decrease is seen. This decrease was a reflection of the drop in the number of Cattle Egrets in 1976, and of Little Blue Herons in 1977. Cattle Egrets appear to be stimulated to begin breeding with rainfall (Werschkul, pers. observ.). For example, in 1976 significant rainfall was absent from mid-April to early June and Cattle Egrets, which normally begin breeding in early May, did not breed until mid-June. All Cattle Egrets that were present in the heronry in 1976 did not breed, and those that did abandoned their nests within 2 weeks after construction. The decline in Little Blue Herons in 1977 is not explainable, though it may be in response to changes in habitat both inside and outside the heronry.

The use of the Cliftonville heronry as a major breeding colony of herons and egrets in east-central Mississippi appears to be near an end. The normal growth of the overstory vegetation since the stopping of the pruning, coupled with the loss of all overstory vegetation in some areas, particularly where the Cattle Egrets have nested, has reduced the number of available nest sites. This normal process of heronry decay may be speeded up by loss of feeding habitat to native herons with construction of the Tennessee-Tombigbee waterway. The Cliftonville heronry is located between the Tombigbee and Noxubee Rivers (see Fig. 1) and food samples from Little Blue Heron nestlings indicate that the low lands near the two rivers are used extensively by this species. A reasonable prediction would be that the heronry would shift westward away from Tennessee-Tombigbee waterway toward the Noxubee River.

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