

# Are Breeding Herons and Egrets Deserting the Central Illinois River Floodplain?

By Richard Bjorklund

Colonies of breeding herons and egrets are ordinarily located in the floodplain of the Illinois River in central Illinois. Colonies are often sited on the natural levee between the river and its backwater lakes. The size of breeding populations in these colonies tends to be inversely related to the water level prevailing in the last half of the previous year's nesting cycle. Low water during nestling development and fledging usually results in more nesting herons and egrets the following spring, whereas high water during the critical development period results in fewer adults nesting the following spring. The latter situation has been especially true following the severe and protracted flooding of recent years (Bjorklund & Holm 1997).

Bjorklund & Holm suggested that protracted highwater is contributing significantly to the declining stability and loss of integrity in the part of the river system in which herons and egrets are major participants. This note provides new information from the 1997 breeding season that indicates the deterioration of colony sites and perhaps foraging areas, and the depressed breeding populations associated with extended high water is continuing.

I began monitoring colonies at Big Meadow Slough in northern Peoria County, at Worley Lake in Tazewell County, and at Clear Lake in Mason County in 1962. Larry Rice has monitored the colony at Big Meadow Slough since becoming the Illinois Department of Natural Resources Site Superintendent for the

Marshall State Fish & Wildlife Area in 1974. Annual censuses of trees with active nests, permanently marked for accuracy, have been a principal part of the monitoring process. In 1994, I assisted U. S. Fish & Wildlife Service personnel in a ground census of the colony near Meredosia Lake in Cass County, which otherwise has been aerially inventoried by Vernon Kleen of the Illinois Department of Natural Resources. The colonies at Meredosia and at Big Meadow Slough have, with rare exception, consisted entirely of Great Blue Herons, *Ardea herodias*. The colonies at Clear and Worley Lakes have typically been mixed-species colonies of Great Blue Herons (GBHE), Great Egrets, *Ardea alba* (GREG, threatened in Illinois), and Black-crowned Night-Herons, *Nycticorax nycticorax* (BCNH, endangered in Illinois). Table 1 displays the number of active nests of herons and egrets for the four colonies combined during recent years,

a period of protracted high-water events.

The trend illustrated in Table 1 is alarming. The Meredosia colony site was abandoned after 1995 and Big Meadow Slough abandoned after 1996 depressing the total number of nesting GBHE. Of course, GBHE might establish new colonies within the system or move to nearby established colonies not ground censused. In 1997 Aaron Yetter of the Illinois Natural History Survey Forbes Station did find a newly-established colony of 20 GBHE nests in drowned timber in the Sanganois Conservation Area, and Vernon Kleen discovered a new colony of 30 nests along the Illinois River below Henry. Only two other colonies are known on the Illinois River below the bend near DePue. They were established before recent high water, and have been aerially inventoried regularly by Kleen. The colony at DePue remained at about 600 GBHE nests from 1993 to 1997, while the colony at Matanzas

**Table 1. Number of Active Heron and Egret Nests in Four Central Illinois Colonies from 1993 - 1997**

YEAR	GBHE	GREG	BCNH
1993	1,889	338	116
1994	1,775	392	96
1995	1,534	371	66
1996	926	258	16
1997	686	97	0

Key to Table: GBHE = Great Blue Heron, GREG = Great Egret, BCNH = Black-crowned Night-Heron