# RANGE EXPANSION AND NEW BREEDING RECORD FOR THE GLOSSY IBIS IN MASSACHUSETTS

### by Robert C. Humphrey

The purpose of this paper is twofold: first, to give a brief summary of the history of the Glossy Ibis (*Plegadis falcinellus*) in North America and its northward expansion into Massachusetts; and second, to report on a new breeding location in the state.

The Glossy Ibis is believed to be a fairly recent arrival in America from the Old World. Although very little literature exists as to how and when it arrived in the new world, Audubon (1967) noted the "first intimation" of this species in the United States as a bird shot in Maryland in 1817. By 1837 he referred to them as existing in vast numbers in Mexico and in flocks, but only as a summer resident, in Texas. Specimens appeared in the Boston Market around 1844. The first documentation of a live bird in Massachusetts was around 1850 (Audubon 1967, Bent 1926).

By 1870 ibises were rare and local in the southeastern United States from Louisiana to Florida. Casual records existed north to Missouri, Minnesota, Wisconsin, Michigan, Ontario, and Nova Scotia (Pearson 1956). The first authentic breeding records occurred in Florida in the 1880s (Palmer 1962). The breeding range in this country was restricted to Texas and Florida for most of the first half of the 1900s. Ibises slowly expanded their breeding range into North and South Carolina in 1944 and 1947, respectively. A more rapid expansion took place in the 1950s. They first bred in New Jersey in 1955 and in Maryland in 1956 (Stewart 1957).

In 1958 there were estimated to be four hundred pairs of Glossy Ibis breeding in the United States. In 1959 over twelve hundred pairs nested at a single location in South Carolina (Palmer 1962). That year ibises also nested in at least nine other locations north of Georgia (Hailman 1959). By 1975 an estimated 6768 pairs bred along the Atlantic Coast as far north as Maine, where there were 494 nesting pairs (Sprunt 1978).

Ibises have been seen annually in Massachusetts since 1947. The first breeding record for the state was in 1974 at Clark's Island in Plymouth County. This colony peaked at 66 pairs in 1976, then declined to zero by 1984. The other major colony in the state, House Island in Manchester, grew to 107 pairs in 1977. By 1982 this colony was abandoned also. At least some of the birds relocated on Kettle Island. Ibises have nested in smaller numbers at several other locations in the state (see Figure 1). The following table gives locations and numbers of nesting pairs in Massachusetts for 1977 and 1984 and shows that ibises have added Spectacle Island and Calf Island (J. Hatch pers. comm.)

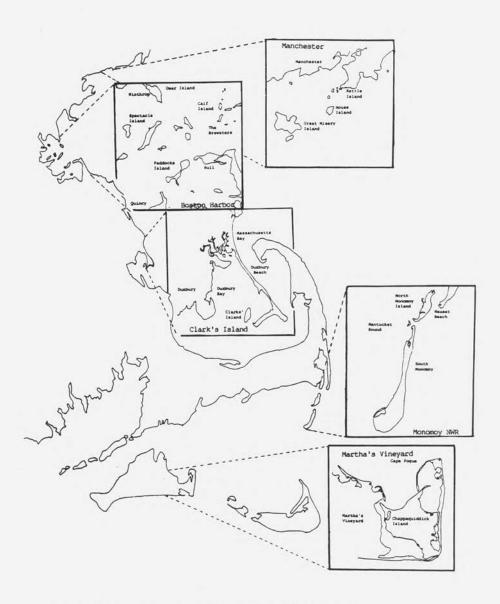


Figure 1. Nesting locations of Glossy Ibis in Massachusetts.

Map by Robert C. Humphrey.

as nesting sites. Since 1984, nesting ibises have not been reported for any other location.

# Location of Glossy Ibis nesting colonies in Massachusetts

## 1977 (Erwin and Korshgen 1979)

House Island, Manchester	107 pairs
Peddocks Island, Boston Harbor	unknown
Clark's Island, Plymouth	5 *

\* only one of two subcolonies censused

#### 1984 (Brad Blodget personal communication)

Kettle Island, Manchester	11
Calf Island, Boston Harbor	1
Spectacle Island, Boston Harbor	10
Cape Pogue, Edgartown	5

Often a large concentration of colonial nesting wading birds results in an accumulation of guano that causes vegetation to burn out, and the birds cause the destruction of their own nest substrate. This is believed to have been the reason for the abandonment of the House Island colony -- a victim of its own success (B. Blodget pers. comm.).

In 1983 a pair of Glossy Ibises were seen intermittently throughout the breeding season in the heron and egret colony on South Monomoy island (D. Holt and J. P. Lortie pers. comm.). Nesting was suspected, but no nest was ever found. In 1984 a single ibis was sighted several times during the breeding season in the South Monomoy wader colony.

On May 24, 1986, while inventorying the heron and egret colony on South Monomoy, I observed a pair of Glossy Ibises perched together in a clump of salt-spray rose (Rosa rugosa) with five adult Black-crowned Night-Herons (Nycticorax nycticorax) that had been flushed off their nest by my approach. I searched the area beneath the rose bushes but only found heron nests. I observed the birds in the same location later the same day and again searched unsuccessfully for a nest.

On May 31, 1986, I conducted a census of the South Monomoy wader colony with the assistance of several volunteers. We were in approximately the same location as on May 24 when we first sighted two Glossy Ibises in flight. After several minutes we observed one ibis land approximately four meters from a clump of rose bushes, where it stood for several minutes. While the other observers marked the location, I approached the spot. I looked under the clump of bush and discovered what I believed to be an ibis nest.

I located three nests within the rose bushes; two I believed to be heron nests. One nest was different from those of Black-crowned Night-Herons. It was

made entirely of beach grass (Ammophila breviligulata). Heron nests on Monomoy are typically made entirely of coarse twigs. The nest was built on the ground underneath overhanging branches of a rose bush that was part of a clump, oblong in shape, approximately 8 meters long, 6 meters wide, and 1.5 meters high at the tallest point. It contained one egg approximately the same size as a heron egg but colored a much deeper blue.

I returned to the area on July 20 and found a single Glossy Ibis fledgling in the rose clump. At first the bird appeared unable to fly. It was adult size but had white and pink color markings on the bill, head, and neck. I photographed the bird (see Figure 2), then observed it as it left the rose clump and flew a short distance to the south.

This record represents a new breeding location for the Glossy Ibis in Massachusetts. It is also significant because of the manner in which the ibises nested. Like most waders, ibises traditionally build elevated nests in trees or bushes. In the early 1980s, the Black-crowned Night-Herons nesting on South Monomoy began abandoning the main colony located in the sparse stands of willow and began nesting as single pairs or in small groups on the ground in the salt-spray rose bushes. The ibises also nested in a similar fashion. If they can successfully compete with herons for nest sites, Glossy Ibis nesting may produce less vegetation burn-out, believed to be the cause of previous colony abandonment in Massachusetts.



Figure 2. Glossy Ibis fledgling, July 20, 1986.

Photo by Robert C. Humphrey.

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ROBERT C. HUMPHREY is the Manager of Monomoy National Wildlife Refuge and a graduate student in wildlife biology at the University of Massachusetts doing research on the American Oystercatcher. An accomplished wildlife artist and photographer, he has won recognition in photographic competitions.

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