

# OBSERVATIONS OF OSPREYS NESTING ON ARTIFICIAL STRUCTURES IN CHARLOTTE HARBOR, FLORIDA.

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Recently reproductive success of normally reproducing populations of Osprey (*Pandion haliaetus*) has been described for southern Florida (Ogden 1975, Wilson Bull. 87: 496-505) and for Chesapeake Bay (Reese 1970, Auk 87: 747-759; and references therein). In the Central Atlantic states, only about one third of all nests are in "natural" situations with the remainder on artificial structures. Between 1.7 and 2.0 young were produced per successful nest and 0.64-1.16 young per active nest in Chesapeake Bay between 1963 and 1969. In Florida Bay, most if not all the nests are in trees on islands and average annual production ranges between 1.3-2.0 young per successful nest and 0.36-1.30 young per active nest in 1968-1974. We cannot find reference to Osprey nesting on artificial structures in Florida but Ogden (pers. comm.) reports increasing nesting on utility poles, signs, and other tall structures along U.S. 1 in the Florida Keys.

Our observations on an admittedly small sample of Osprey nests in the vicinity of Cabbage and Useppa Keys, Lee County, Florida west coast, invite further study. We cannot continue these observations but encourage others to do so.

During irregular visits to the Charlotte Harbor area during 1970-1974 we recorded 3-8 Osprey present in the late winter-spring but none in the late summer-fall. Other than the traditional water tower nest on Cabbage Key, no nests were observed although the possibility exists that nests were destroyed by the U.S. Coast Guard between our visits. During monthly visits in 1975 we recorded 5-8 Osprey in January-early August and recorded nests present on 3 intercoastal waterway channel (I.C.W.) markers 57, 67, and 69 (Nautical Chart 857-SC). None produced young and on 19 April no evidence of the nests remained. On 15 March we observed Coast Guard personnel removing the nest material from marker 69 and we suspect this disturbance caused the lack of production by Osprey in 1975.

Discussions with the Commander of the 7th U. S. Coast Guard District, Miami, Florida, in November 1975 indicated that intercoastal waterway markers had been modified and that nests would not be destroyed unless visibility of the marker light or number was impaired. The necessity of this policy is obvious to anyone who has cruised the waterway in the dark.

During surveys every 2-3 weeks between 28 November 1975 and 24 July 1976, we recorded nests with eggs and/or young present on

I.C.W. markers 4, 58, 60, 61, and/or 67. The latter 4 markers extend from south to north along 2 nautical miles (nm) of the main channel and marker 4 is 0.5 nm to the east on a side channel. All nests are approximately 300 m from land and 4 m above mean high tide. Our visits were not frequent enough to record number of eggs laid or hatching success although we know 3 eggs were laid and hatched on markers 61 and 67; probably only 2 eggs were laid on markers 4, 58, and 60. Marker 50 held a few sticks on 20 February but none was present on 7 March and we suspect this was a false nest although Ogden (pers. comm.) indicates that sub-adult Osprey (1-4 years) commonly build incomplete nests. Three nests (markers 58, 61, 67) received eggs between 29 January and 20 February, marker 50 received eggs between 20 February and 7 March, and marker 4 received eggs between 12 April and 3 May. Neither of the two eggs laid in marker 4 hatched and it was abandoned by 29 May, when a broken egg shell remained in the nest. This nest possibly belonged to a pair of young adults since Ogden (pers. comm.) indicates that they usually lay late and often fail to complete incubation.

The 2 young in marker 58 fledged between 13 April and 3 May, the 2 young in both markers 60 and 67 fledged between 3 May and 28 May, and the 2 young in marker 61 fledged between 12 June and 4 July. We neither heard nor saw any Osprey in the area on 4 July but on 23 July one was heard calling. All nests were still intact but ragged on the latter date.

We know of two other active nests in this region in 1976: the water tower nest on Cabbage Key produced two young in March; and one on an artificial pole at the entrance to Miller's Marina, Boca Grande Island (4 nm north of the other nests) also produced young, one we watched fledge on 13 April, the other was gone on 3 May.

The seven nests which received eggs in 1976 thus produced 2.0 young per successful nest and 1.71 young per active nest.

While our sample size is small and for only one year, this "colony" appears to be producing well. We have not observed Osprey nesting elsewhere on any of the more than 300 markers along the over 130 nm of the intercoastal waterway between Clearwater, Pinellas County, and Sanibel Island, Lee County, that we have surveyed regularly for the past 8 years and the presence of this small colony in Charlotte Harbor is intriguing. One may speculate that as human "development" has occurred along the coast the birds have been forced to nest on the channel markers but why only in this region remains moot. Did Osprey ever nest along this coast in past decades? If so, are they taking more readily to artificial sites now than in the past? Ogden (pers. comm.) suggests that Osprey often tend to clump in nesting.

Pairs apparently pass by "good" nest sites to nest close to other pairs. Is there some relation between actual sites used and "better" feeding grounds?

It is apparent that the intercoastal waterway markers provide good nest sites for Osprey so long as the Coast Guard does not remove nests, a practice that should be lauded. Hopefully boaters will not molest the birds either. Ogden (op. cit.) found that Osprey in the Florida Keys laid in November-February with a peak in December-January. Our nests are slightly later in this more northern region with the latest nest being unsuccessful. This late nest may well have been by a young, inexperienced pair. However, the probability exists that the summer heat is too great for successful nesting in this species in Florida and the reason for the winter-spring nesting is to avoid the summer heat. Or, perhaps the lack of social stimulation from other nesting Osprey was the cause for the abandonment of our lone late nest.

Further observations on this Osprey "colony" in coming years should be rewarding.

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