

THE WHITE-HEADED EAGLE IN NEW YORK STATE

WALTER R. SPOFFORD

The spectacular decline in the breeding success of the White-headed Eagle (*Haliaeetus leucocephalus*) on the west coast of Florida, so abundantly documented by the late Charles Broley, and other accounts of low breeding success coupled with evidence of a diminishing eagle population, have led to widespread concern for the preservation of this great bird. The National Audubon Society has just announced a five year study of the continuing status of this eagle on a continent-wide basis. It seems worth while to gather together here some information about the eagle in New York State. Although the exact status of nesting sites is yet to be studied, enough information is at hand to give a skeletal outline of the breeding population, and a more detailed account of two nesting sites watched more intimately during the last ten years.

As for their distribution in New York, a few pairs of eagles nest in the plains south of Lakes Erie and Ontario, notably near Chautauqua Lake, the Genesee River, Montezuma Refuge, Selkirk Shores State Park, and probably between Sandy Pond and Watertown. Two more sites are reported along the St. Lawrence River; and one each on Lake Champlain and Lake George. Other nests are located in the more mountainous northern counties, each of which has one or more reported nesting sites (Chase). The nesting population in this state would appear to be at least 12 and perhaps 24 pairs. It must be kept in mind that Florida eagles summer here in the north, and various eagles reported from southern and central New York lakes are most likely in this category. Eagles formerly bred for decades on the north side of Oneida Lake, and a nest was reported on Frenchman's Island in the early 1940s (Ernst). The eagles seen here each summer are now believed to be summering eagles from Florida.

The nesting success of the New York eagles is little known, but there are occasional reports of breeding success, such as three young flying with two adults at Piseco Lake in 1951 (McIlroy), two adults and two flying young at Raquette Lake in 1957 (Ernst), and a nest with young near Chateaugay Lake in 1959 (Chase). The spectacular cliff nest at Blue Ledge on the upper Hudson River which was occupied for most of a century (W. Randall) was partially damaged by a rock fall in 1927, but young were raised there in the late 1940s. A nest some miles away in current use may be the "descendent" of this site.

In April 1951 I noticed a nest which I had not previously seen in the dead woods of the storage pool on the north side of the Montezuma National Wildlife Refuge, and this is probably the best known nesting site in New York today. Since 1955 I have also watched a nest near Selkirk Shores State Park, and in the following paragraphs I will outline some of the finding at these two nests, partly from my own observations and partly from both published and unpublished observations of others.

Although the nest in the Montezuma Refuge, in a slanting dead tree in a precarious site hardly 20 feet above the water, was a new nest when I first saw it in early April, Mr. Jayson Walker said that the old nest at the west side near the thruway dated back into the 1940s. This has not been used in the 1950s and I have no record of its occupancy. On 17 April 1951 two adults and an immature were seen near the new nest by Walker.

In early May one young was observed in the nest, and on the occasion of the Cornell spring bird census in mid-May, two downy young eaglets were seen by Prof. McIlroy. I have no further record of this nesting except that on 24 July Walker saw one eagle in immature plumage being followed by three Turkey Vultures several miles west of the refuge.

In 1952, Walker saw two adults at the nest on 30 March, and Farnham watched an adult carrying a long branch with green leaves into the nest in late April. Although records indicate the presence of the eagles near the nest during May, I have not statements of actual nesting. But in late May the nest, already insecure, was greatly tilted, and if young were present they must have spilled into the water. During the summer the eagles built a new nest (Wiley). This suggests that the old nest was in use at the time of the accident. The new nest was in a more substantial situation in an upright dead tree several hundred yards west of the former nest. The nest has since been attended every year except in 1957.

On 29 March 1953, I saw the white head of an adult eagle just showing above the brim of the nest, and similar observations were made throughout April. In May, however, the nest appeared to be empty, and on 20 May the adults were seen in coition (Hileman), a further indication of nesting failure. The adults were recorded several times after that, but no young were raised that year.

The eagles were seen at the nest in late February, 1954, and on 24 April an eagle was observed apparently incubating, only its head showing (Paquette). In late May the nest was found to be abandoned, and while adults were seen subsequently on various occasions, no young were raised that year. On 24 October a bird in the immature plumage was seen, but whether this was a not yet mature eagle from a previous nesting in this area, or whether merely a vagrant eagle, is unknown.

In 1955 the adults were seen in February, and regularly in late March and April. On 15 May Walker reported a young eaglet in the nest, and later observations indicate a successful nesting. An immature was seen on 24 July, and two were seen in August. It seems probable that at least one and perhaps two young were raised that year.

Two adults were at the nest on 3 March 1960, and on 25 March one appeared to be incubating, and through April. On 30 May Walker reported a partly feathered eaglet in the nest. I have no further records of the eaglet, but the adults were frequently seen throughout the year, and it may be assumed that this was a successful nesting.

During the late winter of 1957 the eagles built a new nest on the north side, and which could not be seen from the dyke, but which was visible from the Tyre road. I saw an adult apparently incubating on 23 March and both were at the nest on 21 April, the larger bird feeding, late in the afternoon. On 27 April I saw the male fly up under an Osprey which circled up, yelping, then dropped his fish. The eagle dove after it, picked it up, and carried it toward its nest, but in late May the nest was seen to be abandoned.

The 1958 season was similar, but this time they came back to the regular nest. Both were on the nest on 15 March, one appearing to be incubating. An adult was similarly seen throughout April. On 12 April I saw the male fly to the nest, on which I had not seen a bird, whereupon the whole center of the nest seemed to lift up . . . as the incubating bird got slowly to her feet.

If the old eagle does not have her head up, the nest may appear empty. On this occasion she soon flew off, and the male then slowly settled down upon the nest. Late in the afternoon of 4 May I watched the male fly to the nest with a fish. After some moments the female could be seen slowly rising from the center of the nest. Slowly she stepped to the edge, and flew off with the fish, and the male then settled back on the nest. On 17 May the nest was found to be abandoned, and although eagles were seen on subsequent occasions, no young were raised. On 22 November both eagles were perched upon the nest.

The heavy snows and cold weather of the following winter kept the eagles away most of the time, but on 14 March both eagles were on the nest. Each was standing upon the nest edge, facing the center, leaning forward with their heads out of sight, in mutual ceremony. On 26 March both eagles appeared and flew onto the nest, and on 5 April the female was working at sticks in the nest. The male arrived, and coition took place on the nest. On 7 April an adult was lying flat on the nest, with head up, and appeared to be incubating. She was so observed on 17 April (Seaman) and on 26 April. One was perched on the nest edge and another flat on the nest (Scheider) on 17 May, but on 22 May and 30 May the nest appeared to be empty. On 31 May the two old eagles were seen on the nest edge, again facing in with heads lowered out of sight in the nest center (Seaman), and no eagles were seen at the nest after that. I have seen a Golden Eagle bow her head into the nest beside a hatching eaglet, but in the present case it was soon apparent that the nest was abandoned.

Again in 1960 no eagles were raised. The birds were in attendance in April, apparently incubating on 9 and 28 April, but in mid May the nest was no longer in use.

In summary, during ten years of attempted nesting, they have been successful in only three, raising a total of 3 to 5 eaglets. It is clear that early nesting goes on with seeming success, but if eggs are present (and we know that Peregrines and Buzzards may sit on an empty nest) there is no evidence that they hatched. This nest is quite isolated, all observations being made by balscope from half a mile away, and being in a wide lake in a refuge, there is no trespass. I know of no other disturbing influence, such as low-flying aircraft.

The following observations were made at a nest discovered in mid-March 1955 by D. Moors, in a giant elm tree near Selkirk Shores State Park. Situated in a small clump of trees in an open pasture, it can be closely observed from over half a mile away by balscope. The farmer on whose land the nest is located said it had been built in 1953, that the nest had not been disturbed and the birds did not cause anyone concern. On 26 March I visited this nest, saw the eagle fly off as I approached, and then return immediately as I retreated. This nest was later visited or observed by a number of interested people, and while it was approached closely enough on at least two occasions to cause the eagle to fly off, she came back onto the nest at once. On 14 May she was still on the nest, but in June the nest was seen to be abandoned. Because of the possibility that human dis-

turbance had been a cause in the nesting failure, it was decided to avoid any disturbance in the following year.

On 18 March, 1956, Scheider saw the male carrying a Common Merganser to the nest, and on 1 April he observed an adult eagle apparently turning the egg(s). On 14 April Mr. Broley and others visited the nest and it was still in use. But when Dr. Burt climbed to the nest in June the nest was abandoned and no signs of recent occupancy. However, a first year eagle was seen on 9 August in that vicinity, and it is possible that another nest is in that region.

On 16 March, 1957 I watched the pair in coition, perched upon a horizontal limb near the nest. On 15 April one adult appeared to be incubating, and similar observations were made on several occasions during April, but on 19 May the nest was found to be abandoned, and no trace of occupancy was seen on two subsequent trips in late May and mid-June. The 1958 season was much the same, two birds being present on 2 March, one sitting upon the nest on 15 March, still sitting on 18 May, but the nest abandoned by June.

In 1959, two adults were perched upon the nest on 28 February, an unusually warm day with a good hawk-flight. On 15 March the two eagles were perched in a tall dead tree near the shore a mile from the nest. Then the female carried a long stick to the nest, and the male followed to perch close by. On 20 March the nest was considerably built up, and one bird was standing upon the edge. On 5 April one was flat on the nest, and the other flew into a nearby tree. Both were perched near the nest on 7 April. But on 16 April the birds were still actively nest building, flying to the ground and bringing in sticks and bark. Since eagles often work on the nest at odd times, this is not an indication as to whether or not they had eggs at this time. One eagle appeared to be incubating on 26 April, and on 17 May also. On 7 June there was no sign of the eagles, although several fresh down feathers were nearby and clinging to weeds in the pasture. But further visits showed the nest to be abandoned. In 1960 no attempt was made to nest here, but a bird was seen nearby on several occasions. In the fall of 1960 the nest tree was cut down and the future history of this pair of birds is uncertain, but an attempt will be made to locate a possible new nesting site.

In summary, this pair of eagles attempted to nest in five out of six years of observation at this site, and they appear to have incubated each year, but have apparently never hatched an egg. I do not know that they do lay eggs, but I am inclined to believe that they do. I have seen coition several times, and the eagles seem attentive at the nest. Why there is no nesting success is unknown.

I do not have comparable nesting information at other eagle sites, but from scattered reports I do not believe the pair in the Genesee Valley is much more successful. The nesting success of the eagles reported here seems rather comparable to that of the Ohio eagles reported in Audubon Field Notes, and here I have presented some of the detail which suggests that at least the eagles are really trying! Of course we have no base line on

which to measure the nesting success of these eagles. The apparent regular nesting of Mr. Broley's eagles along the west coast of Florida in the 1940s may be somewhat illusory . . . as with a dense population of eagles it is not really certain which individual eagles are doing the breeding from year to year, as birds do move from nest to nest. Eagles in various parts of the world and of various species including both sea-eagles (as is our White-headed Eagle) and true eagles, often have very low nesting success, especially African eagles of various species (Brown, '52, '60.).

In the present case, however, we are presented not with irregular success but with regular non-success. It is clear that this is much too small a sample on which to generalize, and I hope that the publication of these notes will stimulate others to making more regular observations upon eagles in their regions.

Brown, L., 1952, *Ibis*, 94: 577-620; 95: 74-114. "On the biology of the large birds of prey of the Embu District."

Brown, L., 1960, *Ibis*, 102:285-297. "The African Fish Eagle *Haliaeetus vocifer* especially in the Kavirondo Gulf."

766 Irving Ave., Syracuse 10, N. Y.