

A RECORD LATE BALD EAGLE NESTING

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Beardslee and Mitchell (1965) give a date range of 11 Apr to 16 Jun for Bald Eagle nests "with young" in the Niagara Frontier Region. According to Bull (1974) and Carroll (1988) unfledged Bald Eagle juveniles have been found from 11 Apr to 30 Jun in New York State. Thus, it might be concluded that a Bald Eagle nest with young after 16 Jun would be a new record for the Niagara Frontier Region and unfledged juvenile eagles observed after June 30 would set a new record for New York State. Using the above dates and my personal observations, it seems that the nesting Bald Eagle on Iroquois National Wildlife Refuge have not only broken the record for the Niagara Frontier region, but have also set a New York State record late date for fledging.

Before summarizing these observations, it must be noted that there are several difficulties in observing unfledged Bald Eagle at Iroquois National Wildlife Refuge. First, foliage of the nesting tree often obscures the nest and eaglets. The birds were observed at a distance of 0.7 miles, and it was often difficult to observe their behavior. Although a 50 power Celestron telescope with a 20 centimeter aperture was used in observations, its field diameter of 40 arc minutes made it difficult to determine what was happening outside the nest tree area.

Since Bald Eagle is altricial rather than precocial, it might be assumed that a bird on the nest is unfledged. For the Bald Eagle this assumption is incorrect. Bald Eagle "young after their first flight are prone to return to the nest, in this they continue for a number of weeks, or for as long as they remain in the neighborhood." (Herrick 1923a). Unfortunately an eaglet on the nest does not mean an unfledged bird.

All observations were made from the parking lot next to the Iroquois National Wildlife Refuge headquarters on Casey Road. A brief summary of the author's observations of nesting activity for 1989 is as follows:

22 Mar -two adults near the nest.

23 Apr -one adult near the nest.

6 May - one adult low on the nest in typical brooding position (although my feeling at the time was that this represented the beginning of incubation, records graciously supplied to me by the Refuge Manager, Don Tiller, indicate incubation behavior was observed 13 Apr, and "volunteer comments indicate eggs hatched 29-30 Apr. Biologist Mike Allen stated

"Both adults present - appear to be feeding eaglet(s) at 11:40, May 4."

24 May -adult near nest.

3 Jun - one adult at the nest was joined by a second adult carrying food. The second bird gave the food (a snake or eel) to the first, who ripped it into small pieces and fed it to the young. This feeding behavior was thought to be unique; however, research indicates that it may be common. Herrick (1924b) states: "The direct feeding observed was mainly by the female and only rarely did the male possess sufficient confidence to partake of food at the nest and serve his young," and the same behavior has been observed in Golden Eagle.

14 Jul - a young eagle on the nest. (This observation was recognized as 14 days beyond the N.Y. State record and more detailed observations were attempted).

18 Jul - the nest was observed from 6:50-8:20 and 9:45-9:50 AM. Both eaglets were eventually observed on the nest. One was actively flapping (exercising) its wings and jumping on the nest! At 7:18 AM, the other bird joined in this wing exercising activity. At 7:35 one eaglet defecated over the edge of the nest, but did not leave the nest. Both types of activity indicate that the birds are unfledged.

22 Jul - the nest was observed from 8:05-9:52 AM and from 5:55-6:00 PM. It was a calm, warm, hazy day in which the temperature rose from 25° to 31°C in the first hour and forty minutes of observation. In the first ten minutes one Bald Eagle was found in the nest tree about 15 feet above the nest and 3-5 feet from the top of the tree. At 8:55 the second eaglet was finally found halfway between the nest and the upper left edge of the tree. Both eaglets were observed stretching their wings. At 9:09, the top eaglet dropped down to the nest and later exercised its wings, sometimes jumping on the nest. Then at 9:18, there was a brief test flight from the nest lasting about 15 seconds! No noteworthy activity was observed thereafter. From 5:55 to 6:00 PM. one eaglet was observed on a branch next to the nest.

24 Jul - 8:05-9:05 AM, eventually both eaglets were seen near the top of the nest tree, and were briefly observed casually flapping their wings. One of the immatures took two test flights, the

first from 8:21 to 8:25. The same bird took off again at a low angle at 8:46 and landed at the top of the nest tree at 8:53. The other bird was observed preening between 8:58 and 9:05.

27 Jul - 8:25-10:20 AM, two circles of the nest were made by one of two immature eagles from 8:32 to 8:34. At 8:43 it left the nest into the wind and about twenty minutes later it came in from behind the nest to land into the wind. At 9:29 the light improved and the second eaglet was discovered 2 feet below the nest and 4 feet to the right of the nest preening. This nonflying eaglet later (9:42) tried to fly to the nest, but did not attain enough altitude and hit the edge of the nest and fell 3 feet to a branch. It returned to its starting position after about 20 seconds. Thirty seconds later the bird flew to a branch about 4 feet above; 40 seconds later it successfully flew to the nest. Both birds were then obscured by foliage at 9:44.

29 Jul - 8:05-9:05 AM and 2:21-3:18 PM. At 8:54 a possible wing lift was seen at the nest, and at 9:01 an eaglet left the nest to the left and down. Later at 2:21 PM, one eaglet was observed preening at the left edge of the nest and at 2:49 a second eaglet was seen flapping its wings above the right edge of the nest halfway to the top of the tree. From 2:55 to 2:59 an adult visited the nest. When the adult landed the eaglet on the left moved toward the adult and the higher eaglet moved to the middle of the nest but stayed high and flapped its wings. The three birds remained obscured by foliage most of the time.

7 Aug - 7:37-8:06 AM, 11:58 AM-12:10 PM and 1:56-2:05 PM. At 7:44, one eaglet was seen when it hopped to a branch above the nest, but by 7:49 it had disappeared. Observations later in the day were devoid of eagles or eagle activity.

21 Aug - 7:35-7:50 AM and 1:04-1:26 PM. No eagles observed at or near the nest.

It is difficult to determine an exact fledging date for the eaglets. Observations were intermittent and often difficult to interpret. It is also believed that one eaglet may have matured as much as a week or more ahead of the other. Certainly on 18 Jul both birds were showing unfledged activity. Although there was a short test flight on 22 Jul, only the 24 Jul flights by one eaglet were of sufficient duration to demonstrate independence from the nesting tree. Yet, on that same date, the other eaglet demonstrated difficulty in making short flights (or long hops) in

the nesting tree. Of course this apparent difficulty could be due to an inability to fly among branches rather than simply an inability to fly.

As late as 29 Jul, both birds seemed to demonstrate a dependence on their parent, and as late as 7 Aug, one of the young was observed on the nest. Perhaps it is safe to say that one eaglet fledged on or about July 24, and the other probably fledged some time later, probably after July 27.

Although this represents a new Regional record by about 6 weeks and a new state record by more than 3 weeks, this extremely late fledging might not be as odd or as uncommon as it seems. A check of last year's notes reveal that on 21 Jul immature eagles were observed on the "nest to 20 feet above the nest (but still in the nesting tree)...hopping and flapping their wings!" Discussions with Research Scientist Peter Nye and "Endangered Species Investigation W-166-E" indicate that July Bald Eagle fledglings in New York State are commonplace rather than exceptional in recent studies. It is unfortunate that Bald Eagle data acquired through the "Endangered Species Investigation" has not been published.

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