

The Recent Nesting History of the Bald Eagle in Rondeau Provincial Park, Ontario.

by
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The Bald Eagle (*Haliaeetus leucocephalus*) has long been known as a breeding species along the shoreline habitats of Lake Erie (Weekes 1974a; Field 1976). Two of the reasons for the Bald Eagle's historical abundance along these shores are (1) the proximity to water, and therefore their main food sources of fish and waterfowl, and (2) the extensive natural areas, including forests, which provided prime nesting sites. Indeed early records suggest that there was one nesting pair of eagles for every mile of shoreline between Port Stanley and Point Pelee (Weekes 1974a).

The early part of this century saw a noticeable decline in the southwestern Ontario population of Bald Eagles. This was due primarily to a loss of habitat through the clearing of woodlots and draining of wetlands. An equally insidious cause, that being the widespread use of pesticides such as DDT, exacerbated their decline in the 1940s and 1950s through reproductive failure. By the early 1960s, only 20 pairs could be found in southwestern Ontario (Brownell and Oldham 1980), and by 1980, only three active nest sites remained, none of which successfully fledged any young (Anonymous 1991). Since then the plight of the Bald Eagle in southwestern Ontario has been deemed as "guardedly optimistic". This has resulted from governments throughout North America banning the use of some of

the most harmful chemicals, an increase in water levels especially of the lower Great Lakes which may have diluted the pollution and an active "hacking" or release program by agencies in New York state and Ontario. In 1991, the number of active nest sites in southwestern Ontario had increased to 11, which successfully fledged a total of 11 young (P. Hunter, pers. comm. 1991).

Rondeau Provincial Park is one of the three major sandpits on the north shore of Lake Erie. The park and the area immediately surrounding it consists of rich, southern deciduous forest habitat adjacent to a sandy beach shoreline, an extensive marsh and the shallow waters of Rondeau Bay encompassing almost 5000 ha. Food items for eagles, such as fish and waterfowl, are readily available, and numerous large, deciduous trees are available for nesting and roosting sites. As a result, Bald Eagles have always been known to breed in Rondeau. Up to three pairs of Bald Eagles have attempted to nest at Rondeau in one year, even as recently as 1957. However, successful nesting attempts during the several decades prior to 1980 have been sporadic, with only the period between 1981-1991 showing evidence of annual success.

Virtually all nesting activity in Rondeau has taken place on the western side of the park where the forest and marsh habitats abut. The greater availability of food in the

marsh and bay is undoubtedly one of the reasons for the eagles' preference for this part of the park, but perhaps equally important is the much lower level of human activity here. Cottages and related activity have been present along the eastern shoreline for more than a century, likely discouraging eagles from giving serious consideration to this side of the park as a nesting area. Some of the most recent nest locations are

marked on the accompanying Figure 1, and described in Table 1.

Table 2 documents and provides comment on the recent nesting history of the Bald Eagle, where known, in Rondeau Provincial Park. A "+" indicates, as per the appropriate column, that adults were present during the breeding season and demonstrated at least some nesting activity or that eggs were present, but the number is unknown.

Table 1: Nest location information.

Nest # Description (all distances very approximate)

- | | |
|----|---|
| 26 | This is the main, most visible nest, located in a tall red oak (<i>Quercus rubra</i>), approximately 350 m south of Gardiner Ave. It is the most visible nest from the Marsh Road. It was used in 1978, but was noted in poor shape in 1979 and not used again until at least 1986. Although it has been designated nest #26, it may in fact be the same tree that earlier nests occurred in. The eagles have been known to abandon this nest when it gets in disrepair and in danger of falling out of the tree, and then build a new nest in the same tree after the old nest has fallen. |
| 27 | This nest is approximately 400 m south of nest #26, also in a red oak. This nest was noted in 1979, but was never observed in use and shortly thereafter it fell out of the tree. |
| 28 | This nest was also noted in 1979 for the first time, about 18 m up in a soft maple (<i>Acer</i> sp). An adult eagle was observed on this nest in an incubating position, on 12 March 1979. The nest and tree had blown over by 14 April 1979. |
| 29 | This nest was noted for the first time on 29 November 1979, after leaf fall. It was in a partly dead white oak (<i>Quercus alba</i>). The nest was possibly used later in 1979 after #28 blew over. Its use was confirmed in 1980, but there were no young fledged. |
| 30 | This nest was first noted in February, 1981. It is in a fairly tall white oak, and has been used for several years, especially during the early 1980s. By June 1991, this nest was noted as having fallen out of the tree. |
| 31 | This nest was first noted in late April/early May of 1991. It is located approximately 200 m south of the intersection of the South Point Trail and the abandoned Dillon Trail, about 150 m east of the South Point Trail. It is visible from the South Point Trail until the trees leaf out. This is the first time in at least 20 years that Bald Eagles have chosen to nest in an area other than along one of the most westerly forested ridges in Rondeau, overlooking the marsh and bay. |

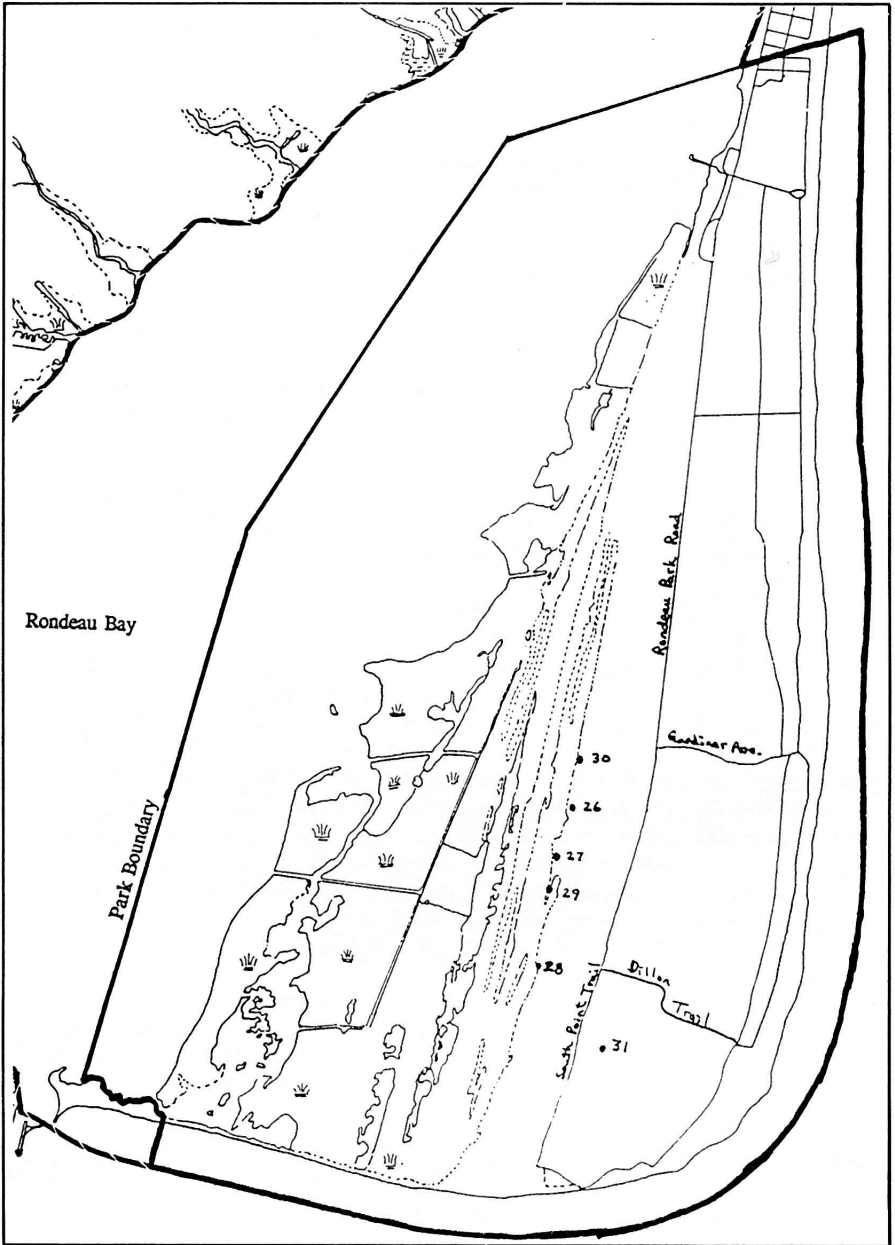


Figure 1: Approximate locations of recent Bald Eagle nests in Rondeau Provincial Park.

Table 2: A summary of Bald Eagle nesting activity and related success at Rondeau Provincial Park, Ontario.

Year/ Source*	Adults Present	Eggs Present	Young Fledged	Comments
1991a	+	+	2	A new nest (#31) was discovered in late April, along the South Point Trail. It is only observable from the trail until the trees leaf out. The two young were banded on 12 June.
a	+	?	0	Nest #30 was considered to be an active nest as well, because of the following events. On 4 April, an adult was seen at a distance of approximately 50-75 m, facing the nest, for a period of about 2.5 h. In addition the top of the nest appeared to be built up somewhat from the previous year, making the observation of an incubating adult even more difficult than usual, especially if the adult was hunched down. Then on 17 April, an adult was seen on the nest in an incubating position. The nest was not examined again until early May, and from that point on there was no sign of any eagle activity at that nest. The ages of the eaglets banded at nest #31 on 12 June were estimated to be about 5-6 weeks old at the time of banding. Hatching therefore would have occurred between 1-8 May. Since the incubation period is 5 weeks at the minimum, incubation should have begun somewhere around 27 March at the latest. The eagle activity at nest #30 in mid April, at a time when eagles at nest #31 would be incubating, suggests that another pair of eagles at least tried to nest at one of the traditional nest sites. Also the discovery of a new nest #31 in a location quite different from nest locations used in the previous 20 years suggests the probability of a new pair taking up residence at Rondeau with a different perspective and choice of nesting locations. Later in the season, up to three different adults were seen, including one pair close together at the south end of the marsh (possibly the pair using #31), and a single adult in a tree almost due west of nest site #26.
1990a	+	+	1	There was an unconfirmed report of 2 young seen in the nest, but most reports, including the findings of the banding crew, indicated that only one young was raised (banded 18 June).
1989a	+	+	2	Young were banded on 27 June at about 6-7 weeks of age.
1988a	+	+	2	Young were banded on 21 June at about 6 weeks of age.

1987a	+	2	1	A late season, as the nest cycle was still at the egg stage on 27 May. This is possibly due to a mate change, as a partially decomposed adult was found in the park on about 27 April.
1986a	+	+	1	Young was banded on 6 June.
1985a	+	+	2	Nest #30; young were banded 7 June.
1984a	+	+	3	Nest #30; young were banded 8 June.
1983a	+	+	2	Nest #30; young were banded 6 June.
1982a	+	+	1?	Nest #30; 1 immature observed in marsh area frequently after 12 June.
1981a	+	+	1	Nest #30.
1980a	+	+	0	Adults observed incubating in March at nest #29, but little or no activity after mid April.
1979a	+	?	?	An unusual year, as the birds seemed to be carrying on normally at nest #28 until early April, when observations on 12 April indicated that the nest had fallen to the ground. This was probably as a result of either a wind storm of 4-5 April or an ice storm of 8-9 April, or both. The birds apparently gave up nesting activity, but then an immature was seen over the park on 15 July, on 25 and 28 August, and again on 16 December, in the company of the two adults. These sightings may be that of an immature which fledged elsewhere, but the fact that it was observed with the Rondeau adults on one occasion and that a new nest (nest #29) had been built in a different location (but not noticed until November, after leaf fall) may indicate that there was some nesting success.
1978a	+	+	1	Nest #26.
1977a	+	+	1	
1976a	+	?	?	
1975a	+	?	?	
1974a	+	+	1	
1973a	+	?	?	

1972c	+	?	?	
1971b	+	+	2	
1970e	?	?	0	
1969e	?	?	0	
1968b,e	+	?	?	No confirmed hatching at nest #22.
b,e	+	?	0	Nest #9.
1967b	+	+	2	Two immatures seen in marsh 28 July, one of which still showed downy feathers.
1966b	+	?	?	Adults at nest #22, but no known success.
1965b	+	?	?	Adult noted on nest #22, 6 and 22 April but no indication of any success.
b	+	?	0	Two adults noted at nest #4, 6 April.
1964b	+	+	1	Nest #22.
1963b	+	?	0	
1962b	+	+	1	One immature noted with adult in marsh later in season.
1961b	+	?	0	Nest #8.
b	+	?	0	Nest #9.
1960b	+	?	0	
1959b	+	?	1?	Adults at nest #21 in March; no activity on 16 May, but adult and immature noted together later in season.
b	+	?	?	Nest #9.
1958b	+	+	2	Nest #20.
1957b	+	?	?	No young reported, nest #9.
b	+	?	?	Nest #8.
b	+	?	?	Nest #4 (one adult, one immature (sub-adult?) reported 25 Feb.).
1956b	+	+	1	Nest #8.
b	+	+	?	Nest #17.
b	+	?	?	Nest #4.

1955b	+	+	2	Nest #8.
1952b	+	+	1	
1942c	+	+	2	
1939c	+	?	?	
1935c	+	?	?	
1934b	+	?	?	

There is an unfortunate lack of records for earlier years, especially prior to 1955. Park naturalist staff have been present only in 1947-1951 (seasonal staff); from 1952-1969 (permanent and seasonal staff); 1970-1972 (seasonal staff); 1973-1985 (permanent and seasonal staff) and 1986-1991 (seasonal staff).

*The above information was obtained from:

- (a) personal records, observations and field notes of the author, 1973-1991;
- (b) the Rondeau Provincial Park files, housed at the Rondeau Visitor Centre;
- (c) a search of the nest record cards in the Ontario Nest Records Scheme, housed at the Department of Ornithology, Royal Ontario Museum;
- (d) Wood 1948;
- (e) Weekes 1974b.

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