

Recent Nestings of Red-necked Grebe on Lake Ontario

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Introduction

The breeding range of the Red-necked Grebe (*Podiceps grisegena*) in North America extends from Alaska through western and central-southern Canada and north-western United States east to northeastern Ontario and west-central Quebec (Godfrey 1986, Lapointe 1996). Within Ontario, it is considered a rare breeder restricted to specific traditional areas, generally in the northwestern and south-central parts of the province (Armstrong 1987). In southern Ontario, it is known to have bred formerly at isolated locations in Wellington and Simcoe Counties, Peel and Halton Regional Municipalities and Manitoulin District (Peck and James 1983). However, there has been a reduction in the distribution and number of breeding pairs in Ontario over the past several decades, and as a result, this species has been identified as being of conservation concern (Austen et al. 1994).

The historical nestings of Red-necked Grebe on Lake Ontario at Burlington, Halton, are of interest, since this is the most southerly nesting location for this species in Canada. It was first found nesting in 1943, with up to seven nests present, and two nests subsequently in

1944 (Speirs et al. 1944). The 1943 nests were either built in submerged crotches of small willows along the shoreline, or as floating mats of vegetation. The latter nest type is more typical of this species, as it usually nests in freshwater marshes (Harrison 1984). A nest was also found farther east along the Lake at Lorne Park (present day Mississauga), Peel, in 1946 (Gunn 1951). These nestings were not entirely surprising, since it was known by as early as the 1930s that Red-necked Grebes regularly spent the summer along the Halton and Peel lakeshores in numbers up to about 100 birds (Gunn 1951). This summering occurrence has continued up to the present, although in smaller numbers. Over the past decade, a summering flock of 20-40 birds typically has been present along the Burlington lakeshore each year (pers. obs.).

The purpose of this article is to document recent nestings of this species along the western shoreline of Lake Ontario within Halton Regional Municipality.

Appleby Creek Nesting

On 25 July 1994, Dobos found a pair of Red-necked Grebes with a nest along the Lake Ontario shoreline at the mouth of Appleby Creek

in the City of Burlington, Halton. The shoreline in this vicinity is heavily urbanized, with private residences occupying the lakeshore. The shoreline itself has been altered drastically with concrete, boulder or steel sheetpile revetments for erosion protection along most of its length. Essentially no natural shoreline remains in this area.

At this location, two adult grebes were first sighted very close to shore. It was then noticed that a floating wooden board about one square metre in size, located between the shore and an "L"-shaped concrete breakwall which juts into the lake, supported an obvious nest structure made from vegetation. The board was tied by a

small rope to the breakwater, and appeared to have been intentionally placed at this location. The nest was a low mound consisting of large twigs, branches, aquatic vegetation and algae, about two feet across. The nest had a slight depression in the centre within which could be seen a minimum of four large, tan-coloured eggs. After a short time, one of the grebes swam up to and hopped onto the board, then settled onto the nest to incubate the eggs.

This nest was visited again on 27 July 1994 by Dobos, at which time photographs were taken of an adult Red-necked Grebe incubating this nest (Figure 1). The site was next visited on 11 August, when two adult grebes were seen swimming nearby, but the nest apparently had



Figure 1: Red-necked Grebe incubating nest at mouth of Appleby Creek, 27 July 1994. Photo by *Robert Z. Dobos*.

been abandoned. Upon closer inspection, there were no signs of any egg shells, and the nest mound was reduced and appeared to be unmaintained. There were no grebe chicks evident with the adults, and the birds did not display any territorial behaviour. It was concluded that the nesting had not been successful.

The next year, this site was visited on 7 and 26 June 1995 by Dobos. Two adult Red-necked Grebes were present on both occasions, along with the floating board, but no sign of nesting activity was evident. A final visit on 13 July produced only a single grebe, and no nesting activity. The site was checked the following year on 4 July 1996, and eight adult grebes were present offshore nearby, but the floating board was no longer present and no nesting activity was detected.

Bronte Harbour Nesting

On 30 June 1997, Edmondstone observed two adult Red-necked Grebes vocalizing in Bronte Outer Harbour on the Lake Ontario shoreline near the mouth of Bronte Creek in the Town of Oakville, Halton. This harbour is protected from the lake by a pair of stone breakwalls. In the 1997 boating season, the outer harbour had not been developed, with only eight floating tires being available for visiting boats to moor at and no permanent dock space available.

On 1 July 1997, the birds were observed piling vegetation onto the tire in the northeast corner of the harbour. There was a sailboat moored at the tire at the time. On 8 July, one of the birds was observed incubating. Four eggs were observed from shore on 13 July. Both birds took turns incubating. Mallards (*Anas platyrhynchos*) and Canada Geese (*Branta canadensis*) that came too close to the nest were subject to attack from below. The incubating birds seemed little disturbed by the boat activity in the harbour. The approach of a jet ski would sometimes cause the bird to slip off the nest briefly.

On 5 August 1997, one chick was seen at the nest. On the next day, the chick was swimming. Often, it was offered fish that were too big for it to swallow. Two chicks were observed on 7 August. On the night of 8 August, a visiting sailboat ran over the nest tire in an attempt to moor at it. Bystanders informed the boaters of the nest and the boaters left. There was no sign of the other two eggs when the nest was checked by Edmondstone using a boat on 11 August. Once mobile, the grebe family seemed quite unperturbed by any human activity. These birds developed a following in the local community, with as many as 20 people at a time gathered to watch them.

There was an abundance of small fish for the growing birds. Rivalry for feeding was not

observed; on at least one occasion, a chick declined a fish offered by a parent. On 16 August 1997, the two chicks were photographed at the nest (Figure 2), one of the last times the nest was used. On 29 August, the chicks were observed catching insects. By early September 1997, the chicks were frequently left alone by their parents. The last sighting of all four birds was on 7 October. The remaining chick was last seen on 26 October. The adults remained until the end of November 1997, even chasing off a Horned Grebe (*Podiceps auritus*) on 26 November.

Additional Breeding Attempts

A pair of Red-necked Grebes engaged in nest building activity was observed on 8 June 1991 by Kevin A. McLaughlin (pers. comm.) on the lakeshore off Shoreacres (a.k.a. McNichol Park) in Burlington. The birds were gathering algae and bringing it onto an isolated part of a low concrete wall which was partly submerged and extended perpendicular from the shoreline. One of the birds also was observed sitting on the concrete wall at times. On the next visit to the site on 20 June (and subsequent visits over the next month), there



Figure 2: Red-necked Grebe with two chicks on a floating tire nest in Bronte Harbour, 16 August 1997. Photo by Gavin Edmondstone.

were no signs of a possible nest.

During a visit to the same Shoreacres site on 29 May 1994 by K.A. McLaughlin, Paul Pratt and others, a pair of Red-necked Grebes was briefly observed copulating (K.A. McLaughlin, pers. comm.). This site is about 1.2 km from the location of the nest found two months after this event (as described above), but it is unknown whether the same birds were involved.

On 4 July 1997, Dobos observed two Red-necked Grebes in nest building activity on the lakeshore off Sioux Lookout Park in Burlington. These birds were diving to retrieve vegetation, then carrying algae and small branches to a site on the shore behind a short concrete pier on the east side of the mouth of Roseland Creek. The actual site where the nest was being constructed could not be seen and was unapproachable since it was on private property. On subsequent visits over the following weeks, there were no signs of these birds and no indication of successful nesting.

Additional breeding behaviours have been observed amongst the summering grebes at Burlington on many occasions. Vocalizations of breeding calls have been heard regularly throughout the summer months (pers. obs.).

Discussion

Given the numbers of summering

Red-necked Grebes at the west end of Lake Ontario, it is not surprising that nesting attempts have been documented occasionally. The highly altered and developed nature of the shoreline in this area provides extremely limited nesting habitat for this species. Human activity, primarily from recreational boaters and jet skis, urban wildlife predators, and wave disturbance during storm events would all provide hazards to successful breeding and fledging of young. The recent successful nesting at Bronte Harbour occurred in an area that provided some shelter from some of these factors, since it was located within the outer harbour area which is protected from the waves of the open lake by an exterior rock breakwall.

Following the discovery of the first nests at Burlington in 1943, local members of the Hamilton Nature Club (HNC) started a program of providing artificial nesting platforms for these birds. The two nests found at Burlington in 1944 were built on floating wooden platforms specifically put out for the birds (Speirs et al. 1944). These platforms were placed behind a breakwall in Burlington Harbour (the current site of Spencer Smith Park) which provided some shelter similar to the current Bronte Harbour situation. The HNC continued to put out these nesting platforms until at least the early 1950s, as well as at sites in Dundas Marsh,

Hamilton-Wentworth, and at the west end of Hamilton Harbour, Hamilton-Wentworth (Benner 1952). However, no indication could be found that these structures continued to be used by nesting grebes during the 1950s.

In light of its status as a rare Ontario breeder, and given the recent nestings of Red-necked Grebes on artificial structures, as well as the continuing presence of summering grebes on Lake Ontario, it may be a worthwhile activity for wildlife agencies or local naturalist groups to undertake an artificial nesting structure program for this species at appropriate locations.

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