Red-necked Grebe: First confirmed nesting for Durham Region, Ontario

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Figure 1. Adult Red-necked Grebe approaching nest on 15 May 2018. *Photo: A. Geoffrey Carpentier*

Introduction and Observations

The Red-necked Grebe (*Podiceps grisegena*) is an uncommon nesting species in much of Ontario, with a widespread but discontinuous distribution. Historically, it has bred on Big Trout Lake, Lake of the Woods, Sioux Lookout, Mildred and Sandy Lakes and lakes in Thunder Bay District in northwestern Ontario, in Cochrane District, on Manitoulin Island and in Luther Marsh, Halton Region, Burlington and Port Credit (Speirs 1985, Godfrey 1986, Armstrong 1987, James 1991). Up to 1983, 71 nests had been recorded for Ontario, primarily in the western part of the province from Thunder Bay to Favourable Lake (northwestern Ontario) and in Cochrane District, with a few scattered nesting attempts

Table 1. Spring and summer occurrences of Red-necked Grebe in Durham Region, Ontario.

Date	Location	Observer	Details	Source
04 June 1960	Lynde Shores	Naomi S. Le Vay	1 bird	eBird 2018
12 June 1969	Cranberry Marsh	Naomi S. Le Vay	1 bird	Tozer and Richards 1974
20 June 1978	Frenchmen's Bay	David D. Calvert	1 bird	eBird 2018
07 June 1979	Lynde Shores	Margaret J.C. Bain	2 birds	eBird 2018
Unspecified date, summer 1979	Pickering	J. Murray Speirs	4 birds	Speirs 1985
20 June 1981	Lynde Shores	John and Naomi S. Le Vay	2 birds	eBird 2018
11 June 1983	Lynde Shores	Naomi S. Le Vay	1 bird	eBird 2018
21 July 1984	Lynde Shores	John and Naomi S. Le Vay	1 bird	eBird 2018
17 June 1990	Lynde Shores	Margaret J.C. Bain	1 bird	eBird 2018
17 June 2013	Cranberry Marsh	Jay van der Gaast	1 bird	eBird 2018
21 June 2013	Lynde Shores	Paul Frost	1 bird	eBird 2018
19 June 2016	Oshawa Second Marsh	Glenn Coady	1 bird	G. Coady, pers. comm.
04 July 2016	Frenchman's Bay	John Brett	1 bird	eBird 2018
05 July 2016	Frenchman's Bay	Toronto and Region Conservation Authority field staff	1 bird	eBird 2018
28 June 2017	Darlington Provincial Park	Michael Ferguson	1 bird	eBird 2018
27 April to 16 July 2018	Nonquon Sewage Lagoon	David B. Worthington, Connor Hawey, A. Geoffrey Carpentier and many other observers	This note	eBird 2018
8 July 2018	Cranberry Marsh	Theresa Dobko and Ella Y Fu	2 birds	eBird 2018

in unspecified locations in southern Ontario (Peck and James 1983). During the second atlas of breeding birds in Ontario (2001-2005), evidence of new breeding locations was reported from Sudbury, Manitoulin Island and the western end of Lake Ontario (Harris 2007). Since the second atlas, successful nesting has occurred at three discrete sites in the Etobicoke area of Toronto and one nesting attempt was made in the Lakeview area of Mississauga, Peel R.M. (G. Coady, pers. comm.). The Regional Municipality of Durham is located east/northeast of Toronto and encompasses an area of approximately 2500 km^2. Scugog Township, where the Nonquon Sewage Lagoons are located, is located in the north

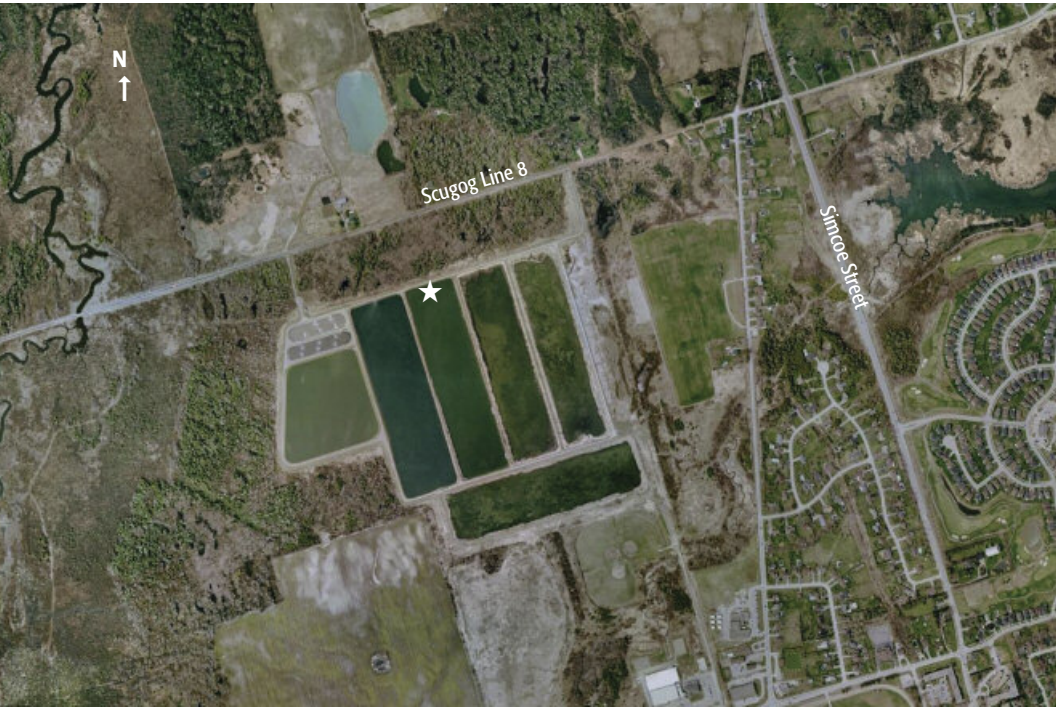

Figure 2. Location of the Nonquon Sewage Lagoons in Port Perry, Durham Region, Ontario. The white star shows the approximate location of the nest.
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half of the Region. Other than the pair that is the subject of this article, I could find only 16 summer records of the Red-necked Grebe in Durham Region (Table 1) and until 2018, no nesting had been reported. The objective of this note is to document the first known nesting attempt and first successful nesting of the Red-necked Grebe in Durham Region.

On 27 April 2018, I found a single adult Red-necked Grebe at the Nonquon Sewage Lagoons in Port Perry, Durham Region, Ontario (Figures 1 and 2). On 5 May 2018, Connor Hawey reported that two adults were observed courting at the Nonquon site (eBird 2018). Subsequently, the species was not reported there again until 17 May 2018, when Dave Worthington reported finding a nest with two eggs along the shore of one of the lagoons (eBird 2018).

On 18 May 2018, I confirmed the nesting, seeing the two adults and three eggs in the nest (Figures 3 and 4). On 15 June 2018, I observed the female incubating eggs on the nest and, on 19 June 2018, I saw the adults with two very small young.

To determine the egg laying dates and incubation period for this nest, I used the first known observation date of two eggs in the nest (17 May), the published

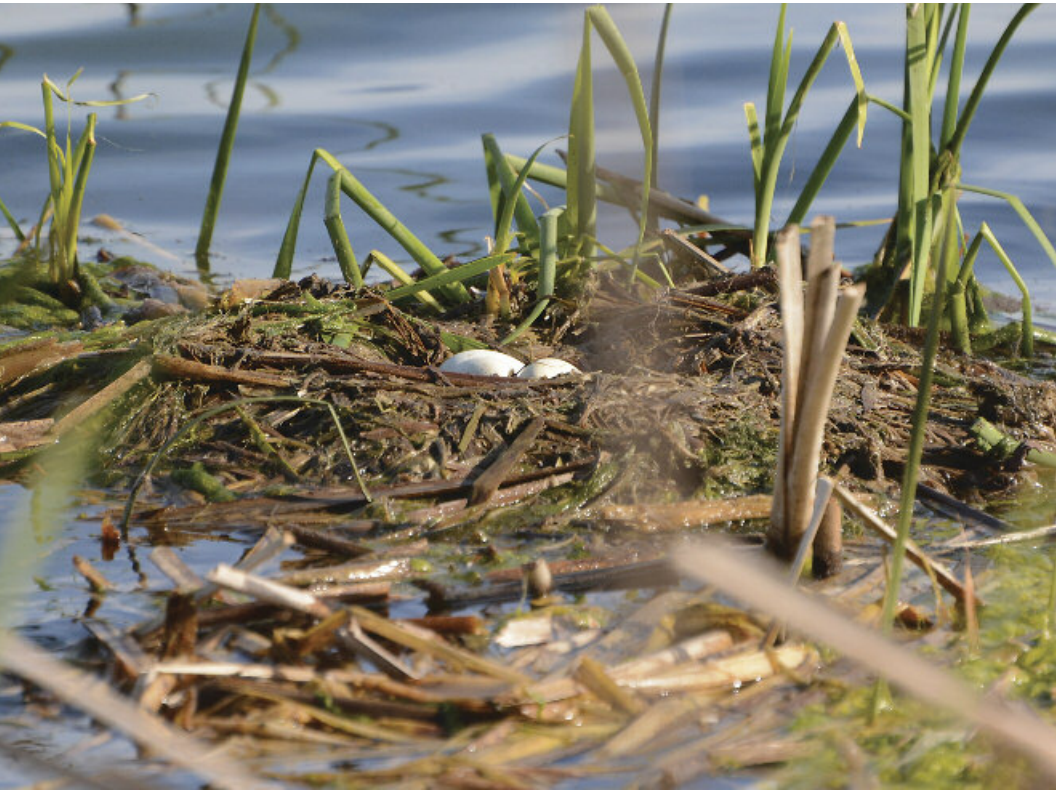

Figure 3. Nest seen through spotting scope, showing three eggs and the nest construction details on 15 May 2018.

Figure 4. Close up of Red-necked Grebe nest showing egg detail on 15 May 2018.

Figure 5. Adult Red-necked Grebe with one young on 11 July 2018. *Photos: A. Geoffrey Carpentier*

laying interval and a date midway between the last known date before the young hatched and the first date young were reported (17 June). Red-necked Grebes lay eggs at intervals of 1-2 days (Stout and Nuechterlein 1999) that are pale bluish-white when first laid, but become stained and splotched with mud and debris as they are incubated. The pale and relatively clean eggs observed on 17 and 18 May (Figure 4) and the addition of an egg on 18 May suggests laying started no earlier than 14 May (based on alternate day laying) and no later than 16 May (based on one egg/day being laid). Red-necked Grebes begin incubating after the first egg is laid and incubation lasts between 22 and 35 days with averages based on a large sample ranging from 25-27 days (Stout and Nuechterlein 1999). This suggests that the incubation period for this nest was between 32 and 34 days, falling within the published extremes for this species.

The nest was situated on the north shore of the third lagoon counting from the eastern most lagoon (Figure 2). The nest was on a floating mat of sparse fresh green vegetation, interwoven with dead, partially decayed vegetation (mostly cattails, *Typha* sp.), some algae and some mud (Figures 3 and 4). Individual stalks of live cattails were woven into the nest platform as anchors. The nest itself was a shallow depression in which the eggs were set and sat barely above the surface of the water about 3 m offshore along the edge of a cattail mat. The details of this nest are consistent with the features described by Stout and Nuechterlein (1999).

The nest was observed by several other birders, but there were never more than three eggs observed. The eggs were ovate and quite pale (almost white) with very small indeterminate darker flecks on them, when freshly laid (Figure 4). Once there were young, the nest was obscured by the vegetation surrounding it and it could not be determined whether the third egg was still in the nest, had fallen out or was depredated. Stout and Nuechterlein (1999) reported that the last laid eggs are often abandoned.

Both parents fed the two young following hatching until at least 22 June. On 9 July, only one young could be found (Figure 5). It was still downy but about half the size of the adults. On 16 July, no young could be found, but the adults were still there. No observations of adults or young after 16 July indicate that the adults had abandoned the site. Since parents usually stay with young until they are able to fly at 7-9 weeks of age, this nesting attempt did not result in new recruits to the Red-necked Grebe population.

Conclusion

This appearance of the young represents the first successful nesting of Red-necked Grebe on its first reported nesting attempt for Durham Region.

Acknowledgements

Early observations and timely reporting by Connor Hawey and David Worthington led to the discovery of this nesting. With the assistance of the editors of *Ontario Birds* and valuable insights by Glenn Coady and Tyler Hoar, this first nesting for Durham Region has been documented.

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