Canvasback breeding at Hearst, Cochrane District, Ontario

D.A. Sutherland, W.J. Crins, K.F. Abraham and A. Wormington

Introduction and Observations

The Canvasback (*Aythya valisineria*) is a rare breeding species in Ontario with fewer than seven confirmed or probable breeding occurrences reported in the first two breeding bird atlases (Sandilands 1987, Coady 2007). These were confined to southern Ontario with the exception of two sites in extreme northwestern Ontario which are closer to its core North American range (Baldassarre 2014). In this paper, we document two instances of confirmed breeding in northeastern Ontario. All available records for this region are summarized in Table 1 and mapped in Figure 1.

On 27 July 2009, during a visit to the sewage lagoons at Hearst, *Cochrane* (49° 41' 14" N, 83° 39' 53" W), DAS and WJC observed one Canvasback male and three females with broods of five, two and one ducklings. Ducklings in each of the broods appeared to be nearly the size of the attendant females, fully feathered (lacking visible down) and flightless (Figure 2). Following the duckling ageing scheme of Gollop and Marshall (1954), all ducklings appeared to correspond to Class IIIa ("Feathered-flightless"). For the Canvasback, Class IIIa has an age range of 54-65 days. The ratio of the length of the young to the adult female for Class III Canvasback ducklings should be close to equal (Dzubin 1959); a comparison of one broadside duckling with the female in Figure 2 suggests that the size ratio is roughly 6:7, and thus the birds may have been at the transition of Class IIc to IIIa, corresponding to an age of about 54 days. Mowbray (2002) provides an incubation period for the Canvasback of 24-29 days (average 25 days) with incubation initiated 1-2 days before the laying of the last egg and thus nesting for these broods was likely initiated sometime during the second week of May.

On 15 July 1989, KFA observed a female Canvasback with a brood of six ducklings at the Hearst lagoons during aerial waterfowl surveys of the Clay Belt (Ross *et al.* 2002). The young were downy and approximately half the size of the female (Class Ic-IIa) (Figure 3). Class Ic

Figure 1. Location of all known observations of Canvasback in north-eastern Ontario.
1) Moose River mouth,
2) Winisk River,
3) Ship Sands Island,
4) Hearst sewage lagoons,
5) Moosonee,
6) Longridge Point,
7) Netitishi Point and
8) Porcupine Lake.

Figure 2. Female Canvasback with brood of four ducklings at Hearst sewage lagoons, 27 July 2009.
Photo: D.A. Sutherland

Left: Figure 3. Female Canvasback with ducklings at Hearst sewage lagoons, 15 July 1989.
Photo: K.F. Abraham

Table 1. Date, location and details of all known observations of Canvasback in northeastern Ontario. Site numbers correspond to Figure 1.

Site	Date	District	Location	Details	Observers
1	26 May 1981	*Cochrane*	White Top (Moose River mouth)	2 (pair) in ponds	M.W. Jennings, P.D. Pratt
2	1 Jun 1981	*Kenora*	Winisk	12 birds	A. Wormington, A.W. McTavish
2	2 Jun 1981	*Kenora*	Winisk	8 birds	A. Wormington, A.W. McTavish
2	4 Jun 1981	*Kenora*	Winisk	6 birds	A. Wormington, A.W. McTavish
3	12 Sep 1987	*Cochrane*	Ship Sands Island	1	D.R. Gardiner, J.A. Cram, W.F. Smith, P.C. Walker
4	15 July 1989	*Cochrane*	Hearst Sewage Lagoons	4, female with brood	K.F. Abraham, R.K. Ross
4	6-13 May 1990	*Cochrane*	Hearst Sewage Lagoons	2 pairs	A. Wormington
4	15 Sep 1990	*Cochrane*	Hearst Sewage Lagoons	1	P. Sinclair, P.W. Jones
4	20-22 Jun 1990	*Cochrane*	Hearst Sewage Lagoons	2	J. Boos
4	27 Jul 2009	*Cochrane*	Hearst Sewage Lagoons	7, male with 3 broods	D.A. Sutherland, W.J. Crins
4	17 Jun 2010	*Cochrane*	Hearst Sewage Lagoons	2, pair	K.G.D. Burrell
5	27 Sep 2012	*Cochrane*	Moosonee	1, male	J.D. Vandermeulen
6	25 Jul 2014	*Cochrane*	Longridge Point	1	James Bay Shorebird Project
7	2 Nov 2016	*Cochrane*	Netitishi Point	2, males	T. Hagedorn
8	4 Nov 2017	*Cochrane*	Porcupine Lake	1, female	R. Filion

has an age range of 19-25 days and IIa has a range of 26-32 days; using the laying and incubation periods as above, laying of the clutch was probably initiated sometime in mid-May.

Discussion

Hearst is over 700 km north to northwest of the breeding sites in southern Ontario and a similar distance east of the breeding sites in northwestern Ontario. Sandilands (1987) and Coady (2000, 2007) provide summaries of the previous Canvasback breeding records in Ontario. Breeding records have come from Lake St. Clair, Chatham-Kent/Lambton; Luther Marsh, Wellington; Port Stanley, Elgin; Toronto, Toronto; and Oshawa, Durham in southern Ontario; and Berens Lake and the Ear Falls area, *Kenora* in northwestern Ontario. Observations of females with broods comprise the bulk of evidence of confirmed breeding. The only nests thus far documented in Ontario have been at the Outer Harbour East Headland (Tommy Thompson Park) and on the Toronto Islands, Toronto (Coady 2000, eBird 2018).

In northeastern Ontario, the Canvasback is evidently a very rare and irregular migrant and rare breeding species. Despite occasional pair and brood surveys by Canadian Wildlife Service (Ross *et al.* 2002) and periodic visits to sewage lagoons by resident and visiting birders, our breeding evidence from Hearst constitutes the only instances of confirmed Canvasback breeding in the northeast. However, the 1989 and 2009 records reported herein are not the only evidence of probable Canvasback breeding at the Hearst sewage lagoons. Other Canvasback records at this location (Table 1) include two pairs present 6-13 May 1990 (AW) and a single pair present 20-22 June 1990 (J. Boos, pers. comm.) and a single pair present 17 June 2010 (K.G.D. Burrell, pers. comm.). Away from the Clay Belt, most Ontario observational records have come from the coasts of James Bay and Hudson Bay. It is a little surprising that the species has not been observed at other sewage lagoons or suitable wetlands in the northeast. Despite its inclusion in the Timiskaming Area Bird Checklist (Anonymous 2011), apparently there are no actual records for this region (M. Werner, pers. comm.).

The Hearst sewage lagoons offer extensive suitable habitat for breeding waterfowl species. The lagoons are comprised of four larger cells totalling 23 ha in extent and three smaller cells (2 ha each) adjoining the west side of the larger cells. All cells support dense submergent and locally dense emergent vegetation, principally of stonewort (*Chara* spp.) and pondweeds (*Potamogeton* spp.), and Common Cattail (*Typha latifolia*) and Canada Bluejoint (*Calamagrostis canadensis*), respectively, and are surrounded on three sides by mixed forest.

The lagoons support a large breeding population of ducks. On 15 July 1989, in addition to the Canvasback brood, the following species were observed: American Wigeon (*Mareca americana*) (many adults, 5+ broods), Mallard (*Anas platyrhynchos*) (many adults, ca. 15 broods), Blue-winged Teal (*Anas discors*) (2-3), Northern Shoveler (*Spatula clypeata*) (2 males), Northern Pintail (*Anas acuta*) (1 female), American Green-winged Teal (*Anus crecca*) (1 pair, 1-2 broods), Ring-necked Duck (*Aythya collaris*) (1 pair, 3-4 broods), Greater Scaup (*Aythya marila*) (1 pair), Lesser Scaup (*Aythya affinis*) (50+ adults, 1 brood), Common Goldeneye (*Bucephala. clangula*) (20+ adults) and Ruddy Duck (*Oxyura jamaicensis*) (1 male, 1 female with brood). One American Coot (*Fulica americana*) with a very young chick was also observed. On 27 July 2009, the following waterfowl species were observed: Canada Goose (*Branta canadensis*) (7, 1 brood), American Black Duck (*Anas rubripes*) (several, 1 brood), Mallard (2, 1 brood), Blue-winged Teal (1), Ring-necked Duck (25, 1 brood), Bufflehead (*Bucephala albeola*) (6), Common Goldeneye (200+, several broods), Lesser Scaup (several, 2 broods) and Ruddy Duck (1).

We urge birders across Ontario to make appropriately timed visits to local sewage lagoons and other enriched permanent wetlands to ascertain whether the Canvasback is a more frequent breeder than current evidence suggests and to obtain records of other breeding waterfowl.

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D.A. Sutherland
Natural Heritage Information Centre
Ontario Ministry of Natural Resources and Forestry
Peterborough, Ontario K9J 3C7
E-mail: donald.sutherland@ontario.ca

W.J. Crins
170 Middlefield Road
Peterborough, Ontario K9J 8G1

K.F. Abraham
434 Manorhill Avenue
Peterborough, Ontario K9J 6H8

A. Wormington, Deceased.