

"Northern" Common Eider (*Somateria mollissima borealis*): New to Ontario

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Introduction

In late afternoon on 4 December 2013, I was birding at Fifty Point Conservation Area in Winona, Ontario. As I was walking along the west side trail at the lake, I noticed a small group of Bufflehead (*Bucephala albeola*) moving away from the rocks. In with this group was a female plumaged eider which I initially took to be a King Eider (*Somateria spectabilis*), although I did not examine it in detail as it was swimming into the light. I walked to the east end of the point but was troubled by something about the eider that

I could not pin down. I returned to the west side but was not able to locate the eider for several minutes. I eventually found it just off the boulder jetty that forms the channel leading into the marina. After walking over to the edge of the channel, I saw the eider again, swimming with a White-winged Scoter (*Melanitta fusca*) at the channel's end on the lake. It was then that I realized that this was a female plumaged Common Eider (*Somateria mollissima*). Though viewing at some distance with my 20 – 60X scope,

and the view being hampered by rough water, which only allowed for very brief glimpses, I was able to watch and photograph the eider in the fading light as it constantly dove, at times resurfacing with a bill full of mussels. Many observers were able to see and photograph the eider the next day and through until about mid-December. Extensive field study and excellent photographs of this bird leave no doubt that this represents the first documented occurrence of the “Northern” Common Eider (*Somateria mollissima borealis*) subspecies in Ontario. The purpose of this paper is to document this occurrence.

Description

This was compiled from prolonged field studies of the bird and aided by many photographs supplied by various individuals.

Size and shape: This was a large, heavily built sea duck, similar in size to the White-winged Scoter it was associating with on 4 December. The head and bill

were particularly large, befitting a member of the eider family. A photo was obtained several days later showing the eider with a White-winged Scoter (Figure 1). The apparent smaller size of the eider relative to the scoter may have been an artifact of the photograph, but may also have been due to the scoter being a male in its first calendar year, showing the female eider to be somewhat smaller by comparison. I aged and sexed the scoter on the basis of the clear white head spots, enlarged bill base and seemingly impressive body size.

Figure 1. First basic female “Northern” Common Eider (*S. m. borealis*) with an apparent first basic male White-winged Scoter at Fifty Point Conservation Area, Hamilton-Wentworth/Niagara on 8 December 2013. Note the smaller size of the eider relative to the scoter, which may have been in part an artifact of the photograph but may have also been due to the actual larger size of the male scoter.

Photo: David D. Beadle.





Figure 2. First basic female “Northern” Common Eider (*S. m. borealis*) at Fifty Point Conservation Area, Hamilton-Wentworth/Niagara on 8 December 2013. Note the dark-centred scapulars with chestnut/white fringes, slightly paler centred lesser and median secondary coverts with chestnut fringes. Also seen here are the minimally pale tipped greater secondary coverts and secondaries, along with the relatively short tertials.
Photo: David D. Beadle.

Plumage: The eider was in female plumage. Although the plumage tone varied in different photographs, in life it gave me the impression of a dark grayish brown. However, after looking at numerous photographs, I was confounded as to how to accurately describe the basic plumage colour. The scapulars had dark centres with narrow white and chestnut tips. The feathering at the sides of the breast/belly had dark centres with narrow off-white or pale brown bars and this was mixed with plain gray feathering.

Short dark/light horizontal barring was evident on the fore breast, mixed with dark spots. This spotted effect continued on the lower breast and belly, noted when the duck raised itself up from the water, and was also seen on the rear flanks. The dark greater secondary coverts and most of the secondaries had thin, dull whitish edging, more prominent on the greater coverts. The dark-centred median and lesser secondary coverts had chestnut fringes (Figure 2).

Head and bill: The head was fairly uniform in colour, a hard to define grayish brown. The mildly sloping forehead was clearly separated from the top edge of the bill, and these, in combination, imparted a lengthy gestalt. The crown was darker and contrasted with a whitish eyebrow which began in the lores and continued over the dark eye, broadening as it reached the back of the head. The pale eyebrow was mixed with thin dark streaking and it seemed to include a vague pale crescent above the eye itself. The bill was thick and long, lacking any trace of concavity, and was largely lead

gray in colour. The swollen tip, including the nail, was a creamy pale colour which contrasted with the rest of the bill, particularly in front-on views. The dorsal portion of the upper mandible narrowed as it approached the base, ending in two thin, short, pointed frontal lobes. The upper edge of the lateral bill feathering, which extended forward from between the lower edge of the frontal lobes and the lateral lobe of the bill, came to a slightly rounded point below the basal part of the nostrils. A narrowing strip of bill below the lateral feathering extended back to the gape (Figure 3).

Figure 3. First basic female “Northern” Common Eider (*S. m. borealis*) at Fifty Point Conservation Area, Hamilton-Wentworth/Niagara on 8 December 2013. Evident in this photograph are the broad, streaked eyebrow, the narrow, sharply pointed, relatively short frontal bill lobes and the relationship of the distal feathering on the bill side versus the basal portion of the nostril, where the feathering extends right adjacent to the basal portion of the nostril (unlike a female King Eider, where this feathering falls well short of extending to the base of the nostril). Note the gray bill colour with a paler tip and the lack of concavity to the bill. Also shown is the effect of forehead and bill not forming a straight lined single unit at the confluence of the bill and forehead as in the other Canadian subspecies of Common Eider. Photo: David D. Beadle





Figure 4. First basic female “Northern” Common Eider (*S. m. borealis*) at Fifty Point Conservation Area, Hamilton-Wentworth/Niagara on 5 December 2013. Note the white axillars, along with white on the median and several greater under secondary coverts. Also evident are the densely spotted underparts.

Photo: Mike Veltri

Underwings: Best determined from photographs, were pale gray except for the axillars, under medians and a few inner under greater secondary coverts, which were white in contrast (Figure 4).

Age determination: Several factors led me to a conclusion that this eider was in its first calendar year, best termed a female in first basic plumage (Humphrey and Parkes 1959). The most compelling of these factors was the lack of heavy dark barring along the side of the body, on the

fore breast and the underparts. Instead, these areas were composed of a profusion of dark spots and many short, pale-tipped dark bars. In all of the photographs that I examined of older females at different times of the year, the intensity of dark/light body barring on those individuals was prominent, to say the least. On the present eider, there was only a faint white edge running along the tips of the greater secondary coverts and the tips of some secondaries (Figure 2). I noted that adult females consistently

showed more or less obvious white wing bars on these tracts. Another factor was the pattern on the side of the head, specifically the broadening whitish eyebrow which started in the lores and extended to the back of the head, offset by the darker crown (Figures 2 and 3). By and large, I found that adult females only showed a small buffy crescent adjacent to the top of the eye. Some showed a short, poorly defined eyebrow, but in no photograph did I find an adult female with an eyebrow resembling the Fifty Point bird. Photographs demonstrated that adult females possess a rather uniformly patterned head with little contrast between the side of the head and the crown. The last age determinative

character involved the structure of the tail feathers. The visible rectrices in the photograph of the diving bird were retained juvenal feathers, showing a notched appearance that was most like Figure 3 in Pittaway and Lorimer (2001). They were broad basally and tapered slightly to the tip which had two points on either side of the central shaft. There were no apparent replaced, pointed, adult-type rectrices on the spread tail (Figure 5). This, along with the complete lack of recently acquired strong body barring, supported the eider being in first basic plumage rather than it having undergone any discernible amount of first prealternate molt.

Figure 5. First basic female "Northern" Common Eider (*S. m. borealis*) at Fifty Point Conservation Area, Hamilton-Wentworth/Niagara on 8 December 2013. In this unusual photograph, note the spread tail of the diving eider showing retained juvenal rectrices. Each feather has two points on either side of the central shaft. Photo: David D. Beadle





Figure 6. Definitive basic female “Pacific” Common Eider (*S. m. v-nigrum*) at a nest on Jenny Lind Island, Nunavut, on 1 July 1998. The massive head, with an essentially straight line combination of forehead and bill, is evident. Note especially the broad extension of feathering over the bill, which terminates in a distally rounded point. Also showing, and characteristic of this subspecies, is the very narrow amount of bill surface visible below the lower edge of the lateral bill feathering. Photo: Glenn Coady

Canadian subspecies of Common Eider

Of the seven subspecies of Common Eider found across the Holarctic region, four occur in Canada, as follows:

***S. m. dresseri*.** (Atlantic Eider). Other names for this subspecies include American Eider, Canadian Eider and Southern Eider. It breeds from Groswater Bay, on the south-central Labrador coast (where it intergrades with *borealis*) south to Massachusetts (Goudie *et al.* 2000). In winter, *dresseri* is found along the Atlantic coast and is casual as far south

as Florida (Goudie *et al.* 2000). The vast majority of previous records of Common Eider from southern Ontario pertain to this subspecies.

***S. m. sedentaria*.** (Hudson Bay Eider). Breeds and overwinters on open waters within Hudson Bay and James Bay (Gilchrist and Robinson 2000). A few are found in the vicinity of south Baffin Island and on the Labrador coast. This subspecies is very scarce outside of this region, although a specimen exists from Nebraska (Mlodinow 1999). Three

individuals were seen, with one first winter male collected, at Navy Island, Ontario on the Niagara River, south of Niagara Falls on 21 November 1936 (Palmer 1976, Goudie *et al.* 2000). A scant few other individuals in southern Ontario have been considered to be this subspecies (Glenn Coady, pers. comm.).

S. m. v-nigrum. (Pacific Eider). This subspecies breeds from Coronation Gulf, Nunavut (east to Jenny Lind Island), west along the coast of the Beaufort Sea and Bering Sea, Alaska (Kodiak, Cook Inlet, Glacier Bay) and the Aleutian Islands. It also breeds in eastern Asia, including St. Lawrence and Commander islands and the Kamchatka Peninsula (Goudie *et al.* 2000). It winters on ice-free waters around the Bering Sea (Goudie *et al.* 2000). It has occurred east to Newfoundland, with a relatively recent record at Cape Spear in 1995 (Mactavish 2014). There are also several records for Manitoba. The first record for the Western Palearctic recently occurred in Norway (Amundsen and Garner 2014). *V-nigrum* now remains the only Canadian subspecies that has yet to occur in Ontario.

S. m. borealis. (Northern Eider). Breeds from Groswater Bay, south-central Labrador and possibly as far south as northern Newfoundland, north around Ungava Peninsula, along Hudson Strait, west to at least Southampton Island and north to Ellesmere Island. It also breeds in west and northwest Greenland. Some arctic Canadian breeding *borealis* winter in southwest Greenland and southern Labrador (Goudie *et al.* 2000). Populations of *dresseri* and *borealis* winter

together in the Gulf of St. Lawrence (Mendall 1986). It has strayed inland to Saskatchewan (Last Mountain Lake, Riceton), as well as to Alaska (Point Barrow) and Great Britain. This is the smallest of the four Canadian subspecies. (Goudie *et al.* 2000).

Subspecies discussion

My experience has been that the colour of body plumage is not particularly useful in the determination of subspecies in the female Common Eider. Moreover, as detailed above, I consider this eider to be a young of the year and I have not found anything to support a typical colour for that age class. Using size as a yardstick is tenuous at best, as there was nothing to compare this duck with other than to a nearby White-winged Scoter (Figure 1). The most useful feature for subspecies delineation involves aspects of the head and bill. I have found through photographic research that *borealis* differs from the other three Canadian subspecies via the impression given by the combination of relative bill and forehead angle, along with the resulting head shape. In *borealis*, the forehead is quite clearly discrete from the top of the bill, that is to say, two separately visible units, forehead and bill, are readily discernible and positioned in an obtuse angle in relation to one another (Figure 3). This contributes to a decidedly round-headed gestalt that is present in this subspecies. The other three subspecies have more of a straight line confluence of the bill and forehead, imparting a wedge-shaped effect to the head, with *v-nigrum* perhaps being the most obvious in this respect.

The extent and shape of the frontal lobes at the base of the bill is another critical separating feature (Mendall 1986, Knapton 1997). These lobes have also been referred to as “processes”. My own term in the past, especially, for example, when comparing the two species of scaup, has been “bill pointers”. From all of the diagrammatic and photographic references that I have consulted, the closest and perhaps easiest fit for the Fifty Point eider, in utilizing frontal lobe structure, is female *borealis*. The frontal lobes on the Fifty Point eider were short and decidedly pointed at the base (Figure 3). The other subspecies that comes closest in this respect is *v-nigrum*, as it shares the acutely pointed frontal lobe bases with *borealis*. A photo was supplied to me showing a pale-plumaged definitive basic female *v-nigrum* on a nest in the Canadian Arctic (Figure 6). Several compelling features involving the head and bill are evident in this photo. The head appears strikingly massive. Augmenting this, there is a profound impression of a straight linear merging of the confluence of the bill and forehead. The lateral bill feathering is distinctive and does not create a look akin to that of the other subspecies, but rather recalls more a female Spectacled Eider (*Somateria fischeri*) in that respect, due to the broad forward

extension of the feathering. The feathering extends down from the base and nearly abuts the back end of the nostril, continuing down in a broad rounded point, covering much of the bill surface below and behind the basal part of the nostril. Although the angle of the photograph precludes full assessment of the frontal lobe structure, a very narrow, basally pointed effect is suggested.

A definitive basic female Common Eider (*sedentaria*) photographed in Churchill, Manitoba in June (Figure 7), shows two age related characters: heavy barring along the sides, as well as a pair of conspicuous white wing bars, these on the tips of the greater secondary coverts and secondaries. More important are the subspecific supportive features involving the head and bill. The appearance of the lateral bill feathering and position with respect to the nostril is very similar, if not identical to that of the Fifty Point *borealis*. The distal part of the feathering is essentially pointed and terminates below the rear portion of the nostril. There is also a moderate amount of bill visible below the bottom line of lateral feathering, comparable to *borealis* and *dresseri* but markedly different when contrasted with *v-nigrum*. The bill itself is long and the frontal lobes are broad and end relatively close to the eye in a rounded

Figure 7. Definitive basic female “Hudson Bay” Common Eider (*S. m. sedentaria*), at Churchill, Manitoba on 15 June 2011. For age, note the heavy barring on the sides and fore breast, along with the conspicuous white wing bars, with the bar on the greater secondary coverts broader than the secondary bar.

Subspecies identification is aided by the long, moderately broad frontal bill lobes which end in a rounded base, along with the unison of bill and forehead in an essentially straight line. Separation from the similar *dresseri* is enhanced by the non-migratory habits of *sedentaria*, with birds of that subspecies, including this individual, being confined in winter to the open waters of Hudson Bay and James Bay.

Photo: David Hemmings





Figure 8. First alternate female “Atlantic” Common Eider (*S. m. dresseri*), Burlington, Ontario on 17 January 2001. The lack of obvious dark barring on the foreparts and the absence of white wing bars assist in ageing this female as first alternate. Note the distal bill side feathering/nostril position, similar to that of both *sedentaria* and *borealis*. The frontal lobes are somewhat broader than in *sedentaria*, with both subspecies possessing a rounded base to the lobes. Also evident in this photo is the blending of bill top and forehead to form an essentially straight edged line. Photo: Kayo Roy

terminus. As in *v-nigrum*, the straight-edged top surface of the bill essentially melds in a linear confluence with the forehead to form one unit.

A first alternate female *dresseri* spent the winter of 2000-2001 along the lakeshore off Hamilton and Burlington (Figure 8). I aged this richly-coloured bird as first alternate on the basis of the broad, fresh chestnut fringes to the dark brown mantle and scapular feathers and the strong vertical dark brown/rich buff barring on the body sides. The lack of barring on the fore breast and the absence of white wing bars were separating characters from a definitive alternate female. The distal bill feathering versus nostril position was quite similar to both

borealis and *sedentaria*. The frontal lobe make-up was most similar to the non-migratory *sedentaria*. My own research has shown that female *dresseri* has somewhat broader frontal lobes throughout when compared to *sedentaria*. As with the previous two described subspecies, the top edge of the bill formed an essentially straight line in combination with the forehead.

When seen in life or in photographs, particularly in side view, characters involving the head can be difficult to judge on any female Common Eider encountered. One needs to obtain optimum views and carefully examine at all angles, the makeup of relative forehead/bill angle, frontal lobe structure

and lateral bill feathering/nostril position of any female plumaged individual, in order to correctly ascertain the subspecific identification of any particular *v-nigrum*, *borealis*, *sedentaria* or *dresseri* Common Eider. The often close range views, supplemented by a suite of excellent photographs of the Fifty Point eider over a span of nearly two weeks, permitted a confident and consistent identification of the so called 'Northern Eider'.

After I first reported this bird on 4 December, I was contacted by James Turland of Kincardine on 5 December, asking me to help him identify a female eider that he and his group had seen off Fifty Point Conservation Area on 2 December. Four photos were taken by Carole Lupton on that day. The photos clearly showed the bird to be a female plumaged Common Eider, most certainly the same one present from 4 December on. I promptly advised James as to the identity. James subsequently sent me his report, along with the photos, which I forwarded to the Ontario Bird Records Committee.

Figure 9. First basic female "Northern" Common Eider (*S. m. borealis*) at Fifty Point Conservation Area, Hamilton-Wentworth/Niagara on 8 December 2013. Note how the lateral bill feathering darkens distally and appears to end short of the nostril. This artifact was apparent in certain lighting conditions and in other photographs. Upon closer examination, the correct forward feather extension can be made out, ending below the rear portion of the nostril. Also evident in this photograph, is the subspecific determinative contrast of the rounded head, including a slightly angled forehead, and the straight-lined upper bill, with a very easily discernible obtuse angle formed between the two.

Photo: Barry Cherie.

I was able to confidently identify this duck as a female plumaged Common Eider in fairly mediocre light in late afternoon on 4 December. This was done with the eider in rough water and diving frequently at a moderate distance of several hundred feet. The distinctive structure, particularly involving the head and bill, was quite evident.

The next morning I saw the eider just off the rocks of Fifty Point at much closer range. I became concerned about one feature on the bird that had me thinking about a possible hybrid eider. This involved the critical issue of the forward extension of feathering on the side of the bill with respect to the position of the nostril. It appeared that, in some lighting conditions, the pale feathering on the bill sides ended in a rounded terminus short of the base of the nostril (Figure 9).



This character would be more appropriate for King Eider, and arguably for a hybrid involving the two species. Such Common Eider x King Eider hybrids have been described (Pettingill 1959, Palmer 1976, Trefry *et al.* 2009). However, all other features looked to be correct for Common Eider. I voiced my concerns to several other observers present and also posted to the ONTBIRDS listserv about this a short time later.

Within a couple of hours, I received four photos from Garth Riley, who had been present earlier in the day. His close range photographs showed the relative positions of the feathering and nostril quite well. These photographs revealed that the distal point of the bill side feathering was slightly darker than the remainder, at least with the eider in certain lighting and relative head positions. This had then created an artifact, making it appear to me in life that the darker tip of the feathering was actually part of the bill, being somewhat similar in colour to it. Garth's photos and those of others taken at close range, showed the darker distal bill feathering going forward, ending in a point below the basal 20 to 30 percent of the nostril. Thus, a diagnostic character was indeed present which eliminated a putative hybrid eider, along with a female plumaged King Eider. I quickly reposted to ONTBIRDS to clear up any confusion.

Jean Iron photographed this eider at close range on 6 December. She and Ron Pittaway were the first observers to recognize this bird as belonging to the subspecies *borealis*. Of greater importance was that through careful research they were also able to confidently state that this eider represented the first known record of *borealis* for the province of Ontario.

This record was accepted by the Ontario Bird Records Committee as the first occurrence of a *borealis* Common Eider for Ontario. It was accepted as occurring from 2-13 December 2013 at Fifty Point Conservation Area, Hamilton/ Niagara (Holden 2014).

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Literature Cited

- Amundsen, T. and M. Garner.** 2014. Magnificent eider in magnificent Varanger. Birding Frontiers blog – 19 February 2014. <http://birdingfrontiers.com/2014/02/19/pacific-eider-in-norway-a-new-western-palearctic-bird/> Accessed 5 July 2014.
- Gilchrist, H. G. and G. J. Robertson.** 2000. Observations of marine birds and mammals wintering at polynyas and ice edges in the Belcher Islands, Nunavut, Canada. *Arctic* 53:61-68.
- Goudie, R.I., J.R. Gregory and A. Reed.** 2000. Common Eider (*Somateria mollissima*). The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from The Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/546doi:10.2173/bna.546> Accessed 5 July 2014.
- Holden, B.R.** 2014. Ontario Bird Records Committee Report for 2013. *Ontario Birds* 32:54-81.
- Humphrey, P.S. and K.C. Parkes.** 1959. An approach to the study of molts and plumages. *Auk* 76:1-31.
- Knapton, R.W.** 1997. Identification of female Common Eider subspecies in Canada. *Birders Journal* 6:134-136.
- Mactavish, B.** 2014. Pacific Eider at Cape Spear in March 2005. The Bruce Mactavish Newfoundland Birding Blog. 5 February 2014. http://brucemactavish1.blogspot.ca/2014_02_01_archive.html Accessed 5 July 2014.
- Mendall, H. L.** 1986. Identification of eastern races of the eider. Pages 82-88 in *Eider ducks in Canada*. (Reed, A., Ed.) Canadian Wildlife Service Report Series, no. 47, Ottawa, Ontario.
- Mlodinow, S.** 1999. Common and King eiders: vagrancy patterns in western North America. *Birders Journal* 8:234-242.
- Palmer, R. S. (ed.)** 1976. *Handbook of North American Birds, Volume 3, Waterfowl (Part 2)*. Yale University Press, New Haven, Connecticut.
- Pettingill, O.S.** 1959. King Eiders mated with Common Eiders in Iceland. *Wilson Bulletin* 71:205-207.
- Pittaway, R. and P. Lorimer.** 2001. Age Duck Tails. *OFO News* 19(3):1
- Trefry, S. A., D. L. Dickson and A.K. Hoover.** 2009. A Common Eider x King Eider hybrid captured on the Kent Peninsula, Nunavut. *Arctic* 60(3):251-254.



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