

**FIGURE 1.** Pacific Common Eider, 15 June 2014, Churchill. Note the bright orange bill and bill lobes, long facial profile, curved lower edge to the black cap, and green suffusion on the cheek and under the cap. Photo credit: Bruce Di Labio.

# SIGHTING OF A PACIFIC COMMON EIDER (Somateria mollissima v-nigrum) AT CHURCHILL, MANITOBA

Ross E. Harris
19 Chicora Avenue
Toronto, ON M5R 1T7
ross.harris@sympatico.ca

Bruce M. Di Labio P.O. Box 538 Carp, ON K0A 1L0

On 15 June 2014. Bruce Di Labio discovered an adult male Pacific Common Eider (Somateria mollissima v-nigrum) at the mouth of the Churchill River in Churchill, Manitoba (Figure 1). The bird was swimming with male and female Hudson Bay Common Eiders (S. m. sedentaria). This is the first confirmed record, with evidence (photographs), of v-nigrum for Churchill and one of few records of this subspecies for Manitoba. 1 In the following note, we describe the circumstances associated with the sighting, present and discuss the identification features, and review the relevance of this record.

#### **Sighting Conditions**

We were birding the mouth of the Churchill River at Cape Merry during the afternoon of 15 June 2014 (approximately from 15:20 h to 17:00 h), scanning the river with 8x and 10x binoculars and a 20-60x spotting scope. As had been typical of previous visits to Cape Merry by us that week, small groups of Hudson Bay Common Eiders were swimming in the river there. These groups included males and females.

Bruce Di Labio initially sighted the adult male Pacific Common Eider, then both of us studied the bird comparing it with the Hudson Bay Common Eiders nearby. The initial sighting distance was about 200-300 m. The bird continued swimming in the area, and we were able to approach more closely and Bruce took photographs. We spent approximately 20-30 min observing the bird, as close as about 50 m. The Pacific Common Eider was swimming during the entire period

of observation; it was never seen flying. Sometimes it was in close association with the Hudson Bay Common Eiders; at other times it was swimming apart.

The viewing conditions were excellent: sunny with cloudy breaks, light wind, no glare, and no precipitation or fog. There were still some large chunks of ice in the river, but the ice cover had broken and the river was >90% free of ice cover.

We birded Cape Merry and other areas along the Churchill River and around Churchill from 10 to 17 June 2014. The Pacific Common Eider was observed only on the one day (15 June), although groups of Hudson Bay Common Eiders were seen every day.

#### **Common Eider Subspecies**

Most taxonomies recognize six or seven subspecies of Common Eider across the Holarctic range of the species, although some authors have combined several of those and considered only four forms.<sup>2,3</sup> The

adult males of most of the subspecies can be identified in the field. Differences in head and bill features among adult males of the four North American subspecies are illustrated well in the sixth edition of the National Geographic field guide and the Sibley Guide to Birds, second edition.<sup>4,5</sup> Adult females and juveniles are much more difficult to identify to subspecies.

Six subspecies are listed below, with brief descriptions of their primary ranges:6

- 1. Pacific Common Eider (S. m. v-nigrum): nests through coastal areas of the central and western Canadian Arctic from Bathurst Inlet and Victoria Island west to and around coastal Alaska to the Bering Sea, and in northeast Siberia; winters in the Bering Sea. Breeding and wintering ranges appear to be disjunct from all other subspecies; there is an apparent gap in the central Canadian Arctic, between v-nigrum and borealis, without breeding Common Eiders.7,8
- 2. Northern Common Eider (S. m. borealis): breeds throughout coastal northern Hudson Bay and the eastern Canadian Arctic south to the central Labrador coast and around coastal Greenland: winters in southwest Greenland, south Labrador and (with *dresseri*) in the Gulf of St. Lawrence. Breeding range lies north of the Hudson Bay Common Eider's range, and east of the Pacific Common Eider's.
- 3. Hudson Bay Common Eider (S. m. sedentaria): resident (breeding and wintering) in coastal Hudson and James bays, over-winters especially in polynyas around the Belcher Islands and possibly other open water areas of Hudson Bay; the expected subspecies of Common Eider at Churchill.

- 4. American Common Eider (S. m. dresseri): breeds along the Atlantic coast, from about central Labrador south to Massachusetts. and around the Gulf of St. Lawrence: winters in breeding range and south to Long Island, New York.
- 5. European Common Eider (S. m. mollissima): breeds and winters primarily along coastal western and northern Europe.
- 6. Faeroe Islands Common Eider (S.m. faeroeensis): resident around the Faeroe Islands, and in Orkney and Shetland Isles off northern Scotland.

A seventh subspecies, S. m. islandica, has been recognized by some authorities but not all. The reported breeding range of this subspecies lies between borealis and mollissima (i.e., southwest and east Greenland, Iceland, and Spitsbergen) and the variable characters of this population fall between those of borealis and mollissima. Most authorities have treated Greenland breeders as borealis: eastern populations (e.g. Iceland) as nominate mollissima. 2 We do not include this as a separate subspecies in this paper.

For the purposes of this paper, we have combined faeroeensis with nominate mollissima based on the following comment: "These differences [smaller body size, size and shape of bill lobes] are subtle, and identification of this subspecies [i.e., faeroeensis] outside its usual range is probably impossible apart from typical individuals measured in the hand."2

In regions where the breeding ranges of two subspecies meet, birds can show characters that are intermediate between those of the two neighbouring subspecies.

Such intergradation is suspected or known to occur between borealis x dresseri, borealis x sedentaria, borealis x mollissima, and mollissima x faeroeensis. <sup>2,9,10</sup>

It has been suggested by some that Pacific Eider deserves species status as it is sufficiently distinct from the other forms of Common Eider. 11,12

### **Description and Identification**

The following discussion presents a description of our Churchill eider, and a comparison with each of five subspecies/groups of Common Eider: v-nigrum, borealis, sedentaria, dresseri, and mollissima/faeroeensis. The subspecies evaluations begin with the easiest, and move on through to the most difficult to eliminate from consideration.

Four features are key to distinguishing adult males of the Common Eider subspecies: (1) the shape and length of the frontal lobes, (2) the colour of the bill and frontal lobes, (3) the extent of green on the head, and (4) the presence/ absence of scapular 'sails'.2,3,6,10 The subspecific identity of most adult male Common Eiders in definitive basic (i.e., colourful breeding) plumage should be distinguishable based on an evaluation of those four characters (we use the most recent plumage terminology in referring to the colourful breeding plumage as basic rather than alternate<sup>2,13</sup>). Additional supporting characters are the shape of the bottom edge of the black cap, the width of black along the lower edge of the frontal lobes, the presence/absence of a black 'V' on the chin, body size, and the shape of feathering along the sides of the bill. The black 'V' on the chin is characteristic of the Pacific Common Eider (hence the species name v-nigrum); however, it does occur occasionally in other populations and



FIGURE 2. Pacific Common Eider (left) with two female and one male Hudson Bay Common Eiders, 15 June 2014, Churchill. Note the differences in the colour and shape of the bill and bill lobes of the two male eiders. Photo credit: Bruce Di Labio.

is usually very difficult to see in the field. We did not see this feature on the Churchill bird, and none of our photographs show it.

The bird that we saw in Churchill was clearly an adult male Common Eider in definitive basic plumage (Figure 1). It was a large, heavily built duck, white across the face, chest and back with black along the sides, rear and on the crown, and a white 'thigh' patch. There were pale green patches on the nape and rear cheeks. The forehead and bill formed a long, sloping profile. The all-white tertials indicated that this bird was not a subadult (2-year old), which would show blackish tertials.

This Common Eider stood out from the other adult male Common Eiders present. Its bright orange bill, with short pointed bill lobes, contrasted with the greenish bills and longer, more rounded lobes on the adult males of the nearby eiders (Figure 2). The bright carrot-orange bill was the feature that initially caught our attention in the field. The lower edge of the black cap was clearly curved, and the green feathering on the nape extended forward in a thin line below the cap. The forward edge of the feathering along the sides of the face, below the lobes, was broadly rounded and not sharply wedge-shaped. A scapular 'sail' was visible on each side of the bird's back. There were no apparent signs of moult.

## **Hudson Bay Common Eider** (subspecies sedentaria)

To help identify the subject eider, it is useful to determine the race of the other Common Eiders swimming with it. Those birds were obviously different from the subject bird (Figure 2). The adult males of these other eiders had greenish bills with lobes rounded at their posterior

ends. The feathering along the sides of the bill projected forward into a narrowly-rounded point (Figure 2). These features match those of the Hudson Bay Common Eider, S. m. sedentaria, which is the local, resident race of Common Eider and the expected subspecies at Churchill.<sup>14</sup> Note that sedentaria and *v-nigrum* are the two largest Common Eider subspecies and our subject eider is very similar in size to the nearby sedentaria.

# American Common Eider (subspecies dresseri)

We can quickly eliminate dresseri from consideration. The American Common Eider is very distinctive: the frontal lobes of the bill are large, long, broad, and rounded, even more than in sedentaria. They are nothing like our subject bird's short, narrow, pointed lobes (Figure 1).

# European/Faeroe Islands Common Eider (subspecies mollissima and faeroeensis)

These subspecies of Common Eider lack obvious scapular 'sails'. However, the subject eider at Churchill does clearly show the white 'bumps' or 'sails' on its back. Additionally, while bill colour in mollissima/faeroeensis is variable, it is typically of olive-grey-yellowish tones and not the bright orange of our subject bird. European/Faeroe Islands Common Eiders also show a curved lower edge to the black cap, but less so than our Churchill eider; the Churchill eider had a deep curve to the lower edge of the cap. The green colour on the nape of European/ Faeroe Common Eiders shows a distinct edge against the white cheek and does not extend forward under the black cap, whereas on the Churchill bird the green is suffused onto the cheek and as a thin line of green under the cap (Figure 1).

# Northern Common Eider (subspecies borealis)

Subspecies borealis occurs in northern Hudson Bay and thus is geographically close to Churchill. Although somewhat variable across its range, the Northern Common Eider has several features that are similar to the Churchill eider: a brightly coloured bill, narrow bill lobes, and scapular 'sails'. However, it also differs in several respects from our subject eider. The bill colour in Northern Common Eiders tends to be more golden-yellow than orange, and the bill lobes are often slightly rounded at their tips. Also, borealis has white cheeks and a distinct edge to the green of the nape at the cheek; the green also does not extend forward below the black cap. The bottom edge of the black cap is straighter and not nearly so curved as in the subject eider, and the forward edge of the feathering along the sides of the bill is wedge-shaped and not broadly-rounded. Borealis is smaller than sedentaria, whereas our eider is similar in size.

# Pacific Common Eider (subspecies v-nigrum)

The subspecies *v-nigrum* provides the best match for the features of our bird. The Pacific Common Eider is a match in size for *sedentaria*, as is our bird. The long sloping profile, and bright orange bill with short, narrow bill lobes are characteristic of *v-nigrum*. The lobes are positioned more toward the midline of the forehead than in other subspecies. Also typical is the distinctly curved lower edge to the black cap. The green on the nape fades onto the cheek (not ending as a distinct edge)

and can be seen as a thin line below the black cap as well. The forward edge of the feathering along the sides of the bill is broadly rounded and not wedge-shaped or pointed. Our bird shows scapular 'sails', although that feature is not unique to *v-nigrum*. Unfortunately, a black V under the chin was not discernible in the field or our photographs. That feature, although not diagnostic, is typical of adult male Pacific Common Eiders.

We conclude that the adult male Common Eider that we saw in Churchill was a Pacific Common Eider. Also, we see no indications that this bird was an intergrade with another subspecies. The features appear to be typical for *v*-nigrum.

#### Discussion

There are several confirmed and possible records of Pacific Common Eider for Manitoba, including Churchill (Table 1). Those records occurred during either late October or early November in southern Manitoba, or at Churchill during June. 1,15,16 The record reported in this paper is, to the best of our knowledge, the first record for Churchill published with evidence (photographs). We have not been able to obtain evidence (i.e. photographs or written descriptions) for the previous sight records of

TABLE 1. Confirmed and possible or suspected records of Pacific Common Eider (Somateria mollissima v-nigrum) in Manitoba.

DATE	LOCATION	EVIDENCE	SOURCES
23 October 1911	Lake Manitoba	Specimen; MM no. 1.2-2751	7, 24
November 1911	Giroux	Photos of specimen at CMN	7, 24
2, 4-6 November 1984	Lockport; near Winnipeg	Sight record	24
3, 5 November 1984	Lockport	Specimen; MM no. 1.2-4100	24
2-5 November 1996	Patricia Beach, Lake Winnipeg	Sight record; written description	25
Early June 1998	Churchill	Sight record (photographs?)	15; L. Bevier, pers. comm.
June 1999	Churchill	Sight record (photographs?)	L. Bevier, pers. comm.; B. Di Labio, pers. obs.
Early June 2000	Churchill	Sight record (photographs?)	15; L. Bevier, pers. comm.
16 June 2005	Churchill	Sight record (photographs?)	16; B. Di Labio and T. Hince pers. obs.
15 June 2014	Churchill	Sight record with photographs	This paper

Notes: MM = Manitoba Museum; CMN = Canadian Museum of Nature.

possible *v-nigrum* at Churchill during the 1998–2000 period and in 2006 (Table 1), although such evidence may exist.

Pacific Common Eiders have been seen several times by Canadian Wildlife Service researchers during studies on Southampton Island (Grant Gilchrist, CWS, pers. comm.). We know of no other confirmed or possible Hudson Bay records.

Pacific Common Eiders nest regularly as close as Victoria Island and Bathurst Inlet.<sup>7,8</sup> They are known to wander quite far on occasion; there are records as distant as Newfoundland and even Norway. 17-22 Interestingly, Manitoba Common Eider records away from Hudson Bay that have been identified to subspecies have proven to be *v-nigrum*; there are no known records of borealis despite that subspecies' geographically closer proximity. Whereas in Saskatchewan the identifiable records of Common Eider are all believed to be of the borealis subspecies.<sup>23</sup>

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