

## **The Status and Occurrence of Spectacled Eider (*Somateria fischeri*) in British Columbia.**

**By Rick Toochin and Jamie Fenneman.**

### **Introduction and Distribution**

The Spectacled Eider (*Somateria fischeri*) breeds only in northern and western Alaska, south to the Yukon-Kuskokwim delta and along a small stretch of the coastline of northeastern Russia from the Kolyma delta west to the Yana delta (Petersen *et al.* 2000). The entire population winters in the northern Bering Sea, primarily in waters immediately south of St. Lawrence Island, where they are restricted to ice free pockets (“polynyas”) within the arctic ice cap (Petersen *et al.* 1995, Petersen *et al.* 1999). Vagrants have occurred west along the arctic coast to Scandinavia and south along the Pacific coast of North America to British Columbia (Lewington *et al.* 1992, Campbell *et al.* 2001, Toochin *et al.* 2013, see Table 1). The current global population of Spectacled Eiders is estimated at c. 330,000 – 390,000 individuals, a population that is sufficiently high to warrant a classification of “Least Concern” by the IUCN (IUCN 2013). Despite this, however, some historic declines, such as a 96% decline in the breeding population of the Yukon- Kuskokwim delta of western Alaska and an 80% decline in the Prudhoe Bay area of Alaska’s north coast (USFWS 2010), have led to the species being classified as “Threatened” by the U.S. Fish and Wildlife Service (USFWS 2010). This species is particularly sensitive to climate change due to the dependence of the entire population on arctic polynyas in the northern Bering Sea during the winter (Petersen *et al.* 2000). Any shifts in the distribution of these wintering areas, particularly those which shift them over deeper waters, could have drastic consequences to the entire population (Petersen *et al.* 2000). Climate change may also partially explain the drastic declines in the southernmost breeding areas such as the Yukon-Kuskokwim delta (Petersen *et al.* 2000). Other factors that are likely associated with its decline are excessive hunting pressure, egg harvest, and lead shot poisoning (USFWS 2010). This species is a casual vagrant to south central Alaska, where it has been observed as far east as Kodiak Island and Kachemak Bay (Petersen *et al.* 2000, West 2008). There are also no records for Spectacled Eider for Oregon or Washington State (OFO 2012, Wahl *et al.* 2005, WBRC 2012). A specimen that was apparently collected at Bitterwater Lake, San Benito County, California in February, 1893, (Moffitt 1940) is excluded from the state’s official bird list due to questions regarding the origin of the specimen (Hamilton *et al.* 2007). There are no inland records of this species anywhere in North America. Given its exclusively high-arctic distribution, its limited tendency for vagrancy, and its declining populations, the Spectacled Eider is considered an exceptional accidental vagrant to British Columbia.

### **Identification and Similar Species**

The identification of the Spectacled Eider is covered in most standard North American field guides. The males are obvious and do not provide any great identification challenges. The

females of this species are different looking, but are similar to female King Eider and female Common Eider and, if reported would require careful scrutiny and photographic evidence to properly document such an extraordinary observation. The following is taken from Peterson *et al.* (2000) and gives good information on how to identify this majestic sea duck.

The Spectacled Eider is a medium-sized sea duck which is 52.8 cm on average total length for males and 49.8 cm for females. The female birds are identified in all plumages by a distinctive, large, round patch of feathers around the eye, which differ in color and in feather texture from the surrounding areas. This area gives the spectacled look the species is named after. The presence of the “spectacles” easily distinguishes this species from all other ducks, including other eiders at close range, but some confusion with other species is possible when birds are too distant for this feature to be seen clearly. The most similar looking species are the Common Eider (*Somateria mollissima*) and the King Eider (*Somateria spectabilis*). Both of these species differ in size from the Spectacled Eider, with the slightly larger King Eider and the distinctly larger Common Eider. Both of these species have frontal process of bill that extends up the forehead to near the eye, while on the Spectacled Eider the frontal process is absent and the feathering of the forehead and lores extends evenly, far forward onto the culmen of the bill, terminating just behind the nostril. The Common Eider is further distinguished by the head profile that is longer and more sloping than that of the Spectacled Eider. Although alternate-plumaged males also are distinguished by clear differences in head pattern, the Spectacled Eider lacks the black crown of the Common Eider, and the blue crown and the large orange frontal process of the King Eider; and it has a shaggy, uneven feathering on the nape that is lacking on other eiders. The female plumages are more similar in color and pattern to other female eiders. In addition to differences in size and shape, the female Spectacled Eider generally is duller and paler, with less distinct barring, than other female eiders. In Eclipse (definitive basic) plumage the male resembles the alternate male in overall plumage pattern and color, but the white and green areas of the body (not wing-coverts) are replaced by dark gray to gray-brown, with some white feather-bases showing on some feathers. The sub-adult alternate males are like the adults, but with the alternate plumage pattern less fully developed. The female plumages do not vary significantly throughout the year. There is no geographic variation in plumage or size.

### **Occurrence and Documentation**

This species has an enigmatic history in British Columbia. It is known from only two coastal sight records, one each from Vancouver Island and the Queen Charlotte Islands; and few details pertaining to either of these records have been published. The dates of the records (June, September), which are unusual for such a northern species, are the most questionable aspects of the sightings. These dates are not entirely unprecedented; however, as there are several

summer and early fall records for King Eider along the coast of British Columbia; with at least one summer record of Common Eider from the Vancouver area and one summer and a couple of early fall records of Steller's Eider along the coasts of Vancouver Island (Toochin *et al.* 2013). So it is possible to have a summer and early fall record of Spectacled Eider in British Columbia at that time of year, even though it seems highly unlikely. Despite these concerns, the Spectacled Eider was included in Campbell *et al.* (2001) as a confirmed species in the province, and the few details published appear to support this assessment. The first observation of the species was of an "adult or near-adult male" observed on September 22, 1962 off James Island near Sidney on southern Vancouver Island (Godfrey 1986, Campbell *et al.* 2001, Toochin *et al.* 2013, see Table 1). This individual was observed by Charles J. Guiguet of the Royal British Columbia Museum, who was among the most knowledgeable and observant ornithologists in the province at the time (Campbell *et al.* 2001). Although this record was originally excluded from treatments of the province's avifauna (e.g., Godfrey 1986, Campbell *et al.* 1990), subsequent review of previously-unseen field notes led Campbell *et al.* (2001) to consider the record valid. Although the field notes are no longer available for review, the conviction with which Campbell *et al.* (2001) validate them suggests that they were reviewed appropriately and thoroughly. The second record of Spectacled Eider in British Columbia is of an adult male observed roosting with Harlequin Ducks at Alliford Bay, Queen Charlotte Islands on June 15, 1988. Campbell *et al.* (2001) provide no further details on this highly unusual observation. Given the lack of information currently available on this observation it is classified here as hypothetical. As with all birds, a future vagrant bird could turn up in British Columbia, but given this species' current low population numbers and limited migration, it seems a long shot for another to turn up in the Province anytime soon.

**Table 1: Records of Spectacled Eider for British Columbia:**

1.(1) adult male September 22, 1962: Charles J. Guiguet: near James Island near Sidney off Vancouver Island (Godfrey 1986, Campbell *et al.* 2001)

Hypothetical Records:

1.(1) adult male June 15, 1988: Alliford Bay, Queen Charlotte Islands (no information exists on record except very vague notes in Campbell *et al.* 2001)

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