# Status and Occurrence of the Steller's Eider (*Polysticta stelleri*) in British Columbia. By Rick Toochin and Louis Haviland.

#### **Introduction and Distribution**

The Steller's Eider (Polysticta stelleri) is a spectacular sea duck that is found breeding from Scandinavia across arctic Russia east to Siberia and the north Slope of Alaska (Brazil 2009, Mullarney et al. 2009). The winter range of this species is found in two separate regions from Scandinavia and the Baltic Sea in Europe and in the Far East with birds wintering from the Kamchatka Peninsula south through the Kuril Island and rarely south to Japan with most birds wintering along the Aleutian Islands as far west as Kodiak Island with some birds wintering in the Bering Sea (Brazil 2009, Mullarney et al. 2009). Steller's Eiders have shown up as vagrants throughout Western Europe (Lewington et al. 1992). In Eastern North America, Steller's Eiders have been found in the Canadian Eastern Arctic, Quebec, Maine, Massachusetts and Greenland (Sibley 2000, Dunn and Alderfer 2011). In British Columbia, the Steller's Eider is a seldom encountered species that is classified as a casual vagrant in Volume 1 of the Birds of British Columbia (Campbell et al. 1990, Please see Table 1). The Steller's Eider is a casual vagrant to the west coastal states with Washington having only 3 accepted records, Oregon having also only 3 accepted records and California having only 3 accepted records (Hamilton et al. 2007, OFO 2012, Wahl et al. 2005, WRBC 2012). Almost all records south of Alaska are of birds found in coastal waters in the company of Harlequin Ducks (Histrionicus histrionicus), mixed Scoter flocks or on their own (Roberson 1980, Campbell et al. 1990, Hamilton et al. 2007). One incredible record involved an eclipsed-plumaged male Steller's Eider found in central Washington in the Walla Walla River Delta from September 9-15, 1995 and remains the only inland record for North America of this species outside of Alaska (Wahl et al. 2005). The Steller's Eider is on Bird Life International's IUCN watch list and is considered vulnerable because it is undergoing a rapid population reduction, particularly in the Alaskan population (Bird Life International 2013). Unless the population stabilizes this beautiful species might be hard to find along the coast south of Alaska in the future.

#### **Identification and Similar Species**

The identification of adult male Steller's Eider is very straight-forward and is covered by all North American field guides. In overall size, the Steller's Eider is a medium small sized sea duck that has a distinct flat shaped crown and forehead with an angular shaped nape (Brazil 2009, Mullarney *et al.* 2009). Another important field mark is the oblong shaped bill which is not wedged shaped as in other sea ducks (Mullarney *et al.* 2009). The body shape of the Steller's Eider is elongated and the tail is long (Mullarney *et al.* 2009, Dunn and Alderfer 2011). These structural characteristics are found in all ages and plumages of Steller's Eider (Brazil 2009, Mullarney *et al.* 2009). The feeding behaviour of the Steller's Eiders is different than other

diving ducks in that it acts much like a dabbling duck on the water (Mullarney et al. 2009). Adult males have a white head with black feathers around a dark eye that enhance how large the eye looks (Mullarney et al. 2009). There is a green patch from the bill base to the eye and on the nape (Mullarney et al. 2009, Dunn and Alderfer 2011). The bill is dark in color and there is a black throat with a black line that extends across to the back of the neck and down the back (Mullarney et al. 2009, Dunn and Alderfer 2011). Below this black line is a white line that extends down the back and onto the wings with light edges to the back plumes (Brazil 2009, Mullarney et al. 2009). The breast is a rich orange-buff that darkens to a chestnut color and on the side of the breast is a dark round spot (Mullarney et al. 2009, Dunn and Alderfer 2011). The orange-buff along the sides cuts up the rump and separates the black ventral area and the long black tail (Brazil 2009, Mullarney et al. 2009). The wings in flight are white with a dark black line running across the inner secondary edge with outer secondary edge being white with the primary feathers being entirely black in coloration (Mullarney et al. 2009). The undersides of the wings are white with a dark trailing edge border (Mullarney et al. 2009). Structurally and in size females are the same as males but have radically different plumage characteristics (Mullarney et al. 2009). Adult female Steller's Eiders are all dark cinnamon-brown colored overall (Mullarney et al. 2009, Dunn and Alderfer 2011). The bill is also dark colored as are the eyes (Mullarney et al. 2009, Dunn and Alderfer 2011). There is light eye ring completely around the eye (Mullarney et al. 2009). On sitting birds if the wings are open there are two bold wing lines with a blue speculum in the middle (Mullarney et al. 2009). The white is thick and obvious when it is seen by an observer (Mullarney et al. 2009, Dunn and Alderfer 2011). The undersides of the wings are bold white with a dark secondary edge (Mullarney et al. 2009, Dunn and Alderfer 2011). This white flash is very obvious on flying birds and allows this species to stand out from other sea ducks like Scoters (Brazil 2009, Mullarney et al. 2009). The juvenile and first winter birds are similar to the females but the speculum is a dull brown with thin white borders (Mullarney et al. 2009, Dunn and Alderfer 2011). The tail is short and straight with less of a curve to it (Mullarney et al. 2009). The first summer males acquire much of the adult plumage characteristics but are dark over all (Mullarney et al. 2009). The second summer males are very similar to the adult males but have varying amount of brown on the head and throat with variable amount of dark on the upper wing coverts (Mullarney et al. 2009). This species is unique looking and shouldn't be confused with any other sea duck that occurs commonly along the West Coast of North America.

#### Occurrence and Documentation

In British Columbia, the Steller's Eider is a casual vagrant with only 8 records (Toochin *et al.* 2013, Please see Table 1). All records come from coastal waters with birds being either on their own or in the company of other sea ducks. The most recent record was found by the authors off the Sheringham Lighthouse while conducting a sea watch on May 26, 2007 (Toochin 2012,

Please see Table 1). The bird was a male, coming out of eclipse plumage or possibly a second year bird in moult. It was feeding close to shore alone in the salt chuck and was well observed by both observers using telescopes. The body was in almost perfect plumage for an adult male except the head was brown colored. The flat head shape was noted by both observers as was the oblong shaped bill. One poor quality digi-scope picture was obtained of the bird as it drifted in the fast current past the lighthouse. The bird was seen briefly in flight but it mostly swam towards the Muir Creek area. Unfortunately the bird was not relocated over the next few days despite being looked for by several observers. This record is interesting because during the fall of 2006 and the winter of 2007 there were a couple of Steller's Eider sightings along the coast from Oregon in Brays Point, Lane County of one bird on February 3, 2007 and of a female in Washington State at Edmonds in Snohomish County on September 28, 2006 (OFO 2012, WRBC 2012). It is possible that the same female seen two days previously in Washington State was relocated by the authors at Port Renfrew on September 30, 2006 (Toochin 2012, Please see Table 1,). The Port Renfrew bird was a female bird that was well observed by two observers through a telescope at close range in the company of a mixed flock White-winged Scoters (Melanitta fusca) and Surf Scoters (Melanitta perspicillata). Unfortunately identifiable photographs were not obtained of the bird and like the Washington State bird it did not stay in the area past the initial observation.

The Steller's Eider is a species that can been found in the Province at any time of the year but there is a definite fall movement of the species in late September through October (Mlodinow 1999). Out of the eight Provincial records half are from this time period. This is likely due to the fact the northern breeding population of Steller's Eiders move south from the Beaufort Sea south to the Aleutian Islands and it is possible a few birds overshoot heading farther south down the West Coast of North America (Mlodinow 1999). This pattern of migration is the same for King Eiders (Somateria spectabilis) and Common Eiders (Somateria mollissima) which probably accounts for these species turning up in the fall well south of Alaska (Toochin 1997, Mlodinow 1999). Careful scrutiny of Scoter flocks and Harlequin Duck groups may help observers find future records of this species in the Province. In at least two occasions Steller's Eiders have been recorded with groups of Harlequin Ducks including an adult male that was photographed at Mitlenach Island on June 17, 1970 and another adult male wintered in Washington between Point Wilson and Port Townsend in Jefferson County from October 18, 1986- February 8, 1987 (Campbell 1971, Campbell et al. 1990, Wahl et al. 2005, WRBC 2012). For any future records to be found it is important for observers to scrutinize sea duck flocks including any large flocks of Harlequin Ducks. Even with the recent population declines in Alaska, Steller's Eider may well turn up in British Columbia in the future. If more observers scrutinize the outer coast and concentration areas for sea ducks there could be more records of the dazzling species found in British Columbia in the future.

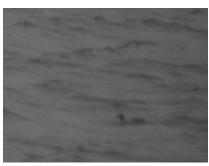


Figure 1: Record #8: Steller's Eider 2<sup>nd</sup> year male at the Sheringham Lighthouse, Shirley on May 26, 2007. Photo © Rick Toochin

### Table 1: British Columbia Records of Steller's Eider

- 1.(1) immature female October 15, 1948: Ronald M. Stuart (specimen: RBCM 10227) Masset Inlet, QCI (Racey 1950)
- 2.(1) adult male June 17, 1970: William Verbruggue (RBCM Photo 7) Mitlenach Island (Campbell 1971, Campbell *et al.* 1990, Toochin *et al.* 2013)
- 3.(1) female February 13-March 27, 1976: Jack Williams, mobs (RBCM Photo 449) 1976
  Rothesay Ave., Sidney (Crowell and Nehls 1976, Campbell *et al.* 1990,
  Toochin *et al.* 2013)
- 4.(1) adult male late September, 1976: Aurora Patterson (FN) Tofino (R. Patterson pers. Comm.) (Toochin *et al.* 2013)
- 5.(1) immature female October 13-21, 1991: Mike Bentley, and other observers(photo) near Sandspit, QCI (Siddle 1992, Toochin *et al.* 2013)
- 6.(1) adult male April 13, 2002: Margo Hearne: Sandspit, QCI (Toochin et al. 2013)
- 7.(1) immature female September 30, 2006: Rick Toochin, Corina Isaac: Botanical Beach, Port Renfrew (Cecile 2007a, Toochin 2012)
- 8.(1) 2<sup>nd</sup> year male May 26, 2007: Rick Toochin, Louis Haviland (photo) Shirley (Cecile 2007b, Toochin 2012)

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