# The Status and Occurrence of Snowy Egret (*Egretta thula*) in British Columbia. By Rick Toochin and Jamie Fenneman.

### **Introduction and Distribution**

The Snowy Egret (Egretta thula) breeds along the Atlantic coast of the United States, north to Maine as well as throughout much of the southeastern and western states, north to eastern Oregon and southern Idaho (Dunn and Alderfer 2011). It is a local breeder in the Midwestern states, and north to North Dakota (Dunn and Alderfer 2011). It regularly disperses north in the late summer and fall into southern Canada, particularly in the Prairie Provinces, southern Ontario, and the Maritimes (Godfrey 1986, Sibley 2000). It withdraws from most interior regions of the continent in winter, moving to the Gulf and southern Atlantic coasts of the U.S. as well as to southern and coastal California and southern Arizona (Dunn and Alderfer 2011). South of the United States, the species is found throughout Mexico, Central America, the Caribbean, and most of South America (Howell and Webb 2010). It is generally present either year-round or in parts of Mexico and northern Central America as a wintering species in areas south of the United States (Howell and Webb 2010). Although the species has a very large population and a distribution stretching from the northern United States to southern South America, populations often experience considerable flux (Parsons and Master 2000). Like other plumed egrets, the Snowy Egret was heavily hunted in the 19th and early 20th centuries and, as a result, populations in many areas of the U.S. plummeted (Parsons and Master 2000). Following cessation of this hunting, however, the species rapidly recolonized former breeding areas along the Atlantic coast of the United States, and even spread into new breeding areas in the northeastern states (Parsons and Master 2000). Populations in many areas subsequently declined, however, with the mid-Atlantic population dropping by c. 39% between the mid-1970s and mid-1990s (Parsons and Master 2000). Breeding populations in western North America appear relatively stable, although the species is apparently declining in the Salton Sea area of California, likely due to competition with the increasingly abundant Cattle Egret (Bubulcus ibis) (Parsons and Master 2000). This is a regular breeding species in California, Oregon, and Idaho, with breeding birds typically arriving in northern portions of its range (Oregon, Idaho) in late April or early May and departing primarily in September (Wahl et al. 2005). It is a rare vagrant to Washington (32 records), where it occurs primarily in spring (May) and fall (August-November) in both eastern and western portions of the state (Wahl et al. 2005, WBRC 2011). It is a very rare vagrant to Alberta, primarily in the late summer and fall (Hudon et al. 2009), but has not yet been recorded in either the Yukon (Sinclair et al. 2003) or Alaska (Gibson *et al*. 2013). The Snowy Egret is a casual vagrant to British Columbia with over twenty records scattered from all over the Province (Toochin et al. 2013a, Please see Table 1).

### **Identification and Similar Species**

The identification of the Snowy Egret is covered in all North American guides. The following is taken from Parsons and Master (2000) and gives useful information on the identification of the Snowy Egret.

The Snowy Egret is a medium-sized heron that is slim and delicate in build. The adult birds are 56–66 cm in length with a wingspan of 100 cm and a mass of about 370 g. The males are slightly larger than females in overall size and weight. The adults are entirely white in plumage with a long, slender black bill that has bright yellow bare skin on the lores. The Snowy Egret has long slender black legs with bright yellow feet. The immature birds and nonbreeding adults have duller greenish-yellow feet and this color extends up the rear of tarsus to the "knee" joint. The bill has a paler grayish base to the lower mandible. Adult birds in breeding plumage develop long, delicate plumes forming a wispy spray of feathers extending off the breast and recurving off the lower back from the lower scapulars. There are also plumes that form a short shaggy crest off the nape. At the height of the breeding period, but not necessarily coinciding with the acquisition of plumes, the lores and feet become a much richer reddish or orangish colour. The sexes are similar in appearance throughout the year and even during the breeding season.

There are two species of heron that occur in North America that can be mistaken for the Snowy Egret. These similar species include the immature Little Blue Heron (*E. caerulea*) which is an accidental visitor to British Columbia and the Little Egret (*E. garzetta*) which has not yet been found in the Province, but could one day in the future. The immature Little Blue Heron, which has overall white plumage, is distinguished by grayish to blue-gray lores (that are never yellow), a thicker and more blunt-tipped bill that is grayish with a black or dusky bill tip (never all black). The Little Blue Heron has more or less uniformly dull greenish legs (never with contrasting yellowish feet), dusky tips to primaries (on most individuals), and often a few dark feathers in its overall white plumage.

The Little Egret (*E. garzetta*), is an Old World species that is casually observed along the Atlantic coast and has recently colonized areas in the West Indies (breeds on Barbados). The Little Egret closely resembles Snowy Egret, but appears slightly larger and stockier, having slightly longer, thicker legs, neck, and bill with slightly more noticeable gular feathering. These visual differences are subtle, however, and size overlaps somewhat with Snowy Egret. The Little Egret is best identified by the color of the bare skin in the lores, which is grayish or bluish-gray (rarely greenish-gray or dull yellow, becoming reddish, orange, or blue-pink at onset of the breeding season). The legs are typically all black on the adult and only immatures may show dull yellow extending up the rear of the tarsus. In breeding plumage, there are 2 (rarely 3) long, lanceolate head plumes that lacks the bushy hind-crest found on a Snowy Egret. It is important to beware,

that there are some individuals, possibly hybrid Little x Snowy Egrets or unusual Snowy Egrets, that have been observed in New England, exhibited a bushy crest and two longer wispy plumes. For more information on distinguishing these species see McLaren (1989) and Massiah (1997).

The Great Egret (*Ardea alba*) is another species that is superficially similar to the Snowy Egret. In all ages the Great Egret is a much larger bird in overall size and has black legs and feet with a bright yellow bill (Sibley 2000, Dunn and Alderfer 2011). They are found in similar habitats, but should be easily distinguished by observers as they are smaller and have different plumage and structural characteristics (Sibley 2000, Dunn and Alderfer 2011).

Another species that is all white is the Cattle Egret (*Bubulcus ibis*) which shouldn't pose any identification problems for observers. The Cattle Egret is quite a bit smaller than the Snowy Egret (Dunn and Alderfer 2011). The immature birds hold their plumage from July to October and have a small dark bill with short dark legs (Sibley 2000). Adult birds hold their winter plumage from the months of August to February of the next year (Sibley 2000). They have a short yellow bill, but with short dark legs (Dunn and Alderfer 2011). The adult breeding plumaged Cattle Egrets will hold this plumage from March to July and develop orange-reddish legs, orange chest plumes, orang back plumes and orange head plume (Sibley 2000). This species, in all ages, should be easily recognized by observers, and poses no reason to be confused with any plumages of the Snowy Egret. The Cattle Egret is found most often in the presence of livestock, and will even take to riding the backs of such animals. This is behavior never exhibited by the Snowy Egret (Sibley 2000, Dunn and Alderfer 2011).

The other species that can look superficially like a Snowy Egret is the white morph of the Reddish Egret (*Egretta rufescens*). To date there are no British Columbia records of Reddish Egret, but it is important to know the differences. The Reddish Egret is a very large, tall bird (Sibley 2000). In all plumages the Reddish Egret has black legs (Sibley 2000). All white morph birds have a white head, white neck with long white neck plumes, a white body, white wings and a white tail (Sibley 2000, Dunn and Alderfer 2011). The immature birds have dark lores and a long dark bill that gradually becomes pinker (Sibley 2000). Adult white morph birds in breeding plumage have a pink base to the bill with a black tip (Sibley 2000). In winter plumage, the bill is mostly dark with a light area in the middle of the bill where the mandibles meet (Sibley 2000). The Reddish Egret is usually found singly, in expanses of shallow salt water, where they are very active and like to chase fish on foot by running, jumping and spinning (Sibley 2000, Dunn and Alderfer 2011). This type of behavior is never exhibited by the Snowy Egret (Sibley 2000).

#### **Occurrence and Documentation**

The Snowy Egret is a casual to very rare vagrant to the south coast of British Columbia and is casual in the southern interior (Toochin et al. 2013, Please see Table 1). It has been recorded in the province on 24 occasions through 2014, with an additional record that is excluded due to questions regarding the validity of the sighting. The earliest account of this species in the province is from Fannin (1891) who states that two specimens were taken at Burrard Inlet, near Vancouver, in May 1879. One of these specimens, however, apparently pertains to a specimen of Intermediate Egret that was housed at the provincial museum (Kermode 1923, Brooks 1923); the location of the second specimen is unknown. As a result of the confusion regarding this record and the specimens to which it apparently refers, it has been excluded from further consideration here. Other authors (e.g., Brooks and Swarth 1925, Munro and Cowan 1947, Campbell et al. 1990) have treated the record similarly. The second report of the species in British Columbia was of a single bird observed at Crescent Beach, White Rock in 1946 by M.W. Holdom (Holdom 1948). Although Holdom (1948) published the record as pertaining to a Snowy Egret, some of the published details did not appear consistent with that identification. Specifically, Holdom states that the "legs and feet were light orange" and "there was no black visible." These characteristics suggest that the species of egret that was being observed may not have been a Snowy Egret, which has characteristically blackish legs with contrasting yellow feet (or, in immatures and winter adults, yellow feet and a yellow stripe up the back of the otherwise black legs) as well as a black bill. Holdom did send more detailed notes to W.E. Godfrey at the National Museum of Canada, who supported the identification as a Snowy Egret (Campbell et al. 1990). Given that further information was provided to Godfrey and the record was accepted in Campbell et al. (1990), the record is included in this account. The first unequivocal sighting of Snowy Egret in British Columbia is of an adult bird that was photographed near Pitt Meadows in the lower Fraser Valley on May 23, 1972 (Campbell et al. 1974). This record was quickly followed by another bird at Esquimalt Lagoon, near Victoria, from August 23-28 of that same year (Tatum 1973). Although Campbell et al. (1974) questioned whether these may have been the same individual, it is more likely that two separate birds were involved, given the time span between the records and the ages of the birds involved. The species was reported sporadically throughout the 1970s and 1980s, but the frequency of sightings increased noticeably through the 1990s and 2000s with 14 of 21 records have occurred since 1990 (Toochin et al. 2013, Please see Table 1). The years 1994 and 1999 were particularly productive for this species in British Columbia with three and four records respectively (although some of these records in each year may refer to a single individual moving around the province). The most recent coastal report is of an adult bird observed in Victoria on the southern tip of Vancouver Island from May 25-June 1, 2012 (Toochin et al. 2013, Please see Table 1). Records of Snowy Egret in British Columbia are primarily from the south coast, especially the lower Fraser Valley east to Chilliwack with eight records and extreme

southeast Vancouver Island from Ladysmith south to Victoria with seven records (Toochin et al. 2013, Please see Table 1). The species has been recorded in the southern interior on only six occasions, two of which have been from the productive littoral habitats at Salmon Arm on the southern shore of Shuswap Lake (Toochin et al. 2013, Please see Table 1). The northernmost interior record, and indeed the northernmost record for the province, is of an individual at Williams Lake from July 30-31, 1999 (Toochin et al. 2013, Please see Table 1). The most recent interior record is of an adult bird found at Roberts Lake in Kelowna from June 3-5, 2014 (D. Cecile Pers. Comm. Please Figure 2-4). Peak occurrence of the species in British Columbia is during May, although some birds have occurred during the summer months (early July to early August) or during post-breeding dispersal in the fall (late August to mid-November) (Toochin et al. 2013, Please see Table 1 & 2). The earliest record for the province is 17 April and the latest is 19 November (Toochin et al. 2013, Please see Table 1 & 2). Like several other vagrant herons and egrets, Snowy Egrets in British Columbia are closely associated with shallow water habitats, both freshwater and marine, where they can wade and feed (Sibley 2000, Dunn and Alderfer 2011). This includes both heavily vegetated habitats, such as sloughs and marshes, as well as more open habitats such as coastal lagoons, mudflats, harbours, marine shorelines, estuaries, lakeshores, and riverbanks (Parsons and Master 2000). They generally occur alone rather than in the company of other waders, although they may frequent the same habitats as those used by Great Blue Herons (Ardea herodias) or Green Herons (Butorides virescens) (Parsons and Master 2000).



Figure 1: Record # 13: Snowy Egret at Terra Nova in Richmond on May 16, 1999. Photo © Evelyn Whiteside.



Figures 2, 3 & 4: Record #25: Snowy Egret at Roberts Lake, Kelowna on June 5, 2014. Photos © Don Cecile.

## Table 1: Records of Snowy Egret for British Columbia:

- 1.(1) immature August 28, 1946: M. Holdom (collected) Crescent Beach, White Rock, Surrey (Holdom 1948)
- 2.(1) adult May 23-25, 1972: Bryan Gates, Bill Otway, mobs (RBCM Photo 244) Reichenbach Rd., Pitt Meadows (Campbell *et al.* 1974, Campbell *et al.* 1990)
- 3.(1) immature August 23-28, 1972: Mr. Meikeljohn, mobs (RBCM Photo 239) Esquimalt Lagoon (Crowell and Nehls 1973, Tatum 1973, Campbell *et al.* 1990)
- 4.(1) immature September 11, 1976: Barry Leach: Serpentine Fen, Surrey (Shepard 1977, Campbell *et al.* 1990)
- 5.(1) adult April 17, 1985: Jack Evans, Ken Summers, mobs: Serpentine Fen, Surrey (Campbell 1985, Campbell *et al*. 1990)
- 6.(1) adult May 11, 1985: Andy Bulher, mobs (RBCM Photo 1096) Gibsons (Campbell 1985, Campbell *et al*. 1990)
- 7.(1) immature November 18-19, 1986: mobs: Cowichan Bay, southern Vancouver Island (Campbell 1987, Campbell *et al.* 1990)
- 8.(1) adult May 23-27, 1987: Vic and Peggy Goodwill, mobs (photo) Hastings Flats, Saanich, near Victoria (Campbell 1987, Campbell *et al*. 1990)
- 9.(1) adult September 30-October 1, 1991: Derrick Marven, and other observers: Duncan (Anonymous 1991, Toochin *et al.* 2013b)
- 10.(1) immature September 25, 1994: Phil Gehlin, mobs (photo) shore of Kamalka Lake, at mouth of Coldstream Creek, Vernon (Bowling 1995, Toochin *et al.* 2013a)

- 11.(1) immature October 10, 1994: Chris Charlesworth, mobs: Salmon Arm (Bowling 1995, Davidson 1995, Toochin *et al.* 2013a)
- 12.(1) immature October 16-17, 1994: Lidia Smedly and Denis Knopp: off Barritt Rd, Chilliwack UTM 10 U 574550 5448036 (Toochin 2012b)
  - (1) immature November 6-8, 1994: Mike Toochin, mobs (photo) Harrison River near Kilby Provincial Park (Bowling 1995, Davidson 1995, Toochin 2012b)
- 13.(1) adult May 15-16, 1999: Janice Brown, Reggie Ho, Eric Greenwood, mobs (photo) Richmond West Dyke, Richmond (Shepard 1999a, Toochin 2012a)
- 14.(1) adult May 18, 1999: Michael Bates: Hammond Cedar Mill, Maple Ridge (Shepard 1999a, Toochin 2012a)
- 15.(1) adult July 23, 1999: R. Wysocki, J. Morgan: Salmon Arm (Sheppard 1999b, Toochin *et al.* 2013a)
- 16.(1) adult July 30-31, 1999: S. Howard, mobs: Williams Lake (Sheppard 1999b, Toochin *et al.* 2013a)
- 17.(1) adult May 26, 2001: *fide Ed Beynon*, mobs: Robson, West Kootenay (Cecile 2001, Toochin *et al*. 2013a)
- 18.(1) adult June 1, 2001: Rick Toochin: North Arm Jetty Base on Fraser River, Iona Island, Richmond (Toochin 2012a)
- 19.(1) adult June 3-10, 2002: Ed Pellizzon, and other observers (photo) Quicks Bottom area, Saanich, near Victoria (Cecile 2002, Toochin *et al*. 2013b)
- 20.(1) adult July 9, 2004: *fide Victoria Bird Alert*: in a pond between Ladysmith and Chemainus (Toochin *et al*. 2013b)
- 21.(1) adult July 12-13, 2004: *fide Victoria Bird Alert*: Timber West Shoal Island, Crofton Pulp Mill (Toochin *et al*. 2013b)
- 22.(1) immature September 3, 2006: Markus Tomlinson: Beach Grove Lagoon, Tsawwassen (Toochin 2012a)
- 23.(1) adult May 19-22, 2011: Ralph Crombie, and other observers: Tofino (Toochin *et al.* 2013b)
- 24.(1) adult May 25-June 1, 2012: Warren Drinnan, and other observers (photo) Panama Flats, Victoria (Toochin *et al*. 2013b)
- 25.(1) adult June 3-5, 2014: Matthias Deter, Harvey Chapple (photo) Roberts Lake, Kelowna (D. Cecile Pers. Comm.)

Hypothetical Records:

1.(1) age unknown November 19, 1986: Nitnat Lake, PRNP (no citation or bibliographical information given *in* Taylor 1994)

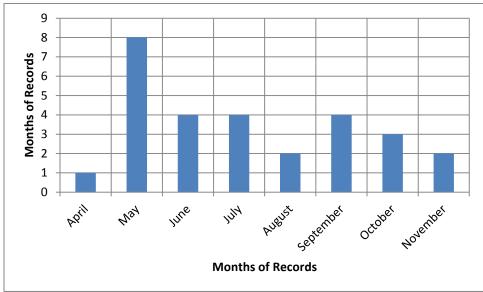
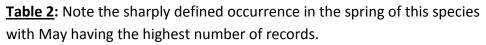


Table 2: Seasonal distribution of Snowy Egret records in British Columbia:



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