

Status and Occurrence of Ivory Gull (*Pagophila eburnea*) in British Columbia.
By Rick Toochin.

Introduction and Distribution

The Ivory Gull (*Pagophila eburnea*) is a very rare species that has a circumpolar, but patchy, breeding distribution across the high arctic (Olsen and Larsson 2004, COSEWIC 2006). There are small, scattered colonies that occur in Arctic Canada, Greenland, Spitzbergen, Franz Josef Land, and the northern islands and archipelagos of Russia in the Kara Sea (Olsen and Larsson 2004, COSEWIC 2006). Birds leave their breeding sites between August and September where there are movements of birds found along the coasts of Eastern Greenland, the Taimyr Peninsula in Russia, the Bering Sea and Barrow in Alaska (Olsen and Larsson 2004). The wintering distribution of the Ivory Gull is poorly known, but is generally along the southern edge of pack ice found throughout the Arctic (COSEWIC 2006). Many Ivory Gulls migrate through Western Baffin Island and Eastern Lancaster Sound in the Canadian Arctic in the fall from late September into October to spend the winter in Davis Strait and the Labrador Sea (Renaud and McLaren 1982, Olsen and Larsson 2004). In Canada, the Ivory Gull has a highly restricted breeding range, nesting exclusively in Nunavut Territory (COSEWIC 2006). Both Aboriginal Traditional Knowledge and recent intensive breeding colony surveys from 2002-2005 indicate that the Canadian breeding population of this long-lived seabird has declined by 80% over the last 20 years (COSEWIC 2006). The total world population is believed to number around 9,000 pairs or possibly as high as 25,000 pairs (Olsen and Larsson 2004). The Ivory Gull feeds along ice-edge habitats in the high Arctic and breeds in very remote locations (COSEWIC 2006). Threats to species survival include contaminants in the food chain, continued hunting in Greenland, possible disturbance by mineral exploration at some breeding locations, and degradation of ice-related foraging habitats as a result of climate change (COSEWIC 2006). The Ivory Gull is a regular winter visitor to Newfoundland and Labrador, and occasionally as far south as Nova Scotia (Olsen and Larsson 2004). Further south in North America, the Ivory Gull is a casual to accidental species throughout western and southern Canada, and also in the lower 48 states of the United States (Sibley 2000, Dunn and Alderfer 2011). In Alaska, the Ivory Gull is not known to breed in the state, but is an uncommon, and seriously declining migrant in the Chukchi Sea, Bering Sea and Beaufort Sea regions (West 2008). It is a casual species elsewhere in southern Alaska (West 2008). Along the west coast south of Alaska, the Ivory Gull is classified as an accidental species. In British Columbia, the Ivory Gull has only a few records (Toochin *et al.* 2014, see Table 1). In Washington State, there are only a couple of accepted state records by the Washington Bird Records Committee (Wahl *et al.* 2005, WBRC 2014). There are no records for Oregon (OFO 2012). In California, there are a couple of accepted state records by the California Bird Records Committee (Hamilton *et al.* 2007). The records in California represent the most southerly records in North America (Hamilton *et al.* 2007). The Ivory Gull is casual in

Southern Europe in the winter, and has been recorded as far south as Italy (Lewington *et al.* 1992). In Asia, the Ivory Gull has been recorded as far south as Japan and Korea (Brazil 2009).

Identification and Similar Species

The identification of the Ivory Gull is covered in all standard North American field guides. In the context of British Columbia, there is no regular occurring species that looks like an Ivory Gull. Observers should take care to watch out for fully albinistic individuals of other small or medium-sized larids that can look similar to this species (Mallory *et al.* 2008). The Ivory Gull is a plump, medium-sized 2 year gull, measuring 40–43 cm in length with a wingspan of 108–120 cm (COSEWIC 2006, Mallory *et al.* 2008). The Ivory Gull is about 10% larger and is longer-winged than the Black-legged Kittiwake (*Rissa tridactyla*) (COSEWIC 2006). It is distinctive at all ages, but is particularly striking in adult plumage that is pure white (Olsen and Larsson 2004). Recent phylogenetic analysis based on mitochondrial DNA has provided strong evidence that the Ivory Gull is a sister taxon to the Sabine's Gull (*Xema sabini*) (Crochet *et al.* 2000, COSEWIC 2006).

In Ivory Gulls, the sexes look the same and there is no pronounced seasonal variation, and no subspecies (Mallory *et al.* 2008). The adult birds are entirely white with a faint ivory cast to the upperparts (Grant 1986, Olsen and Larsson 2004). The bill is thick and is slate-blue graduating to grayish-green with yellow or red tip (Olsen and Larsson 2004, Brazil 2009). The legs are blackish (Sibley 2000, Dunn and Alderfer 2011). The primary shafts are white to straw-yellow in some individuals (Grant 1986, Olsen and Larsson 2004). Juvenile birds hold this plumage from the time of fledging, usually from May through till July (Olsen and Larsson 2004). These birds have a blackish face mask, usually a narrow black subterminal tail band, and varying amounts of black spots on the upperparts, all of which impart a distinctive “ermine” appearance (Mallory *et al.* 2008). Second winter plumage is held from August to the following April and looks very close to adult-plumaged birds (Olsen and Larsson 2004). Birds in this plumage differ slightly from adult birds by having a variable amount of dark spots that can appear on the medium coverts, especially near the carpal joint, or on the primary coverts and alula (Olsen and Larson 2004). These birds can also have a black spot near the eye (Olsen and Larsson 2004). At all ages, the tibia is fully feathered to the tibio-tarsal joint (Mallory *et al.* 2008). The upright head and very rounded crown, stocky body and short legs, and depressed wingtips projecting beyond the tail give perched individuals the silhouette of a pigeon (*Columba*) (Mallory *et al.* 2008). The dark iris set against a white plumage further contributes to a “gentle” look to this species (Mallory *et al.* 2008). The gait of the Ivory Gull resembles most *Charadrius* plovers (Mallory *et al.* 2008). In flight, this species is graceful, agile, almost tern-like and powerful (Mallory *et al.* 2008). The legs and feet are tucked forward in belly feathers or backward in the undertail coverts during cold weather (Mallory *et al.* 2008). At other times in flight, the legs are left dangling conspicuously

during aggressive encounters or when birds circle feeding areas (Mallory *et al.* 2008). The call is a harsh disyllabic “*kee-urr*”, quite tern-like and very different from most large gulls (Mallory *et al.* 2008).

Occurrence and Documentation

The Ivory Gull is an accidental species in British Columbia with 9 records (Toochin *et al.* 2014, see Table 1). The timing of these records is from late September to mid-February (Toochin *et al.* 2014, see Table 1). Birds have been found from all over the Province: 4 records from the northwestern region, 1 record from the Queen Charlotte Islands, 1 record from the Vancouver area in Delta, 1 record from the Fraser Valley in Matsqui Prairie near Abbotsford, 1 record from the Victoria waterfront, and 1 from the Okanagan Valley (Toochin *et al.* 2014, see Table 1). The most recent British Columbia records are believed to have been the result of large Arctic outbreaks where cold extreme weather came south straight out of the Arctic, likely blowing these birds way out of range (M. Meredith Pers. Comm.). Many of these vagrant birds have been found near, and feeding on, animal kills. The bird found by Peter Hamel in the Nass Valley was feeding on a dead Moose (P. Hamel Pers. Comm.). The bird relocated along the Roberts Bank Coal Port Jetty was feeding on a dead Canada Goose (R. Toochin Pers. Comm.). One of the ways the Ivory Gull survives in the Arctic is by following Polar Bears around on the Sea Ice, feeding on the remains of Bear kills (COESWIC 2006). This is why this species is vulnerable to climate change (COESWIC 2006). The shrinking of Sea Ice in the Arctic Ocean makes it harder to find food (COESWIC 2006). Some birds found as vagrants could be birds that were starving and driven to move extreme distances looking for food (Mallory *et al.* 2008). The timing of vagrancy is the same with the few records that have occurred down the west coast (Hamilton *et al.* 2007). There are only 2 records for Washington State: 1 immature found on December 20, 1975, at Ocean Shores, Grays Harbor County; and the other, a bird found and videotaped on January 20, 2008, at the Yakima River delta, Benton County (Wahl *et al.* 2005, WBRC 2014). There are currently no records for Oregon (OFO 2012). There are 2 records for California: the first was of a 1st year bird photographed on January 5, 1996, at Doheny State Beach, Orange County; and the second was a more recent record of an adult found and photographed between November 4-7, 2010, at Pismo Beach, San Luis Obispo County (Weintraub and San Miguel 1999, Tietz and McCaskie 2014).

With changing weather patterns and arctic ice shrinking over the past couple of decades, it is unclear if this species will stabilize in its population size or continue to shrink. If this species continues to decline, it is less likely that future records will be found in British Columbia.



Figure 1 & 2: Record #7: Ivory Gull at the end of the Roberts Bank Coal Port Jetty on December 16, 2001. Photos © John Ireland.



Figure 2: Record #8: Ivory Gull adult in Matsqui Prairie on November 11, 2007. Photo © Dave Beeke.

Table 1: Records of Ivory Gull for British Columbia:

- 1.(1) 1st winter male September 1889: (specimen: RBCM 1462) Dease Lake (Campbell *et al.* 1990b)
- 2.(1) adult female October 1897: J. T. Studley (specimen: RBCM 1463) Penticton (Brooks 1900, Cannings *et al.* 1987)
- 3.(1) adult February 19, 1925: W. H. A. Preece: Victoria Harbour (Preece 1925, Munro and Cowan 1947)
- 4.(1) adult January 12, 1982: Peter Hamel: south of Aiyansh, Nass Valley, near Nisqu'a Highway (P. Hamel Pers. Comm.)

- 5.(1) 1st winter November 15-22, 1987: Ute and Ed Kirschner (RBCM Photo 1212) Logger Bay on Atlin Lake (Campbell *et al.* 1990b)
- 6.(1) 1st winter October 30-November 2, 1988: Ron Mayo (RBCM Photo 1228) Atnarko River near Stuie (Campbell 1989a, Campbell *et al.* 1990b)
- 7.(1) 2nd winter December 4, 2001: Jon King, Tom Plath, Rick Toochin, Peter Candido, mobs (photo) 72nd St. & 36th Ave, Delta (King 2002, Toochin *et al.* 2014)
- (1) 2nd winter December 15-23, 2001: Guy Pickavance, mobs (photo) Roberts Bank Coal Port Jetty (King 2002, Toochin *et al.* 2014)
- 8.(1) adult November 10-13, 2007: Chris Kinman, mobs (photo) Matsqui Flats, Page Road, Abbotsford (Toochin *et al.* 2014)
- 9.(2) adults October 8, 2013: Peter Hamel: Sandspit, QCI (P. Hamel Pers. Comm.)

Hypothetical Records:

- 1.(2) adults October 17, 2007: Neil Robins, and other observers: Englishman River Estuary (Toochin *et al.* 2014)

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