

The Status and Occurrence of Red-legged Kittiwake (*Rissa brevirostris*) in British Columbia.

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Introduction and Distribution

The Red-legged Kittiwake (*Rissa brevirostris*) is a small species of gull that in North America is only known to breed at five known island locations in the Bering Sea off Alaska (Denlinger 2006). It is estimated that 80% of the world's population breeds at these five locations and the total population of Red-legged Kittiwakes in Alaska is believed to be approximately 209,000 individuals (Denlinger 2006). The remainder of the global population of Red-legged Kittiwakes breeds on the Commander Islands which are found on the Russian side of the Aleutian Island chain (Denlinger 2006). The Russian population has been estimated at 4-5,000 individuals (Denlinger 2006). The winter range of the Red-legged Kittiwake is not properly understood, but does include the waters found in the southeastern region of the Bering Sea (West 2008). This species is believed to be found in the open ocean of the North Pacific from well off the coast of Japan south of the Aleutian Islands to far outside of Canadian waters, west of the Queen Charlotte Islands (Byrd and Williams 1993, Sibley 2000, Brazil 2009). The Red-legged Kittiwake is a casual vagrant along the Pacific coast of North America south of Alaska (Sibley 2003). This species has been recorded in California with three records (Cole *et al.* 2006, Hamilton *et al.* 2007), Oregon with eight records (OFO 2012) and Washington with nine records (Wahl *et al.* 2005, WBRC 2012). British Columbia has four confirmed records all of which have occurred along the outer coast of the Province (Toochin *et al.* 2013). There is also an incredible specimen record from Nevada of a bird found at Corn Creek near Las Vegas on July 3, 1977 (Roberson 1980, Alcorn 1988). Another amazing specimen record comes from the west central Yukon at Forty Mile on October 15, 1899 (Godfrey 1986).

Identification and Similar Species

The Red-legged Kittiwake is an obvious looking species that is covered in most standard North American field guides. Breeding plumage is acquired in early spring, from March to May, and is retained into the summer, being lost in late summer or early fall from August to September. (Olsen and Larsson 2004, Howell and Dunn 2007). The back, scapulars, and most of the upperwing are medium- to dark grey, contrasting sharply with the white rump, uppertail coverts, and trailing edge to the tertials, secondaries, and inner primaries (Howell and Dunn 2007). The wings are tipped with black, except for small white tips to the outer primaries, giving the impression that the wings have been 'dipped in ink' (Howell and Dunn 2007). The relatively short, white tail is squared or very shallowly forked (Olsen and Larsson 2004). The head and underparts are wholly white, and the underwings are whitish or very pale grey with pale grey undersides to the flight feathers (still retaining a white trailing edge); the underwings also show black tips, similar to those displayed on the upper surface of the wings (Olsen and Larsson 2004,

Howell and Dunn 2007). The iris is dark, the narrow orbital ring is bright red, and the noticeably short, stubby bill is yellow (Olsen and Larsson 2004). The legs and feet are brilliant red (Olsen and Larsson 2004, Howell and Dunn 2007).

Non-breeding adult plumage is acquired between July and September and is retained throughout the winter, but is lost between March and May (Howell and Dunn 2007). Non-breeding individuals are very similar to breeding-plumaged birds, but show pale dusky-grey mottling or a pale grey wash on the nape which sometimes extends down onto the crown (Olsen and Larsson 2004, Howell and Dunn 2007). These birds also have a pale grey smudge around the eye, and have a distinct dark grey patch on the rear portion of the ear coverts (Howell and Dunn 2007). The bare part colouration is similar to that of the breeding adult, although the orbital ring may be duller (Olsen and Larsson 2004, Howell and Dunn 2007).

Second-summer immature plumage is acquired in late May or early June of the second summer and is retained until early fall, usually into September or October (Olsen and Larsson 2004, Howell and Dunn 2007). This plumage is similar to the non-breeding adult, but the black wingtip is somewhat more extensive and the bill is more greenish-yellow and usually has a small dark tip (Olsen and Larsson 2004, Howell and Dunn 2007).

The Juvenal plumage is held throughout the first fall and winter, with a partial molt during the following spring producing a similar 'first-summer' plumage that is held throughout the spring (Howell and Dunn 2007). Juvenal-plumaged birds are more or less similar to non-breeding adults, although the bill is black and the legs and feet are flesh-pink rather than bright red (Olsen and Larsson 2004, Howell and Dunn 2007). In addition, there is a more pronounced dark smudge around the eye and a well-defined dark grey collar across the lower nape (Grant 1986, Olsen and Larsson 2004, Howell and Dunn 2007). In flight, the upperwings show a bold white 'triangle' formed by the wholly white secondaries, inner primaries, and inner greater primary coverts, as well as more extensive black on the wingtips that extends along the leading edge of the primaries and primary coverts (Grant 1986, Olsen and Larsson 2004, Howell and Dunn 2007). By late winter or early spring, the base of the bill often becomes greenish-yellow and the legs become orange to orange-red (Olsen and Larsson 2004, Howell and Dunn 2007). Following the partial spring molt, the head and neck become whiter with less extensive grey markings, often showing little or no dark grey collar across the nape (Olsen and Larsson 2004, Howell and Dunn 2007).

The bright red legs and feet of adult and older immature individuals render them virtually unmistakable if this feature is observed; distance or conditions may prevent observation of the feet, and because occasional Black-legged Kittiwakes may show pale orangey feet, this feature

should not be relied upon for all observations (Howell and Dunn 2007). Adults are most similar to adult Black-legged Kittiwake, but can be distinguished by their smaller size, distinctly shorter and stubbier bill, relatively larger eye, and, perhaps most importantly, their darker grey upperparts that differ noticeably from the paler grey upperparts of adult Black-legged Kittiwake (Olsen and Larsson 2004, Howell and Dunn 2007). In flight, Black-legged Kittiwakes typically show a slight contrast between the paler grey primaries and darker grey upperwing coverts, whereas the upperwings of Red-legged Kittiwake are uniformly darker grey (Sibley 2003, Howell and Dunn 2007). Furthermore, the undersides of the primaries and secondaries of Red-legged Kittiwake are pale grey, contrasting with the whitish-grey underwing coverts; whereas the underwings of Black-legged Kittiwake are entirely white (Sibley 2003, Howell and Dunn 2007).

The Juveniles and first-winter immature birds are very different from juvenile Black-legged Kittiwake in that they have darker grey upperparts that lack the bold black 'W' extending across the outer primaries, primary coverts, and upperwing coverts (Sibley 2003, Howell and Dunn 2007). Juvenile Black-legged Kittiwake also shows a much blacker and sharply-defined black collar across the nape, and has a narrow black terminal band across the tip of the tail, whereas the tail of juvenile Red-legged Kittiwake is entirely white (Olsen and Larsson 2004, Howell and Dunn 2007). The all-white tail is a critical field mark that will distinguish young Red-legged Kittiwake from all other small gull species found in western North America (Sibley 2000, Howell and Dunn 2007). The underwings are much whiter in juvenile Black-legged Kittiwake, showing only a narrow black tip to the primaries, whereas the underside of the wings of juvenile Red-legged Kittiwake are more greyish-white with much more extensive black tips (Olsen and Larsson 2004). Juvenile Red-legged Kittiwake may be more likely to be confused with juvenile or adult Sabine's Gull due to the bold white 'triangle' or 'wedge' across the trailing edge of the upperwings (Olsen and Larsson 2004). The upperwing pattern of Sabine's Gull is even bolder, however, with a cleaner and more sharply-defined black wedge on the outer primaries and primary coverts (Sibley 2003). Adult Sabine's Gull usually shows a complete blackish head, but in the case of immature birds they can be distinguished by the partial dark grey hood that does not extend onto the lower nape (Sibley 2003, Howell and Dunn 2007). Juvenile Sabine's Gulls can be further distinguished by their scaly brownish upperparts and black terminal band on the tail. Sabine's Gulls spend the winter months in the southern hemisphere; and all reported winter sightings of this species should be scrutinized for the chance the bird in question could be a first winter Red-legged Kittiwake (Howell and Dunn 2007). Both species share a whitish triangle on the wings, and given that Sabine's Gull is a common migrant off British Columbia, it would be easy to misidentify an actual Red-legged Kittiwake, especially if the bird was seen by boat and at some distance (Howell and Dunn 2007). In first winter plumage, Red-legged Kittiwake shows an all-white square shaped tail lacking any dark tail bands (Olsen and Larsson 2004). Juvenile Red-legged Kittiwake also bears a slight resemblance to adult and juvenile

Ross's Gull, due primarily to the whitish 'triangle' that is visible across the flight feathers on the underwing (Howell and Dunn 2007). Ross's Gull is easily distinguished, however, by its smaller size, wedge-shaped tail, and very pale grey upperparts (Olsen and Larsson 2004). Juvenile Ross's Gull shows a blackish 'W' across the upperwings that resembles that of juvenile Black-legged Kittiwake, but is not shown by juvenile Red-legged Kittiwake (Olsen and Larsson 2004, Howell and Dunn 2007).

Occurrence and Documentation

Along the west coast of North America the Red-legged Kittiwake is a species that is not encountered very often away from Alaska (West 2008). However, as with any pelagic species, this could change in the future with more observer coverage given to the outer coast and deep water pelagic zone, especially in the winter months (Roberson 1980). Many reports along the West Coast are of sick, dying, or freshly dead birds (Roberson 1980, Hamilton *et al.* 2007). When looking at all the west coast records south of Alaska, it appears that Red-legged Kittiwake can occur at any time of year, and all odd looking Kittiwakes should be carefully scrutinized by observers for this potential species.

In British Columbia, of the nine reported observations, only four have detailed descriptions. A record from the Queen Charlotte Islands is the only report to have accompanying photographs (Campbell *et al.* 2001, Toochin *et al.* 2013b). On March 1, 2009, while conducting a sea watch, two of the authors encountered a first winter Red-legged Kittiwake close to the shoreline of Botanical Beach, near Port Renfrew on the west coast of Vancouver Island (Toochin 2013a). This bird was in the company of a couple hundred Black-legged Kittiwakes. The ages of the Black-legged Kittiwakes consisted of mostly adult winter plumages birds. There were numerous first winter birds in the same area as well. The bird was watched for well over thirty minutes in telescopes at close range and was directly compared to the nearby Black-legged Kittiwakes. The Black-legged Kittiwakes appeared in the area after a two week period of strong northwesterly winds, consistently blowing at 30 Knots or more, which is undoubtedly why the Red-legged Kittiwake appeared in the same area (M. Meredith Pers. Comm.). There has been another sighting of an immature Red-legged Kittiwake at the mouth of the Juan de Fuca Strait on the Washington side, in Neah Bay, from June 28-July 5, 1999 (WBRC 2012). There is also a credible sight record from Clover Point by good observers on June 7, 1979 (Goodwill 1979g, Toochin *et al.* 2013c). It seems highly probable that another Red-legged Kittiwake could be found in the Juan de Fuca Strait area again with proper coverage in the future. Another recent well described bird was carefully observed close shore at Amphitrite Point in Ucluelet after a large winter northwesterly wind storm, and was watched in flight feeding with over a dozen Black-legged Kittiwakes for well over twenty minutes through a telescope (Toochin *et al.* 2013c). This

location is an excellent sea bird watching spot; and should be checked after such weather events for oceanic species such as Red-legged Kittiwake again in the future.

Recent observations from Tarr Inlet in the Alaska Panhandle are intriguing and are covered by Campbell *et al.* 2008. Upon further review, these observations all fall within Alaskan waters. A huge Glacier covers the British Columbia border area and extends well into Alaska (Google Maps). The waters of Tarr Inlet terminate 1.5km in Alaska before the British Columbia border (Google Maps). Both the land area and water regions that are exposed fall just inside Alaska and are therefore excluded here (Google Maps).

Given that Red-legged Kittiwakes have appeared several times along the west coast of North America, it is highly probable that more observations will occur in British Columbia in the future, if more observers check the outer coastal region on a regular basis.

Table 1: British Columbia Records of Red-legged Kittiwake:

The following four records, which span the period from early December to early March, are considered valid and are therefore included in this treatment. These records are supported by either photographic documentation or detailed field notes that leave no doubt as to the identity of the individual. The June record, though omitted by some authorities in the past, does have enough details to be included here. Since the time of the original observation, our understanding of Red-legged Kittiwake identification has evolved tremendously over the past few decades.

- 1.(1) sub-adult June 7, 1979: Vic and Peggy Goodwill: Clover Point, Victoria (Goodwill 1979, Toochin *et al.* 2013c)
- 2.(1) adult winter plumage December 6, 1992: Mike Bentley (BC Photo 1602) Sandspit, QCI (Campbell *et al.* 1990b)
- 3.(1) adult January 2, 2003: Mitch Meredith: off Amphitrite Point near Ucluelet [with 12+ Black-legged Kittiwakes] (Toochin *et al.* 2013b)
- 4.(1) 1st winter plumage March 1, 2009: Rick Toochin, Louis Haviland: Port Renfrew: Botanical Beach [with 200+ Black-legged Kittiwakes] (Toochin 2013a)

Hypothetical Records of Red-legged Kittiwake with no details:

- 1.(1) [age not given] July 4, 1969: west of Tofino (Campbell *et al.* 2008)
- 2.(1) [age not given] September 7, 1971: west of Tofino (Campbell *et al.* 2008)
- 3.(1) [age not given] June 15, 1989: Triangle Island (Campbell *et al.* 2008)
- 4.(1) [age not given] November 11, 1992: west of Tofino (Campbell *et al.* 2008)

Record of Red-legged Kittiwake thought to be in British Columbia but were actually in Alaskan Waters

1.(24) adults and immatures May 10-31, 2002: Ron Walker (photo) Tarr Inlet, (Campbell *et al.* 2008)

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