

## **The First Record of Purple Sandpiper (*Calidris maritima*) in British Columbia.**

**By Rick Toochin and Don Cecile. Submitted: April 15, 2017.**

### **Introduction and Distribution**

The Purple Sandpiper (*Calidris maritima*) is a mid-sized shorebird that breeds in the Arctic of both North America and Europe (Hayman *et al.* 1986). In North America, the Purple Sandpiper breeds mainly on islands in the high Canadian Arctic south to the eastern shore of Hudson Bay (Godfrey 1986); it may breed west to Banks Island (Henry and Mico 1999). There are also other known breeding locations including Melville Island, Bathurst Island, Devon Island, Bylot Island, and Baffin Island, south to Southampton and Belcher Island, and North Twin Island in James Bay and has been recorded in the summer and possibly breeding west to Banks Island and Prince Patrick Island, and north to southern Ellesmere Island (Manning 1981b, Forbes *et al.* 1992, American Ornithologists' Union 1998a, Engelmoer and Roselaar 1998, Henry and Mico 1999, Lindström *et al.* 2002).

In Europe, the Purple Sandpiper breeds in Greenland, commonly in the low-arctic region and locally in southern parts of the high-arctic region (Payne and Pierce 2002). The range of the Purple Sandpiper in Greenland is along the entire west coast north to Qaanaaq/Thule area and rarely Washington Land, and along the east coast north to Kangersittuaq, and irregularly north to Germania Land (Salomonsen 1950, Boertman 1994). The Purple Sandpiper is also found breeding in Iceland, northern Europe, and coastal regions of northern Russia to north-western and central Siberia (Payne and Pierce 2002). These breeding areas include Jan Mayen Island, Faeroe Islands, northern United Kingdom, Norway, Sweden, Finland, coastal Murmansk, Svalbard (including Bear Island), Franz Josef Land, Novaya Zemlya, Severnaya Zemlya, New Siberian Island, and the Taimyr Peninsula (Howell 1932, Cramp and Simmons 1983).

The Purple Sandpiper winters farther north than any other shorebird, and is found along ice-free coastlines of both the Arctic and Temperate regions of the Northern Hemisphere (Hayman *et al.* 1986, Summers *et al.* 1998a).

In North America, the Purple Sandpiper winters along coastlines from eastern Quebec and Newfoundland, south through the Canadian Maritimes, and coastal New England states, south to South Carolina and, rarely, as far south as northern Florida (Payne and Pierce 2002) This species is very rare from southern Florida, west along the Gulf Coast to southern Texas (Payne and Pierce 2002). South of the rocky shoreline areas in northern New England, wintering sites are local and are mainly human-made jetties and groins (Payne and Pierce 2002). The Purple Sandpiper also occurs in small numbers along coasts of the Great Lakes and is local, but regular,

mainly along the eastern lakes (Pearson 1936, Lowery 1955, Janssen 1984, Bohlen 1989, Peterjohn 1989b, Robbins 1991, Watson 1998, Payne and Pierce 2002).

In Europe, the Purple Sandpiper regularly winters along the coastlines of Greenland (Boertman 1994) and is abundant in Iceland, it is also found in northern Norway, and across coastal areas of Northern Europe including; Faeroe Islands, Great Britain, Ireland, Murmansk in Russia, the Baltic coasts, Denmark, western and northern Germany, the Netherlands, and Belgium (Payne and Pierce 2002). Small numbers of Purple Sandpipers winter along the coastal areas of Asturias in northern Spain (Sanchez 1995).

In North America, the Purple Sandpiper is a vagrant inland and westward in North America with records from Manitoba, Iowa, Minnesota with a few sightings away from Lake Superior (Janssen 1984), Iowa, and Oklahoma (Payne and Pierce 2002). There is a recent accepted record for Utah by the Utah Bird Records Committee with a first-winter bird found and photographed November 28- December 4, 2010, at Sand Hollow State Park, in Washington County (O' Donnell *et al.* 2014). Another incredible recent record was accepted by the Alberta Bird Records Committee of an adult in breeding plumage found and photographed at the Inglewood Bird Sanctuary in Calgary from May 9-10, 2013 (Hudon *et al.* 2014). There are also good sight records for Saskatchewan, Tennessee, and inland Texas (Payne and Pierce 2002).

Along the West Coast, the Purple Sandpiper is an accidental vagrant. There are only a handful of fairly recent records. There is 1 accepted record for Alaska with a bird collected at Point Barrow on September 29, 1990 (Gibson and Kessel 1997a). California has a very recent accepted record by the California Bird Records Committee of a bird photographed at Salt Creek in the Salton Sea area in Riverside County March 25 - April 17, 2016 and likely the same bird was photographed on April 25, 2016 at Kehoe Beach, Pt. Reyes in Marin County (Tietz and McCaskie 2017). There are no records for Washington State (Wahl *et al.* 2005, WRBC 2016) or for Oregon (OFO 2016). The Purple Sandpiper is an accidental vagrant in British Columbia with a recent photographed record (L. Haviland Pers. Comm.).

In Europe, the Purple Sandpiper is a vagrant in the Azores (Union American Ornithologists' Union 1998a), Morocco, Madeira (Hayman *et al.* 1986), the Canary Islands (Atkinson *et al.* 1978), and in central Europe from southern Poland east to Hungary and Greece and south to Italy and Malta (Hayman *et al.* 1986).

### **Identification and Similar Species**

The identification of the Purple Sandpiper is covered in all standard North American field guides. The Purple Sandpiper is a medium-sized sandpiper measuring 23 cm in length, with a wingspan of 43.18 cm (Sibley 2000), but there is some variation in size depending on

geographic origin of breeding population (Cramp and Simmons 1983, Hayman *et al.* 1986). This species weighs 60–75 g when non-migratory (range otherwise from about 50 g to >100 g). Female averages larger than male, especially in bill length, although magnitude of difference varies by breeding location; size alone not a reliable field character for judging sex (Atkinson *et al.* 1981, Boere *et al.* 1984). The Purple Sandpiper is very closely related to the Rock Sandpiper (*Calidris ptilocnemis*) which breeds in parts of northern Japan, the southern regions of Kamchatka Peninsula of Russia, throughout the Aleutian Islands and in coastal regions of north-eastern Alaska and is locally common along the west coast in the winter and is found on rocky shorelines in British Columbia (Hayman *et al.* 1986, Campbell *et al.* 1990b). The Rock Sandpiper is similar in size to the Purple Sandpiper measuring 23 cm in length, with a wingspan of 43.18 cm, and weighs 70 grams (Sibley 2000, Dunn and Alderfer 2011).

The Purple Sandpiper is stockier than most *Calidris* sandpipers, with its overall size and shape similar to the Rock Sandpiper and in general size falls between a Dunlin (*C. alpina*) and Red Knot (*C. canutus*) (Payne and Pierce 2002). The Purple Sandpiper typically has a squat posture, with a medium length, and slightly drooping bill (Payne and Pierce 2002).

Adults in alternate, or breeding plumage, have a whitish supercilium, blackish-brown mantle and scapular feathers that are extensively fringed chestnut, buff, or whitish (Payne and Pierce 2002). The wings are dark gray with the coverts fringed whitish and in flight have a noticeable white wing-stripe across base of remiges (Message and Taylor 2005). The rump and central tail feathers are blackish, contrasting with gray lateral tail feathers and whitish base of these feathers and lateral upper-tail coverts (O'Brien *et al.* 2006). The under-parts are whitish with heavy dark spotting and streaking across breast and the down flanks, with the belly and under-tail coverts whiter (Payne and Pierce 2002). The under-wings are whitish with dark mottling on the margins and on the primary coverts (Payne and Pierce 2002). The base of bill and legs are dull olive (Dunn and Alderfer 2011).

Birds in basic, or winter plumage, have dark slate-gray upper-parts with a faint purple gloss visible at close range (Payne and Pierce 2002). The base of the bill and legs is much brighter than on breeding birds, with legs yellowish-orange and the base of bill orange-yellow (Pittaway 1993b).

Juvenile plumage is similar to alternate-plumage except wing coverts, scapulars, and mantle are narrowly edged with white or buff (Payne and Pierce 2002). Juvenile wing length, until about 1 year old, is about 1–2 mm shorter, on average, than found on adults (Boere *et al.* 1984).

The Rock Sandpiper is the closest shorebird in appearance to, but unlikely to be encountered with, the Purple Sandpiper (O'Brien *et al.* 2006). Nevertheless, the occasional vagrant Purple

Sandpiper is possible within the range of the Rock Sandpiper and has occurred in recent years on the west coast of North America (Gibson and Kessel 1997a, Paulson 2005, Tietz and McCaskie 2017). Separation of these 2 closely related species is complicated by the wide variation among subspecies of Rock Sandpiper, with duller individuals of Aleutian Rock Sandpiper (*C. p. couesi*) most similar to Purple Sandpiper (Hayman *et al.* 1986, Paulson 2005). In alternate plumage, the Purple Sandpiper is darker and less rufous above, lacks blackish patch on breast and belly, and has narrower white wing-stripe (Prater *et al.* 1977). In basic plumage, the Purple Sandpiper is darker above; the pattern on the under-parts is more diffuse and plainer than on the Rock Sandpiper which has more distinct spotting on the lower breast and flanks (Payne and Pierce 2002). The legs and base of bill is much more orange on the Purple Sandpiper rather than dull yellowish-green or olive on the Rock Sandpiper (Paulson 2005). Juvenile-plumaged Rock Sandpiper is quite similar to the Juvenile-plumage of the Purple Sandpiper, but note narrow rufous edging to the upper-parts and a stronger buff-wash across the breast (Sibley 2000). The typical calls of each species are very similar to one another, but subtle differences have been noted (Lowery 1955, Miller 1996a, Payne and Pierce 2002). Dunlin in basic plumage is superficially similar-looking to Purple Sandpiper, but the Dunlin prefers mudflats to feed and not the rocky shore (Payne and Pierce 2002). For more in-depth discussions on the plumage differences between Purple Sandpiper and Rock Sandpiper, it is recommended to read any of the following source materials Hayman *et al.* (1986), Message and Taylor (2005), Paulson (2005) or O'Brien *et al.* (2006).

### **Occurrence and Documentation**

The Purple Sandpiper is an accidental vagrant to British Columbia and was only recently added to the list of provincial birds with a well-documented bird in Victoria during the fall and winter of 2016-17.

There is however, an old unpublished hypothetical record that deserves mention. On November 28, 1960, while birding the Victoria waterfront, Ed Moody and John Toochn discovered a 1<sup>st</sup> basic plumaged Purple Sandpiper on the breakwater at the Oak Bay Marina at high tide (J. Toochn Pers. Comm.). Both observers noted the bright orange-yellow legs and orange-yellow bill base plus the overall plumage characteristics (J. Toochn Pers. Comm.). The bird was with Surfbirds and Black Turnstones (J. Toochn Pers. Comm.). Both observers were familiar with Rock Sandpipers (J. Toochn Pers. Comm.). Unfortunately, photographing rare birds in this era was extremely hard and no photos were taken (J. Toochn Pers. Comm.). The bird was so extraordinary for its time it was ignored and blown off by the experts (J. Toochn Pers. Comm.). Though this record will remain hypothetical, it is a fine example of why records should not be discarded as the recent record in Victoria is from the same time of year and almost the exact location!

The first confirmed record of a Purple Sandpiper for British Columbia was a young bird found and photographed by Marie O'Shaughnessy on Trial Island just off the Victoria waterfront on September 29, 2016 (M. O'Shaughnessy Pers. Comm.). The record went unreported as it was thought to be an early Rock Sandpiper, but the observer did note it had very bright legs and a bright bill base. It was found independently and photographed by Geoffrey Newell on the rocks in behind the Victoria Golf Course on November 28, 2016 (G. Newell Pers. Comm.). The account was put on e-bird noting that the Rock Sandpiper in the picture looked odd (G. Newell Pers. Comm.). The bird was found and photographed on Kitty Islet, off McMicking Point, along the Victoria Waterfront, on December 30, 2016, by Jeremy Gatten and it was noted that the odd-looking bird might not be a Rock Sandpiper, but instead 1<sup>st</sup> year Purple Sandpiper (M. Hafting Pers. Comm.). Over the coming days more observations and better quality photographs were sent to various experts, and it was agreed unanimously that the bird was indeed a 1<sup>st</sup> year Purple Sandpiper (M. Hafting Pers. Comm.). The bird was seen mostly on Kitty Islet and on nearby Trial Island in the company of Black-bellied Plovers, Surfbirds, Black Turnstones, and Dunlin (R. Toochin Pers. Obs.). The bird was last reported on April 17, 2017 (L. Haviland Pers. Comm.).

There are not enough records for British Columbia or along the west coast to formulate a vagrancy pattern for the Purple Sandpiper. Birds migrate in the fall from the breeding grounds in stages with a few migrants arriving in the Maritimes in early August, and then the next major wave of birds arrives in mid-October, with the peak number of birds arriving on the wintering grounds in mid-November (O'Brien *et al.* 2006). In the mid-Atlantic region the first birds arrive in late September (rarely earlier), and then the next major wave of birds arrives in mid-October, with the peak number of birds arriving on the wintering grounds in mid-November or even December (O'Brien *et al.* 2006). The Victoria bird not only is interesting as it is an overshoot, but the date of this record matches exactly the date of a collected bird from Pt. Barrow Alaska. In the future, early records of reported Rock Sandpipers should be scrutinized carefully on the chance the record is actually a lost Purple Sandpiper. As always, securing good photographs is a good aide in confirming an identification.

The lack of records for Purple Sandpiper in western North America is most likely due to the similarity this species shares with Rock Sandpiper. What complicates identification is the 3 subspecies of Rock Sandpiper that can and do occur along the British Columbia coastline in the winter months. Many areas where Rock Sandpiper occur, and likely a stray Purple Sandpiper, are largely inaccessible to most avid observers making detection that much harder. As our identification understanding has improved and our understanding of bird migration and vagrancy has improved, it is likely another Purple Sandpiper will occur in British Columbia in the future. It is possible that this species has been an overlooked rarity in the past.



Figure 1: Record #1: 1<sup>st</sup> winter plumaged Purple Sandpiper on Kitty Islet, Victoria on January 28, 2017. Photo © Tim Zurowski.



Figure 2: Record #1: 1<sup>st</sup> winter plumaged Purple Sandpiper in flight near Kitty Islet, Victoria on January 3, 2017. Photo © Peter Candido.





Figure 3: Record #1: 1<sup>st</sup> winter plumaged Purple Sandpiper on Kitty Islet, Victoria on January 8, 2017. Photo © Don Cecile.

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