

Status and Occurrence of Great Shearwater (*Ardenna gravis*) in British Columbia.

By Rick Toochin. Submitted: April 15, 2017.

Introduction and Distribution

The Great Shearwater (*Ardenna gravis*) is an abundant trans-equatorial migrant that breeds in the Southern Hemisphere in the central Atlantic Ocean on Nightingale Island, Inaccessible Island, in the Tristan da Cunha group, Gough Island (Onley and Scofield 2007), Kidney Island in the Falklands (Woods 1975). Most birds are back at their colonies on eggs by November (Onley and Scofield 2007). During the breeding season, the Great Shearwater forages in the South Atlantic Ocean between 38° S – 50° S, and may go as far east as 65° E in the Indian Ocean (Onley and Scofield 2007). Once the breeding season is over, adult birds head north crossing the equator into the Northern Hemisphere (during our summer) in the North Atlantic Ocean during the month of April, with juvenile birds leaving the nesting islands in May, with birds being present in the North Atlantic till October (Onley and Scofield 2007). When the Great Shearwaters first head northward, they move north-west to the pelagic waters off South America (Onley and Scofield 2007). Then this species heads up to the waters off the Maritimes of eastern Canada, then north to Greenland (Onley and Scofield 2007) From here the Great Shearwaters move into the waters of the north-eastern Atlantic (Onley and Scofield 2007), where they are abundant off south-west Ireland, but are casual in the North Sea and the waters off Scandinavia (Harrison 1983), before heading back south between October and November to the Southern Hemisphere and the South Atlantic Ocean (Harrison 1983, Onley and Scofield 2007).

The Great Shearwater regularly occurs off Argentina during the boreal winter, and has been recorded in the South Pacific off Chile (Hamilton *et al.* 2007) and southern Australia (Marchant and Higgins 1990).

Along the west coast of North America, the Great Shearwater is an accidental species that has had a rapid growth of records since 2000. In California, there are 14 accepted records by the California Bird Records Committee (Hamilton *et al.* 2007, Tietz and McCaskie 2014). In Oregon, there are 2 accepted records by the Oregon Bird Records Committee (OFO 2016). In Washington there are 9 accepted records by the Washington Bird Records Committee (Wahl *et al.* 2005, WBRC 2016). In British Columbia, there are 5 records, including some with photographs (Toochin *et al.* 2014). The Great Shearwater is also an accidental species in Alaska, where there is one photographed record in the Gulf of Alaska from August 3, 2001 (Pearce 2002).

Identification and Similar Species

The identification of the Great Shearwater is covered in all standard North American field guides. This species is a medium to large-sized shearwater measuring 46 cm in length, with a wingspan of 112 cm, and weighs 840 grams (Sibley 2000, Dunn and Alderfer 2011). This is a large, heavy, big-headed, long-tailed shearwater with, broad, long wings and long slender bill. The wings are held fairly straight, but slightly bowed (Onley and Scofield 2007). The chin, lower, throat, and front of the neck is white, sharply demarcated from the blackish-brown forehead, crown, nape and ears, which form a black cap from the brown mantle (Onley and Scofield 2007). The bill and eyes are dark (Sibley 2000). The rest of the upper-parts are dark grey-brown, with pale feather tips in fresh plumage (Onley and Scofield 2007). The lower upper-tail coverts are white, forming a U-shaped mark, immediately above the blackish tail (Onley and Scofield 2007). The under-parts are white with an indistinct, brownish-gray partial collar and variable brownish mottling or wash on the belly, both of which can be gradually lost due to wear on the feathers (Onley and Scofield 2007). Grayish-brown rear flanks, blackish-brown under-tail coverts and under-tail (Onley and Scofield 2007, Dunn and Alderfer 2011). The upper-wing has darker flight feathers and leading edge, and paler central panels with narrow white fringes to feathers (Onley and Scofield 2007). The under-wing is mainly white with black flight feathers forming a dark trailing edge and tip (Onley and Scofield 2007). The dark border narrows near the inner wing and widens towards the outer wing (Onley and Scofield 2007). There are two diagonal, parallel dark lines extending from the base of the trailing edge across the lesser coverts towards the elbow with the anterior line generally prominent (Onley and Scofield 2007). There are variable dark markings also present in the armpits (Onley and Scofield 2007). The legs and feet are fleshy-pink (Onley and Scofield 2007). Stage moult can be used to distinguish immature birds from adults during the summer months (Onley and Scofield 2007).

In British Columbia, this Great Shearwater should be distinct enough that keen observers should be able to easily identify this species from the regularly occurring shearwater species.

Occurrence and Documentation

The Great Shearwater is an accidental vagrant to the pelagic waters of British Columbia. This is a recent addition to the avifauna of the province with the first record found on a pelagic survey by Richard Rowlet, and others on June 24, 2000, at 28 NM southwest of Cape Beale at [48°24.3'N, 125° 37.0'W] (Toochin *et al.* 2014). The second record for British Columbia, was found on a pelagic trip by Christophe Barbraud, and was seen by other observers, plus was photographed, at Clayoquot Canyon, off Tofino on September 12, 2010 (Ratcliffe and Barbraud 2010). The third record for the Province was found by Paul Lehman, and seen and photographed by other observers from aboard a Cruise Ship about 111km NNW of Triangle Island (Toochin *et al.* 2014). The fifth and sixth records could involve the same birds, but were

found and photographed by Jared Towers at Laskeek Bank in Hecate Strait, with 1 bird found on September 5, 2013, and 2 birds found on September 6, 2013 (Toochin *et al.* 2014). With the exception of the June record, the rest of the records for British Columbia have been found in the summer months. There are not enough provincial records to formulate a vagrancy pattern yet, but with the explosion of records from California to Washington State since the year 2000, it would seem very plausible that future records will develop a pattern in British Columbia. When examining the timing of records from California, Oregon and Washington State, this species has a propensity to occur between the months of August through October, with individual records scattered from February, April and June (Wahl *et al.* 2005, Hamilton *et al.* 2007, Tietz and McCaskie 2014, OFO 2016, WBRC 2016). The records from the west coast are the correct latitudes and fit well with where this species would occur naturally in the Northern Hemisphere of the North Atlantic Ocean (Hamilton *et al.* 2007). The Great Shearwater's migration off the southern tip of South America takes it east and up into the North Atlantic. This species has been recorded in the waters of the west of the Strait of Magellan (Harrison 1983). Once in the South Pacific Ocean side of South America, nothing would stop these particular Great Shearwaters from carrying on migrating north to be found off the west coast of North America (Hamilton *et al.* 2007). Future pelagic trips off the British Columbia coast should be on the lookout for this pelagic rarity. It appears that there is a very good chance that this species will occur in the future.



Figure 1: Record # 3: Great Shearwater found 85 km northwest of Sartine Island on August 5, 2013. Photo © Owen Schmidt.



Figure 2: Record # 4: Great Shearwater found in Hecate Strait on September 5, 2013.
Photo © Jared Towers.



Figure 3: Record # 4: Great Shearwater found in Hecate Strait on September 5, 2013.
Photo © Jared Towers.



Figure 4: Record # 4: Great Shearwater found in Hecate Strait on September 5, 2013.
Photo © Jared Towers.



Figure 5: Record # 4: Great Shearwater found in Hecate Strait on September 5, 2013.
Photo © Jared Towers.

Table 1: Records of Great Shearwater for British Columbia:

- 1.(1) adult June 24, 2000: Richard Rowlett, and other observers: 28 NM southwest of Cape Beale [48°24.3'N, 125° 37.0'W] (Toochin *et al.* 2014)
- 2.(1) adult September 12, 2010: Christophe Barbraud, and other observers (photo) off Clayoquot Canyon (Ratcliffe and Barbraud 2010)

- 3.(1) adult August 5, 2013: Paul Lehman, and other observers (photo) Ship 85 km northwest of Sartine Island [51.36° N, 129.77° W] (Lehman 2016)
- 4.(1) adult September 5, 2013: Jared Towers (photo) Laskeek Bank, Hecate Strait (Toochin *et al.* 2014)
- 5.(2) adults September 6, 2013: Jared Towers and James Pilkington: off Bonilla Island, Hecate Strait (Toochin *et al.* 2014)
- 6.(1) adult August 13, 2016: Jared Towers (FN) SW of Triangle Island [50° 43.126 N, 129° 00.731 W] (J. Towers Pers. Comm.)

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