

MANX SHEARWATER IN BRITISH COLUMBIA: COMMENTS ON A PIONEERING SEABIRD

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On 8 August 2004, Jukka Jantunen and six observers from the Rocky Point Bird Observatory (Mary-Ann Cain, Jeremy Gatten, Jessica Murray, Ed Pellizzon, Chris Saunders, and Al Woodhouse), headed out in two small boats for an afternoon of birding and whale-watching in the Strait of Juan de Fuca, British Columbia. They departed the Pedder Bay Marina in Metchosin at 1600 hrs under clear

skies, calm seas, and with high expectations for a close encounter with humpback whales (*Megaptera novaeangliae*), seen in the area the previous week. To maximize their chances of finding marine mammals they employed a simple and proven strategy: locate multi-species seabird feeding flocks. These “feeding frenzies” are often the result of cetaceans and pinnipeds driving prey, such as fish and zooplankton, close to the surface within reach of avian predators.

Fifty minutes later, between five and 10 km east of Race Rocks, BC, while investigating a mixed feeding flock of marine birds, primarily California Gull (*Larus californicus*), Heermann’s Gull (*L. heermanni*), Glaucous-winged Gull (*L. glaucescens*), Red-necked Phalarope (*Phalaropus lobatus*), Common Murre (*Uria aalge*), and Rhinoceros Auklet (*Cerorhinca monocerata*), Jukka spotted a notably different black-and-white seabird join the flock. The bird was immediately identified as a Manx Shearwater (*Puffinus puffinus*). The bird obligingly settled on the water only 30 m away from Jukka and, apart from one short flight, remained with the flock for approximately 15 min. The second boat, which had been contacted by radio, arrived shortly afterwards. Everyone had excellent views and Jukka obtained a series of photographs to document the record (Figure 1a and 1b). Eventually the shearwater flushed heading southeast with the observers in pursuit; however, it was never seen again. At the time, the seven observers were unaware of the significance of their good fortune, the status of the bird in British Columbia, nor that 2004 was an exceptionally good year for Manx Shearwater in the northeast Pacific Ocean. The photographs taken represent the first photographically confirmed Manx Shearwater for British Columbia (Cecile 2005a), and the first seen by multiple observers.

The Manx Shearwater is widespread and locally abundant throughout the north Atlantic Ocean. It is the commonest West Palearctic shearwater (Harrison 1985), with sizeable breeding populations (10,000 or more pairs) in Wales, Scotland, Ireland, Faeroes, and Iceland (Enticott and Tipling 1997). Small breeding outposts exist in the Channel Islands, off the French Atlantic coast, and on islands in the eastern Atlantic Ocean (the Azores, Madeira and possibly the Canary Islands; see Enticott and Tipling 1997 and Harrison 1985 and 1987). In North America, the only stable



Figure 1a. Manx Shearwater near Race Rocks, Strait of Juan de Fuca, BC. 8 August 2004 (Jukka Jantunen). BC Photo 3296. Note the diagnostic white undertail coverts.



Figure 1b. Manx Shearwater near Race Rocks, Strait of Juan de Fuca, BC. 8 August 2004 (Jukka Jantunen). BC Photo 3296.

colony is on Middle Lawn Island off the south coast of Newfoundland's Burin Peninsula (Robertson 2002, Storey and Lien 1985). Manx Shearwater sightings in New England increased during the 1950s and the 1960s and it is now a fairly common summer visitor (Bierregaard et al. 1975, Post 1967). North America's first nesting occurred in Massachusetts in 1973 when an incubating bird was serendipitously found under a plank (Bierregaard et al. 1975, Finch 1973). Prospecting birds (e.g., in burrows) have been found on Grand Columbiar Island, off St. Pierre et Miquelon, but breeding has yet to be confirmed (Mactavish 2004).

Manx Shearwaters vacate their natal areas during the non-breeding season and wander as far south as coastal South Africa and southern South America. The species can be common off the east side of Tierra del Fuego, Argentina during the late austral summer: exceptional March counts of up to 1,000 birds have been recorded off Isla Grande de Tierra del Fuego, Argentina (Michael Force pers. obs.). They are occasionally found in the Strait of Magellan as far west as Punta Arenas, Chile (Michael Force pers. obs.); the open waters of the Pacific Ocean lay not far to the west. Frequent sightings off Chile and Peru (Michael Force pers. obs., Steve Howell pers. comm., and Jaramillo 2003) and a recent observation off western Mexico (San Miguel and McGrath 2004) indicate an east to west movement of Manx Shearwaters from the Atlantic Ocean.

As with many seabirds, long-distance vagrancy is

not unusual. Manx Shearwaters have been recorded in Australia (Post 1967) and in the southern Drake Passage as far south as 59° South (Michael Force pers. obs.). A Manx Shearwater photographed in northwest Montana in May 2004 was an incredible occurrence for an inter-montane valley, especially since there was no major weather events prior to its arrival (Trochlell 2004). A bird found moribund in Michigan in August 2000 likely found its way into the interior of the continent via the Great Lakes. Banding data revealed that it had been banded in Ireland in 1991 (ID Frontiers Listserv 2000).

Early sightings in the northeast Pacific Ocean were fraught with confusion. Initially it was proposed that Newell's Shearwaters (*Puffinus auricularis newelli*) were involved in these sightings. Newell's Shearwaters breed in Hawaii, and, based on that fact, it was believed that they would be more likely to wander eastward to the westcoast of North America than would a species from the Atlantic Ocean. However, Newell's is a tropical breeder closely associated with warmer tropical and sub-tropical sea surface temperatures and as yet its presence in the temperate north Pacific Ocean remains unconfirmed. Complicating matters is the possibility of Townsend's Shearwater (*Puffinus townsendi*) occurring, a Mexican endemic, at least off southern California (Rottenborn and Morlan 2000). Manx, Newell's, and Townsend's shearwaters are quite similar in appearance and until relatively recently, identification criteria were poorly known.

For distinguishing amongst the three species, readers should refer to Howell et al. (1994) and Roberson (1996).

The first northeast Pacific Ocean record of a Manx Shearwater was a single bird seen in south coastal Alaska on 4 June 1975 (Kessel and Gibson 1978). Sight records in Washington in September 1990 were later confirmed with photos in October 1992 (Mlodinow 2004a). The first accepted Manx Shearwater for California was in July 1993 (Erickson and Terrill 1996). Although there were prior sight records in California and Washington of black-and-

white shearwaters believed to be Manx, the evidence was insufficient to eliminate congeners.

Manx Shearwater sightings from British Columbia are summarised in Table 1. Additional sightings either beyond Canada's Exclusive Economic Zone and/or previously unpublished are included in the table for completeness. Note the relatively high number of sightings in 2004. All observations have occurred between May and August (especially June and July), however, the reader is reminded of the fact that this in part reflects when most surveys occur.

The year 2004 was good for Manx Shearwaters

Table 1. Manx Shearwater records in British Columbia, including additional sightings from the adjacent northeast Pacific Ocean. All records are of single birds.

Date	Location	Observer(s)	Source	Comments
2 Jun 2005	west of Dare Point, West Coast Trail, southwestern Vancouver Island.	Nathan Hentze	Cecile (2005b)	observed from shore with spotting scope; field notes
8 Aug 2004	Race Rocks, Strait of Juan de Fuca.	Jukka Jantunen	Cecile (2005a)	photographed
20 Jul 2004	Hecate Strait.	Michael Retter	Cecile (2004)	field notes
16 Jun 2004	north of Scott Islands. (50°50.6' N, 128°26.1' W)	Ken Morgan	CWS files ¹	
*7 Jun 2004	Bering Sea (53°53.2' N 175°33.8' W)	Michael Henry	CWS files	
4 May 2002	north of Triangle Island. (50°57.0' N 128°54.5' W)	Michael Henry	CWS files	position deduced
6 Jun 1998	Hecate Strait, east of Lyell Island, Haida Gwaii. (52°41.7' N 130°42.8' W)	Michael Force	Shepard (1998)	field notes
18 May 1998	off Triangle Island. (50°45' N 129 °31' W)	Michael Bentley	CWS files	field notes
Jul 1994	Triangle Island.	Ian Jones and Christine Adkins	CWS files	calling bird recorded in burrow**
*19 Jul 1993	Gulf of Alaska (54°52.0' N 163°11.9' W)	Ken Morgan	CWS files	
*18 Jul 1993	Gulf of Alaska (54°44.2' N 155°05.8' W)	Ken Morgan	CWS files	

* beyond 200 nautical mile Exclusive Economic Zone.

** audio tape suggestive of Manx Shearwater (see text).

¹ Canadian Wildlife Service files (Ken Morgan, Institute of Ocean Sciences, Sidney, BC).

in British Columbia, Washington, and Alaska, but not elsewhere in the northeast Pacific Ocean. Of approximately 20 sightings (22 individual birds) from Alaska, eight were from 2004, including two birds together sitting on the water and one photographed (Gus Van Vliet, pers. comm.). Up to five birds were seen during three days of surveys along a 30 km stretch of southeastern Alaskan coastline in mid-July 2004, and another was found nearby six weeks later (Tobish 2004, 2005). Five Manx Shearwaters were also seen in Washington during June and July 2004, including two off Matia Island in the northern San Juan Islands (Mlodinow 2004b), well inside the Strait of Georgia.

Having established Manx Shearwater as a confirmed visitor to British Columbia, albeit expected given the upward trend evident throughout the northeast Pacific Ocean, three questions invariably come to mind:

- 1) Is this just an anomalous situation or a genuine range expansion?
- 2) Are Manx Shearwaters nesting in British Columbia?, and
- 3) If so, where?

Sightings annually off California are now reaching double digits. For example, in some years up to 12 northbound birds have been seen in spring during a shore-based Gray Whale (*Eschrichtius robustus*) population survey off the southern Big Sur coast (Richard Rowlett pers. comm.). The frequency of sightings is such that the California Bird Records Committee recently debated unsuccessfully to delete Manx Shearwater from its review list. Delisting was considered premature in light of what is likely a dynamic situation (Peter Pyle, pers. comm., Rottenborn and Morlan 2000). There are now approximately 150 Manx Shearwater sightings from the northeast Pacific Ocean (Mlodinow 2004a, Canadian Wildlife Service unpubl. data) mostly of single birds, but some multiple records as well, an impressive number considering they are in the “wrong” ocean.

Seasonal trends off California, although biased by the timing of pelagic birding boat trips and

sea-watching effort (McKee and Erickson 2002), reveal a pattern of more sightings during spring and autumn. If not completely an artifact of survey effort, such a pattern is consistent with a migratory northern hemisphere breeder; *i.e.*, the timing of these movements is analogous to that of Manx Shearwaters in the north Atlantic Ocean (Lee 1995, Mlodinow 2004a). Moreover, many of the birds (particularly those in Alaska) were close to shore in coastal channels and fjords, typical of summer habitat (Terres 1980). Manx Shearwaters have previously wandered into protected coastal waterways such as Puget Sound and the Strait of Georgia, with additional spring and summer records from the Washington side of the Strait of Juan de Fuca to as far east as Admiralty Inlet (Mlodinow 2004a).

Even taking into account increased observer effort, we suggest that there has been a dramatic increase in the number of Manx Shearwaters in the northeast Pacific Ocean over the past 20 to 30 years. The number of sightings raise suspicions that this species might either be nesting or at least prospecting somewhere in the northeast Pacific Ocean (Jaramillo 2003, Mlodinow 2004a). The apparent tendency for spring and summer sightings is significant given the number of birds involved. Furthermore, the locations of sightings in British Columbia are roughly at the same latitude as some of the major nesting colonies in the eastern north Atlantic Ocean.

An additional piece of evidence suggesting that Manx Shearwaters may be nesting or prospecting in the northeast Pacific Ocean is provided by the following. Over several consecutive nights in July 1994, researchers Ian L. Jones and Christine Adkins heard an unknown bird calling from an inaccessible burrow within a small storm-petrel colony on Triangle Island, British Columbia’s largest seabird colony. An audio recording of the bird was made, but for years the identity of the bird remained a mystery. Ten years later, Ken Morgan suggested to Jones and Adkins that the mystery bird might have been a Manx Shearwater. After being presented with a variety of Manx Shearwater calls from a colony in the North Sea, both Jones and Adkins were firmly convinced that the identity of the bird was indeed a Manx. The audio recording was sent to several Manx Shearwater experts for their opinions; but the quality of the recording was confounded by the background

calls of other seabirds, which precluded definitive confirmation (Christine Adkins pers. comm.).

It is worth noting that the first well documented sight record of a Manx Shearwater in British Columbia occurred relatively close to Triangle Island in 1998 (Campbell et al. 2001). Since then, there have been another two sightings within 35 km of Triangle Island (Table 1).

Considering what we now know about Manx Shearwater in British Columbia, particularly its well developed seasonality and preference for littoral and/or neritic aquatic habitats, it would be worthwhile to re-examine any questionable black-and-white shearwaters seen in the province. Notably, spring sight records of Black-vented Shearwater (*Puffinus opisthomelas*) should be considered as suspect and could very well have been Manx Shearwaters. There is a precedent for Black-vented Shearwater in British Columbia (Campbell et al. 1990), and the ‘bias’ created by that knowledge could easily influence inexperienced observers when a small, rapidly flying black-and-white shearwater is encountered in an unexpected location. At the time Campbell et al. was published (1990) the possibility of an Atlantic shearwater finding its way into a west coast waterway such as the Strait of Georgia would seem rather far-fetched when Black-vented Shearwater was the “expected” small black-and-white shearwater. However, other than a single February occurrence, all accepted records of Black-vented Shearwater have been during July to November, likely correlated with northward irruptions during warm water years (Campbell et al. 1990). Manx and Black-vented shearwaters can appear very similar, especially in strong light, an identification pitfall to which even experienced observers are not immune (pers. obs., Roberson 1996).

The relatively limited history of Manx Shearwaters in British Columbia compared to the rest of the northeast Pacific Ocean is due to a variety of inter-related factors, primarily a lack of coverage of our extensive offshore and littoral zones and difficulties accessing these areas. There are few ports along our sparsely populated outer coast with the necessary infrastructure for systematic coverage of pelagic birds. Pelagic bird surveys conducted by Environment Canada (Canadian Wildlife Service) aboard Department of Fisheries and Oceans/

Canadian Coast Guard vessels have essentially been the only platforms available for detailed studies of this vast region. Knowledgeable personnel aboard these vessels (officers, crew, etc.) have for years reported seeing small black-and-white shearwaters during the course of their work but, other than providing tantalizing discussion of a possible first for British Columbia, Newell’s Shearwater, and even Townsend’s Shearwater, were not safely eliminated. Based on the emerging trend, probably many (or all) of these small black-and-white shearwaters were Manx Shearwaters.

The Manx Shearwater is a long-lived species: a bird banded in 1957, when it was already believed to be five years old, was recaptured at its nesting island off north Wales in 2002 (CNN news 2002). Manx Shearwaters reach breeding age in their fifth or sixth year; however, non-breeders return to the breeding grounds as early as three or four years of age (Bierregaard et al. 1975). Assuming that Manx Shearwaters exhibit some degree of site fidelity, then the chance of repeat sightings over subsequent years is not unreasonable. The inherent flaw in this logic is that it assumes prior nesting. Perhaps an unknown proportion of birds being reported from British Columbia and Alaska are pioneering non-breeders. The idea that these birds represent a growing number of trans-equatorial migrants “trapped in the wrong ocean” is in our opinion too simple an explanation.

Regardless of whether or not the species is prospecting or has started nesting in British Columbia, it is apparent that the Manx Shearwater is currently a rare but regular component of the marine avifauna off the west coast of Canada. What they are doing here is still uncertain and further investigations will need to take place to clarify their status. Scattered along thousands of kilometres of British Columbia’s coastline are hundreds of remote islets and headlands. Finding a nesting pair will require a combination of shrewd detective work and a great deal of luck.

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About the Authors

Michael was born in Vancouver, British Columbia, at a time when the Crested Myna was a common bird in the family yard. A boyhood yearning to identify it ignited an everlasting passion for birds. A pelagic trip off Westport, Washington in 1974 introduced him to the charismatic birds of the open ocean. Since 1990 he has worked as a seabird and marine mammal observer on a variety of oceanographic and fisheries research vessels, having logged more than 2,500 days at sea in most of the major oceans of the world.

Ken is a pelagic seabird biologist with Environment Canada. The main focus of his work entails at-sea monitoring of seabirds off the west coast of Canada and identifying the oceanographic conditions that control the composition, distribution and abundance of the pelagic seabird community, and assessing the conservation threats of the incidental take of seabirds in commercial fishing gear and mortalities caused by chronic oil pollution.

Jukka is an experienced naturalist and committed birder who conducts bird surveys and assists with bird banding operations in the province.

“Happy is the man whose lot it is to know the secrets of the earth.”

Euripides