

NOTES ON RECENT BREEDING OF COMMON MURRES AT STARLIGHT REEF AND CLELAND ISLAND, BRITISH COLUMBIA

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Abstract

Breeding by relatively small numbers of Common Murres (*Uria aalge*) was reported in 1969-82 at Cleland Island, Florencia Islet and Starlight Reef on the central west coast of Vancouver Island, British Columbia. No evidence of breeding or colony attendance has been reported since 1982. In 1989, one egg was found on Starlight Reef, likely indicating continued sporadic breeding by isolated pairs at this location. In 2006, five to 10 murres regularly attended and at least two pairs probably bred at a new breeding area on Cleland Island, but eggs or chicks were not seen. Since 1982, sporadic attendance without breeding also has occurred at Murre Reef, the previous breeding area at Cleland Island in 1969-82.

Introduction

In an earlier issue of *Wildlife Afield* (Vol. 1, No. 2), the breeding and attendance of Common Murres (*Uria aalge*) at Cleland Island, British Columbia, from 1969-82 was discussed (Carter 2004). In addition, sporadic breeding attempts at Florencia Islet in 1969 and Starlight Reef in 1975 and 1980, plus attendance of breeding habitats at White Islet (1968-70), were noted. Since 1982, no murres had been noted breeding or attending breeding habitats

at Cleland Island, Florencia Islet, Starlight Reef, or White Islet. In this paper, we report attendance and breeding by Common Murres at Starlight Reef in 1989 and Cleland Island in 2006, and briefly discuss their implications.

Starlight Reef (1989)

Between 20 and 30 June 1989, Ken H. Morgan and Peter Ewins conducted seabird colony surveys in the Barkley Sound area, primarily for Pelagic Cormorants (*Phalacrocorax pelagicus*) and Glaucous-winged Gulls (*Larus glaucescens*; see Vermeer et al. 1992). While counting gull nests on foot at Starlight Reef (Figure 1), Ken found a Common Murre egg. Unfortunately, field notes for this work have been lost long ago but Ken had the following memories of this discovery. The egg was found exposed on the open ground within a small fissure about 15-20 cm deep and 20 cm wide that extended for a few metres across the rock surface near the highest part of this rather flat 7-m high reef. Sufficient relatively flat surfaces existed for only a few potential nesting pairs near the egg. When handled, the egg was intact, seemed relatively heavy (*i.e.*, not desiccated), and seemed to be somewhat warmer than the ambient air temperature; it also was rather clean (*i.e.*, not covered with guano) and had no major signs of weathering. It had been laid no more than a month earlier in 1989. The egg was left on the rock where it was found. An adult murre had been observed flying from the general vicinity of the egg several minutes earlier while the reef was being surveyed on foot. This bird may have been incubating the egg prior to being flushed or the egg may have been abandoned earlier.

This single egg occurred nine years after another single egg had been discovered at Starlight Reef in 1980, and another single egg was reported there in 1975. Given infrequent surveys and difficulty of detecting isolated breeding pairs of Common Murres within breeding colonies of other seabirds, it is unclear how many breeding attempts actually have occurred over time at Starlight Reef. The two earlier breeding attempts apparently had failed but we do not know the fate of the 1989 egg. Breeding attempts by isolated pairs of murres at Starlight Reef likely are unusual because murres typically nest in dense colonies. However, breeding by single or a few isolated pairs of murres has been recorded during



Figure 1. Nesting Glaucous-winged Gulls circling over Starlight Reef, BC, on 4 August 1974 (R. Wayne Campbell). Common Murres have also been found nesting at this site in 1975, 1980, and 1989.

other colonization events, including on Cleland Island (Campbell et al. 1975, Figure 2; Parker et al., in press). Reasons for failure are not known but these eggs were not eaten by predators. Origin of these colonists also is unclear. While breeding ended at Cleland Island in 1982, the female that laid the egg at Starlight Reef in 1989 may have come from the nearby Cleland Island colony. Several Cleland Island adults likely survived well beyond 1982 and two may have eventually attempted breeding at this new location. Or, chicks hatched at Cleland Island in the last few years of active breeding prior to 1983 may have survived to breeding age (usually four to nine years; Harris et al. 1994) and attempted breeding at Starlight Reef in 1989 instead of at their empty natal colony. In any case, exposed rocky breeding habitats at Starlight Reef are limited and similar to those available at Cleland Island. Recent surveys on 30 June 2004 by P. Clarkson on foot (Hipfner 2005), and on 11 July 2006 by Harry Carter and Percy



Figure 2. Eggs of two pairs of Common Murre nesting side by side on Cleland Island, BC, on 12 August 1973 (R. Wayne Campbell). Note one egg is pipping. The eggs of Common Murres vary greatly in base colouration and spotting. BC Photo 3449.

Hébert by boat, suggested a lack of current nesting at Starlight Reef.

Cleland Island (2006)

On 28 July 2006 at about 1100 hr (Pacific Daylight Time), Trudy Chatwin and Francis Bruhwiler visited Cleland Island to conduct a seabird disturbance study and to make general wildlife observations. While passing by the northeast side of the island at about 50 m from shore in a British Columbia Parks boat, five Common Murres were observed about five metres above sea level on the upper rocks that surround the vegetated center of the island (see Campbell and Stirling 1968). Trudy launched a kayak from the vessel and slowly approached the shoreline adjacent to the murres for better observation and photographs. Upon close approach, three murres became wary and stood up in alarm postures but two murres remained in incubation postures (Figure 3). However, after a few minutes, two standing murres settled down again in incubation postures beside the two birds which had remained in incubation posture, while only one bird remained standing. No eggs were seen from the kayak. However, it is likely that the two birds that remained in incubation postures were incubating eggs and two of the other birds were their mates. During relatively small disturbance events observed at breeding colonies in California, non-incubating birds (either mates of incubating birds or subadults) usually stand, headbob, or flush while incubating birds typically remain on eggs (G. McChesney, pers. comm.). Murres did not flush or walk away from their sites, indicating strong attachment to this location. Incubation in late July by small numbers of murres also is consistent with past breeding at Cleland Island (Carter 2004). The large amount of guano on surrounding rocks (Figure 3) also suggested that murres had attended this location for some time in 2006. Several Glaucous-winged Gulls that were nesting in close proximity, walked by the murres (within two metres) but did not bother them, suggesting that they were used to their presence. Despite lack of final confirmation of breeding, we contend that sufficient evidence was obtained to strongly suggest that breeding by two pairs occurred in 2006. To avoid further disturbance, Trudy Chatwin and Francis Bruhwiler departed from this area. No other research or monitoring visits were



Figure 3. Common Murres attending breeding habitats at Cleland Island, BC, on 28 July 2006 (Trudy Chatwin). Three murres are standing and two sitting in incubation postures, with one sitting bird only partly visible behind the leftmost standing bird. BC Photo 3443.

made to Cleland Island in 2006 after 28 July.

Probable breeding in 2006 provides the first widely-known evidence of murre use of Cleland Island since 1982. However, the lack of published observations of murres from 1983 to 2005 reflects both a lack of breeding and a general lack of observations of murres at Cleland Island. Murres have been seen on occasion at Murre Reef, the historical nesting area at Cleland Island (Carter 2004), by local naturalists who visit Cleland Island by boats on several trips over spring and summer (A. Dorst, pers. comm.). We believe that murres have not bred at the new location prior to 2006 because it is easily viewed and they would have been seen if they had. As recently as 6 July 2004, a specific survey for murres at Cleland Island also was conducted on the island but no birds were seen (Hipfner 2005). On 9 May 2006, no murres attended the island when Canadian Wildlife Service, Pacific Rim National Park, and British Columbia Parks visited the island for research and protection purposes from 0930 to 1530 hr. On 6 June 2006, no murres attended the new colony location during an earlier disturbance study trip by Trudy Chatwin (unpubl. data) and Emma Neill. During these May and June trips, personnel were not specifically searching for murres and may have missed them. However, egg laying had not

begun by 6 June (given apparent incubation noted on 28 July) and murre probably were not present at this time. Local naturalists observed murre on the island during several trips in June to September 2006, usually about five to six birds (similar to five birds seen on 28 July) with a high count of about eight to 10 birds (G. Bradd, pers. comm.). In summary, murre have sporadically attended Cleland Island since 1982 but long-term attendance and breeding did not reoccur until about late June or early July 2006.

Carter (2004) suggested that low population levels in Washington may have contributed to producing few colonists for sustaining breeding at Cleland Island and other nearby locations after the early 1980s, perhaps leading to the loss of breeding murre on the central west coast of Vancouver Island after 1982. Only slight growth in numbers of murre breeding in Washington has occurred since 1983 (Wilson 1991; Carter et al. 2001; U.W. Wilson, pers. comm.). The largest Common Murre colony in British Columbia at Triangle Island also was found to have lower numbers in 2004 (4,327) than in 1989 (5,937; Hipfner 2005). While increased colonists are not expected from reduced regional populations, some colonists may have left Tatoosh Island, Washington, or Triangle Island, under poor breeding conditions (Parrish et al. 2001, Hipfner 2005) that promoted movements to Cleland Island. We doubt that any birds from the original colony were still alive to assist this recolonization event in 2006. Perhaps new colonists also selected the new breeding area on Cleland Island, instead of using the historical breeding area on Murre Reef. However, chicks that hatched in 1980-82 would have been 24-26 years old in 2006 and may have finally bred at their natal colony, although a new location at that colony, in 2006, possibly after years of sporadic attendance. The latest reported age of first breeding at an active colony is 15 years old (Harris et al. 1994).

Future Monitoring

At Starlight Reef, future surveys should focus on searching for continued breeding by isolated pairs of murre. Most areas of Starlight Reef can be viewed well from a motorized boat with binoculars under calm conditions traveling slowly around the island at ~100 m from shore to reduce disturbance to breeding

murre or cormorants. Given little available breeding habitat limiting colony size to only a few pairs at most and few other needs for visiting Starlight Reef, we suggest that only infrequent surveys are needed to track long-term trends in murre use. At Cleland Island, annual monitoring of murre use is needed because this island has hosted the largest murre colony in the region and various decisions must be made about island access for research and monitoring purposes. Boat counts of murre should be conducted: a) around all coastlines to ensure that all areas used by breeding murre are detected; b) at ~100 m from shore in motorized boats to reduce disturbance; and c) any evidence of eggs, chicks, or fish-carrying adults should be noted. Ground surveys are not needed or desirable to track murre use of Starlight Reef or Cleland Island.

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