

Marine Birds

Marine birds are widely distributed throughout coastal BC and are known or believed to use habitats in PNCIMA for breeding, foraging, migration and staging during part or all of their life cycles.^{1,2} Different species spend different parts of their lives in different regions within PNCIMA.¹ Species' habitat preferences relate to a variety of marine features, including sea surface temperature, bathymetric features (shallow water, near land, near shelf breaks, or away from shelf breaks), seasonal concentrations of chlorophyll *a*, and areas of upwelling. Most (80 to 90 percent) of the coastal and marine birds recorded in BC regularly use or have occurred in PNCIMA.³

Most species of seabird, waterfowl, shorebird, raptor and scavenger are considered migratory birds. These species are protected under the *Migratory Bird Convention Act*.¹ Environment Canada's Canadian Wildlife Service has identified a number of areas of interest for migratory bird conservation in PNCIMA.²

A total of 33 marine bird species or subspecies occurring in PNCIMA have been listed as species of conservation concern by the BC Conservation Data Centre, Committee on the Status of Endangered Wildlife in Canada (COSEWIC), *Species At Risk Act* (SARA), and/or the International Union for Conservation of Nature. These include 21 seabird, six waterfowl, four shorebird, and two falcon species.² Among these, the Pink-footed Shearwater, Marbled Murrelet and Short-tailed Albatross are listed as Threatened, and the Ancient Murrelet and Black-footed Albatross are listed as species of Special Concern by COSEWIC and under SARA.¹

Important Bird Areas

Important Bird Areas (IBAs) is a program of BirdLife International (represented in Canada by Bird Studies Canada and Nature Canada) which seeks to conserve the world's bird populations and diversity by conserving key habitats. BC contains 84 designated IBAs. These sites meet global, continental or nationally significant thresholds for one or more of the following: threatened species, restricted range species,



Common Murre with Pacific sand lance.
Photo: Mark Hipfner

Marine birds use habitats in PNCIMA for breeding, foraging, migration and staging

or congregatory species/bird concentrations. More than 60 percent of BC's IBAs are marine or coastal.^{4,5}

Thirty-two designated IBAs fall within PNCIMA. The majority (21) are designated for their global significance. Half of these surround Haida Gwaii,² including the world's largest breeding colony of Ancient Murrelets, and globally significant breeding colonies of Ancient Murrelet, Cassin's and Rhinoceros auklets, and Leach's Storm-Petrel.⁶

The waters surrounding the Scott Islands, off the northwest corner of Vancouver Island, are an area of significant tidal mixing, driving high productivity.¹ As a result, the Scott Islands IBA supports the largest concentration of breeding seabirds in the eastern North Pacific south of Alaska, and comprise the largest seabird breeding colony in BC, including more than 50 percent of the world's population of Cassin's Auklets, 90 percent of the Canadian population of Tufted Puffin and 95 percent of the western Canadian population of Common Murre.^{6,7} The Scott Islands are protected as a Provincial Park (Lanz and Cox islands) and Ecological Reserves (Sartine, Beresford and Triangle islands) At the time of writing, the marine area associated with the Scott Islands is being proposed as a marine National Wildlife Area by Environment Canada.

Brooks Peninsula, off the west coast of Vancouver Island, is located where the continental shelf is at its narrowest along the West Coast of Vancouver Island, creating a significant north/south boundary area for many eastern Pacific species.⁸ Solander Island and Brooks Bay IBA to the north of Brooks Peninsula support populations of Leach's Storm-Petrels and Cassin's Auklet, both in globally significant numbers.

Immediately west of Prince Rupert, Chatham Sound is one of two areas of particularly high primary productivity as a result of tidal mixing. This makes the Kitkatla Channel, Goschen Island North to Porcher Island IBA to the south of Chatham Sound, a vital staging area for some migrating species, such as Surf, Black and White-winged scoters and waterfowl.⁸

IBA designation is non-regulatory; however, nearly one quarter of the area within the IBA network in BC overlaps with lands that have some form of legal conservation status, primarily through provincial parks and reserves.⁴

Material presented is drawn from the following literature reviews, which include primary references:
 1 Clarke, C.L. and Jamieson, G.S. 2006. Identification of ecologically and biologically significant areas in the Pacific North Coast Integrated Management Area: Phase I – identification of important areas. Can. Tech. Rep. Fish. Aquat. Sci. 2678: vi + 89 p.
 2 McFarlane Tranquilla, L., Truman, K., Johannessen, D. and Hooper, T. 2007. Appendix K: Marine birds. In Ecosystem overview: Pacific North Coast Integrated Management Area (PNCIMA). Edited by Lucas, B.G., Verrin, S. and Brown, R. Can. Tech. Rep. Fish. Aquat. Sci. 2667: vi + 68 p.
 3 Davidson, P. 2011. Bird Studies Canada in litt.
 4 Englund, K., Murray, A. and Davidson, P. 2009. Introducing BC's Important Bird Areas. Bird Studies Canada and BC Nature, 49 pp.
 5 Bird Studies Canada and Nature Canada. 2004-2009. Important Bird Areas of Canada database. Port Rowan, Ontario: Bird Studies Canada. To access the Canadian IBA directory: <http://www.ibacanada.com>
 6 P. Davidson, BC Program Manager, Bird Studies Canada. Personal communication, February 2011.
 7 Bird Studies Canada. N.d. IBA site summary: Scott Island Group. <http://www.bsc-eoc.org/iba/site.jsp?siteID=BC006> (Accessed January 2011).
 8 Clarke, C.L. and Jamieson, G.S. 2006. Identification of ecologically and biologically significant areas in the Pacific North Coast Integrated Management Area: Phase II – final report. Can. Tech. Rep. Fish. Aquat. Sci. 2686: v + 25 p.

