

## Basic Information

*This section contains basic information about the dataset, suitable for a minimal metadata entry.*

**Title:** Important Areas for Birds in Pacific North Coast Integrated Management Area

**Dataset ID:** ia-birds-pncima

**Quality Control:** Check Required

### Summary:

This layer details Important Areas (IAs) relevant to key seabird species in the Pacific North Coast Integrated Management Area (PNCIMA). This data was mapped to inform the selection of marine Ecologically and Biologically Significant Areas (EBSA). Experts have indicated that these areas are relevant based upon their high ranking in one or more of three criteria (Uniqueness, Aggregation, and Fitness Consequences). The distribution of IAs within ecoregions is used in the designation of EBSAs.

Canada's Oceans Act provides the legislative framework for an integrated ecosystem approach to management in Canadian oceans, particularly in areas considered ecologically or biologically significant. DFO has developed general guidance for the identification of ecologically or biologically significant areas. The criteria for defining such areas include uniqueness, aggregation, fitness consequences, resilience, and naturalness. This science advisory process identifies proposed EBSAs in Canadian Pacific marine waters, specifically in the Strait of Georgia (SOG), along the west coast of Vancouver Island (WCVI, southern shelf ecoregion), and in the Pacific North Coast Integrated Management Area (PNCIMA, northern shelf ecoregion).

Initial assessment of IAs in PNCIMA was carried out in September 2004 to March 2005 with spatial data collection coordinated by Cathryn Clarke. Subsequent efforts in WCVI and SOG were conducted in 2009, and may have used different scientific advisors, temporal extents, data, and assessment methods. WCVI and SOG IA assessment in some cases revisits data collected for PNCIMA, but should be treated as a separate effort.

Other datasets in this series detail IAs for cetaceans, corals and sponges, fish, geographic features, invertebrates, and other vertebrates.

Though data collection is considered complete, the emergence of significant new data may merit revisiting of IAs on a case by case basis.

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**Cite this data as:** Cathryn Clarke, Ken Morgan, Sean Boyd, and Mark Hipfner. 2019. Important Areas for Birds in Pacific North Coast Integrated Management Area. Published Feb 12 2019. Data distributor: Cathryn Clarke, Marine Spatial Ecology Section, Fisheries and Oceans Canada, Nanaimo, BC.

**Start Date:** 2004-09-01

**End Date:** 2005-03-31

## Contact Information

*This section contains contact information for the data creator and program manager.*

**Data Creator:**

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**Co-Creators:** Ken Morgan, Sean Boyd, Mark Hipfner

**Program Manager:**

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**General**

*General metadata compatible with the Canada Open Data metadata standard.*

**Topic Category:** Biota

**Date Completed:** 2005-03-31

**Date Published:** 2019-02-12

**Status:** Completed

**Update Frequency:** Not Planned

**Dataset Level:** Series

**Keywords (GoC Thesaurus):** birds, environmental quality, ecology, environmental planning, marine ecosystems

**Science**

*This section contains metadata specific to the Science branch at DFO.*

**Science Keywords:** important areas, british columbia, ia, queen charlotte basin, queen charlotte sound, ebsa, pncima

**Theme:** Coastal Species or Ecosystem

**Methods:** Sean Boyd, Mark Hipfner and Ken Morgan drew polygons on paper map to denote Important Areas for birds that met a priori criteria. The experts' hand-drawn polygons were heads-up digitized using ArcView 3.2 on the 50,000 Canadian Hydrographic Service (CHS) coastline watershed basemap. Hand-drawn polygons were clipped using the PNCIMA boundary polygon provided by OHEB-GIS unit. The layers of individual experts were shared among all the experts for the species grouping. Experts were asked to provide

confirmation and to check for accuracy and completeness. Any changes requested by the experts were performed and again returned to the experts for vetting.

The dataset was updated in 2019 to conform to MSEA's GIS Hub publication standards. The PNCIMA IA data set was split into taxonomic themes (birds, cetaceans, coral and sponges, fish, geographic features, invertebrates, and other vertebrates). The Check Geometry tool was used to validate each layer.

**Data Sources:**

Source: Paper maps, March 2005, by Ken Morgan, Sean Boyd, and Mark Hipfner.

**Scripts or Software Routines:** Data was digitized from paper maps in ArcView 3.2, using polygons which were hand-drawn upon maps by experts.

**Spatial Data Quality:** Location data is typically digitized from paper charts and snapped to geographic features such as coast-lines. Accuracy of locations designated is limited by expert knowledge of available research at time of publication.

**Positional Accuracy:** Positional accuracy is dependent on the expert responsible for polygon creation. Polygons were hand-drawn on PNCIMA-scale maps so boundaries at different scales may not be accurate.

**Attribute Accuracy:** This information is a one-time summary of the available expert knowledge.

**Logical Consistency:** All features are rated by standard criteria across the PNCIMA IA's, though multiple experts are used for different IA's and ratings are selected based upon their knowledge. Experts and their knowledge may change between the PNCIMA, WCVI and SOG IA's. Rating schema were adhered to in differing degrees between these series. The delineating and rating of IA's is dependant upon the experts cited. The experts themselves may have used a variety of study methods and literature to determine what areas are important to given taxa. Less information may have been available for particular taxa at time of publication. More easily studied taxa (eg those occurring in more accessible geography and water depth) may have better data.

**Completeness:** This information is a one-time summary of the available expert knowledge.

**Absence Data:** No Absence Data

**Uncertainties:** Criteria scores are subjective ratings assigned by experts based upon their understanding of their best available data.

**Use Restrictions:** This data was created to inform the selection of EBSAs. Not for navigational purposes. Criteria may be unsuitable for other forms of assessment.

**Change History:**

Date of Change	Description of Change
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**Temporal Coverage:** This is a one time summary of expert knowledge of available literature and research at time of creation.

**Species Code List:**

905 - PROCELLARIIDAE (FAMILY) (UNIDENTIFIED SHEARWATER SP.), Targeted

987 - MELANITTA (GENUS) (UNIDENTIFIED SCOTER SP.), Targeted  
 988 - MELANITTA NIGRA (BLACK SCOTER), Targeted  
 989 - MELANITTA FUSCA (WHITE-WINGED SCOTER), Targeted  
 957 - ALCIDAE (FAMILY) (MURRES, MURRELETS, AUKLETS & PUFFINS), Targeted  
 961 - SYNTHLIBORAMPHUS ANTIQUUS (ANCIENT MURRELET), Targeted  
 962 - PTYCHORAMPHUS ALEUTICUS (CASSIN'S AUKLET), Targeted

**Species Data:**

Code and Name	Age Data	Obs Type
905 - PROCELLARIIDAE (FAMILY) (UNIDENTIFIED SHEARWATER SP.)		Targeted
987 - MELANITTA (GENUS) (UNIDENTIFIED SCOTER SP.)		Targeted
988 - MELANITTA NIGRA (BLACK SCOTER)		Targeted
989 - MELANITTA FUSCA (WHITE-WINGED SCOTER)		Targeted
957 - ALCIDAE (FAMILY) (MURRES, MURRELETS, AUKLETS & PUFFINS)	AUKLETS & PUFFINS)	MURRELETS
961 - SYNTHLIBORAMPHUS ANTIQUUS (ANCIENT MURRELET)		Targeted
962 - PTYCHORAMPHUS ALEUTICUS (CASSIN'S AUKLET)		Targeted

**References:**

Reference: Clarke, C.L., and G. S. Jamieson. 2006a. Identification of Ecologically and Biologically Significant Areas in the Pacific North Coast Integrated Management Area: Phase I - Identification of Important Areas. 2678: 97 p.

Reference: Clarke, C.L., and G. S. Jamieson. 2006b. Identification of Ecologically and Biologically Significant Areas for the Pacific North Coast Integrated Management Area: Phase II - Final Report. 2686: 32 p.

Reference: DFO. 2004. Identification of Ecologically and Biologically Significant Areas. DFO Canadian Science Advisory Secretariat Ecosystem Status Report 2004/006: 15 p.

Reference: DFO. 2007. Guidance Document on Identifying Conservation Priorities and Phrasing Conservation Objectives for Large Ocean Management Areas. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2007/010.

Reference: Jamieson, G.S. and C. Levesque. 2014. Identification of Ecologically and Biologically Significant Areas on the West Coast of Vancouver Island and the Strait of Georgia, and in some nearshore areas on the North Coast: Phase II – Designation of EBSAs. DFO Can. Sci. Advis. Sec. Res. Doc. 2014/101: 36 p.

**Collaboration:** Experts consulted were affiliated with the Canadian Wildlife Service.

**Confidentiality:** Not Protected