# Marine Birds – Rhinoceros Auklet Foraging Habitat

## description

This feature represents the home range of the piscivorous Rhinoceros Auklets (*Cerorhinca monocerata*) that nest in colonies on Triangle Island in the Scott Islands. Rhinoceros Auklets were marked with radio tags while at their colony and aerial surveys were performed to detect these birds while at-sea. More information on the surveys can be found in McFarlane Tranquilla et al. 2005.

A kernel density estimate was performed by Environment Canada using the telemetry points for Rhinoceros Auklet in 2002. The feature shows several proportions of the calculated home range determined via the telemetry.

PHOTO: RICK LECHE

## data sources

- Environment Canada (Canadian Wildlife Service) – Rhinoceros Auklet Telemetry Data, 2002

## data resolution

- The aerial surveys had a mean horizontal detection distance that ranged to a maximum of approximately 16 km.

## date collected

- 2002

## date compiled

- 2012

## reviewers

- Representatives from Environment Canada (Canadian Wildlife Service)

## reviewer comments

- The feature shows areas used by Rhinoceros Auklet, as assessed by telemetry.
- Information on other species is essential to assess importance of areas to seabirds, as each species has its ecological niche and may use different marine areas.
- The telemetry data represent the chick-rearing period and do not reflect at-sea patterns prior to nesting, or post fledging, which could be important.
- Not all individuals were detected at the same rate or consistency and therefore the results could be biased in favour of some individuals who were detected more often than others.

## caveats of use

- The density values in an area can change over time in response to natural population fluctuations and changes in habitat conditions (natural or anthropogenic).
- The Rhinoceros Auklet telemetry data show areas used by birds nesting on the Scott Islands only. The telemetry data do not show areas used by this species nesting on other sites, or during periods other than chick-rearing.
- In order to fully assess use of marine habitats, the distribution determined by at-sea surveys also needs to be considered, as the at-sea data includes a longer time period, covers the entire breeding season, and covers the entire coast. The telemetry data alone are inadequate to assess use of the marine environment coast-wide.
- Recommended date of expiry for use of these data in a Marine Planning context: None provided

## map, feature data and metadata access

- Visit *www.bcmca.ca/data* for more information.

## references

- McFarlane Tranquilla, L., J.L. Ryder, W.S. Boyd, S.G. Shisko, D.F. Bertram, and J.M. Hipfner. 2005. Diurnal marine distributions of radio-tagged Cassin's Auklets and Rhinoceros Auklets breeding at Triangle Island, British Columbia. Technical Report Series No. 423. Canadian Wildlife Service, Pacific and Yukon Region, British Columbia.

# BCMCA Atlas

## Marine Birds

## Rhinoceros Auklet Foraging Habitat

### Legend

**2002 home range**

95% home range

Note:
- Rhinoceros Auklet home range from radio-telemetry. Kernel Density Estimate done with Geospatial Modelling Environment software.

**Data Sources:**
Environment Canada
(Canadian Wildlife Service)

**Base Data:**
ESRI Base Data, GeoBase, GeoBC, NOAA, Natural Resources Canada, USGS, Washington State Government

**Thematic Data:**
For more information on data sources and methods please refer to the facing page to this map

**Projection:** BC Albers NAD83

0 25 50 75 100 125 150
Kilometres

0 25 50 75
Nautical Miles

1:4,250,000 *

* Written scales are approximate and are based on a 11 x 17 inch paper size.

Prepared for:

BC Marine Conservation Analysis

Map template by Caslys Consulting Ltd.

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142°W 140°W 138°W 136°W 134°W 132°W 130°W 128°W 126°W 124°W 122°W

54°N 52°N 50°N 48°N 46°N