

# Marine Birds – Common Murre Migration

## description

This feature represents the movement of the piscivorous Common Murre (Uria aalge), following the end of the land based nesting season on Triangle Island, one of the Scott Islands. Common Murre were marked with satellite telemetry tags while at their colony. Satellites operated by a private company detected the locations several times a day during the sample period.

A kernel density estimate was performed by Environment Canada using the telemetry points for Common Murre for each of 2006 and 2007. The map shows three consecutive time periods, averaged over the two years. The time periods show a progressive movement of the Common Murre away from the Triangle Island colony, towards late summer and fall habitats, following the end of the nesting period on land.



#### data sources

• Environment Canada (Canadian Wildlife Service) – Common Murre Telemetry Data, 2006-2007

## data resolution

• The locations determined by satellite are accurate within 250 m to 1.5 km.

## date collected

• 2006-2007

## date compiled

• 2012

#### reviewers

• Representatives from Environment Canada (Canadian Wildlife Service)

#### reviewer comments

- The data show the movements of Common Murre away from the nesting colony, at the end of the nesting period. The telemetry data do not show areas used for foraging during the nesting season. The nesting season is defined as the period that adult Common Murre are looking after eggs or chicks while on land.
- from the land based nesting site under care of the male parent.

#### caveats of use

- The habitat use patterns in an area can change over time in response to natural population fluctuations and changes in habitat conditions (natural or anthropogenic).
- 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.
- In order to assess use of marine habitats by Common Murre, the distribution determined by at-sea surveys must be considered, assess use of the marine environment.
- 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.

• The breeding season includes the first part of the migration period away from the nest sites, as Common Murre chicks swim away

as the at-sea data includes a longer time period and covers the entire breeding season. The telemetry data alone are inadequate to



## **BCMCA** Atlas

Marine Birds

Common Murre Migration

#### Legend

95% home range Migration following nesting at Triangle Island

- 26 28 July 2006 31 July - 2 Aug 2007
- 29 July 1 Aug 2006 3 - 6 Aug 2007
- 11 Aug 22 Oct 2006 7 - 25 Aug 2007

Note:

- Common Murre home range from satellite 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

| )              | 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:



Map template by Caslys Consulting Ltd. May 10, 2013