

# Marine Birds – Herring Gull Winter Surveys

# description

This atlas page illustrates the best available data that identifies Herring Gull winter habitat, which falls within the months of October through to February. The Herring Gull (*Larus argentatus*) is easily confused with other large gull species, having no distinguishing features that set it apart. They occupy a wide variety of habitats near water year-round, and can be found as far north as Alaska, but during winter months they are most often found near salt water or open fresh water.

Source data used to develop this map consisted of a range of shoreline-based, ground, boat and aerial surveys, which were focused on identifying, counting and recording marine birds. The majority of the surveys were collected at sites with defined boundaries and areas. Surveys collected along transects from each dataset were buffered depending upon observation width described within the source survey methodology in order to generate a survey area.

Observations of the listed species were totalled for each survey location and divided by the area surveyed to generate a density value for each survey location. The densities of all of the survey locations within a single planning unit were averaged and adjusted for survey effort to calculate the illustrated metric, average density of Herring Gull in the winter by planning unit. The values were then classified and symbolized using 5 quantiles, meaning that each class consisted of 20% of the non-zero planning units. (A quantile is established by dividing the frequency distribution of a variable into equal groups: that is, each quantile contains the same fraction of the total number of values being measured.)



## data sources

- Environment Canada (Canadian Wildlife Service) BC Ferry Surveys
- Environment Canada (Canadian Wildlife Service) Coastal Waterbird Inventory
- Environment Canada (Canadian Wildlife Service) Pelagic Seabird Surveys
- Environment Canada (Canadian Wildlife Service) West Coast Vancouver Island Waterbird Survey
- Bird Studies Canada BC Coastal Waterbird Survey
- Alan Burger Southwest Vancouver Island Shelf Surveys

## data resolution

• Weighted averages were calculated for each 2 kilometre x 2 kilometre planning unit.

### data collected

• 1971-2008

# date compiled

• 2010

#### reviewers

- Peter Davidson, Bird Studies Canada
- James Kenyon, Ducks Unlimited Canada
- Representatives from Environment Canada, Canadian Wildlife Service

#### reviewer comments

• None provided.

#### caveats of use

- Survey effort is not consistent across all planning units, across all areas of the coast or across all seasons. Areas with no data may not have been surveyed and these data gaps are not necessarily indicative of an absence of Herring Gull.
- 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 precision of the average density values displayed in the legend is not indicative of the original precision of the survey counts.
- This feature is a compilation of data collected by many people, for different purposes, using different survey techniques with different methodologies within each technique and, therefore, considerable care must be taken when using the data.
- Surveys performed in different seasons will produce different results.
- 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

Species description contains material from:

- B.C. Conservation Data Centre. *Species Summary: Larus argentatus*. BC Ministry of Environment (MoE) 2010. 21 Sep. 2010 http://a100.gov.bc.ca/pub/eswp/
- Seattle Audubon Society. BirdWeb Seattle Audubon's Guide to the Birds of Washington. Revised 2008. www.seattleaudubon.org/birdweb

www.bcmca.ca Marine Atlas of Pacific Canada

