Marine Plants – Giant Kelp

description

Giant kelp *(Macrocystis pyrifera)* is intolerant of warm and low salinity water and therefore is not found in areas where these two conditions occur together, such as the Strait of Georgia (from Beecher Bay to Johnstone Strait and in Broughton Strait east of Malcolm Island) and the inner portions of the Strait of Juan de Fuca. This species is perennial, and beds are generally found in semi-protected areas as well as some semi-exposed areas, as the species appears to need some swell or surge on a regular basis. Giant kelp beds are less variable in bed area and consistency than bull kelp *(Nereocystis luetkeana)*, though bed density can change. Giant kelp is resilient to smaller impacts (e.g. conservative harvesting) and beds provide significant habitat values for marine fauna.

This atlas pages illustrates giant kelp beds along the coast of British Columbia. This feature is a combination of polygon data from a variety of sources. Polygons for giant kelp were extracted from all of the datasets and combined. All mapped polygons are displayed, regardless of the date of the original surveys.

Also displayed are point observations of giant kelp. Based on reviewer feedback, the data for giant kelp (previously identified as *Macrocystis integrifolia*) and giant perennial kelp (previously identified as *Macrocystis pyrifera*) have been combined into a single feature to represent giant kelp (currently recognized as *Macrocystis pyrifera*).

PHOTO: CLAIRE FACKLER, CINMS, NOAA

data sources

- Living Oceans Society – Merged Kelp Datasets
- Parks Canada – Haida Gwaii Marine Plants; Pacific Rim Confidence Weighted Abundance Rasters
- Province of British Columbia – Kelp Surveys
- University of British Columbia Herbarium – Kelp specimen records
- Michael Coon – observation
- Louis Druehl – observation

data resolution

- Because of the poor registration and differences in coastline this data should be considered accurate only to a scale of 1:40,000.

date collected

- 1897-2008

date compiled

- 2012

reviewers

- Dr. Michael Hawkes, University of British Columbia

reviewer comments

- Only one species of *Macrocystis* is currently recognized.

caveats of use

- Survey effort is not consistent across all planning units or across all areas of the coast and some species tend to be under-represented by some survey methods. Areas with no data may not have been surveyed and these data gaps are not necessarily indicative of an absence of kelp. Some locations may still be important but currently lack associated data to confirm their value.
- 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. Please refer to the original metadata document for data limitations and usage.
- Sub-surface marine plant distribution has not been comprehensively mapped.
- 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.

BCMCA Atlas

Marine Plants

Giant Kelp

Legend

- Giant Kelp (previously identified as *Macrocystis integrifolia*)
- Giant Kelp (previously identified as *Macrocystis integrifolia*)
- Giant Kelp (previously identified as *Macrocystis pyrifera*)

Note:
- Size of the giant kelp polygons has been exaggerated slightly to increase visibility at this scale.

Data Sources:
Michael Coon, Louis Druehl,
Living Oceans Society,
Parks Canada,
Province of British Columbia,
University of British Columbia Herbarium

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.

April 10, 2013

Inset Map 1:500,000*

Note: The inset has been provided to illustrate the level of detail available in the data. The inset is for illustrative purposes only and does not imply any significance to this region.