

Marine Plants – Giant Kelp Bioband

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 semiexposed 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 page illustrates bioband information from the BC Shorezone Mapping system, a systematic methodology for mapping the biophysical character of the Shorezone by way of aerial low tide oblique surveys for the entire BC coastline. The system involves the subdivision of the Shorezone into along-shore units and across-shore components. The marine flora and fauna visible within a shore unit are described in terms of common species assemblages known as biobands. The biobands are defined by the dominant cover species. This feature displays the shoreline units where giant kelp was observed and coverage was rated as either 'patchy' (visible in less than 50% of the shore unit) or 'continuous' (visible in greater than 50% of the shore unit).



PHOTO: ED BIERMAN

data sources

- Province of British Columbia – Shorezone Mapping System – Bioband
- University of British Columbia Herbarium – Kelp specimen records

data resolution

- Data from the BC Shorezone Mapping System is linked to shoreline segments that average approximately 400 metres in length. There are a total of 90,027 shoreline segments with some attribute information.

date collected

- 1979-2008

date compiled

- 2008

reviewers

- Mary Morris, Archipelago Marine Research Ltd

reviewer comments

- None provided.

caveats of use

- Southwest coast of Vancouver Island, including Barclay sound and Strait of Juan de Fuca to Victoria are data gaps.
- 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

- For more detailed information on the biological component of the BC Shorezone Mapping System (March 1995) see: www.ilmb.gov.bc.ca/risc/pubs/coastal/bioshore/index.htm

BCMCA Atlas
Marine Plants
Giant Kelp Bioband

Legend

~ Giant Kelp Bioband
 (*Macrocystis pyrifera*)

Data Sources:

Province of British Columbia -
 Shorezone Mapping System

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:



Map template by Caslys Consulting Ltd.

April 16, 2013

