

Marine Plants – General Kelp

description

Kelp is a large seaweed or algae. Two primary species of canopy forming kelp (i.e. kelp that matures at heights and in dense beds) are found along the coast of British Columbia: bull kelp (*Nereocystis luetkeana*) and giant kelp (*Macrocystis integrifolia*). These species are very similar, however giant kelp can be distinguished by its holdfast, used to anchor to substrate, which is large and pear-shaped rather than flat and creeping. By mid-summer, the nearly impenetrable surface of the kelp canopy is most dense, fuelled by nutrient-rich water and sunlight. These large species of kelp are often referred to as kelp forests, which are tiered like a terrestrial rainforest with a canopy and several understory layers below, which provide habitat and shelter for a diverse variety of marine species. In addition, canopy-forming kelp provides significant primary productivity in shallow waters and sources of food for herbivorous animals in areas where they occur and are important for herring spawn.

Not all available datasets differentiate between the species of kelp that were observed during the surveys. Therefore, this atlas page illustrates all observations of kelp where the species was not recorded. This feature is a combination of polygon data from a variety of sources. Polygons for general kelp were extracted from all of the datasets and combined. All mapped polygons are displayed, regardless of the date of the original surveys.



PHOTO: JACLYN MCPHADEN



PHOTO: DALE SANDERS

data sources

- Capital Regional District – Harbours Atlas
- Living Oceans Society – Merged kelp datasets
- Parks Canada – Haida Gwaii Marine Plants
- Province of British Columbia – Kelp surveys

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

- 2008

reviewers

- Not reviewed.

reviewer comments

- None provided.

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.
- This feature includes observations of stalked kelp (*Pterygophora californica*) and bladed kelp (*Laminaria* spp.) from the Capital Regional District Harbours Atlas. These two species groups may be more appropriate as a separate feature.
- 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

General Kelp

Legend

■ General Kelp

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

Data Sources:
Capital Regional District,
Living Oceans Society,
Parks Canada,
Province of British Columbia

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.

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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.