

## Commercial Fisheries - Feature Count

### description

One of the goals of BC Marine Conservation Analysis (BCMCA) is to collaboratively identify marine areas of high conservation value and areas important to human use in Canada's Pacific Ocean, and to make these products available for use in marine planning. In order to identify areas important to human use the BCMCA ran individual Marxan analyses for each of six sectors of marine use (commercial fishing, ocean energy, shipping and transport, sport fishing, tenures and recreation and tourism). The features used in these analyses are illustrated in the *Marine Atlas of Pacific Canada* and represent where and how each sector uses the marine resources of the Canadian Pacific.

Commercial fishing in British Columbia is an important source of employment and income for coastal communities. In 2009, commercial fisheries captured 157 thousand tonnes of fish and shellfish, with a landed value of \$250 million (DFO 2011a, DFO 2011b). Landed value is the price commercial fishermen fetch for the fish before it is processed. Groundfish, at 98 thousand tonnes, made up the greatest proportion of the catch followed by salmon, shellfish and herring (DFO 2011b). As of 2006, there were approximately 2,000 vessels participating in commercial fisheries, with 8,000 people working as skippers or crew and a further 3,700 people employed to process fish from both commercial fisheries and aquaculture operations (DFO 2009).

This map was generated by overlaying all the commercial fishing features that the BCMCA collated to go into the Marxan analysis. The map illustrates the number of different commercial fishing features that inform each 2 kilometre by 2 kilometre planning unit. There were a total of 35 commercial fishing features used in the Marxan analysis. Fifteen of these are from commercial salmon fisheries in the Salmon Catch Estimate Areas while one is from the commercial halibut fishery in IPHC statistical areas. The remaining twenty are commercial fisheries in 4 km x 4 km or 10 km x 10 km grid cells generated by DFO. As the facing map shows, up to 24 of the features overlapped in some of the planning units.

Thirty-five commercial fishing features were included in this tally:

- Chinook Salmon (Gillnet)
- Chinook Salmon (Seine)
- Chinook Salmon (Troll)
- Chum Salmon (Gillnet)
- Chum Salmon (Seine)
- Chum Salmon (Troll)
- Coho Salmon (Gillnet)
- Coho Salmon (Seine)
- Coho Salmon (Troll)
- Dungeness Crab
- Geoduck
- Green Sea Urchin
- Groundfish (Trawl)
- Halibut
- Humpback Shrimp
- Krill
- Pink Salmon (Gillnet)
- Pink Salmon (Seine)
- Pink Salmon (Troll)
- Pink Shrimp
- Prawn
- Red Sea Urchin
- Rockfish (Hook and Line) - ZN
- Roe Herring (Gillnet)
- Roe Herring (Seine)
- Sablefish (Longline)
- Sablefish (Trap)
- Sardine
- Schedule II
- Sea Cucumber
- Shrimp (Trawl)
- Sidesripe Shrimp
- Sockeye Salmon (Gillnet)
- Sockeye Salmon (Seine)
- Sockeye Salmon (Troll)

### data sources

- Fisheries and Oceans Canada (DFO)
- International Pacific Halibut Commission (IPHC)

(Note: Please see individual feature atlas pages and/or metadata for feature specific data sources.)

### data resolution

- Features were tallied by their presence in 2 kilometre by 2 kilometre planning units.

### date compiled

- 2010

### reviewers

- Not reviewed.

### reviewer comments

- None provided.

### caveats of use

- Please see individual feature atlas pages and metadata for feature or commercial fisheries specific caveats.
- Recommended date of expiry for use of these data in a Marine Planning context: none given.
- There are a number of licensed commercial fisheries in the Pacific Region that were not mapped by the BCMCA due to lack of spatial data. The fisheries not represented here include fisheries for Anchovy, Clam (razor and intertidal), Eulachon, Herring (Spawn on Kelp, Food and Bait, Special Use), Surfperch, Surf Smelt, Tuna, and exploratory fisheries (Scallop by dive, Scallop by trawl, Octopus by dive). Some of these fisheries have not been active in the recent past.
- Data displayed should not be assumed to match current or future conditions due to ongoing changes in the environment and management.
- Due to screening of data to meet confidentiality requirements for some fisheries, footprints mapped may be smaller than reality. Therefore, this overlap of fisheries features may be missing areas that are commercially fished.

### map, feature data and metadata access

- Visit [www.bcmca.ca/data](http://www.bcmca.ca/data) for more information.

### references

- Fisheries and Oceans Canada. *Economic Impact of Marine Related Activities in Canada*. Prepared by Gardner Pinfold. Statistical and Economic Analysis Series. Publication No. 1-1. 125 p. 2009. [www.dfo-mpo.gc.ca/ea-ae/cat1/no1-1/no1-1-eng.pdf](http://www.dfo-mpo.gc.ca/ea-ae/cat1/no1-1/no1-1-eng.pdf)
- Fisheries and Oceans Canada. *2009 Value of Atlantic & Pacific Coasts Commercial Landings, by Province*. 2011a. [www.dfo-mpo.gc.ca/stats/commercial/land-debarq/sea-maritimes/s2009pv-eng.htm](http://www.dfo-mpo.gc.ca/stats/commercial/land-debarq/sea-maritimes/s2009pv-eng.htm)
- Fisheries and Oceans Canada. *2009 Volume of Atlantic & Pacific Coasts Commercial Landings, by Province*. 2011b. [www.dfo-mpo.gc.ca/stats/commercial/land-debarq/sea-maritimes/s2009pq-eng.htm](http://www.dfo-mpo.gc.ca/stats/commercial/land-debarq/sea-maritimes/s2009pq-eng.htm)

**BCMCA Atlas**  
**Commercial Fisheries**  
**Feature Count**

**Legend**

**Feature count**  
 (by planning unit)

- 1 - 4
- 5
- 6
- 7 - 8
- 9 - 14
- 15 - 24

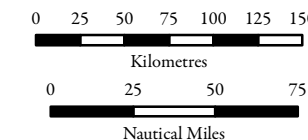
Note:  
 - Classification based on 6 quantiles.

**Data Sources:**  
 Fisheries and Oceans Canada,  
 International Pacific Halibut Commission

**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



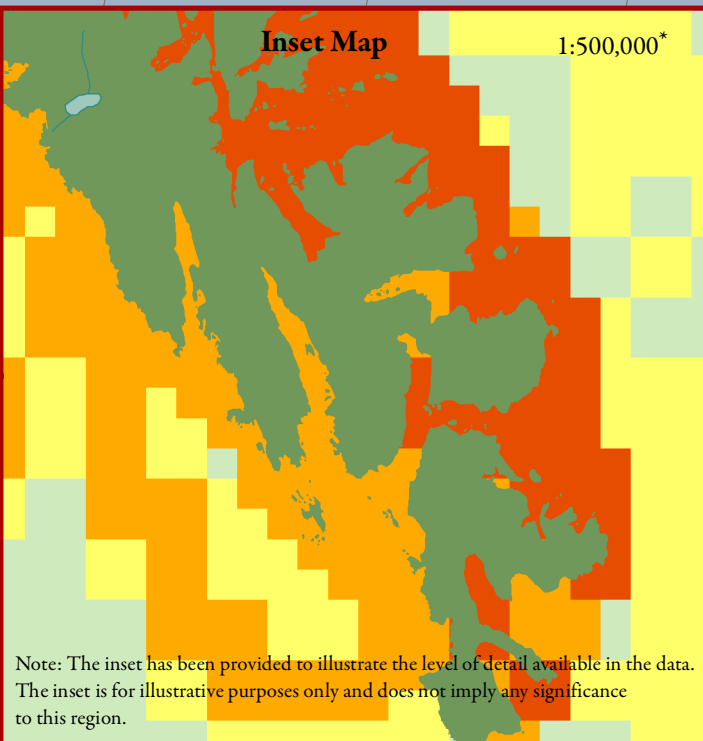
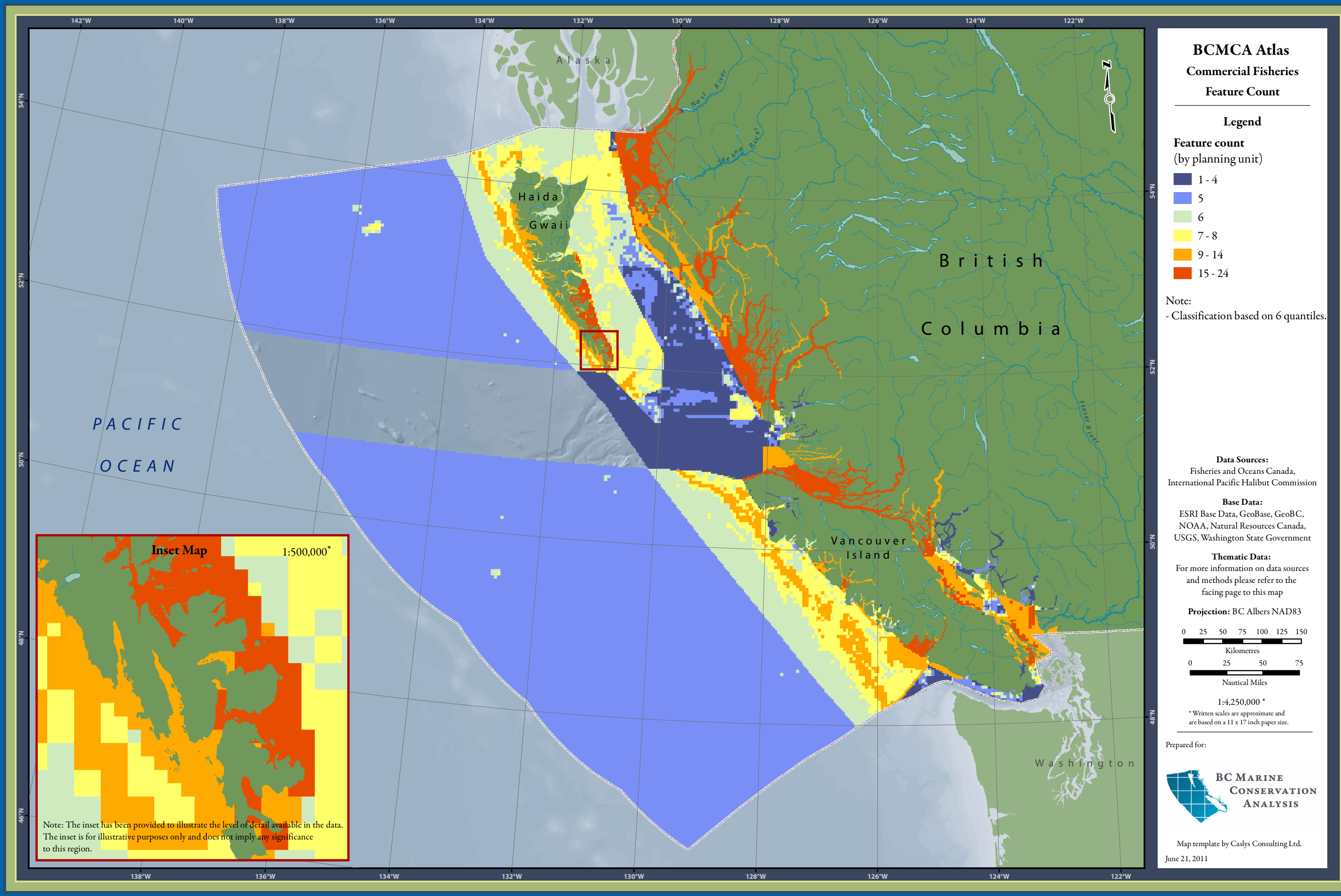
1:4,250,000 \*

\* Written scales are approximate and  
 are based on a 11 x 17 inch paper size.

Prepared for:



Map template by Caslys Consulting Ltd.  
 June 21, 2011



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.