

## Marine Fish and Invertebrates – IPHC Standardized Stock Assessment Survey Stations – Observed Catch - 2009

### description

The International Pacific Halibut Commission (IPHC) has been conducting standardized stock assessment surveys at fixed station locations since 1998. The objective of these surveys is to provide standardized information on species abundance to facilitate halibut (*Hippoglossus stenolepis*) stock assessments. The surveys are done between May and August each year using fixed-hook setline fishing gear at stations in a 10 nautical mile survey grid. The survey points illustrated on the map represent the midpoint of the set at each station in the Canadian Pacific Exclusive Economic Zone (regulatory area 2B). The sets must be within three nautical miles of one of the fixed stations. Standard survey gear consists of fixed-hook skates. Each skate is 1,800-feet long with 100 circle hooks (#3, 16/0) spaced 18 feet apart. All hooks are baited with 0.25 to 0.33 pound pieces of Alaska Seafood Marketing Institute (ASMI) grade No. 2 semi-bright or better chum salmon (*Oncorhynchus keta*).

This series of maps illustrates the spatial variability in the catch (percent of hooks with catch) observed among different years. (One map is provided in the print atlas, and BC Marine Conservation Analysis (BCMCA) provides separate maps for each year from 2003 to 2009 on their data repository. See the link below, under 'Map, feature data and metadata access.')

The percentages were calculated using the number of hooks retrieved and observed, as not all hooks are retrieved due to wear and tear on the gear. The catch values are displayed in equal interval classes determined by looking at the range of values from all years of data. Thus, data may not exist in all classes for every survey year, but colour classes are comparable among years.

In 2009, seven skates were set at each station. At two stations, not all of the skates were retrieved.



PHOTO: GILL PHOTO

### data sources

- International Pacific Halibut Commission
- Fisheries and Oceans Canada, Pacific Region

*Note that the Pacific Halibut Management Association (PHMA) also undertakes longline surveys, also known as the PHMA/DFO Inshore Rockfish Research Survey. BC Marine Conservation Analysis (BCMCA) did not obtain data from these surveys for display in this atlas.*

### data resolution

- Source data is collected by set and is listed as the midpoint between the start and end points of a given set. The position of the point assumes a straight line between the start and end point of the set. Because the midpoint calculation is affected by the number of skates set, there can be a slight variation on the position of each station from year to year.

### date collected

- 2009

### reviewers

- Claude L Dykstra, Biologist, International Pacific Halibut Commission (June 2010)

### reviewer comments

- None provided.

### caveats of use

- Spatial extents of survey stations are limited. Lack of data outside these areas should not be interpreted as lack of fish and invertebrate biota.
- These data are not considered representative of the commercial halibut fishery, as commercial fishers are good at maximizing the catch of halibut and minimizing bycatch (other types of fish, that are caught unintentionally). The surveys are systematic spatially so both good and bad fishing spots are targeted, not necessarily in equal amounts.
- These surveys target halibut species primarily; other species are caught but not necessarily consistently. Therefore, these catch indices are relative values for the area surveyed only, and for limited species. These values should not be interpreted as indices of overall ecosystem abundance.
- Survey data represents only the season when the data were collected, and many species do migrate with season.
- Survey data are essentially a snapshot taken on one day, and are not reflective of what the commercial or sport fisheries may encounter throughout the season.
- The number of skates fished varies from year to year. Longer sets (more skates) may cross through more varied habitat and therefore affect the percentage of occupied hooks from year to year.
- These data represent percentage of hooks that returned some form of catch (as opposed to an empty hook, or a baited hook with no catch). A high percentage of hook occupancy could indicate multiple species encounters, or many occurrences of the same species (either resident or transient populations).
- Recommended date of expiry for use of these data in a marine planning context: None provided, however, as the timing and amount of gear fished for a given position varies from year to year, multiple years should be assessed when using this data set for marine planning purposes.

### map, feature data and metadata access

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

### references

- For information on all survey areas, see: [www.iphc.washington.edu/halcom/survey/ssadata/ssadata.htm](http://www.iphc.washington.edu/halcom/survey/ssadata/ssadata.htm)



**BCMCA Atlas**  
**Marine Fish and Invertebrates**  
**IPHC Standardized Stock**  
**Assessment Survey Stations**  
**Observed Catch - 2009**

**Legend**

Observed Catch  
 (percent of hooks with catch)

- 2 - 13
- 14 - 26
- 27 - 39
- 40 - 52
- 53 - 65
- 66 - 78

Notes:  
 - Data may not exist in all classes for this survey year.  
 - Each point (station) represents one day of fishing, summer months only.  
 - In 2009, seven skates were set at each station. At two stations, not all of the skates set were retrieved.

**Data Sources:**

International Pacific Halibut Commission (IPHC), Fisheries and Oceans Canada

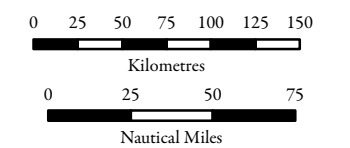
**Base Data:**

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.  
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