

Tourism and Recreation – Scuba Dive Sites

description

Tourism is one of the province's leading economic drivers, generating \$13.8 billion in spending, \$6.6 billion in gross domestic product (GDP), 131,000 person-years of employment and \$4.7 billion in wages and salaries in 2008 (Tourism BC, 2009). The money spent by visitors and residents on ocean tourism and recreation activities in BC supports thousands of businesses and employees in coastal communities. Most marine tourism and recreation activities are seasonally dependant and use is concentrated in months with the most favourable weather conditions. However, timing varies according to the activity and some activities are pursued year-round.

BC is recognized as one of the world's top cold-water dive destinations for its abundant and diverse marine life, relatively healthy marine environment and challenging dive opportunities. There are two principle types of scuba diving access: shore-based and boat-based. Boat-based dive areas are accessed by private marine transportation, shuttling services or tour operators. Resort lodges may also offer diving services.

Divers in the region, both British Columbia residents and non-residents, must either be certified divers or participating in certification courses. Diving may be pursued independently by private divers who purchase or rent equipment and transportation, or can be part of a guided and organized commercial tour, in which case the tour operator arranges the outfitting and transport. The diving experience for both user groups ranges from half a day to multiple days in duration. A 2004 survey of the BC dive industry found that 116 dive operators (guides, charters, instructors, equipment manufacturers, wholesalers, and retailers) served about 25,000 divers in 2003, with gross expenditures on services and equipment of over \$15 million (Ivanova, 2004).

The data on scuba dive sites available from the Province of BC were originally mapped as part of the Coastal Resource Inventory. Different contractors compiled the data between 1992 and 1998 for separate projects in Southern and Northern Strait of Georgia, Johnstone Strait/Central Coast, and North Coast / Haida Gwaii. Some, but not all, sites were assigned a relative importance value, although the basis and methods used to assign those values varied from project to project. The Province merged the data from each regional project into the Coastal Resource Information Management System (CRIMS) after 2001.

The CRIMS scuba diving data were found to have gaps in coverage for the North Coast, Haida Gwaii and the West Coast of Vancouver Island. These data gaps were filled by the BC Marine Conservation Analysis (BCMCA) with information extracted from guide books and websites (see references below), local knowledge, spatial data from Tourism Resource Inventories (1996-1998) and Tourism Opportunity Studies (1998-2003) conducted by the Province of BC, spatial data prepared for the province for the Central Coast LRMP by the Outdoor Recreation Council (1998), a dive site database compiled from five guide books and three websites by Parks Canada, and from local knowledge provided by Pacific Marine Life Surveys Inc. No relative importance information was available for these added sites. Sites are identified as accessible by boat or shore when that information was provided with the data. Many of the sites from the original source data were imprecisely located, positioned in deep channels, or on land. The locations of all scuba dive sites were verified and adjusted using nautical charts with the assistance of Pacific Marine Life Surveys Inc.

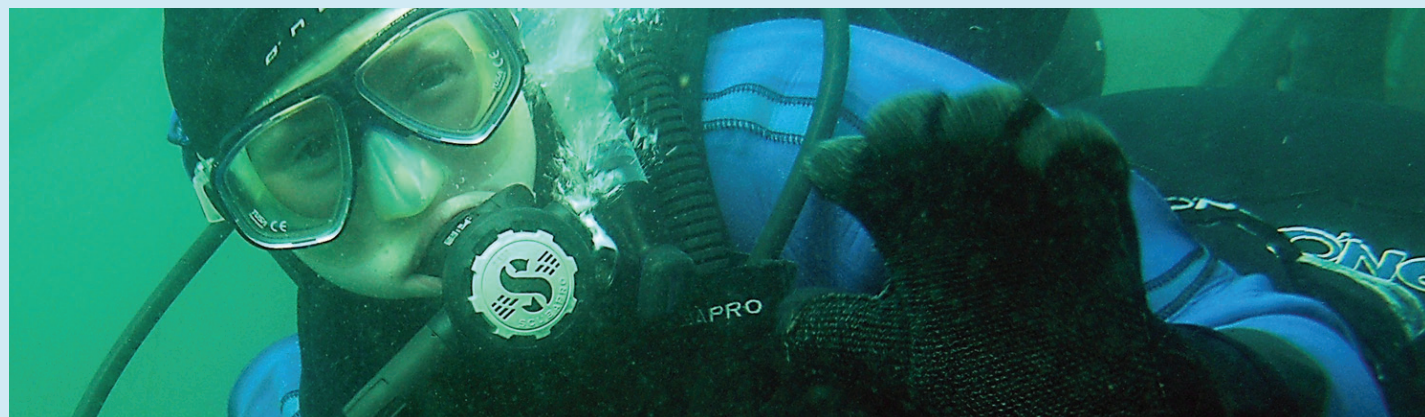


PHOTO: ED BIERMAN

data sources

- Fisheries and Oceans Canada, Local Ecological Knowledge
- BCMCA, Dive Site database developed using information from guide books and websites (see references) and local knowledge collected from participants at "Diver Days", Vancouver Aquarium
- Outdoor Recreation Council (provided by GeoBC)
- Pacific Marine Life Surveys Inc.
- Parks Canada, GeoDatabase developed using information from guide books (see references)
- Province of British Columbia, Coastal Resource Information Management System
- Province of British Columbia, Tourism Opportunity Studies

data resolution

- Sites were mapped against CHS Nautical Charts with scales ranging from 1:300,000 to less than 1:20,000.

date compiled

- Original source data were compiled by the Province of BC between 1992 and 2003.
- Outdoor Recreation Council data were compiled from interviews conducted in 1997-1998.
- Parks Canada data were compiled between 2007 and 2009.
- Fisheries and Oceans Canada, Local Ecological Knowledge is from 2007.
- Some information was collected by BCMCA from individual divers who participated in the January 2009 Diver Days at the Vancouver Aquarium.
- Information was obtained from Pacific Marine Life Surveys Inc in 2009.
- The BCMCA merged and reconciled the different datasets in 2011.

reviewers

- Not reviewed.

reviewer comments

- None provided.

caveats of use

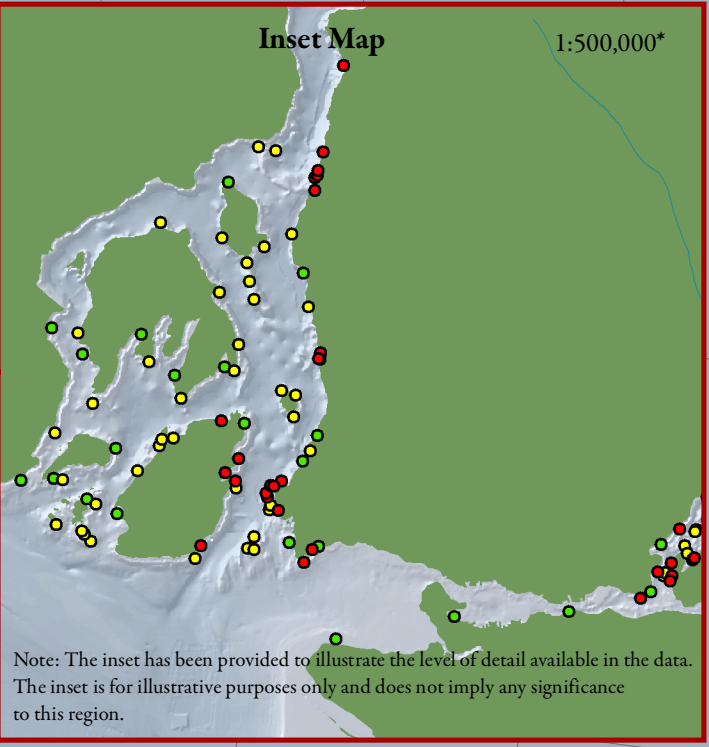
- Not to be used for navigational purposes.
- One point may represent several different dive sites in an area.
- Recommended date of expiry for use of these data in a marine planning context: None provided.

map, feature data and metadata access

- Visit www.bcmca.ca/data for more information.

references

- Coastal Resource Information Management System can be accessed at: <http://archive.ilmb.gov.bc.ca/cis/coastal/others/crimindex.htm>
- Ivanova, Iglika. *Recreational Scuba Diving in British Columbia Survey Report*. Dive Industry Association of British Columbia. 2004. www.tti.gov.bc.ca/research/ResearchbyActivity/pdfs/water_based/Recreational_Scuba_Diving_in_British_Columbia.sflb.pdf
- Tourism BC. *The Value of Tourism in British Columbia Trends from 1998 to 2008*. 2009. www.tti.gov.bc.ca/research/IndustryPerformance/pdfs/tourism_indicators/Value_of_Tourism_in_British_Columbia.pdf
- Tourism Opportunity Studies can be accessed at: <http://archive.ilmb.gov.bc.ca/cis/initiatives/tourism/index.html>
- Spatial information on scuba dive sites was extracted from the following tourism studies:
 - Commercial and Public Recreation Study for the Sunshine Coast Forest District, 2002.
 - Forest and Fisheries Tourism Opportunities Study for the North Coast Forest District, 2000.
 - Forest and Fisheries Tourism Opportunities Study for Portions of the Campbell River and Port McNeill Forest Districts, 2000.
 - Forest Tourism Opportunities Study for Squamish Forest District and In-SHUCK-ch/N'Quat'qua Statement of Intent Area, 2000.
 - Haida Gwaii Tourism Resource Inventory, 1998.
 - Nootka Sound Forest Recreation and Tourism Opportunity Study, 1998.
 - Vancouver Island Tourism Resource Inventory, 1996.
- The following books were referenced for information on the location of scuba dive sites:
 - Carey, Neil G. *A guide to the Queen Charlotte Islands*. Raincoast Books, 1998
 - Dombowsky, Greg. *Diver's Guide, Vancouver Island*. Heritage House, 1999
 - Flamarique, Ingio Novalés; Hendry, Michael and White, Ted. *Victoria's Shore Dives* Hancock House Publishers, 1995.
 - Mussio, Russell and Mussio, Wesley. *Backroad Mapbook, Volume 1: Southwestern BC and Volume II: Vancouver Island*. Mussio Ventures Ltd., 2005
 - Pratt-Johnson, Betty. *99 Dives from the San Juan Islands in Washington to the Gulf Islands and Vancouver Island in British Columbia*. Heritage House, 1994.
 - Pratt-Johnson, Betty. *151 dives in the protected waters of British Columbia and Washington State*. Mountaineers Books, 2007.
 - Trepanier, Carl. *The Vancouver Area Diving Guide*. Gordon Soules Book Publishers, 2004.
 - Weber, Edward. *Diving and Snorkeling Guide to the Pacific Northwest*. Gulf Publishing Company, 1993
- The following websites were referenced for information on the location of scuba dive sites:
 - Cool Dives BC Ltd. *Best Dive Sites In British Columbia*. www.best-scuba-diving-vacations-in-british-columbia.com
 - Hiebert, Mark. *Diving in Victoria British Columbia (And Other Places)*. <http://victoriadiving.awardspace.com/>
 - *Shore Diving*. www.shorediving.com/Earth/Canada/index.htm
 - Werry, Kerry L. et al. *SCUBA British Columbia Dive Site Reviews*. www3.bc.sympatico.ca/kerryw/scuba/divesite.htm



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.

BCMCA Atlas

Tourism & Recreation

Scuba Dive Sites

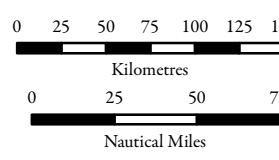
- Legend**
- Dive Site Type**
- Boat-based
 - Shore-based
 - Unknown

Data Sources:
BCMCA,
Fisheries and Oceans Canada,
Pacific Marine Life Surveys Inc.,
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



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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