

CARICOMP and the CMS Caribbean Coastal Data Center (CCDC)
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The Center for Marine Sciences (CMS)

The Center for Marine Sciences is a part of the University of the West Indies in Jamaica. It comprises an administrative office, the Caribbean Coastal Data Center (CCDC) and the Discovery Bay Marine Laboratory (DBML). It functions as an umbrella organization to facilitate research in the marine sciences, to support graduate students and to interact on a national level with relevant organizations.

Caribbean Coastal Marine Productivity Program (CARICOMP)

Individuals within CMS were founder members of the Caribbean Coastal Marine Productivity Program which is an international, collaborative, academic, research program designed to assess and monitor the major coastal ecosystems of the Caribbean: mangrove, seagrass and coral reef. Twenty-two marine laboratories, parks and reserves in 14 islands and 8 mainland countries have been collecting data since 1993 according to prescribed methods given in the CARICOMP Methods Manual.

In the case of coral reefs, the monitoring method requires five fixed 10 m transects at 7-13 m deep at each of two comparable locations on the fore-reef, giving 10 transects from each site. These are monitored once or twice per year using a light chain running beneath the transect line and following the contours of the substratum. Organisms or substratum are recorded beneath each chain link. Corals are identified to species and algae to type (calcareous, fleshy, turf, encrusting). Gorgonians and urchins are counted in 10 m² belt transects centered on each line. Physical measurements are also collected on a weekly basis (salinity, light attenuation and temperature using an automated Hobotemp instrument). Monitoring of fish using the AGRRA protocol has recently been added to the method, but no data are yet available.

The data collected have formed the basis of papers presented at the 8th International Coral Reef Symposium (ICRS) held in Panama in June 1996. More recent data have been presented through papers at the 9th ICRS held in Bali, Indonesia in October 2000. In relation to coral reefs, these data show a range of percent live hard coral covers at CARICOMP sites from 1-45% with higher (>20%) covers towards the southeast of the region. Most sites have shown little change in coral cover since 1993. Two sites, in Belize and the Bahamas have shown significant declines in coral cover and one site in Nicaragua has shown an increase.

To allow those who collect the data to publish their results, there is a two-year moratorium on release of data, after which data are freely available on request from the data center. To facilitate this process, data will shortly be available in downloadable form from the website.

Funding for CARICOMP has been provided by UNESCO, the US National Science Foundation, the MacArthur Foundation, the US National Oceanic and Atmospheric Administration, the US Environmental Protection Agency and the Interior Department through the U.S. Coral Reef Task Force.

The Caribbean Coastal Data Center

The Caribbean Coastal Data Center (CCDC) started as the CARICOMP data center. Its function is to archive, manage, analyze and disseminate data from regional monitoring programs including CARICOMP and Component 5 of CPACC. The CCDC has developed a relational database in Microsoft Access to store the dataset from CARICOMP.

The data center was established in 1993 with funding from the McArthur Foundation, and became fully operational with the acquisition of a full-time data manager in October 1994. Within the last year, following the inclusion of CPACC coral reef data and responsibility as a regional node for the Global Coral Reef Monitoring Network (GCRMN), the staff of the CCDC has increased to three.

In addition to storing data from these important regional and international monitoring programs, CCDC will, in the future, also archive data collected nationally, including Kingston Harbour data collected during the last 15 years, Bibliographic references of marine science studies conducted in Jamaica to date and data on the geological resources of Jamaica's EEZ.

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