

### IN THIS ISSUE

- Personnel Changes
- Projects Update
- Coastal Management Projects
- Student Matters
- Specialty and Upgrade Courses



Scenes from Christmas Lunch 2000



Dr. Warner and a juvenile pelican

## Personnel Changes

There has been a pleasing increase in the number of scientific personnel employed in CMS over the last 2 years – greatly strengthening our capacity.

- Ms Marcia Chevannes-Creary has been appointed Coordinator for data analysis for the Caribbean Planning for Adaptation to Global Climate Change project (CPACC) Component 5 (coral reef monitoring). These data are held in our data center, now renamed the Caribbean Coastal Data Centre (CCDC).
- Dr Michael Haley was awarded a UWI Research Fellowship in October 2000 to work on projects designed to investigate methods of coral reef restoration. These include the potential roles of artificial reefs and artificial corals in providing habitat for coral reef fishes, and studies on sea urchins as important grazers of algae on coral reefs.
- Miss Tatum Fisher was appointed in November 2000 as Marine Data Analyst in the CCDC, to help archive CARICOMP data and to submit summaries to the Global Coral Reef Monitoring Network.
- Dr Norman Quinn, a coral reef biologist previously based in Papua New Guinea, was appointed in November 2000 as Director of the Discovery Bay Marine Laboratory (DBML). Dr Quinn has been actively initiating new research into lobster and coral settlement, while struggling with the financial and maintenance problems of running this large laboratory.

- Ms Arlene Lawrence was appointed in May 2000 as Outreach Officer under our Coastal Water Quality Improvement Project (CWIP) grant at DBML.
- Mr. Peter Edwards was appointed as Scientific Officer in the CMS Main Office in July, and Mrs Leandra Cho-Ricketts was appointed as Part Time Research Assistant under our ALO (USAID) grant with the University of Delaware to develop graduate teaching in Integrated Coastal Management.

## Project Updates

A major achievement over the past 18 months was the most extensive coral reef survey ever undertaken in Jamaica. The work was carried out in collaboration with the Atlantic and Gulf of Mexico Rapid Reef Assessment (AGGRA) project. AGGRA specialists from the USA, including our old friend and colleague Dr Judy Lang, led a workshop at DBML in August 2000 during which a cadre of Jamaican divers, scientists, students and coastal managers were trained in AGGRA methods. Then four AGGRA survey teams, composed mainly of the newly trained Jamaicans and supported by Mr Peter Gayle with boats and equipment from DBML, studied 60

sites along the North Coast. 371 coral reef transects were surveyed. Mean percent live coral cover at sites deeper than 5 m was 11.7% and 4.8% at shallower sites. Fish populations showed high proportions of small fish and low numbers of commercially important types such as snappers and groupers. Sadly, no surprises – our reefs are in poor condition and heavily overfished! It also showed us that the reefs around DBML are fairly typical of the whole North Coast. This was important since Discovery Bay is our Caribbean Coastal Marine Productivity (CARICOMP) site, monitored annually by Peter Gayle. Other coral reef monitoring surveys by CPACC (3 sites: Discovery Bay, Portland, SE Cay) and at 5 sites in the Port Royal Cays by Tatum Fisher (UWI, MSc project) have given similar results.

A Coastal Water Quality Improvement Program (CWIP) GOJ/USAID-funded project headed by Dr Tony Greenaway involved sampling and analyzing the water quality of coastal water from several sites including Negril and Ocho Rios. Analyses were performed at DBML in the Chemical Analytical Lab. The results of this work show that there is cause for concern about near-shore water quality in several sites close to these important tourist areas.

Another CWIP grant enabled DBML to help in the implementation of four environmental outreach projects in the Ocho Rios area. The projects involved Environmental Education, a Management Plan for the Ocho Rios Marine Park, Solid Waste Management and Community Animation Training.

Our Fisheries Improvement Programme has continued with studies by Ms Nadine Earle and the International Center for Living Aquatic Resources Management (ICLARM) on the role of the Discovery Bay Marine Protected Area in fisheries management. Nadine has now transferred her expertise to Ocho Rios in collaboration with the NGO Friends of the Sea and their CWIP project to develop a Management Plan for the Marine Park.



## Coastal Management Projects

Coastal Management Projects Two grant-supported initiatives intended to improve coastal management started this year. “Impact and amelioration of sediment and agro-chemical pollution on Caribbean coastal waters” is a DFID-funded collaborative venture between CMS UWI Mona, The University of York UK and Marine Resources Assessment Group Ltd (MRAG). In Jamaica, the project is coordinated by Dr Dale Webber and involves CMS, the Department of Chemistry, the Caribbean Agricultural Research and Development Institute (CARDI) and Caribbean Coastal Area Management (CCAM). The intention is to assess impacts of agrochemicals on the coastal zone by literature and agency research and a questionnaire to farmers. A parallel project is running in St Lucia.



The second project “ECOCOAST - US/Jamaica Educational Cooperation for Integrated Coastal Management” is a collaborative 2-year project between CMS, the Center for the Study of Marine Policy at the University of Delaware, UNEP-Regional Seas Program, and NOAA International Program Office, USA. The project is funded by USAID through the Association Liaison Office (ALO) for University Cooperation in Development, and

provides for faculty and student exchanges between CMS and Delaware, the development of distance-education graduate level modules and the creation of an educational website concerning Integrated Coastal Management.



## Funding

Thanks to our partners and collaborative agencies who provide funding for the many and varied projects we have been involved in here at the Centre.

In no particular order we gratefully acknowledge the following agencies

- UNEP
- CPACC
- AGGRA
- ICLARM
- DFID
- CARICOMP
- USAID
- CPACC
- JHTA

## Workshops

A Caribbean Planning for Adaptation to Climate Change (CPACC) workshop on the Component 5 monitoring protocol was held on 11th -25rd May 2001. Participants from the Caribbean, North America and Europe, met to discuss and analyse the results of coral reef monitoring exercises over the past year. The participants also reviewed the existing monitoring protocol and made recommendations for modifications where necessary.

## Student Matters

Congratulations to Ms Marcia Creary and Carlton Campbell who were

awarded MPhil degrees for their work on Kingston Harbour Bryozoa and Discovery Bay phytoplankton respectively.

We have 14 other higher degree students at various stages of their degrees. Of particular note (because they started in the last 18 months) are Stacy-Ann Moses and Robert Stephenson who started in 2000 and Paula Lindo and Kayan Campbell who started in this semester. Their fields are artificial coral, urchin grazing, pelican breeding and coastal water quality respectively. Graduate students in other departments also use our facilities programme.



Trainee Divers

## Speciality and Undergraduate Courses

An Underwater Photography course was presented at DBML in May, organized by Dr Quinn, with assistance from professional underwater photographer Mr. Barry Lipman. Participants included undergraduate and postgraduate students, and employees of UWI and NRCA (now NEPA).

A Life Sciences summer course "Diving Technology for Aquatic Scientists" was taught in August 2001. The course was delivered mainly by CMS personnel. Nine undergraduates took the course and all were successful.

We expect to repeat both courses in 2002.