

DEPARTMENT OF GEOGRAPHY AND GEOLOGY

Professor David Barker, BSc *Wales*, PhD *Bristol*, Dip Urb & Reg Studies *Birmingham* – Head of Department

WORK OF THE DEPARTMENT

The Department of Geography and Geology continued to mount a full programme of undergraduate teaching and postgraduate supervision in spite of the continuing and increasing challenges imposed by budget and resources (both human and physical, including space and equipment).



Professor Simon Mitchell (Geology) and **Dr David Miller** (Geography) were granted sabbatical leave for the year. As part of his research activities, Professor Mitchell visited England, the Netherlands, Texas and Mexico City. **Ms Shakira Khan** was appointed to take over Professor Mitchell's teaching for the year, but because of organizational problems relating to replacing Dr Miller, he was given permission to take his sabbatical year beginning with Semester II; he will return to the Department in Semester II, 2010/2011. His Level II course (Geosphere and Hydrosphere) was taught by Professor Paul Shaw and Dr Matthew Wilson, from the St Augustine campus.

With existing vacancies remaining unfilled, the Department faces severe problems in finding qualified lecturing staff to mount the full range of undergraduate courses necessary for the completion of both the Geography and the Geology Majors. **Mr Kevon Rhiney** and **Mr Robert Kinlocke** were appointed as Temporary Assistant Lecturers, and **Mr Donovan Campbell** was appointed as a Teaching Assistant. **Dr Lyndon Brown** was appointed as Head of the Earthquake Unit.

Student numbers in first-year Geology were, for the second successive year, far higher than expected, again creating enormous difficulties in

Geology practical classes. These difficulties were compounded by the shortage of demonstrators/teaching assistants and put pressure on the use of scientific equipment for laboratory work.

The Geography section of the Department (staff and postgraduate students) was well represented at the Annual Meeting of the Association of American Geographers held in Washington, D.C. in April 2010. The group of thirteen staff and postgraduates was the largest contingent from the Department ever to attend this prestigious meeting, and a total of twelve papers were presented and three panel sessions organized, details of which are included later in this report.

The book *Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk*, co-edited by Dr Duncan McGregor, Dr David Dodman (former lecturer in Geography) and **Professor David Barker** (Geography), was awarded the prize for the bestselling environmental studies book published by UWI Press in the period 2007-2010. **Dr Parris Lyew-Ayee** (Director of the Mona GeoInformatics Institute and affiliated to the Department) and **Mr Rafi Ahmad** (Geology) were awarded the prize for the best publishing proposal for their *Natural Hazard Atlas of Jamaica*, to be published shortly.

The Department continued to administer the Earthquake Unit, the Unit for Disaster Studies, and the Marine Geology Unit

INCOME GENERATION

Dr Michael Burn (Geography) was part of a team including Allison Bain (P.I.), Lisa Kennedy and Debbie Pearsall which received a grant of C\$37,000 from the Social Sciences and Humanities Research Council of Canada for a research project on “Human Eco-dynamics in Barbuda – New Approaches for Caribbean Archaeology.”

Dr Sherene James-Williamson, Geology Museum Curator, received a grant of C\$12,000 from the Canada Fund for Local Initiatives for the upgrade of the education capacity of the museum with the installation of interactive whiteboard and multimedia facilities for effective teaching and learning. Mr Stephen Hallihan, the Canadian High Commission to

Jamaica, officially opened the learning centre on March 11, 2010. The Principal of the Mona Campus, Professor Gordon Shirley, was in attendance.

Dr Susan Mains (Geography) received a UWI Research and Publications and Graduate Grant of US\$1,298 for a research project on “Media and Place (MAP) Lab: Centre for Qualitative Analysis of Caribbean Geographies.”

Professor Simon Mitchell (Geology) received a grant of US\$5,000 from the Petroleum Corporation of Jamaica, Sargress Energy and CaribX for graduate research and travel on a variety of small-scale consultancies.

The **Marine Geology Unit** received a grant of US\$8,460 from the World Resources Institute, Washington, D.C., USA, for research on coastal flooding related to reef protection and weather systems. The Unit completed its final report on “Beach Erosion at Long Bay, Negril” for the Environmental Foundation of Jamaica.

PAPERS PRESENTED

D. Barker

- With D. Campbell. “Climate change and adaptation in Jamaica’s agriculture: farmers’ perceptions of changing weather patterns in different agro-ecological zones.” Annual Meeting, Association of American Geographers, Washington, D.C., USA, April 2010.
- With D. Miller (organizers), Panel on “Global Change and Caribbean Vulnerability. (1) Land, Livelihoods and Landscapes. (2) Environment, Hazards and Ecology.” Annual Meeting, Association of American Geographers, Washington, D.C., USA, April 2010.

M. Burn

- With F. Mayle & T. Killeen. “Differentiation of pollen spectra from Amazonian rainforest communities and implications for lowland palaeoecology in tropical South America.” *Eos*

Transactions of the American Geophysical Union, Foz do Iguassu, Brazil, 2010.

S. James-Williamson

- “The University of the West Indies Geology Museum: a university-wide teaching resource.” Annual Symposium of the Archaeological Society, UWI, Mona, May 6, 2010.

S. Khan

- With **E. Robinson**, R. Coutou & M. Johnson. “Beach erosion and sea-level rise at Long Bay, Negril, western Jamaica.” Quaternary Land-Ocean Interactions: Driving Mechanisms and Coastal Responses, IGCP Project 495.INQUA Annual Conference, October 25-31, 2009, Myrtle Beach, South Carolina, U.S.A.

S. Mains

- “(Re) imagining Caribbean spaces: transnational islands and shifting tidalectics.” 29th Annual West Indian Literature Conference, UWI, Mona, April 2010.
- “Islandness and ‘stories-so-far’: engaging tidalectics in Caribbean placemaking.” Annual Meeting, Association of American Geographers, Washington, D.C., USA, April 2010.

A. Mandal

- With A. Haiduk. “Assessment of the water quality of the groundwater of the Kingston basin.” Sixth Annual Meeting and Geosciences World Community Exhibition, Singapore, August 11-15, 2009.
- “Modelling of rainfall-induced river flooding of Port Maria, St Mary, Jamaica.” Eighth International Conference on Disasters, Havana, Cuba, June 14-18, 2010.

David Miller

- “Geomorphologic and sediment dynamics in Manatee Bay, St Catherine, Jamaica: a hurricane impact complex response system.” Annual Meeting, Association of American Geographers, Washington, D.C., USA, April 2010.

S. Mitchell

- “Jamaica’s geology – Jamaica’s geologists. 180 years since the first geological map of Jamaica. 150 years since the establishment of the first Geological Survey. 140 million years of geological history. A personal celebration.” Department of Geography & Geology, UWI, Mona, November 16, 2009.
- “Geological background.” Second Licensing Round, Petroleum Corporation of Jamaica Promotion. Geological Society of London, London, March 1, 2010.
- “Geological background.” Second Licensing Round, Petroleum Corporation of Jamaica Promotion, Houston, Texas, U.S.A., April 27, 2010.
- “Jamaican copper mines of the mid-nineteenth century.” The Archaeological Society of Jamaica, 8th Symposium, UWI, Mona, May 6, 2010.

K. Rhiney

- “Citizens associations and participatory urban governance: the case of the Portmore Municipality, Jamaica.” Annual Meeting, Association of American Geographers, Washington, D.C., USA, April, 2010.

PUBLICATIONS

Books and Journal Issues

D. Barker

- * with D. McGregor, & D. Dodman (eds.). Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk. UWI Press, Kingston, Jamaica, 2009. 389pp.

S. Mains

- * with T. Skelton (guest editors). “Special Section on Neoliberalism, Mobilities and Development: Caribbean Intersections.” *The Singapore Journal of Tropical Geography*, 30, 2009.
- * “Tenth Anniversary Special Issue.” *Qualitative Research on Geography Specialty Group Newsletter: People, Place, Praxis*. April 2010

S. Mitchell

- * with **T. Steman** (eds.). *Caribbean Journal of Earth Science*, 41, 2010.

Refereed Book Chapters and Journal Articles

D. Barker

- * with D. McGregor, & D. Campbell. “Environmental change and Caribbean food security: recent hazard impacts and domestic food production in Jamaica.” In D. McGregor, D. Dodman & D. Barker (eds.), Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk. UWI Press, Kingston, Jamaica, 2009, 3-21.
- * with D. Dodman & D. McGregor. “Caribbean vulnerability and global change: contemporary perspectives.” In D. McGregor, D. Dodman & D. Barker (eds.), Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk. UWI Press, Kingston, Jamaica, 2009, 197-217.

- * D. Dodman, & D. McGregor. “Beyond Caribbean vulnerability: towards resistance and resilience.” In D. McGregor, D. Dodman & D. Barker (eds.), Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk. UWI Press, Kingston, Jamaica, 2009, 365-384.

M. Burn

- * with F. Mayle & T. Killeen. “Pollen-based differentiation of Amazonian rainforest communities and implications for lowland palaeoecology in tropical South America.” *Palaeogeography, Palaeoclimatology, Palaeoecology*, 295, 2010, 1-18.

D. Campbell

- * with C. Beckford “Negotiating uncertainty: Jamaican small farmers’ adaptation and coping strategies, before and after hurricanes – a case study of Hurricane Dean.” *Sustainability*, 1(4), 2009, 1366-1387.

S. Mains

- * with T. Skelton. “Intersections of neoliberalism, mobilities and development in the Caribbean: an introduction.” *The Singapore Journal of Tropical Geography*, 30, 2009, 151-157.

S. Mitchell

- * “The Cretaceous crinoids *Uintacrinus socialis* from Jamaica and its significance for global correlation.” *Geological Magazine*, 146, 2009, 037-940.
- * “Revision of three large species of *Barrettia* from Jamaica.” *Caribbean Journal of Earth Science*, 41, 2010, 1-16.
- * with I. Brown. “Lithostratigraphy of the Cretaceous section in the Benbow Inlier, Jamaica.” *Caribbean Journal of Earth Science*, 41, 2010, 25-37.
- * with A. Hastie, A. Kerr, & I. Millar. “Geochemistry and tectonomagmatic significance of Lower Cretaceous island arc lavas from the Devil’s Racecourse Formation, eastern Jamaica.”

In K. James, M. Lorente & J. Pindell (eds.), The Origin and Evolution of the Caribbean Plate. Geological Society of London Special Publication SP328, December 2009, 339-410.

- * A. Hastie, A. Kerr, I. McDonald, J. Pearce, M. Wolstencroft & I. Millar. "Do Cenozoic analogues support a plate tectonic origin for Earth's earliest continental crust?" *Geology*, 38, 2010, 495-498.
- * with J. Pons. "Systematic and biostratigraphic significance of the American rudist bivalve *Durania aguilae* Adkins, 1930." *Journal of Paleontology*, 84, 2010, 554-555.

K. Rhiney

- * "Forging new linkages in a changing global economy? The case of cooperatives and their link with the Negril tourism industry." *Caribbean Geography*, 15(2), 2009, 142-159.
- * "(Re)defining the link? Globalization, tourism and the Jamaican food network." In D. McGregor, D. Dodman & D. Barker (eds.), Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk. UWI Press, Kingston, Jamaica, 2009, 237-258.

E. Robinson

- * with R. Ramsook. "A new record of the Paleocene larger foraminifer *Ranikothalia catenula* in the Wagwater Formation of eastern Jamaica." *Caribbean Journal of Earth Science*, 40, 2009, 21-23.
- * with D. Rowe, S. Khan. "Hurricanes or tsunami? Comparative analysis of extensive boulder arrays along the southwest and north coasts of Jamaica. Lessons for coastal management." In D. McGregor, D. Dodman & D. Barker (eds.), Global Change and Caribbean Vulnerability: Environment, Economy and Society at Risk. Kingston: The University of the West Indies Press, 2009, 49-73.

T. Stemann

- * with H. Loeser, & S. Mitchell. ‘Oldest scleractinian fauna from Jamaica (Hauterivian, Benbow Inlier).’ *Journal of Palaeontology*, 83(3), 2009, 333-349.

Technical Report

K. Rhiney

- * “Analytical Study on Industry within Jamaica of a National Spatial Plan” (lead author). Prepared on behalf of the Centre for Leadership and Governance, Department of Government, UWI, Mona. Sponsored by the National Environment and Planning Agency and the Office of the Prime Minister. Project Coordinator: Dr Lloyd Waller, Department of Government, UWI, Mona.

PUBLIC SERVICE

D. Barker

- Editor, *Caribbean Geography*.
- Convenor, CAPE Geography.
- President, Jamaica Geographical Society.
- Editorial Committee and writer, *CaribXplorer Magazine*.

S. James-Williamson

- Council member, Jamaica Institute of Environmental Professionals.
- Chairperson and Treasurer, National Environmental Education Committee;
- Member, Steering Committee, NEEC/PANOS Caribbean Climate Change Project.
- Vice President, Geological Society of Jamaica;
- Member, Publications Committee, Natural History Museum of Jamaica, Institute of Jamaica.

- Member, Steering Committee, International Conference on Rudists 2011.

S. Mains

- Co-chair, Qualitative Research Specialty Group, Association of American Geographers, 2009-2011.
- Editorial boards of: *Handbook of Human Geography series*; *The Journal of Media Geography*; *The Spaces of Democracy and Democracy of Space*; and *Revista Brasileira do Caribe*.
- Manuscript reviewer for: *ACME: An International e-Journal for Critical Geographies*; *Gender, Place and Culture*; *Journal of Cultural Geography*; and *Professional Geographer*.
- Council member, Jamaica Geographical Society.
- Special local correspondent, Caribbean Hurricane Network – StormCARIB.

S. Mitchell

- Permanent member, Standing Committee for the Caribbean Geological Conference.
- Member, Scientific Committee, International Rudist Congress.
- Chairman, Commission on Jamaican Lithostratigraphy.
- Council member, Geological Society of Jamaica.
- Editor, *Caribbean Journal of Earth Science*.
- Chairman, Ninth International Congress on Rudist Bivalves, Kingston, Jamaica, 2011.

E. Robinson

- Member, Jamaican National Council on Ocean and Coastal Zone Management.
- Fellow, Third World Academy of Science.
- Member, Coastal Education and Research Foundation.
- Board Member, International Centre for Environmental and Nuclear Science.
- Member, Geological Society of Jamaica.
- Member, Jamaica Institute of Environmental Professionals.
- Board Member, Centre for Marine Sciences.

- Member, Graduate Faculty, Florida International University,
U.S.A.

CATEGORIES OF STUDENTS

Undergraduate Students: Geography

Year I:	115
Year II:	53
Year III:	45

Undergraduate Students: Geology

Year I:	130
Year II:	44
Year III:	45

Postgraduates:

MPhil Geography:	7
MPhil Geology:	5 (1 completed)
PhD Geography:	9
PhD Geology:	1