

The newsletter of the GODWIN INSTITUTE FOR QUATERNARY RESEARCH

ISSUE 24 LENT TERM 2003

CONFERENCES KICK OFF 2003

QRA Annual Discussion Meeting Land-Ocean Correlation: Recent Advances 6th-8th January, Newcastle "Our Friends in the North..."

A sizeable contingent of Cambridge colleagues, both old and new, were present at the QRA Discussion Meeting in Newcastle, in the exotic surroundings of St James' Park football ground. It was a varied programme on the theme 'Land-ocean correlation: recent advances', and everyone engaged well with the topics discussed - the questions asked often got straight to the heart of the issues being addressed by each speaker, and a number of fruitful discussions had to be terminated to keep to time in the formal parts of the meeting.

The thing I most appreciated was that the organisers (Darrel Maddy, Dave Bridgland and Anthony Long, Newcastle and Durham) had very wisely included lunch in the programme, so that everyone stayed in the meeting room and chatted, rather than scattering. Similarly, on the Tuesday evening we all headed off to a nearby pub and then on to a rather good tapas restaurant next to the Millenium Bridge on the Quayside. It was a great opportunity both to catch up with old friends and to meet new people and get a flavour of what research is going on across the country.

But enough of that, on to the talks! Highlights of the first day included Chronis Tzedakis' (Leeds) impassioned plea, with which I'm sure Godwin Institute members would agree, to consider researching sediments which are older than the Late-glacial. He outlined significant evidence of the detailed

information available when one does so. Erin McClymont (Durham) gave a very interesting talk on her Ph.D. research looking at possible oceanic forcing factors for the Mid-Pleistocene Revolution (the transition from 40 kyr to 100 kyr cyclicity). Mention should also be made of her impressive ability to ignore a very loud version of the Police's 'Every Breath You Take' coming over the P.A. system. Katy Roucoux (Leeds) and Isabel Cacho (Cambridge, but soon to return to Barcelona) took us to the Mediterranean, and showed that this area was highly sensitive to climate fluctuations during MIS 2-4, with vegetation onshore recorded in marine sediments) palaeotemperature proxies offshore both recording very rapid fluctuations. Takeshi Nakagawa (visiting Royal Holloway, London) awed us all with the sheer volume of his data - having constructed a pollen record from the laminated Lake Suigetsu sequence in Japan with 424 levels and 250 radiocarbon dates!

On the second day Tom Coulthard (Aberystwyth) challenged some of our views about how fluvial and oceanic systems interact by showing that the modelled sediment flux into the Humber Estuary only accounted for 2% of the estuarine infill. 90% of the fill can be traced to coastal erosion to the north and there is therefore a net inflow of sediment into the estuary, challenging many assumptions made by the modelling community of which he is a part. Also notable were Kim Cohen's (Utrecht) impressive 3-D dataset from the Rhine-Meuse estuary and Pete Langdon's (Exeter) use of chironomids to reconstruct terrestrial temperature histories in NW Iceland, for comparison with the many marine records from this area.

All in all, a good time was had by all (except when trying to catch a train that ran south of Darlington on Wednesday afternoon!)

Becky Briant

British Geomorphological Research Group and the Joint Association for Quaternary Research

Cryospheric Systems

13-14th January, London

The occurrence of widespread glaciation and periglaciation and the "Ice Age" is synonymous with the Quaternary Period and in particular the Pleistocene Epoch. The dominance of glacial climates throughout the Quaternary therefore suggests that the study of cryospheric systems is more important than any other branch of Quaternary Science (says a glacial geomorphologist). This conference provided a healthy mix of the modern and the past and convened in the rather pleasant surroundings of the Geological Society at Burlington House, London.

The first session was introduced by Charles Harris (Cardiff) who emphasized the aim of bringing together ideas of the glacial and permafrost communities. The first three keynote speakers did this eloquently with Wilfried Haeberli (Zurich) providing an excellent example of how the two are intertwined in his discussion of glacier/permafrost interactions in high mountain areas. Then Geoffrey Boulton (Edinburgh) provided us with a model of glacier-permafrost hydraulic relations, followed by David Sugden (Edinburgh) who discussed glacial and periglacial processes in the Dry Valleys of Antarctica. Here he showed clearly that fresh moraines are not always as young as they seem with clear valley glacier moraines in this area being millions of years old due to weathering rates that are the lowest known on Earth.

The afternoon session was chaired by Julian Murton (Sussex) and began with a keynote lecture from Bernd Etzelmüller (Olso) who discussed the interaction of glaciers and permafrost on Svalbard. Colin Ballantyne (St Andrews) then followed with an enthusiastic championing of paraglacial landscape modification. This is essentially erosion and sediment release from the landscape following conditioning by glacier ice. He argued that the interpretation of the geomorphology of glaciated landscapes cannot be divorced from the consideration of the long-term history of landscape modification. Also, both glacial and periglacial rates of sediment transport are often conditioned by a complex history of alternating glacial and paraglacial sediment transfer. As well as these keynote lectures a total of 12 papers were presented and the wine reception at the end of the day was therefore a welcome distraction. Numbers were still strong when we were all ejected

from Burlington House and a crocodile of glacial and periglacial folks meandered down Piccadilly towards Soho whereupon we stumbled upon a welcoming public house. Following a few beverages the remarkably large crowd then went in search of food led by some boisterous glaciologists. It must have been quite a sight in this part of town: bearded geologists, folk in Berghaus jackets (Tweed suits for the old-school), many with the ultimate accessory - the ruckack.

Predictably, Charles Harris had to delay Tuesday's proceedings by 20 minutes due to the late arrival of a large proportion of the delegates. Whether this was due to the awful congestion in central London at that time of morning or due to other reasons is unclear. Nevertheless, the proceedings began, chaired by Michael Davis (Dundee). The morning was dominated by the permafrost people with keynote lectures by Daniel Vonder Mühll (Basel) on the thermal monitoring of permafrost in the Alps and by Toni Lewkovicz (Ottawa) on the monitoring of cryogenic slope processes.

The afternoon session, chaired by Hugh French (Ottawa), was opened by Chris Burns (Carleton, Ottawa) on the monitoring of permafrost response to climate change. Real Quaternary returned once more when Jef Vandenburghe (Amsterdam) discussed the Quaternary permafrost climates of Europe and the record of permafrost in sediments and its relation to Quaternary stratigraphy. The afternoon papers were of particular note. Colin Lewis (Rhodes, S. Africa) presented evidence for Late Quaternary glaciers in the Drakensburg of South Africa. Hanne Christiansen (UNIS, Svalbard) reconstructed the last glacial ice-sheet in the Faroes and presented cosmogenic exposure dates from nunataks that stood above this ice-sheet. The afternoon papers were concluded by Brigitte Van Vliet-Lanoë (Lille) who talked about the last glacial in Iceland, rather controversially it must be said, differing markedly from the ideas developed by J.T. Andrews at Colorado. The highly impressive conference ended at 5pm at which time everyone left the building into the chaos that is rush hour London.

Phil Hughes

QRA, Short Field Meeting

Glen Affric and Kintail, Northern Highlands of Scotland

8th-12th May, 2003

Organisers: Richard Tipping, Eileen Tisdall

and Althea Davies

Theme: Holocene environmental evolution

Contact: Richard Tipping (rt1@stir.ac.uk)

NEWS

- A memorial service for the late Professor Richard John Chorley, Emeritus University Professor in Geography and Emeritus Fellow of Sidney Sussex College, Cambridge, will be held in Great St Mary's Church, Cambridge on February 15th at 2.00 pm, followed by a reception at Sidney Sussex College. A fund has been established in his honour and donations should be sent to Sidney Sussex College, marked 'Dick Chorley Fund'.
- Becky Briant will commence work in Cambridge as a post-doctoral research associate with Dr Martin Bates (Lampeter) on an English Heritage funded project entitled "Palaeolithic Archaeology of the Sussex-Hampshire Corridor"

EARLY/MIDDLE PLEISTOCENE TRANSITIONS: THE LAND-OCEAN EVIDENCE

4th April 2003

A one-day Symposium to be held at Cambridge University in association with the Quaternary Research Association and INQUA.

Organisers: Martin Head and Philip Gibbard

Those wishing to present their research, either as a poster or talk, are asked to contact Martin Head (mh300@cam.ac.uk) with a provisional title in the first instance.

Fully-Funded NERC PhD Studentship

Sequencing Ocean-Ice-Climate Interaction in the North East Atlantic

NERC funding is available for a three-year tied-studentship to join a research team investigating North Atlantic "Ice-Ocean Interactions". The project focuses on the last glacial period, specifically Heinrich Events and their European precursors during Marine Isotope Stages 2 and 3.

Application Closing Date: 1 March 2003, Start Date: 1 October 2003

Supervisor: Dr. William Austin e-mail: wena@st-andrews.ac.uk; Tel. +44 (0)1334 463988; Fax +44 (0)1334 463949.

BILL BISHOP MEMORIAL TRUST

This trust provides grants (£100-£400) to aid postgraduate students working for a higher degree in the following areas:

- 1. Cenozoic stratigraphy, palaeoenvironments and chronology in relation to hominid evolution
- 2. British Quaternary stratigraphy, palaeoenvironments and geomorphology

Closing date: 15 March each year

Further details and application forms are obtainable from The Secretary, BBMT, 4 Ashridge Gardens, Pinner, Middlesex, HA5 1AU.

QRA ANNUAL FIELD MEETING AND AGM, DRYMEN

26th-30th March, 2003

QUATERNARY OF THE WESTERN HIGHLAND BOUNDARY, SCOTLAND

Themes:

- 1. Late Pleistocene glacial stratigraphy and palaeogeography
- 2. Lateglacial interstadial and Loch Lomond Stadial palaeoecology
- 3. Loch Lomond Stadial readvance landforms and sediments
- 4. Postglacial sea level changes
- 5. Paraglacial landforms

Organiser: David Evans (devans@geog.gla.ac.uk)

Quaternary Discussion Group

Friday, February 7*
* CHANGE OF VENUE:
Clare Hall Meeting Room , 8.30pm.

High resolution temperature records (0-25 kyr) from the Cariaco Basin (S.E. Caribbean)

David Lea (Godwin Laboratory, Cambridge)

Friday, February 28

The early Middle Pleistocene of eastern Europe

Charles Turner (Open University)

Friday, March 14

Ice cores and climate: extending the Antarctic record beyond half a million years

> Eric Wolff (British Antarctic Survey)

The second and third talks will be held as usual in West Court, Clare Hall, Hershel Road at 8.30pm.
Everyone welcome.

All enquiries contact: R.C. Preece, (3)36666, e-mail r.c.preece@zoo.cam.ac.uk

S.P.R.I. SEMINAR SERIES

Wednesday, February 5

"The last British Ice Sheet: growth, maximum extent and deglaciation"

Bill Austin (School of Geography and Geosciences, University of St. Andrews)

Thursday, February 20

"Recent observed changes in the ice flow of West Antarctica: exploring potential causes"

> Tony Payne (Bristol Glaciology Centre, University of Bristol)

Wednesday, March 5

Glacier surging in Svalbard and East Greenland.

Tavi Murray (Department of Geography, University of Leeds)

All seminars will be held in the Scott Polar Research Institute Lecture theatre at 17.00 hrs.

For further information please contact:

Dr. Colm Ó Cofaigh Phone: 01223-336563 e-mail: c0232@cam.ac.uk

Deadlines:

Copy for the next issue of CAMQUA should be submitted to the editors by the beginning of the Easter Term 2003.

Editors:

William Fletcher (wjf20@cam.ac.uk)
Philip Hughes (pdh27@cam.ac.uk)
Department of Geography
University of Cambridge

This issue is produced and funded by the Department of Geography.