



# GEOPHEMERA

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The Newsletter of  
THE BRITISH GEOMORPHOLOGICAL RESEARCH GROUP  
Registered Charity 1054260

November 2004 No. 93

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### Postgraduate Meeting: Royal Meteorological Society, University of Leeds, 13th—15th September

From Monday 13<sup>th</sup> to Wednesday 15<sup>th</sup> of September 2004, 47 postgraduate research students from 16 institutes across the UK met at the University of Leeds for the Royal Meteorological Society Student Community Conference. The conference aimed to enable the discussion of current research projects, aid career development and encourage greater interaction amongst students in meteorological fields. In a similar fashion to the BGRG Research Student Workshop, this conference emphasised the applied nature of many research projects and highlighted the inter-disciplinary nature of current meteorological investigations.

The enthusiastic young researchers arrived on Monday afternoon to an initial session of ice-breaking activities, which were accompanied by a spontaneous game of 'piggy (or is that meteorologist?) in the middle'. Group ice-breaking games included climatological 'jigsaws' and 'researcher bingo' – aimed at revealing interesting facts about each group member's hobbies and research background. No expense was spared with the prizes – a tantalising collection of Royal Meteorological Society calendars!

Oral presentations began on Tuesday morning, with session one consisting of ten talks from the diverse 'climate analysis' area of meteorology. Presentation content and delivery was of a consistently high standard, with projects from a wide range of specialist fields. Notable examples included Victoria Johnson's (Imperial College) discussion on the 'Search for a consistent atmospheric signature to solar particle events' and Charles Williams's (Sussex) study on 'Rainfall variability and climate change over southwest Africa'.

Session two contained six reports on data assimilation and modelling / Earth observation and satellite meteorology. Complex research projects were presented in an audience-friendly manner, with examples including Georgina Miles's (Oxford) discussion on 'Detecting volcanic sulphur emissions from space' and Vivienne Payne's (Oxford) study on 'Retrievals of water vapour and methane from the MIPAS satellite instrument'.



Figure 1. The conference room at Bodington Hall, Leeds University

*Report continued on page 22*

A B.G.R.G. non-publication compiled by Sue McLaren, Department of Geography,  
University of Leicester, Leicester LE1 7RH

PLEASE SUBMIT MATERIAL FOR GEOPHEMERA 94 BY 1 February 2005

### Executive Committee: 2004-2005

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Hon. Treasurer	Prof. Michael Thomas	Stirling	m.f.thomas@stirling.ac.uk
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### Editorial, Geophemera 93

Thanks go to Professor Adrian Harvey for all the effort that he has put into being the BGRG Executive Committee Chair for the past year and best wishes to Mark Macklin as he takes over for the year 2004-2005.

Professor John Wainwright has stepped down as the Membership Secretary and on behalf of the BGRG members I would like to thank him for all the hard work that he has done.

The November issue is largely taken up with the minutes of the BGRG AGM which this year was successfully held at Glasgow.

Sue McLaren, Leicester

### Contact the B.G.R.G.

**For further information on the BGRG contact:  
Honorary Secretary**

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**For information about BGRG meetings and collaboration contact:  
Editor of Geophemera & Meetings Officer**

**Dr Sue McLaren**  
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**For further information about BGRG postgraduate issues  
contact: Postgraduate Rep**

**Sarah Crowe**  
Department of Geography, University of Manchester  
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Visit the BGRG Web Site at: <http://www.bgrg.org/>  
Submit electronic copy for *Geophemera* to: sjm11@le.ac.uk

## BULLETIN BOARD

### MEMBERSHIP SECRETARY

Please note that the BGRG failed to replace the Membership Secretary at the Glasgow meeting. The Executive Committee will therefore have to co-opt a member or delegate one of the ordinary members. BGRG members will be informed of the new Membership Secretary in the next issue of Geophemera and also it will be announced on the BGRG web site.

### MEMBERSHIP RENEWAL

**Reminder notice:** Annual Subscriptions for membership of the BGRG are due. Please remember to send payment to the BGRG Administrator. Can those members who pay by standing order please check they have updated them in line with the Sept 2001 increase in subscription rates.

**Membership rates:** Full £20 per year; Postgraduate (PhD) £20 for three years at the commencement of their studies or £10 a year; Postgraduate (MSc/MA) £5 per year; Overseas £50 for 5 years; Retired, unemployed £10 per year.

### AG Meetings from 2006

#### onwards

The EC is seeking offers to host the AG meetings from 2006 onwards. Please contact the Honorary Secretary

### Discussion List

At the AGM there was a debate over proposed name changes for the BGRG. We would like to give all BGRG members the opportunity to communicate their ideas and thoughts intelligently and quickly via the web. The website url is <http://www.bgrg.org/pages/about/maillinglist/index.html>

### Mapping hazardous terrain using remote sensing 13 & 14 December 2004 Geological Society of London, Burlington House, Piccadilly.

Organised by the Geological Remote Sensing Group, a GSL and RSPSoc Special Interest Group. The aim of this conference is to link the common interests of applied geomorphologists, remote sensing scientists and civil engineers, in the mapping of terrain that is hazardous to human activities. The sessions will be based on the various types of hazards (volcanic, seismic, slope instability, subsidence and flooding) with a session on new remote sensors and techniques. It is envisaged that a thematic set of papers presented at the conference will be published in an international journal.

### BGRG Spring Field Meeting Devon & Cornwall May 20<sup>th</sup> - 22<sup>nd</sup> 2005

Convenors: Dr Martin Stokes & Dr Jim Griffiths  
School of Earth, Ocean and Environmental Sciences, University of Plymouth

#### Programme:

- Friday 20<sup>th</sup> May – Open paper session, University of Plymouth
- Saturday 21<sup>st</sup> & Sunday 22<sup>nd</sup> May – Field excursion, west and north Cornwall.

The field excursion will examine aspects of the following:

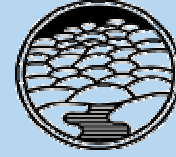
- the geomorphic impact of extreme Atlantic weather conditions
- long term landscape development in SW England

Price: TBA

Contact: [martin.stokes@plymouth.ac.uk](mailto:martin.stokes@plymouth.ac.uk) to register interest & for further information.



# B.G.R.G. Business



## BRITISH GEOMORPHOLOGICAL RESEARCH GROUP

Registered Charity Number 1054260

### ANNUAL GENERAL MEETING

## BRITISH GEOMORPHOLOGICAL RESEARCH GROUP

Friday 20<sup>th</sup> August 2004, 1:20 PM, Moat House Hotel, Glasgow

(in association with the Joint International Geomorphology Conference)

### MINUTES

1. **Apologies for absence:** Prof. Brian Whalley, Prof. Rob Ferguson, Dr Sue McLaren, Dr. Dave Nash, Dr Dave Favis-Mortlock, Simon Reid, Dr John French, Dr Steve Rice, Dr Mark Powell, Dr Ian Livingstone, Prof. David Sugden, Prof. Eric Brown, Dr Larissa Naylor, Prof. Mike Kirkby, Dr David Sear.

31 members were present at the AGM (the quorum, with 549 members being 28).

2. **Minutes of the last meeting** (University of Oxford, 6<sup>th</sup> September 2003; published in *Geophemera* 90, November 2003 – and online version at: <http://www.bgrg.org/pages/geophemera/PDF/geophemera90.pdf>)

Acceptance of the minutes was proposed by Prof. Paul Bishop; seconded by Sarah Crowe. The meeting duly accepted the minutes as a true record of the 2003 AGM.

3. **Matters arising from the Minutes of the 2003 AGM:** None.

4. **Report on the Review of the Discipline of Geomorphology:** The previously circulated report was noted by Prof. Adrian Harvey, who requested feedback from members either directly, by e-mail, or through a discussion in *Geophemera*. With respect to point 1 in the report, Prof. Keith Richards noted that an additional grantsperson workshop had also been arranged on 20<sup>th</sup> September 2004 through the RGS-IBG.

Prof. Denys Brunsten noted his disappointment that given the low numbers at the AGM, how the debate could be broadened. Adrian Harvey noted that there may be a need to call a special meeting to discuss the issues raised and that the whole process may take a year or even longer.

Prof. Paul Bishop noted that an e-mail discussion would enable the position to be much further advanced by the time of the next meeting. Dr Dave Higgett asked if the debate could be carried out through a LISTSERV mechanism. The EC thought this an appropriate mechanism. Prof. Keith Richards noted that it was urgent for the BGRG to affiliate with the EGU. Prof. Adrian Harvey noted that the EC had already considered this issue and was moving forward with the EEON group (to be noted in AOB).

5. **Constitutional amendments:** The previously circulated report was noted.

1. **Creation of the position of a permanent Web Officer as a member of the Executive Committee** (amendment to section 7(i) of the BGRG constitution). The move to make the constitutional amendment was proposed by Prof. Tony Parsons, and seconded by Prof. Gary Willgoose. The meeting passed the amendment unanimously.
2. **Modification of the Research Sub-committee to the Strategy Sub-committee** (amendments to section 7 (xiv) and 7(xv) of the BGRG constitution). Prof. Paul Bishop noted that the eight-year membership was perhaps a little excessive. Prof. Harvey noted that this issue had been discussed, to avoid the development of a “clique”, and may account for retirements within the body, and would contain a wide range of sub-disciplinary expertise. The move to make the constitutional amendment was proposed by Prof. Macklin, and seconded by Prof. Gurnell. The meeting passed the amendment by 30 votes to 1.

6. **Report of the Honorary Secretary:** The previously circulated report was noted. Acceptance of the report was proposed

by Prof. Tony Parsons. Seconded by Prof. Gary Willgoose. The meeting duly accepted the report.

7. **Report of the Honorary Treasurer:** The previously circulated report was noted. Acceptance of the report was proposed by Mark Macklin. Seconded by Tony Parsons. The meeting duly accepted the report.

8. **Elections to the Executive Committee:**

*Junior Vice-Chair:* Prof. Paul Bishop. Proposed by Prof. Adrian Harvey, seconded by Prof. Mark Macklin.

*Honorary Secretary:* Dr Barbara Rumsby. Proposed by Prof. Lynne Frostick, seconded by Prof. John Wainwright.

*Membership Secretary:* No nominations were received. The EC will co-opt a Membership Secretary for the coming 3 years.

*Ordinary Member:* Dr James Brasington - Proposed by Prof. Stuart Lane, seconded by Prof. Keith Richards. Dr Steve Rice - Proposed by Prof. John Wainwright, seconded by Dr Mark Powell. An election was held. Steven Rice was duly elected.

*Web Officer:* (depending on the outcome of item 5, above). Dr Richard Chiverrell. Proposed by Prof. Mark Macklin, seconded by Prof. Adrian Harvey.

*Report of the election of a Postgraduate Member:* Helen Moggridge, King's College London was elected by the postgraduate students as their new representative at the Postgraduate Symposium in April

9. **Appointments to the BGRG sub-committees:**

*Election of a member of the Awards sub-committee:* Dr Heather Viles. Proposed by Prof. Denys Brunsten, seconded by Prof. Antony Orme.

*Election of a member of the Education and Outreach sub-committee:* Dr Harriet Orr. Proposed by Prof. John Wainwright, seconded by Prof. Adrian Harvey.

**Items 10 – 15 were all taken together due to time pressure.** Acceptance of the reports was proposed by Prof. Tony Parsons. Seconded by Prof. Paul Bishop. The meeting duly accepted the reports.

10. **Report of the Geophemera Editor:** The previously circulated report was noted.

11. **Report of the Membership Secretary:** The previously circulated report was noted.

12. **Report of the Publications sub-committee:** The previously circulated report was noted.

*Dr Heather Viles requested confirmation as to why there are so few women on the editorial board of Earth Surface Processes and Landforms. This question has been forwarded to the sub-committee for response.*

13. **Report of the Research sub-committee:** The previously circulated report was noted.

14. **Report of the Awards sub-committee:** The previously circulated report was noted.

15. **Report of the Education and Outreach sub-committee:** The previously circulated report was noted.

16. **Risk assessment:** For report – risk assessments as required by the Charity Commissioners are being continually developed and responses enacted upon.

17. **Any other business:**

a) Note the capitation for membership of EEON.

b) Membership to make their best efforts to attend the IAG conference in Zaragoza next September. The BGRG has put aside additional funds to support postgraduate students to attend.

c) Thanks to retiring members – Mark Powell, Simon Reid, Dave Nash, John Wainwright & Ian Livingstone. Also, to Janet Hooke for superb organisation of this conference, & to Chrissie James at the RGS-IBG for her efforts as BGRG Administrator.

18. **Date of next meeting:** University of Southampton in the weeks of 15 or 22 September 2005

Prof John Wainwright: Honorary Secretary (outgoing) &(with many thanks!); Dr Barbara Rumsby *Honorary Secretary (incoming)* Meeting closed: 2.15

## Report on the Working Group to Consider the State and Future of UK Geomorphology

In September 2003 Professor Mark Macklin was tasked by the BGRG Executive Committee (EC) to undertake a SWOT (Strengths, Weaknesses, Opportunities and Threats)-type analysis of geomorphology in the UK. This was prompted by growing concerns amongst many members of the BGRG that geomorphology is under threat because of a number of longer term and more recent developments in the discipline. These include: (i) changes in the teaching of geomorphology in schools; (ii) a decline in the number of postgraduate students; (iii) difficulties in obtaining funding from NERC especially for blue sky research, and (iv) structural changes in the UK's research culture arising from the RAE. Ironically, these developments have taken place just at a time when geomorphology is being increasingly used by non-geomorphologists to underpin, for example, the implementation of the EU Water Framework Directive, for improving flood risk estimation and major NERC initiatives such as Earth System Science research. Carrying out a SWOT assessment of UK geomorphology is a major task and clearly could not be undertaken by one person. In the light of this, the BGRG EC decided that the best approach would be to convene a working group of senior UK geomorphologists, comprising past and present BGRG Chairs.

Two one-day meetings of the working group were held at the Royal Geographical Society in London. At the first meeting on November 12<sup>th</sup> 2003, 17 participants attended and each gave a short assessment of UK geomorphology and the steps they believed should be taken to ensure its continued growth and vitality. Written comments were received from a further three past chairs who could not attend the meeting (a list of participants and copies of all presentations has been archived by Chrissie James). Following this meeting Professor Macklin collated the presented material in the form of a SWOT analysis of UK geomorphology, which was circulated to all members of the working group and approved. This full SWOT analysis was presented to the BGRG EC at their January 20<sup>th</sup> 2004 meeting. From this the EC identified a limited number of key strategic issues that affect geomorphological research in the UK, which they asked the working group to consider in more detail at their second meeting held at the RGS on March 10<sup>th</sup> 2004. Following this meeting the working group made the following recommendations:

1. To develop grantspersonship workshops to improve the collective success rates of group members, particularly those at the beginning of their careers.
2. To establish a BGRG Strategy Sub-committee with a remit to consider the state of the discipline and to make suggestions related to strategic actions that may be need to be taken by the EC to maintain and develop the position of geomorphology (to be considered in item 5 of this agenda, below).
3. To change the status of the BGRG to that of a learned society (which effectively we are), and to change the name to address the issue of the group's public image and the need for re-branding and re-alignment (see note below).
4. To promote the very best of UK Geomorphology (pure and applied) at a major international interdisciplinary conference on "Geomorphology and Earth System Science". The BGRG should initiate and co-ordinate this meeting (and publication), which should be jointly organised with the GS, the QRA, the British Hydrological Society and RGS-IBG.
5. To produce a one-page state of the discipline document entitled "Geomorphology: the discipline and its UK context" to be presented to NERC under the BGRG badge (see below).
6. To consider the possibility of having *ex officio* 'swaps' of committee membership with cognate groups.
7. To change the structure of Geophemera so that the March issue each year is used as more of a promotional item, reflecting the state of the discipline and 'showcasing' cutting-edge research (pure and applied) currently being undertaken.

All of these recommendations are presently being taken forward by the EC. On behalf of the EC, I would like to thank all of the past and present BGRG Chairs who participated in the working group and who gave up so much of their very valuable time. I also wish to thank Chrissie James and staff at the RGS for helping me organise both workshops and for facilitating their smooth running.

Professor Mark G. Macklin, BGRG Vice-Chair, August 2004, University of Wales, Aberystwyth

## Status of the BGRG

Currently the BGRG has a high international profile. The BGRG is seen as the leading organisation within academic geomorphology in Britain. Despite these two positive attributes the BGRG has only a low profile within British science as a whole (at Research council and Government levels), a very low profile within the “professional” world and is probably unheard of in the media. Even within academic geography we are often perceived as merely a study group of the RGS/IBG. Similarly we have a low profile within British geology.

One of the reasons for this may be that we evolved from a small research group, and although we now function as a learned or professional society, in many ways we still operate and are often perceived simply as a research group. The BGRG working party on the future of geomorphology recommends that we should address this problem. There seem to be two issues here: (i) structural/ organisational (ii) the BGRG name.

**Structural:** The term “research group” may imply limited aims, short duration and a sub-organisation of a parent body. We have a wider remit than that – with aspirations to educational, and public roles as well as to sponsoring primary research, conferences and publications. We are financially autonomous, with charity status, but linked as a study group to the RGS/IBG and the Geological Society. According to our constitution we are governed by an elected EC (to which some appointments are *ex officio*). Our elected Chair serves a one-year term (after service as JVC then VC); other primary posts (Hon. Sec.; Hon. Treas.) serve 3-year terms.

The working party identified that we do not necessarily have the most effective structure for leadership and strategic planning; we tend merely to follow. With this in mind the EC is proposing the formation of a strategy committee to comprise past and present chairs (part of the role will be to undertake the duties of the present research committee). There are other immediate recommendations (see report of the working party), but there are other longer term considerations for the EC. One could be a longer (two or three year?) term of office of the Chair. The EC is to explore implications of becoming a fully fledged learned and/or professional society which would allow us to speak with more authority for geomorphology as a whole: in education (both in schools and at the University/professional levels); and in the public field (in relation to research bodies, government and private, and to the media?). We also need to consider how to increase our membership from cognate areas in both professional and educational fields.

There are implications that would need to be explored. The main ones are: (i) financial; (ii) retaining our charitable status (probably not a problem); and (iii) although we would be fully autonomous (we are effectively that now), we would wish to retain some kind of affiliation with both the RGS/IBG and the Geological Society.

**Name change?** Perhaps the most important outward indication of our recognition of the potential role of the BGRG would be to change our name from one that implies small and informal to one that reflects our potential role. The EC recognises both advantages and disadvantages of a name change, recognising that if we are to change our structure and image more towards that of a learned society then a name change is probably essential.

### *Disadvantages of a name change:*

- Familiarity with BGRG as a name
- Current relaxed informality might be damaged
- Unless we are serious about our wider functions, a name change might appear merely cosmetic.

### *Advantages of a name change:*

- Limited aims, permanence and role implicit in “research group”
- Current low level of public awareness – in relation to our wider functions
- Potential for increasing membership from wider geomorphological community
- We would have a clearer platform to develop policies to strengthen the subject as a whole.
- It would be in line with much of what we do already

The Working Group to Consider the State and Future of UK Geomorphology was very much in favour of both structural and name change.

There have been several suggestions for a new name: *British Geomorphology*; *British Association for Geomorphologists*; *British Geomorphological Society*; *British Society for Geomorphology*

Of these, the suggestion most favoured by the committee is The British Society for Geomorphology – the others all have some disadvantage either in their implications (restricted to British geomorphologists or geomorphology/landforms) or have unfortunate initials that may lead to confusion or indicate affiliation with other organisations (BG, BAG, BGS as opposed to BSG).

At present this document is merely to inform the membership of the current thinking of the EC. The EC intends to pursue this matter and at the moment seeks the support of the membership to do so. Obviously, any constitutional, structural or name changes would have to be ratified by the membership. It is the intention of the EC to be in a position to bring proposals to the next AGM (2005). In the meantime we welcome comments from the membership, either directly to the Honorary Secretary or via the Chrissie James at the RGS/IBG office of the BGRG or through the medium of *Geophemera*.

Prof. Adrian Harvey; BGRG Chair; August 2004; University of Liverpool

## **GEOMORPHOLOGY: The Discipline and its UK Context**

### **(as presented to NERC in the meeting held with Professor John Lawton, and representatives of NERC on Friday 25<sup>th</sup> June 2004, at the Royal Geographical Society with IBG, London)**

**Definition:** Geomorphology as an intellectual specialism is the scientific study of the form of the land surface, the processes that construct and modify land form, and the interactions between these forms and processes. It seeks to establish empirically-tested general principles applicable over a wide range of time and space scales. This body of theory helps geomorphologists decipher landscape history and advise on contemporary environmental and earth-resource issues.

**Interdisciplinarity:** Geomorphology is closely related to several other specialisms within the earth and environmental sciences. In particular, it is intimately related to other areas of both physical geography and geology. It is also linked more widely to other disciplines including ecology, environmental management and civil engineering. Important contributions to the discipline are made by people in many countries; not all of these people call themselves geomorphologists, some are in professional rather than academic positions, and the academics are spread over several teaching subjects (mainly geography in the UK and Commonwealth countries; mainly geology but also geography in the US).

In addition to the broad linkages noted above, most areas of geomorphology also have close intellectual ties with other scientific specialisms. For example, research on fluvial processes and forms (including water action on hillslopes as well as in rivers) links closely with hydrology, aquatic and riparian ecology, and process sedimentology. Research into aeolian and coastal processes likewise has links with sedimentology as well as with boundary-layer meteorology and oceanography, respectively. Glacial and periglacial geomorphology link with glaciology, and weathering studies interface with soil sciences, environmental chemistry and the conservation of buildings. Geomorphological research also considers changes to earth surface systems over longer time scales. At the Quaternary scale there are links with archaeology, palaeoecology and palaeoclimatology. Over longer timescales (Neogene and longer) links to several aspects of geology and geochemistry are critical. For example, the long-term evolution of fluvial landscapes involves consideration of interactions between geomorphology, tectonics and climate that involve feedbacks such that the tectonics and climate can be explicitly influenced by the geomorphology (erosion).

In recognition of these intellectual links the British Geomorphological Research Group (BGRG) is affiliated to both the Royal Geographical Society and the Geological Society of London, and has from time to time organised joint meetings with a range of other organisations including, for example, the QRA. BGRG members are active in other organisations and have held office in, for example, the British Hydrological Society (BHS), the International Glaciological Society (IGS) and the International Association of Hydrological Sciences (IAHS).

**Methodological pluralism:** Geomorphology internationally is very healthy because rapid technological developments have greatly increased our ability to quantify land form change, history, and process in more detailed and spatially-distributed ways, and also to construct numerical models of processes and their larger-scale consequences. We can therefore improve our current understanding of how the Earth's surface works and tackle previously intractable problems. Progress has been achieved through a free but critical interplay of empirical and theoretical approaches at a wide range of time and space scales.

**Status of British Geomorphology:** British geomorphology has very high international standing, possibly surpassed by the US but certainly by no other country. The BGRG was the first national organisation for geomorphology. It currently has a membership



of approximately 500 (approximately 20% from beyond UK HEIs and Institutes) and it was the leader in setting up the International Association of Geomorphologists. UK geomorphologists publish extensively in the highest-impact journals in the earth and environmental sciences in general as well as in two specialist international journals: Earth Surface Processes and Landforms (ESPL) and Geomorphology (the former was set up by the BGRG and the current editor-in-chief of the latter is a BGRG member). A recent measure of the publishing activity of UK geomorphologists is that they contributed the largest proportion (27%) of articles to ESPL and second largest proportion (13%) to Geomorphology during 2003 with no other country apart from the US contributing more than 8% to either journal. Moreover, many of the most-cited advanced geomorphological textbooks are British. Moreover, UK geomorphologists are invited collaborators in research programmes funded by the US NSF, Canadian NSERC, etc and partners or leaders in EU projects.

**The future:** Geomorphology has a vibrant future in the UK and globally. Environmental management increasingly requires geomorphological expertise to assess and predict future land surface changes; the controls over global climate that are so critical for future generations are increasingly acknowledged to depend on the rates and distribution of weathering and erosion; and, fundamental advances in our understanding of the Earth system are being derived from improved geomorphological understanding. Geomorphology is an outward-looking and multi-faceted discipline that has a fundamental contribution to make in advancing understanding of the functioning of the Earth system and in developing approaches to the sustainable management of its resources.

*British Geomorphological Research Group; June 2004*

## **BGRG CONSTITUTIONAL AMENDMENTS TO BE CONSIDERED AT THE 2004 AGM**

**1. Creation of the position of a permanent Web Officer as a member of the Executive Committee:** As with many other organizations, the BGRG increasingly relies on the internet as a means of communicating and disseminating information to the membership and to the broader public. To maintain a professional web site has required an increasing amount of effort over the last few years. Given that the profile and reputation of the Group in part depends on the quality and reliability of the information provided on the web site, we feel that it is vital to have a permanent officer to undertake a number of roles. The remit of the BGRG Web Officer will include the following tasks:

- a) To assume overall responsibility for the content and management of the BGRG website;
- b) To liaise with the Geophemera Editor and other officers to ensure that new material is added to the site on a regular basis;
- c) To liaise with the BGRG Administrative Assistant in charge of uploading materials onto the site;
- d) To liaise with the Chair of the Education & Outreach Sub-Committee to check suitability of materials for the Education section of the site before they are uploaded;
- e) To undertake regular searches for items about British geomorphology and British geomorphologists for posting on the site;
- f) To undertake necessary measures to ensure that the website maintains a high profile on all major Search Engines;
- g) To undertake regular (at least quarterly) reviews of the website to ensure both currency of content and that all links are active;
- h) To undertake an annual review of the website organisation and design to ensure that both are appropriate;
- i) To be aware of, and implement where necessary, any developments in good practice for access to the website for disabled users;
- j) To be aware of future web-related marketing and publicity opportunities, including the development and sale of BGRG-related 'e-publications';
- k) To present an annual report to the EC on website matters including, if possible, statistics on usage and feedback from users.
- l) To undertake any other website-related activities as necessary.

Dr Dave Nash has undertaken this role on a co-opted basis over the last year, and the arrangement has proved very successful. We therefore suggest making the position permanent and amending item 7(i) of the constitution to read:

7(i) Management of the Group shall be in the hands of an Executive Committee consisting of a Chair, Vice-Chair, Junior Vice-Chair, Honorary Secretary, Honorary Treasurer, Membership Secretary, Web Officer and five Committee members, plus the Chair

of the Publications Sub-Committee, the Chair of the Education and Outreach Sub-Committee and the Editor of *Geophemera* *ex officio*. The Honorary Secretary, Honorary Treasurer, Membership Secretary, Web Officer and the Editor of *Geophemera* shall hold office for three years. Committee members shall hold office for three years, two members retiring and two new members being elected each year: except in every third year the election will be of one Committee member and a Membership Secretary. In addition, one postgraduate member shall be elected each year to serve on the Committee for two years. The postgraduate members shall be from different institutions. Neither officers nor Committee members shall be eligible for immediate re-election to the same office. The Vice-Chair shall hold office for one year and then succeed to the Chair for one further year; the Junior Vice-Chair shall hold office for one year and then succeed to the Vice-Chair. At least one officer of the Group or one member of the Committee shall be a Fellow of the RGS-IBG; and at least one officer of the Group or one member of the Committee shall be a Fellow of the Geological Society.

**2. Modification of the Research Sub-committee to the Strategy Sub-committee:** At the meetings to review the status of the discipline, it was recognized that the Group often lacks a memory of past developments and a mechanism to address potential future developments, opportunities and threats on a permanent basis. Given that the present period reflects something of a state of flux in the discipline and potential major changes to the structure of the BGRG, it is considered vital that there be a Sub-committee to discuss strategic issues and make suggestions to the EC on what action might be necessary to take. The EC believes that the best way to provide this mechanism is to expand the role and composition of the existing Research Sub-Committee. As well as the existing role evaluating research-related grants, the Sub-Committee will have a remit to consider the state of the discipline, and make any suggestions relating to strategic action that may be needed by the EC to maintain and develop the position of the discipline of geomorphology. We therefore suggest making the following amendments to items 7(xiv) and 7(xv) of the constitution:

- xiv) The following are permanent sub-committees of the Executive Committee: Strategy; Awards; Education and Outreach; and Publications. The Executive Committee shall have the power to set up temporary Sub-Committees for specific purposes. The duration of temporary Sub-Committees should be no longer than two years.
- xv) The Strategy Sub-Committee makes recommendations on (a) any strategic actions required to maintain and strengthen the position of the Group and the discipline of geomorphology; and (b) the award of research-related grants. The incoming Junior Vice-Chair of the Group becomes a member of the Sub-Committee following the AGM and remains on the Sub-Committee for eight years, chairing the Sub-Committee in the eighth year of membership. Sub-Committee recommendations are reported via the Honorary Secretary.

## **Annual Report of the Honorary Secretary 2003–4**

The Group's year kicked off with the AGM held from 5<sup>th</sup>–7<sup>th</sup> September 2003 at Oxford University. Kelin Whipple of MIT gave the Frost Lecture on 'Erosional control of rock uplift rate in active orogens', inviting us to re-think cause and effect in the link between erosion and tectonics. Papers on the Saturday were organized into sessions on 'Moving it on down', 'New and different: techniques and data sources for geomorphologists', 'Linking it up', and 'Old and cold: palaeoflora, glacial and periglacial landscapes'. The AGM was moved to its new lunchtime slot, whereby business was carried out swiftly, efficiently and relatively painlessly. Olav Slaymaker received the Linton Award and talked on 'The sediment budget from 1930s Switzerland to 21<sup>st</sup> century global concern' in his stimulating Linton Lecture. Dave Nash was on hand to receive his Warwick Award, and Katie Szkornik the Sweeting Award. Another early start on the Sunday allowed sessions on 'Go with the flow: modelling and monitoring fluids, channels and surfaces' and 'Linking it up 2: hillslope-channel coupling'. Wiley's were generous enough to provide support to invite the winner of the Wiley Award for the first time. Eric Cameraat was the well-deserved winner and gave a stimulating Wiley Award lecture entitled 'Runoff, thresholds and scale: some considerations for geomorphologic response'. Thanks to Heather Viles, Mary Bourke and the rest of the team at Oxford for organizing a highly successful meeting. A full and entertaining report ('highly cute graphics?') is given in *Geophemera* **90**, 21–23.

Sessions at the first RGS-IBG meeting to be held in September were less fully attended, given the timing immediately before the main AGM. Despite our best efforts, there were a number of difficulties with this arrangement, which caused the EC to revisit the timing of subsequent BGRG AGMs. A second January meeting was held at the Geological Society at Burlington House in London on the subject 'Controlling the Loss of Soil to Water'. Organized by Michelle Clarke, Marianne McHugh, Phil Owens and Alison Collins of the NSRI, the meeting provided an excellent forum for discussion between academic and applied geomorphologists, and environmental managers from both governmental and non-governmental organizations. The applied rôle of geomorphologists was clearly demonstrated and illustrates how the BGRG can achieve a presence in a number of areas (see *Geophemera* **91** for more details of the meeting). The work of BGRG Members in the establishment of the Dorset and East Devon Coast World Heritage Site is a prime example of what can be achieved in raising the profile of our discipline and a number of Conservation Review sites –

including geomorphological – have recently been established there (see <http://www.swgfl.org.uk/jurassic/scag.htm>). The third January meeting is already planned (with the distinction that it will actually occur at the start of February), with a dryland theme, and offers for future meetings are very welcome.

The Spring Field Meeting that was due to be held in Exeter unfortunately had to be cancelled due to a lack of uptake. The character of the Spring meetings is currently under review, and the EC welcomes input from members.

On a happier note, the Postgraduate Symposium (14<sup>th</sup>-16<sup>th</sup> April 2004) was attended by 24 postgrad members, with 17 talks and 4 posters presented. Many thanks to Richard Breakspear, Duncan Kitts, Catherine Millington and Jeff Neal of the University of Southampton School of Geography for organizing a highly successful event with two days of presentations and a fieldtrip. Jonathan Butler, Kevin Lynch and Michael Marshall received best paper awards (and can be seen clutching them in *Geophemera* 92, 25). The BGRG-NERC Postgraduate Research Training Workshop in Windsor (8-11<sup>th</sup> December 2003) was also a great success, attended by 31 students, including three from overseas. This number was a healthy upturn on the previous year, and thanks are due to Brian Whalley and Bernie Smith for their unstinting efforts in organizing the workshop.

During the year, the BGRG also supported the Postgraduate Workshop on Contaminated Sediments, held between May 25<sup>th</sup>-26<sup>th</sup> 2004 and organized by Kevin Taylor of Manchester Metropolitan University. The BGRG Working Group on 'Terrestrial Geochemical Sediments and Geomorphology' organized a symposium preceding the main AGM in Oxford on Geochemical Sediments chaired by Sue McLaren, David Nash and Andrew Goudie.

On the subject of working groups, the BGRG offers a number of opportunities for support for members, all of which are summarized inside the back cover of recent issues of *Geophemera*. As well as the three-year Working Groups, there are standard research grants, postgraduate research and conference funds, support for long-term geomorphological monitoring, the promotion of geomorphology in schools and task forces for major research projects. Some of these sources of funding receive appropriate amounts of applications, but others are chronically underused, and all can provide vital support for different aspects of members' work.

Growing out of the "task forces" idea and from discussion at the last AGM, the EC organized two meetings in November 2003 and March 2004. The "Working Group to Consider the State and Future of UK Geomorphology" as it became known was organized by Mark Macklin and received a great deal of input from past chairs of the group. A more detailed report is presented elsewhere in the AGM, so I won't dwell here beyond saying that there should be a number of exciting developments in the near future that will enable the UK geomorphology community to stay ahead of the game.

Part of this process is to maintain a high profile. The group's website ([www.bgrg.org](http://www.bgrg.org)) was redesigned last year, and Dave Nash has taken the lead this year in ensuring the quality of content, layout, design, features and usability. Aably abetted by Christine James and Andy Whalley, I think a fantastic job has been done. The web is becoming a more onerous duty, and it is for this reason that we intend to institute a permanent web officer later in the AGM.

As a final word, this is my last AGM as Honorary Secretary and ends a six-year stint on the EC. I would like to thank all of my colleagues on the EC throughout the last three years for their help in carrying out the position. The assistance of Christine James, the BGRG administrator, is once again very gratefully acknowledged. I shall now sail off into the sunset – to concentrate on more highly cute graphics, no doubt!

*Prof. John Wainwright, Department of Geography, King's College London, 10<sup>th</sup> August 2004*

### **Honorary Treasurer's Interim Report 2003-2004**

My report for the AGM this year has to be of an interim nature, since it is taking place before the end of our financial year, on 31 August 2004. The figures offered are, therefore, provisional and for guidance only. They are based on payments made and payments received to date, plus inclusion of known commitments related to the 2003-2004 financial year.

**Income:** Income has remained stable and risen very slightly since 2002-2003, roughly in line with inflation. This is in part due to the more effective collection of subscription fees. Three welcome additions to the budget this year came from Adverts placed in *Geophemera* (500), a grant from John Wiley and Son to reimburse the costs of the Wiley Award (400) and a balance from the Cardiff Cryogenics meeting in January (450).

**Expenditure:** Although the broad pattern of expenditure this year has continued from previous years, additional payments were made with respect to two areas of activity. The BGRG Website, which has been redesigned and re-launched this year at a cost of

£3000, which was the agreed fee payable to Andrew Whalley, acting as our consultant. A further £1000 was paid to Bede College for the services of Edward Anderson, who has designed educational material for the new site. We have also agreed to pay a fee to Steve Darby as 'BGRG Editor' for ESP&L, and this was implemented for the first time this year.

Administration costs have increased this year, but this is because of the specific costs of convening two meetings in London of the Working Group to consider the future of UK Geomorphology. Executive Committee and Office costs, which are recurrent, have not increased. Office costs consist of a contribution to the salary of Christine James at the RGS, plus the costs of insurance and inspection of accounts (Accountants' fee). It can be seen that there will be a net loss, predicted to be around £2500 on the year's trading. This is regarded as being in line with agreed policy, although the value of our assets has not been reduced.

**Investments:** There has been no change to the pattern of our investments, and it can be seen that our funds in the Jupiter Ecology Fund have not advanced in value over the past year. There seems, now, little prospect of this investment ever approaching our initial investment of £15000 in 2000. I propose to look with more urgency at the possibility of a better placement for our other investment, currently in the Abbey Business Reserve Account, earning 3.4% (from July 04).

**Prospect:** Our funds remain healthy, but changes in membership numbers have been downward and possible changes in academic publishing, though not at present notified or threatening could affect our royalty income in the future. I regard the present situation as one where the Group is able to take new initiatives to safeguard and enhance our future activities, and should do so.

*Prof. Michael F Thomas, Honorary Treasurer, 12<sup>th</sup> August, 2004, University of Stirling*

## **REPORT ON GEOPHEMERA Issues 90–92**

- The production and printing of Geophemera issues 90-92 has been relatively free of problems.
- The size of each issue has varied largely as a function of the amount of BGRG Business that has had to be incorporated.
- For this year only, the July issue was released in June because it was necessary to get the details of any proposals for changes to the constitution out to BGRG members in plenty of time, before the earlier than usual AGM in August 2004.
- There has been discussion at BGRG meetings to consider changing the structure of Geophemera so that from 2006 the March issue each year (or a separate 'special issue') is used as more of a promotional item to be distributed widely, reflecting the state of the discipline and the key research and applied work that has been carried out. The production of such an issue earlier than 2006 would not be possible as it needs to be planned and targeted very carefully if it is to be a success.
- The final pdf versions of each issue (87-92) have been passed on to Christine James to be put on to the BGRG web pages.
- The new format Geophemera is still working out to be cheaper, in terms of both printing and postal costs, than the old version (pre issue 86).

*Sue McLaren, Honorary Editor, Geophemera, June 2004 University of Leicester*

**BGRG Summary of Accounts for 2003-2004 (Interim Statement on 12/08/04)**

	Accounts for 1/9/01-31/8/02	Notes	Accounts for 1/9/02-31/8/03	Interim Accounts for 1/9/03-31/8/04*	*Prepared 12/08/04
<b>Income:</b>					
Subscriptions	6801.50		6631	8271	
Royalties	15873.85	1	15464.91	14765	1
IBG Subvention	294.00		418	315	
Wiley Award	NA		400	400	2
Advertising	0.00		0	500	3
Meetings	643.00		0	450	4
Miscellaneous	0.00		0	0 (NA)	
	12.79		99.28	125	
Building Society Interest	973.00	2	840.64	791	
Total Income	24598.14		24589	25677	
<b>Expenditure:</b>					
Research	9706.00	3	9850	10200	5
Subscriptions	1938.74		702.84	700	6
Awards and Expenses	2228.88	4	1145.7	1938	7
Publications	4448.07	5	3088.11	2998	8
Education	809.63			1000	9
BGRG Editor's Fee	NA		NA	1000	10
Administration	10259.10	6	7489.78	9975	11
Insurance	0.00		367	367	
Total Expenditure	29390.42		23933.26	28178	
NET INCOME for the year	4792.28		655.74	-454	-2501
Items outstanding			1110	12	Not available

Notes to accompany summary accounts

		<b>Income</b>	
NOTES			
	1	ESP&L royalties (John Wiley )	14765
	2	'Wiley Award' support costs	400
	3	2x adverts in 'Geophemera'	500
	4	'Cryogenic' meeting, Cardiff	450
		<b>Expenditure</b>	
	5	Research Includes:	
		Research Grants	400
		Postgraduate Grants	7800
		Meetings	2000
			10200
	6	IAG subscription €1000	700
	7	Awards and Expenses include:	
		Linton, Warwick, Linton, Sweeting	
		Wiley awards and Frost lecture	1938
			1938
	8	Geophemera printing costs	2998
	9	Education materials for website	1000
			1000
	10	BGRG Editor's Fee (ESP&L)	1000
	11	Administration includes:	
		Committee	1899
		Office	3906
		UK geomorphology Working Group	2068
		Website development	3000
			10873
	12	Awarded but unpaid research grants	
<b>ASSETS</b>			
		Current Account - TSB (as at 31/07/04)	7265
		Business Reserve Account - Abbey (as at 01/04/04)	29937
		Jupiter Ecology Fund (quoted as at 11/08/04)	7218 (Sept 03, 7457)
		<b>Total</b>	<b><u>44420</u></b>

## Annual Report of the Membership Secretary: 2003–2004

As of 6<sup>th</sup> August 2004, there were a total of 549 members of the BGRG listed on the database. Of these, 273 are full members, 163 are postgraduate members (3 Masters), 39 are retired/unwaged and 74 are overseas members. The advantages of joining the BGRG continue to be advertised in the Geophemera. Application forms and an on-line registration and credit card payment facility are available from the revamped BGRG web site. A flyer advertising the BGRG has been placed in the conference packs for delegates attending the Joint International Geomorphology Conference in Glasgow. I would like to record my thanks to Chrissie James for her efficient help in maintaining the membership database.

*Dr. Mark Powell, Membership Secretary, August 2004, University of Leicester*

## Annual Report of the Publications Sub-Committee

### 1. Earth Surface Processes and Landforms (August 2003 – July 2004)

*NB: figures in parentheses refer to preceding 11 month period*

**Number of papers:** 132 (119) papers were received by the editorial office – which includes 23 papers for three special issues (11 for 2 Special Issues). This shows a slight fall in the number of papers submitted. In addition Steve has received 13 (14) papers – also a slight fall.

**Acceptance/rejection:** This year submissions show three peaks – in August/September 27%, December/ January 22 % and June/July 27%. Of the papers not out with referees or in the editorial office 33%(38%) have been accepted, 30%(33%) have been rejected and the remainder are with authors for either major revision 21%(22%) or minor revision 16%(6%). The acceptance figures are slightly lower than last year but the number of papers requiring only minor revision is higher. Most papers requiring minor revision will be accepted for publication and the majority (70-80%) but certainly not all of those requiring major revision will be published. This gives us an acceptance/rejection split of roughly 63%/37%. For Steve the rates are 9%(33%) acceptances and 36%(42%) rejections with the remainder 54% with authors for minor or major revision.

**Authors:** For papers received by the editorial office U.K. authorship has remained stable at 19% (18%) North America has fallen slightly to 30%(32%) and European authorship has also fallen slightly to 21%(23%). The contribution from China, Japan and the rest of Asia has risen a little to 16%(14%) and papers from Australasia comprise 9% (11%) of submissions. Papers were also received from Iran, Israel, Kuwait, South Africa and Argentina.

**Publication:** The backlog has again decreased. At the start of the report year it was 8 months. We now have 64 (70) papers in the pipeline including 1 set of special issue papers and a seven month wait until print issue. Early View allows the on-line publication of material up to three months before print publication and this is now possible for Special Issues of the journal. The backlog of papers has fallen slightly as the number of pages per issue rose in January 2004. 98 (81) papers have been published this year.

**Special Issues:** There has been one Special Issue published this year.:

Papers from the 5<sup>th</sup> ICAR/GCTE-SEN Meeting ed. Ted Zobeck, Lubbock, Texas July 2002 Published October 2003

#### **In progress:**

Significance of Soil Surface Characteristics in Soil Erosion ed. A. Auzet, J. Poesen & C.Valentin COST 623 Strasbourg, France Received/With publisher/Due for publication August 2004

Terrestrial Geochemical Sediments and Geomorphology ed. S. McLaren, D. Nash & A. Goudie. BGRG Fixed Term Working Group Brighton May 2002 Received/With publisher/Due for publication November 2004

Runoff Variability – Spatial and Temporal Structures and their Evolution ed Katerina Helming COST 623 Muencheberg, Germany October 2002 With Managing Editor

Chaos and Complexity ed. D. Favis-Mortlock, C. Lloyd & N. Tate RGS-IBG Meeting Belfast January 2002

Gully Erosion in Mountain Areas ed. Nicole Mathys & John Wainwright Digne Colloquium October 2003

Quantifying Rates and Timescales of Geomorphic Processes ed Arjun Heimsath & Todd Ehlers AGU Meeting San Francisco De-

ember 2003

Controlling the Loss of Soil to Water ed. M. Clarke, A. Collins, M. McHugh & P. Owens BGRG Conference January 2004

The Managed Landscape ed. A.J. Parsons & J. Hooke IAG Conference Glasgow August 2004

**Other developments:** There have been a number of changes to the editorial board this year. New members are:

Professor Paul Bishop	University of Glasgow
Professor Jim Kirchner	University of California/Berkeley
Professor Stuart Lane	University of Durham
Professor Dave Montgomery	University of Washington
Dr. Massimo Rinaldi	University of Florence
Professor Ian Rutherford	University of Melbourne
Professor Greg Tucker	University of Colorado

Plans are underway to produce a new cover design and layout for the journal. A new feature will be included in the journal from the start of 2005. Called Earth Surface Exchanges it will consist of short invited discussion papers and responses to them and is aimed at stimulating debate on current geomorphological issues. This section of the journal will be edited by Stuart Lane.

**Journal prices for BGRG members:** The ESPL journal page budget will remain the same in 2005 as for 2004. At 1768 pages for 13 issues, this allows 136 pages per issue. The following are the price increases for 2005:

BGRG member print and electronic combined rate will increase from £70 to £72; BGRG post-graduate member rate will increase from £35 to £36; The BGRG electronic rate will cease at the end of 2004, since no-one took advantage of this rate.

**2. Geomorphological Techniques & History of the Study of Landforms:** Both volumes have yet to appear and there has been continued slippage with their respective publication schedules. BGRG will, in time, receive royalties from both these volumes.

*Dr Jon French, Chair, Publications Sub-Committee, August 2004, University College London*

### Report of the Research Sub-committee 2003 – 2004

The BGRG Research Sub-committee comprised Charles Harris (Chair), David Thomas and Adrian Harvey. Applications were made to BGRG through Christine James for four deadlines: 30<sup>th</sup> September, 31<sup>st</sup> December, 31<sup>st</sup> March and 31<sup>st</sup> May. Applications were on application forms downloadable from the BGRG Website.

A total of 34 applications were processed by the Research Sub-committee, breaking down into 16 Postgraduate Research Grant applications, 15 Postgraduate Conference Grant applications, and 3 Research Grant applications. Applications and outcomes are summarised in Table 1.

Table 1. Applications for and outcomes of BGRG Grant Awards 2003-2004

Category	Total Requested	Total Awarded	Percent Awarded	Nos. Applicants	Nos. Supported	Percent Supported
PGR	£8,270	£4,450	54	16	13	81.25
PGC	£4,804	£3,200	67	15	15	100
RG	£4,134	£800	19	3	2	66.6
Total	£17,208	£8,450	49	34	30	88.24

The total expenditure corresponds to approximately one half of the total funds requested, though this is slightly distorted by inclusion a single large research grant (£3000) that was rejected. The sub-committee provided full support to research student conference applications, although this does not include applications that were retrospective, which were not considered. Applications for conference and research grants were received from a total of 25 institutions, with five institutions applying more than once. The standard of application was high, and covered a wide range of geomorphological research fields. The average level of award was



Post Graduate Research: £342, Post Graduate Conference: £213 and Research Grant: £400.

The following points were noted, and discussed by the sub-committee

1. The need to encourage institutions to design PhD programmes in which basic fieldwork can be funded without recourse to BGRG for financial support. BGRG funds have been directed towards research that provides “added value” to PhD research programmes. There is a potential, as pressures increase on university departments to take on more PhD students, for BGRG to be approached for basic fieldwork funding, a situation which could rapidly increase demand for funds, and exceed our budget.
2. A tendency was detected for some students to request inflated travel costs, particularly air fares. Where this was considered to be clearly the case by the committee, awards were adjusted accordingly.
3. A disappointingly small number of non PG research grant applications were received (3 in total). The committee urges postdoctoral and academic staff to consider BGRG Research Grant funding to support small projects, or as seed corn funding for developing new geomorphological research programmes.

A more general issue regarding BGRG procedures that has been raised by the Honorary Treasurer and endorsed by Research Sub-committee members, relates to problems arising from processing applications for the 31<sup>st</sup> May deadline. University examination timetabling makes June a particularly difficult month for sub-committee members to assess applications. This year the result was that letters to applicants offering funding were not mailed until 1<sup>st</sup> July. This late processing will result in many grants not being claimed by recipients until after the treasurer has presented his accounts for the current financial year. I propose, therefore, that the BGRG Research Sub-committee consider dropping the 31<sup>st</sup> May submission round. This would encourage applicants to apply for their funding earlier, make processing of grants much easier and more efficient, and largely avoid spreading one year’s grant funding across more than one accounting year.

*Prof. Charles Harris, Chair, Research Sub-Committee, 6/8/4, University of Wales, Cardiff*

### **Awards Sub-committee Report : Citations**

**Linton Award:** Prof. David Sugden, University of Edinburgh; MA,(Oxon) 1962, DPhil (Oxon) 1965, Lecturer, 1966, Senior Lecturer 1973, Reader 1985 (Aberdeen), Professor (Edinburgh) 1987 and Head of Department (twice). Foundation Head of the newly-formed School of GeoSciences 2003 (Edinburgh).

The David Linton Award is given to a geomorphologist who has made a leading contribution to the discipline over a sustained period. David’s first publication was in 1962 (the same year as the award of his First Class Honours MA), and his output of cutting-edge and provocative research has continued unabated since. His papers have often stimulated debate and even disagreement, and he has often found himself in – or even gone looking for! – energetic academic and intellectual debates. Early external recognition of David’s research achievements included the Cuthbert Peak Medal of the RGS in 1980 and Chair of the British Geomorphological Research Group in 1984. Before being appointed to his Chair in Edinburgh, David had already served on NERC’s Geological Sciences Grants committee. Other accolades followed including Fellowship of the Royal Society of Edinburgh (1992), the Vega Medal (awarded by the King of Sweden), and the Mungo Park Medal (RGS) both in 1993, and the Polar Medal in 2002. In 1996 David was elected President of the Institute of British Geographers and Vice President of the RGG (with IBG). External recognition has also included membership of three successive RAE panels in Geography and honorary doctorates from Stockholm (1998) and Dundee (1999). Throughout his career David’s research has been supported by numerous grants from NERC and the Royal Society; he has been a Co-Investigator on NSF grants, particularly for his recent work on long-term landscape evolution in Antarctica. His prodigious publication record includes a seminal undergraduate text in 1976 with Brian John, *Glaciers and Landscape: A Geomorphological Approach*, in 1976 which has passed through 13 reprints and is still used and cited nearly three decades later, and more than 90 papers in the most prestigious journals, including Nature and Science.

David Sugden is the foremost glacial geomorphologist working in Britain today with an outstanding international reputation. Throughout his career he has remained at the cutting edge of his field. In his early work on patterns and processes of glacial erosion in Scotland, Greenland and the Canadian Shield, he introduced the concepts of areal scouring and selective linear erosion and related these to the thermal regimes beneath ice sheets. These ideas continue to be widely cited internationally. His most recent work has involved a major contribution to the on-going debate over the stability of the massive East Antarctic ice sheet. The history of this ice sheet is a critical issue in understanding its stability and likely evolution in a warming Earth. David has been a key member of a large, dominantly US-based team that has used a wide range of intriguing and novel evidence to understand the stability of the ice sheet. The work is particularly important in challenging the former, widely-held view that the ice sheet had experienced deglaciation in the Pliocene, a view that implies that the ice sheet has

much lower stability than is indicated by David's and colleagues' work. In the course of this work David and colleagues discovered the oldest known glacier ice on Earth (more than 8 million years old).

One of the most impressive features of David Sugden's work is his life-long willingness to look beyond traditional disciplinary boundaries and to embrace new approaches and data sources. He has promoted numerical modelling approaches enthusiastically, building a sizeable group around him in this area, and he has employed the latest geochronological techniques, including cosmogenic isotope analyses and low temperature thermochronology. He has successfully embedded his Antarctic work in recent plate tectonic interpretations of passive margin evolution. Fundamentally, however, he is a field geomorphologist with a keen eye and a sharp mind. He continues a very active field work programme, having been in Antarctica as recently as 2001 and in Patagonia in 2000.

In short, the key component of David's research has been his ability to combine local field-based study with large-scale mathematical modelling and dating techniques, thereby synthesising contributions from geomorphology, geophysics and glaciology. David Sugden is a most worthy recipient of the BGRG's David Linton Award for 2004.

### **Gordon Warwick Award:** Dr Jo Bullard, Loughborough University

Jo is one of a new generation of resourceful and talented geomorphologists working in the field of aeolian research. The three selected publications are representative of a larger body of research and important publications that she has produced over the past decade. Jo Bullard's work has focused on three main aspects of aeolian processes in drylands: (1) the controls of the morphology and processes on partly vegetated linear dunes; (2) the response of vegetated dune systems to climate variability on annual to decadal scales; and (3) relations between aeolian and fluvial systems. She is also developing new interests in remote sensing, aeolian abrasion, and dunes on Mars. This research has involved field studies of landforms and processes, use of aerial photographs and satellite images, and laboratory experiments.

Her initial work on Kalahari dunes involved studies of dune morphology (Bullard et al., 1995) and processes (Wiggs et al., 1995) in an area in which climate change and variability has played and continues to play an important role in determining the magnitude and frequency of sand transport events. These dunes are vegetated to a variable extent. The cover of vegetation controls the rate of sand transport and thus dune activity through its effect on transport thresholds. Drought cycles in the region impact vegetation cover, and so influence the activity of the dunes on an annual to decadal scale.

Jo's paper *Dunefield activity and interactions with climatic variability in the Kalahari desert* explores these links, using a modification of the dune mobility index developed by Prof. Nick Lancaster, in conjunction with other climate data to show how dune activity has varied in relation to climate variables. The study revealed significant temporal variations in potential dune field activity, which was low during the relatively wet period of the 1970s and much higher during the drought years of the 1980s. This research has direct applications to understanding human impacts on dune activity in this area by providing baseline information on the climatic controls of dune activity, as well as to assessment and modelling of the impacts of future climates on these and other semi-arid regions. The concepts developed in this paper can be used to model the impact of global warming on dune fields, by using data from GCMs as inputs to indices of dune activity. One example of this is a recent study by Melanie Knight for her PhD at Sheffield University.

Jo has continued her interest in the dune fields of the southwestern Kalahari by focusing on the relations between the linear dunes and the several incised river valleys that cut through the area. She noted the changes in dune pattern adjacent to the valleys, and hypothesized that they were the result of local topographic controls on wind direction (Bullard and Nash, 1998). Field data provided limited insights into this complex problem, so Jo initiated a series of wind tunnel experiments to explore how winds change over topographic obstacles of this nature. The results of these experiments were published in the second of the nominated publications: Bullard, J.E., Wiggs, G.F.S. & Nash, D.J. 2000. *Experimental study of wind directional variability in the vicinity of a model valley*. *Geomorphology*, 35: 127-143. An important conclusion from the wind tunnel experiments was the importance of wind direction relative to the orientation of the valley. For example, flow diversion occurs when flow approaches the valley at less than 90° to the upwind valley side, so that winds within the valley are oriented more parallel to its strike.

Although not mentioned here, this work has led to a further set of detailed field experiments examining the effects of interactions between winds and valleys on sand transport in a rather simpler situation in Namibia, conducted by a PhD student at Sheffield University (Brian Garvey), jointly-supervised by Jo and Giles Wiggs. Interactions between fluvial and aeolian systems are not just a case of topographic influence on winds. Most importantly, rivers supply sediment for aeolian processes, often resulting in formation of dune systems downwind of fluvial depositional areas. The Simpson Desert of Australia is a classic example of these interactions. The close links between aeolian and fluvial processes in space and time have been documented from a range of localities. The paper: Bullard, J.E. & McTainsh, G.H. 2003. *Aeolian fluvial interactions in dryland environments: scales, concepts and Australia case study*. *Progress in Physical Geography*, 27, 4, 471-501, reviews the nature of many of the linkages between fluvial, lacustrine,

and aeolian systems, and provides an excellent discussion of the interactions in the context of Australia. Jo and her co-author Grant McTainsh identify some key issues for future research, including the role of floodplains as sources of sediment for sand and dust transport by the wind; the need for more studies of the processes by which fluvial sediments are mobilized by the wind; and the response of these linked systems to climate change. I expect to see Jo Bullard's name on many of these future studies.

In summary, these three papers span a wide range of issues in aeolian geomorphology and accurately represent the breadth of Jo Bullard's insights into aeolian processes and landforms. Although all three are co-authored papers, in each case Jo played the leading role in the development of the conceptual background, the field and laboratory experiments, and the data analysis. Jo Bullard clearly embodies the spirit of this award by her enthusiasm and dedication to aeolian geomorphology. She is a worthy candidate for this award.

References Cited:

Bullard, J.E. and Nash, D.J., 1998. Linear dune pattern variability in the vicinity of dry valleys in the southwest Kalahari. *Geomorphology*, **23**: 35-54.

Bullard, J.E., Thomas, D.S.G., Livingstone, I. and Wiggs, G.F.S., 1995. Analysis of linear sand dune morphological variability, southwestern Kalahari Desert. *Geomorphology* **11**: 189-203.

Wiggs, G.F.S., Thomas, D.S.G., Bullard, J.E. and Livingstone, I., 1995. Dune mobility and vegetation cover in the southwest Kalahari Desert. *Earth Surface Processes and Landforms* **20(6)**: 515-530.

**Wiley Award** : David D. Breshears, Jeffrey J. Whicker, Mathew P. Johansen and John E. Pinder for their paper: 'Wind and water erosion and transport in semi-arid shrubland, grassland and forest ecosystems: quantifying dominance of horizontal wind-driven transport', *Earth Surface Processes and Landforms* **28(11)**, 1189-1209.

This paper is part of an excellent special issue on Wind Erosion Field Studies. Breshears and his co-workers address a very important issue in Earth surface processes, landform genesis and land management, namely, the relative importance of wind- and water-transport of sediment in semi-arid systems. As they point out, there is a large literature on the relative magnitudes of water and wind transport in semi-arid landscapes and a 'conventional wisdom' that water erosion exceeds wind erosion for all but the driest sites.

The paper provides a novel framework for comparing horizontal mass transport of wind- and water-transported materials and combines, for three different semi-arid ecosystems, data on wind erosion and sediment transport from field measurements and water erosion and transport data from rainfall simulations. Critically, the influence of soil texture is explicitly considered. Breshears and co-workers find that wind erosion can exceed water erosion for ecosystems with >250 mm annual precipitation, and that horizontal wind transport exceeds horizontal water transport in all three ecosystems. Their results lead them to a set of hypothesized conceptual relationships for erosion and horizontal transport based on their quantitative data. They indicate in this conceptual model the influence of variations in soil texture on erosion and fluxes, and propose a series of hypotheses that, as they rightly point out, now need testing.

In summary, this paper is awarded the 2004 Wiley Award of the BGRG because it embodies many of the key components of good science that is well reported. It addresses a very important issue in Earth surface processes and landform genesis, using a strong conceptual base and methodological framework. The work is solidly grounded in high quality data that are interpreted in a new conceptual model. This model is eminently testable and therefore provides the basis for a wide range of future research on Earth surface processes.

*Paul Bishop, Acting Chair, Awards Sub-committee, University of Glasgow, May 2004*

## **BGRG Education and Outreach Sub-committee: Report to the AGM 2004**

- 1 Promoting Geomorphology in Schools:** The main thrust of E&O subcommittee activity has been to provide educational materials for the new BGRG website. Ed Anderson has produced a considerable volume of web-based material on cold-climate geomorphology, aimed at AS/A2-level students and their teachers. This is now being added to the BGRG site and the next stage will be to encourage further contributions. One target group who will be users of the materials and may also contribute to the site is PGCE students, and E&O is developing contacts with tutors of PGCE Geography students.
- 2 BGRG/FSC Advanced Certificate in Geomorphology:** Two modules from the teachers' certificate, validated at University of Birmingham, were due to run during 2003/4 and arrangements were made at Field Studies Centres. Unfortunately, the lack of publicity by the Centre for Lifelong Learning at Birmingham meant that the modules did not recruit any students. Negotiations are continuing to fix dates for the modules for 2004/5 but failure to recruit in the coming year will mean that the subcommittee will have to reconsider the best format and host institution for this course.
- 3 Marjorie Sweeting Dissertation Prize:** This prize is awarded annually by the BGRG for the best geomorphology dissertation submitted as part of an undergraduate degree in the UK. E&O subcommittee is responsible for judging entries for this prize.

### *2003 Competition:*

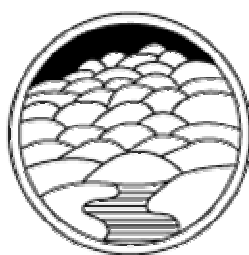
This year we considered 11 dissertations. We drew a short-list of three projects all of which represented very substantial pieces of high quality research work. The winner of the Sweeting Prize for 2003 is: David Milledge (School of Geography, University of Leeds) 'Disrupted Downstream Fining on the River Wharfe: patterns, processes and potential for sediment delivery estimation using sediment fingerprinting'. The runners-up (alphabetical order) are: Joanne Paulson (School of Geosciences, University of Edinburgh) 'Jokulhlaups, Bedrock Erosion and the Volcanic History of Eyjafjallajokull' and Graham Ricketts (Department of Geography, University of Cambridge) 'Campanian Ignimbrite Ash Layers in the Don Valley (Russia): volcanological and stratigraphic importance'.

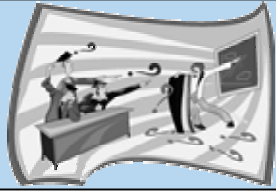
### *2004 Competition:*

10 entries have been received and they are currently being judged.

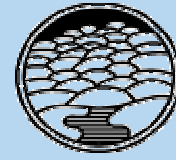
- 4 Subcommittee Membership:** At the 2003 AGM, the BGRG agreed a constitutional change to the terms of E&O subcommittee membership, so that elected members join for 4 years, acting as chair in their 4th year. To reflect this change existing members have agreed the following arrangements for chair the subcommittee: 2004/5 Dave Simm; 2005/6 Stephan Harrison; 2006/7 Ed Anderson.

*Ian Livingstone, Chair, BGRG Education and Outreach Subcommittee, University of Northampton, August 2004*





## B.G.R.G. Meetings



*Joint BGRG/BSRG International Conference*

### **Drylands: Linking Landscape Processes to Sedimentary Environments**

2<sup>nd</sup> - 4<sup>th</sup> February 2005, Geological Society, London

The overall aim of this joint BGRG/BSRG international conference is to bring together researchers working in modern and ancient dryland environments, in order to improve our understanding of arid zone processes and landforms and the preservation potential of dryland sediment successions in the geological record. We anticipate that the meeting will not only promote interaction between geomorphologists and sedimentologists, but will also enhance our knowledge about contemporary dryland environments and the factors influencing subsurface sedimentary architecture. This conference will also be of considerable interest to practitioners working in the water and hydrocarbon industries.

Keynote speakers confirmed so far include:

Professor Kevin Bohacs (Exxon Mobil, Houston, Texas, USA)

Professor Gary Kocurek (University of Texas, Austin, USA)

Professor Jon Laronne (Ben Gurion University, Israel)

Full details of the scientific programme are accessible through the conference website, where online registration is also available. Delegates registering before 30 November 2004 are eligible for a reduced registration fee.

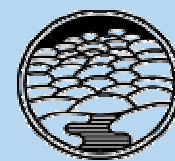
For further information contact the Convenors: Dr David Nash (University of Brighton), Dr Joanna Bullard (Loughborough University) and Dr Colin North (University of Aberdeen).

Website: <http://www.bton.ac.uk/environment/drylands/>

Email: [drylands.2005@lboro.ac.uk](mailto:drylands.2005@lboro.ac.uk)



# Reports



*Continued from page 1:* Session three introduced the theme of atmospheric composition, with 5 talks addressing the various sub-fields of atmospheric chemistry. This session also served as an examination of 'audience composition', with the research chemists displaying considerable skill in conveying complex chemical theories and processes to a group of individuals with backgrounds in subjects including mathematics, physics, meteorology, geography and computer science. Projects included Sarah Walker's (Leeds) study on 'The seasonal and diurnal cycle of gas-phase hydrogen peroxide and organic hydroperoxides in the troposphere: Halley, Antarctica and Jungfraujoch observatory, Switzerland'.

Tuesday evening also provided the opportunity for the research students to hear from two of the conference guest speakers. First, Peter Cox (Hadley Centre, Head of Climate, Chemistry and Ecosystems) presented his expert opinion on 'Never become an expert – a personal view of research in the Met Office'. This was an insightful and humorous account of the current role of researchers as the bridge between science and policy.

Second, Eleanor Highwood (Reading) introduced her ideas on the multi-faceted role of today's lecturers/scientists. This discussion highlighted the modern university academic's commitments to teaching, research and administration, combined with some of Eleanor's own positive and negative experiences of the transition from PhD to Post-Doc to lecturer.

Following the motivational addresses from both guest speakers, it was time for the conference poster session – an activity that once again emphasised the diversity of current meteorological research activity and highlighted meteorology's strong inter-disciplinary links with hydrology, biology and ecology. Projects included Thomas Crawford's (Queen's University Belfast) 'Modelling the implications of shifts in rainfall characteristics for runoff in Ireland' and Anne Jones's (Liverpool) 'Dynamical malaria modelling – integration of a transmission model within a probabilistic multi-model forecast system'.

Perhaps the most eagerly anticipated event was Tuesday night's conference meal at a local restaurant. This was an invaluable opportunity for delegates to discuss points of interest, enjoy the social side of 'networking' and relax after the stress of presentation questions!

Session four, on Wednesday morning, dealt with weather and small-scale phenomena. Superficially, this may have seemed to be focussed on more 'traditional' meteorology, but

revealed critical modern interpretations and techniques for investigating this area of research. Studies included Samuel Randall's (Birmingham)

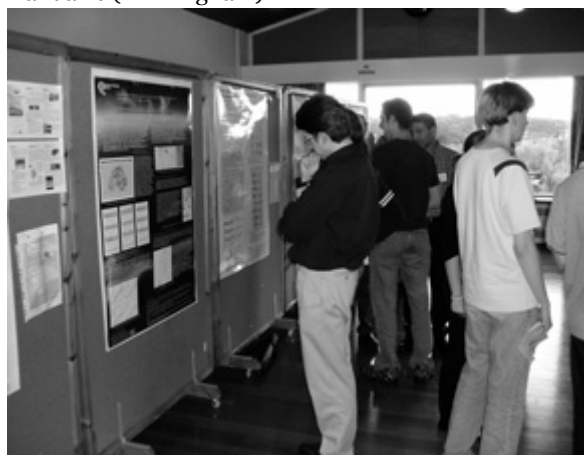


Figure 2. The conference poster session

'Weather derivatives: managing the costs of the weather' and Lindsay Bennett's investigation into the 'Initiation of precipitating convection in the UK'.

Following lunch, there was a short careers advice session with some of the UK's leading weather prediction companies, including the Met Office, Weathernews UK and WeatherQuest. This led into the final guest speaker address from David Carruthers (CERC) on 'A career using a meteorological background' – an informative account of his own experiences of moving from the academic to professional meteorological field.

Session five, the final set of oral presentations, was focused on climate modelling. Projects included Hugo Lambert's (Oxford) 'Constraining changes in 20<sup>th</sup> and 21<sup>st</sup> century precipitation' and Sarah Keeley's (Reading) 'Relating patterns of climate change to modes of present day variability'.

Exhausted by two and a half days of intense meteorological discussion (augmented by extensive 'networking' in the bar), the conference delegates left Leeds on Wednesday evening to return to their own universities. This was an excellent opportunity to meet researchers at a similar stage in their careers, and particular thanks must go to Matt Sapiano (chair) and the rest of the organising committee for an interesting and enjoyable conference.

*Tommy Crawford, Queens University Belfast*

**Report from the BGRG supported British-Australian Nullarbor Caves Microgravity Expedition 2004**

During March and April 2004, collaborative fieldwork between researchers of the University of Wales Swansea and Latrobe and Curtin Universities in Australia was carried out to address the contentious question of the karstification extent of the Nullarbor Plain, Australia.

The Nullarbor Plain is one of the worlds' most extensive karst areas (>200,000 km<sup>2</sup>) and its subdued topography ranks it

also amongst the largest homogeneous land units. Many blowholes exist in the area, which display strong barometric draughts, but generally connect to voids too small for direct exploration. In contrast, only few, but spectacularly large cave systems, accessible through collapse dolines, have been discovered here. The number and size of these caves is at odds with the relative abundance of blowholes and the extent of limestone, and the question of their origin and true extent is highly contentious. Since conventional cave exploration approaches have failed to establish the specific origin of the draughts, a land surface-based microgravity surveying and draught monitoring programme was carried out at three blowholes. This approach allowed remote detection of the presence and shape of inaccessible cave passage, evaluation whether the strong barometric draughts from blowholes are generated by vast unexplored cave systems or arise from air contained within the porosity of the limestone itself as previously suggested.

All blowholes investigated were associated with large gravity anomalies and blowhole draught volumes measured generated by changes in atmospheric pressure were in accordance with the cavity volumes determined by microgravity. The results suggest that blowholes may typically be linked to substantial underground passages, which provide the air reservoirs responsible for draughts. Combined with previous evidence from a pilot study at Cocklebidy Cave in 1999, and additional microgravity surveys carried out during the 2004 expedition over potential extensions of known cave systems, we were able to produce a considerable body of geophysical evidence suggesting that the known deep Nullarbor caves are relatively small parts of much larger systems. Since the number of blowholes on the Nullarbor Plain vastly exceeds known caves (by more than 1000 to 1) it is inferred that the karstification of the Nullarbor has produced much more extensive cave passage than previously thought. Given the nature of local karstification processes and age of the Nullarbor Plain, these findings have considerable implications for our understanding of karst processes in low-lying carbonate platforms, and climate and sea level history in the region. Further field work involving simultaneous logging of draughts over several blowholes is planned for 2005. We are grateful to the BGRG, RGS and BCRA for supporting the 2004 expedition.

*Dr Stefan H Doerr (s.doerr@swan.ac.uk) and Dr Rob Davies (R.R.Davies@swan.ac.uk)*

**International Conference on Sediment and Geochemical Budgets in Geomorphology to honour Professor Olav Slaymaker**

The University of British Columbia (UBC) hosted an international meeting from June 27<sup>th</sup> to 30<sup>th</sup> 2004 to celebrate the achievements of Professor Olav Slaymaker, marking his retirement after 36 years of service at UBC. Olav Slaymaker, who wanted to be physical geographer since a very young age, was born in Swansea, Wales. He obtained a B.A. (Hons.) in Geography at Cambridge, quite a unique achievement without a Geography tutor present at the time, and a PhD at Cambridge under the tutelage of Dick Chorley. He taught at Aberystwyth from 1964 before moving to Vancouver, Canada, in 1968. His research and teaching focus has been on the drainage basin as the fundamental unit of enquiry for understanding surface processes and landscape development, with a wider interest in resource and social development and stewardship in mountain regions. While the regional emphasis of his work was in British Columbia, Olav maintained strong links with the UK Geomorphology community throughout his career, and his achievements were recognised by the BGRG David Linton Award in 2003.

Friends and colleagues with an interest in sediment and geochemical budgets, including most of his former Masters- and PhD-students, attended the conference in Vancouver. During two days of presentations current research on sediment and geochemical budgets was introduced by selected speakers and during poster sessions. The topics followed the path of water and sediment through a drainage basin, from hillslope to channel to coastal environments. Nel Caine, University of Colorado, and Tom Dunne, University of California, presented memorable keynote addresses on Geochemical denudation in alpine environments and Lowland floodplain sedimentation budgets along the Amazon river, respectively. Both highlighted Olav Slaymaker's groundbreaking efforts in the field of sediment and geochemical budgets, and also emphasised the need for further research, which should result in good prospects for young geomorphologists continuing in his footsteps.

Olav Slaymaker's connections to his native country were reflected by the high number of contributions from UK scientists, including (with apologies for unintentional omissions) presentations on Meltwater solute fluxes (Collins and MacDonald, Manchester), Sediment dynamics in the Bush catchment, Northern Ireland (Evans, Sheffield, and Gibson and Roswell, Belfast), Asymmetric glaciation in British Columbia (Evans, Durham), Erosion in blanket peat catchments (Evans, Manchester, and Warburton, Durham), Rainfall magnitude and spatial patterns of sediment sources (Kuhn, Exeter), and Alluvial fan development in New Zealand (Quine and Nicholas, Exeter). Poster presentations from the UK covered Accumulation and dispersion of highway sediments (Evans, Guymmer, Gaskell and Maltby, Sheffield), Sediment production and yield in peatland catchment (Evans and Yang, Manchester), and The European Sediment Research Network: SedNet (Owens, Collins, both Cranfield, and Quinton, Lancaster).

Two fieldtrips into the Lilloet River Basin and the Chilliwack Valley introduced conference participants to the environment and challenges faced by Olav Slaymaker, his co-workers and

students (some apparently still hold the presence of bears at the field site against him!) when monitoring sediment budgets in British Columbia over the last 35 years. The Lillooet River basin covers 3,850 km<sup>2</sup>, containing 400 km<sup>2</sup> of glaciers and ice fields and an unusually active sediment source in the form of the Meager Creek volcanic complex. The valley experienced extensive river training from 1946-1951, which steepened and straightened the river above Lillooet Lake and lowered the outlet of Lillooet Lake by 2.5 metres. More recently, bedroom communities serving Whistler, whose prominence as an international skiing destination has made housing prohibitively expensive, led to building of homes on the Lillooet River floodplain. The Chilliwack Valley is a 1200 km<sup>2</sup> drainage basin in the glaciated northernmost Cascade Mountains about 100 km east of Vancouver. Modern land use includes forestry and mixed institutional uses. In the valley the regional geomorphological history of the Holocene Epoch has been studied to examine the problems of establishing long term sediment budgets in drainage basins substantially larger than most experimental or "representative" basins.

On a very personal level, colleagues, friends and former students thanked Olav Slaymaker during a dinner banquet on June 28<sup>th</sup> for his contribution to the discipline of geomorphology in general, and the substantial positive influence on their professional development, and expressed the hope that he would continue to lead and inspire within and beyond the limits of the discipline after his retirement.

For further information about Olav Slaymaker, the conference and more pictures, go to: <http://www.geog.ubc.ca/olav2004/index.html>

*Nikolaus J. Kuhn, Exeter*



Figure 3: Olav Slaymaker at the Gallie Pond field site during the Lillooet Basin field trip (courtesy of Phil Owens).



Figure 4: Impression of the upper Lillooet Basin, flying in by helicopter (courtesy of Detlef Holberg).



Figure 5: "But Aaron, it's not square!"

BGRG Executive Committee member David Favis-Mortlock (Queens University Belfast) and Prof. Aaron Yair, Hebrew University, mapping microtopography in the Zin Valley Badlands, northern Negev, Israel, in March 2004. The final proof that Dave is doing field work!

Photo courtesy of Nikolaus Kuhn, University of Exeter



## Review of the Postgraduate Workshop on Contaminated Sediments (May 25th and 26th).

The informal workshop, led by Kevin Taylor (MMU) and Phil Owens (NSRI, Cranfield) provided a well-structured and informative introduction to the subject of contaminated sediments. The ~18 postgraduates that attended the 2 day event were from very diverse backgrounds and had travelled from all corners of the UK. We were all richly rewarded with a variety of presentations, interactive exercises and a field excursion.

After the obligatory delegate introduction thought moved onto the drivers of the workshop. Initially the relevant directives and the Soil Thematic Strategy were discussed and placed in context, this was especially useful to those of us with limited

knowledge of the field. After coffee it was full throttle into contaminated sediments, the sources of contaminants and sediments and the different ways in which they are traced and modelled. The afternoon session covered the interactions between contaminants and sediments and the long and short-term mobility of the contaminants. The focus then shifted to the management of contaminated sediments.

As is customary at these events there was a social in the evening, entailing a meal at a local restaurant and then out in Manchester. Several of the delegates managed to make it to one of many late night bars, getting home in the early hours. Rumour has it that some stalwarts then managed to catch the repeated highlights of the Monaco grand prix!



Figure 6: Discussions in the field.

The second day showed no let up in the material coverage, sore heads were no excuse. The morning session again covered sediment management (this time in more depth) and the different elements of the source-pathway-receptor idea. Finally the remediation methods for both in situ and ex situ treatment were covered. Examples were given to draw attention to the extent of the problem faced by some areas and the vast costs

involved in some of the sediment clean up projects.

At lot of the work performed by the workshop leaders focuses on the Manchester Ship Canal and the Salford Quays, therefore after lunch the group spent an hour or so at Salford Quays where Kevin and Phil highlighted areas on interest. Pointing out the remediation methods used at present and the effect these have had in the past. Management issues of the

Salford Quays were discussed in context as specific items were highlighted on the visit. Surprisingly the weather was kind and the fresh air did a few hangovers the world of good.

Figure 7: Oxygen injection into Salford Quays.



Speaking as someone new to this sphere of sediments the workshop provided an introduction to the main ideas and theories, and coupled with the continual citing of examples to highlight specific points, this proved a suitably mix that allowed the concepts introduced to be understood with comparative ease. The workshop was a great success and all attendees agreed that the time spent at the event was worth while. The two days provided an excellent opportunity for everyone to discuss ideas in a very friendly, warm and relaxed atmosphere. PhD experiences were passed down from those in the later stages to those who had just set out. Thanks should be passed along to Kevin Taylor, Phil Owens and their postgraduates in making this workshop informative and very successful.

*Aaron Lockwood (formally at Leeds University), now at Westlakes Scientific Consulting.*

# MISCELLANY

## Thesis abstracts

### 'Morphological and process dynamics of the Lower Mississippi River'

Oliver P. Harmar

School of Geography, University of Nottingham,

During the twentieth century, the geomorphology of the Lower Mississippi River has been transformed by a series of engineering modifications to improve flood control and aid navigation. These have included steepening of the long profile by removal of the most sinuous bends, fixing the river to a constant planform through extensive bank stabilisation, and regulating sediment movement through the channel system by dike field construction.

Morphological analysis over successive ten-year periods reveals that the river has responded to engineering intervention at two principal spatial scales: at the reach-scale by vertical changes in the elevation of the channel bed; and at the sub-reach scale by increasing large-scale bedform resistance through longitudinal and cross-sectional adjustments. Prior to these modifications, the Lower Mississippi River adjusted its planform to satisfy large-scale flow resistance requirements. However, this mode of adjustment has now been effectively removed. At shorter timescales, analysis of morphological and process dynamics in individual sub-reaches and cross sections indicates that the Lower Mississippi River also adjusts its characteristic pool-crossing configuration, again in association with stage-dependent changes in flow resistance. Hence, complex, spatially-distributed feedbacks operate over multiple scales of channel morphology, and longer-term morphological behaviour cannot simply be approached by scaling-up from shorter term dynamics.

These changes have general significance in terms of research design because detecting the complexity at each scale of adjustment, and forming linkages between scales of adjustment, is dependent upon taking into account all possible degrees of freedom, and developing a range of suitable analytical techniques. The Lower Mississippi provides an ideal, large-scale opportunity to demonstrate and refine concepts of the alluvial channel system because of the strength of the available data record, and to improve management practices for a range of navigation and flood control purposes.

#### **BRITICE; a map & GIS database of landforms related to the last British ice sheet.**

We have produced a 'Glacial Map' for Britain and an accompanying GIS database. The compilation was produced by reviewing over 1000 publications of the academic literature and British Geological Survey mapping. Relevant data were extracted from these and digitised and entered into a GIS. The map and a paper detailing its compilation are to be published in *Boreas* in late 2004. PDF copies of the map (north and south sheet) are available for academic use and the GIS layers can be freely downloaded from: [http://www.shef.ac.uk/geography/staff/clark\\_chris/britice/index.html](http://www.shef.ac.uk/geography/staff/clark_chris/britice/index.html)

Emphasis is on information that constrains the last ice sheet. The following are included: moraines; esker; drumlins; melt-water channels; tunnel valleys; trimlines; limit of key glacial deposits; glaciolacustrine deposits; ice-dammed lakes; erratic dispersal patterns; shelf-edge fans and the Loch Lomond Readvance limit of the main ice cap. The GIS contains over 20,000 features split into thematic layers (as above). Individual features are attributed such that they can be traced back to their published sources. It is hoped that this compilation will:

- Stimulate greater scrutiny of published glacial landform data;
- Assist in palaeo-glaciological reconstructions of the ice sheet;
- Facilitate use of field-evidence in numerical ice sheet modelling & d) Help direct field-workers in their future investigations.

The paper and printed map (ca. 2 x 1 m in size and at 1:625 000) can be found in *Boreas* and should be cited as: Clark, C.D., Evans, D.J.A., Khatwa, A., Bradwell, T., Jordan, C.J., Marsh, S.H., Mitchell, W.A. and Bateman, M.D. (2004) Map and GIS database of landforms and features related to the last British Ice Sheet. *Boreas* 33 (4).

Chris Clark, Department of Geography, University of Sheffield.

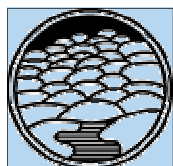
#### **University of Glasgow Centre for Geosciences**

The Glasgow Department of Geography & Geomatics and Division of Earth Sciences have formed a research-driven alliance known as the Centre for Geosciences. The aim of the Centre is to create the grouping of academics & support staff required to address a range of geoscience (geographical, earth science & environmental) research questions in Earth surface & near-surface processes, & Earth history & human occupation. A major objective is to exploit the world-class analytical & geochronology facilities at the Scottish Universities Environmental Research Centre (SUERC) in nearby East Kilbride.

Recent highlights for the Centre for Geosciences include:

- 3 SRIF2 infrastructural projects: construction of University of Glasgow cosmogenic isotope analysis preparation facility at SUERC; installation of an Environmental SEM in the Earth Sciences Building; & refurbishment of part of Geography & Geomatics to include a Digital Geosciences Centre.
- Successful joint Glasgow-Edinburgh-SUERC(NERC Radiocarbon Lab) bid to the recent NERC Capital Equipment Competition for a dedicated 'small' AMS system for carbon cycle science (£650k) (complementing the recently commissioned 'large' AMS system for cosmogenic isotope analyses & routine radiocarbon analyses (£3.9M));
- Appointment and/or commencement of 3 new academic staff in the last few months: Dr Rhian Thomas (fluvial geomorphology) in Geography & Geomatics, Professor Roderick Brown (thermochronology and landscape evolution) in Earth Sciences, and Dr Zoë Shipton (structural geology & neotectonics) also in Earth Sciences. Dr Susan Waldron has also joined us, transferring her NERC Advanced Fellowship from SUERC to the Department of Geography & Geomatics.

Paul Bishop, Professor of Physical Geography & Chair of the Centre for Geosciences Research Committee, University of Glasgow



### Grants Available From the B.G.R.G.

The B.G.R.G. runs a range of different grant programmes spanning research and education initiatives and conference travel. Full details of eligibility, and application forms are available on the B.G.R.G. Website at <http://www.bgrg.org/> The main categories of grant available are:

#### Research Grants:

Funds are available to contribute to small projects or specific costs of research. These grants are available to all non-postgraduate members of the B.G.R.G. and are judged on their scientific merit. Maximum £1000

#### Postgraduate Research Funds:

Funds available to all postgraduate members registered for a higher degree. They are primarily to support students who do not receive full funding, or where an opportunity has arisen to add value to an existing PhD programme. Maximum £500

#### Postgraduate Conference Fund:

This fund assists postgraduate members in presenting a paper or poster at a conference and is intended to cover part of the total cost of registration, accommodation and travel.

#### B.G.R.G. Fixed Term Working Groups:

The B.G.R.G. funds up to three working groups at one time to enable members to meet to discuss specific topic areas Funding up to £500/year

#### Long Term Geomorphological Monitoring:

Aims to supply small sums (up to £200 pa) to support individuals to maintain long term monitoring sites (at least 10 years)

#### Promotion of Geomorphology in Schools

Grants of up to £500 for projects involving school teachers and pupils that will raise the profile of Geomorphology in schools

#### Task forces to develop proposals for major research projects

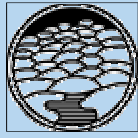
Funding of up to £1000 available for groups of members aiming to develop major proposals for submission to external funding bodies.

### New Grants

Institution:	Funder:	Amount:	Holders:
Portsmouth	EU FP6 Global Change Programme	EU950,000	J Hooke et al.
Leeds	Moors for the future	£10,000	J Holden et al.,
Leeds	NERC & English Heritage	£11,200	J Holden et al.,
Leeds	NERC & ESRC	£49,000	J Holden et al.,
Leeds	Environment Agency	£10,000	J Holden et al.,
Leeds	British Council	£600	C Keylock
Leeds	Leverhulme	£20,993	O Phillips
Leeds	Japanese Society for promotion of science	£6000	C Keylock
Swansea	EU	€157,500	S. Doerr et al

### New Appointments / Promotions

Institution	Name	Position	From	Previous position
Portsmouth	P Sandercock	Research Fellow	U. W Australia	
Leicester	A Boom	Lecturer	Munich	Research Fellow
Leicester	R Marchant	Lecturer	Dublin	Research Fellow
Leeds	J Holden	Lecturer		Research Fellow
Leeds	R Nawaz	lecturer	Hull	PDRA
Leeds	J Lloyd	Chair	Max Planck	Professor
Leeds	D Ripplin	R. S.	Bristol	R.S.
Leeds	K. Arrell	Lecturer	Durham	PhD
Leeds	L See	Senior Lecturer	Leeds	Lecturer
Leeds	S Lewis	R. S. Fellow	Leeds	PDRA
Leeds	T Murray	Chair	Leeds	Reader
Durham	R. Ferguson	Professor	Sheffield	Professor
Durham	S. Lane	Professor	Leeds	Professor
Durham	R. Hardy	Lecturer	Leeds	
Durham	D. Evans	Reader	Glasgow	
Durham	C. O'Cofaigh	Lecturer	Bristol	
Oxford	G. Wiggs	Lecturer	Sheffield	Reader



## Diary

### Events convened / supported by the BGRG

Date	Conference	Location	Contact
<b>2004</b>			
Dec 13-14	Mapping hazardous terrain using remote sensing	London	Richard.Teeuw@port.ac.uk
<b>2005</b>			
Feb 2-4	Drylands: linking landscape processes to sedimentary environments	London	drylands.2005@lboro.ac.uk

### Events convened by organisations other than the BGRG

Date	Conference	Location	Contact
<b>2004</b>			
23 Nov	Isotope Studies of Palaeoclimate through geological time		caar@nigl.nerc.ac.uk
<b>2005</b>			
Jan	QRA Annual Discussion Meeting—Ancient Human Occupation of Britain	London	s.lewis@qmw.ac.uk
4-6 Jan	SWAPNET	Portsmouth	Derek.mottershead@port.ac.uk
5-9 April	QRA/IQUA Field meeting	W. Ireland	pcoxon@tcd.ie
23-27 Aug	Glacial Sedimentary Processes & products	Wales	mjh@aber.ac.uk
7-11 Sept	6th International Conference on Geomorphology	Zaragoza, Spain	iag2005@unizar.es

## JOINING THE BRITISH GEOMORPHOLOGICAL RESEARCH GROUP

### Why join the BGRG?

- Contact with a world-wide body of geomorphologists;
- Geophemera, the tri-annual newsletter of the BGRG containing news, views, reports, forthcoming conference announcements, registers of new students & grants and much, much more;
- access to a variety of research & conference funding opportunities; funds targeted directly at postgraduates;
- opportunities to attend fixed-term working groups on specific developments or topic areas within Geomorphology, postgraduate training workshops, conferences & field trips;
- discounted subscriptions to Earth Surface Processes & Landforms (£72) and other Journals – e.g. Hydrological Processes, Journal of Quaternary Science & Geomorphology.

### How do I join and how much does it cost?

Please print out a membership form from the BGRG website, complete the form, & send it to the BGRG Administrator (Christine James) together with your subscription. The form will be used both as a record of your wish to take up membership of the BGRG & to establish a computerised database of members. The information will be used in the strictest confidence (under the Data Protection Act) all members will have access to their own records on request. The annual subscription rate to the BGRG is £20 for full membership (or £50 for five years for overseas members). Unwaged, fulltime students & retired members pay £8 per year whilst postgraduate students may pay £20 for a three-year membership, commencing at the beginning of their research project. Subscriptions may be paid by standing order (by completing the form from the website & sending to your bank & the BGRG Administrator), cheque, or money order. Administration costs can be reduced if members pay by standing order. Cheques should be made payable to the British Geomorphological Research Group & made out in pounds sterling. Other currencies cannot be accepted.