



Quaternary Research Association

Minutes of the 47th Annual General Meeting of the Quaternary Research Association held at the Beaulieu Hotel, New Forest on 4th January 2012 at 1745 hours.

The Vice-President, Professor David Evans chaired the meeting, which was attended by 44 members of the Association:

Siwan Davies, Mary Gagen, Ian Candy, Keith Barber, Antony Long, Chris Caseldine, Jane hart, Michael Grant, Jane Bunting, Peter Allen, Trevor Faulkner, John Catt, Mary Edwards, William Gosling, John Dearing, Hazel Reade, Fiona Murphy (Wiley-Blackwell), Frank Mayle, Harry Langford, Eliza Cook, Samantha Allcock, Colin Whiteman, Xavier Panades I Blas, Paul Hughes, Danni Pearce, Sven Lukas, Simon Lewis, Charlotte Bryant, Danielle Schreve, Peter Morgan, Gareth Tye, Tim Lane, Kathryn Adamson, Jennifer Sherriff, John Gordon, Max Barton, Buba Apagu Ankidawa, Eleanor Brown, Jim Rose, Rupert Housley, Erin McClymont, Simon Blockley, Christine Lane, Peter Langdon (minutes).

1. Welcome and apologies for absence

The Vice-President welcomed members to the meeting. Apologies were received from Dan Charman, James Scourse, Cynthia Burek, Richard Waller, Barbara Silva, Emrys Phillips and Marcus Hatch.

The Vice-President noted that the Association had lost some important members of the Quaternary community during 2011, in particular the Honorary Members who had died over the last year including Russell Coope, Richard Hey, and John Hutchinson, and a minute's silence was held to remember them.

2. Minutes of the 46th Annual General Meeting

These were accepted as a correct record of the meeting.

3. Matters arising from the minutes

There were no matters arising from the minutes.

4. President's report (presented by the Vice-President)

a) INQUA 2011

The 18th INQUA Congress in Bern during July was widely held to be a success and QRA members again made a huge contribution to it. It is worth noting that the UK had 277 delegates, more than any other nation (out of a total attendance of c. 2000). Over 40 QRA members were financially assisted by the QRA (more details in the Awards Officer's report). The President has written to the INQUA organisers to thank them on behalf of the QRA. Besides the scientific sessions, INQUA Council met on three occasions during the Congress. Four items are worth briefly noting here:

- 1) Three new members were elected into INQUA; Ukraine, West Africa and Belarus.
- 2) Margaret Avery is the new INQUA President and one of her aims is to push further the operations of the commissions and develop their links with national members, particularly noting the monies that can be bid for through the commissions.
- 3) The QRA nominated John Lowe to stay on as an INQUA Vice-President and Jim Rose as an honorary member of INQUA. Both nominations were successful.
- 4) The next INQUA meeting will be in Japan in 2015.

b) QRA Constitution and affiliations with GeolSoc and RGS-IBG

The previous President reported on our affiliation with RGS-IBG at the last AGM. During this year we have also been negotiating closer links with the Geological Society of London. We have had no formal links with the Geological Society since the dissolution of the rather unsatisfactory Joint Association for Quaternary Research a few years ago. The new arrangement is far less bureaucratic but has the same intellectual and practical benefits that we had previously of being involved with Geological Society affairs and of being able to make use of their facilities. To formalise the links with Geological Society and RGS-IBG, the Executive Committee proposed a revised constitution for the members to approve formally at the AGM. The revision is mostly structural to improve clarity, but is also designed to formalise the closer relationship with the Geological Society and the Royal Geographical Society/Institute of British Geographers. The substance of the constitution is unchanged and does not diminish the independence of the QRA. An email was sent to all members in December and a copy of the existing and proposed revision to the constitution was included in the most recent circular with an invitation to members to comment. Members were asked for any comments on the revised proposal and there were none. A vote was taken and the new constitution was approved.

c) New radiocarbon award

The President announced a new donation and ongoing commitment to the Association from the CHRONO Centre at Queen's University, Belfast. As Director, Paula Reimer has written to the QRA offering an annual QRA award of 10 radiocarbon dates per year, similar in arrangement to the current QRA luminescence award. The details of the award will be made available via the QRA website and the President thanked the CHRONO Centre for their generous contribution to the QRA awards.

5. Honorary Members of the QRA

The Vice-President announced that two members had been nominated by the Executive Committee for Honorary Member status: Doug Harkness (SUERC) and Brian Moorlock (BGS). These nominations were accepted unanimously by the membership and were announced the following day at the meeting with a citation that will subsequently appear in QN.

6. Annual Report of the Secretary

This report covers the period January - December 2011.

a) Membership

Total membership of the Association stands at **1135**, our highest membership in recent years.

| Census date Category | 29/3/06 | 29/3/07 | 01/01/08 | 01/01/09 | 14/12/09 | 21/12/10 | 19/12/11 | Change (10-11) |
|---------------------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------------|
| Ordinary Members | 599 | 562 | 573 | 545 | 564 | 575 | 581 | +6 |
| Postgraduate Members | 231 | 223 | 269 | 269 | 247 | 275 | 331 | +56 |
| Unwaged/Retired Members | 126 | 131 | 137 | 140 | 145 | 145 | 149 | +4 |
| Honorary members | 15 | 16 | 19 | 22 | 26 | 28 | 28 | 0 |
| Institutional members* | 40 | 36 | 41 | 33 | 33 | 29 | 29 | 0 |
| Corresponding members | 14 | 14 | 14 | 16 | 15 | 19 | 19 | 0 |
| Total Membership | 1025 | 982 | 1053 | 1025 | 1030 | 1071 | 1137 | +66 |

*Includes copyright member

Subscriptions for 2011 were unchanged at £20, with a reduced rate of £10 for students and unwaged members. The institutional membership rate is £35. The majority of the current membership now pays by standing order, the rest by cheque, credit card, bank transfer or bacs. Val Siviter, the QRA's administrator deals with management of the membership database. On behalf of the QRA I would like to thank Val for her continuing hard work for the Association.

Honorary Members

Two distinguished scientists were elected as Honorary Members of the Quaternary Research Association at its AGM, held in Liverpool in January 2011; Professor Valerie Hall (Queen's, Belfast), and Professor Ann Wintle (Aberystwyth). Citations were published in *Quaternary Newsletter*, number 123 (February 2011). A list of Honorary Members of the QRA can be found on the website: www.qra.org.uk

b) Meetings

i) Annual Discussion Meeting: Palaeohydrology: learning lessons from the past 4-6th January 2011.

Organiser: Fabienne Marret. Report: *Quaternary Newsletter*, no. 124 (June 2011)

ii) Field Meeting: Quaternary of the Exe Catchment and the Blackdown Hills 18-20th April 2011
Organisers: Laura Basell and Tony Brown.

iii) 16th Annual QRA Postgraduate Symposium, 30th August-1st September 2011
University of Durham, Organisers: Vicky Brown & Ed Garrett

iv) Field meeting/workshop: Glaciotectonics/Norfolk 11-16th Sept 2011.
Organisers: Emrys Phillips & Jon Lee

The QRA also co-sponsored four events in 2011:

i) AGU Chapman Conference on Climates, Past Landscapes, and Civilizations 21-25th March, 2011 (no sponsorship money required) Santa Fe, New Mexico, USA, Organiser: Peter Clift

ii) EGU session "Cold Regions Geomorphology" April 2011 (no sponsorship money awarded)
Vienna, Organiser: Sven Lukas

iii) The Geologists' Association- Geoconservation for Science and Society: An Agenda for the 21st Century, 9-10th September 2011 (£500 sponsorship awarded)
University of Worcester, Organisers: David Bridgland & Eleanor Brown

iv) Marine Tephrochronology, November 2011 (£500 sponsorship awarded)
Burlington House, Geol Soc, Organiser: Bill Austin

The **John Wiley Lecture** for 2011 was delivered during the Annual Discussion Meeting at the University of Liverpool by Guillaume St Onge (Institut des sciences de la mer de Rimouski (ISMER) and GEOTEP) on "*Evidence of Lake Agassiz-Ojibway final outburst flood Eastern Canada*".

The Executive Committee extends its thanks to the many people who organised meetings, supported the meetings through their participation, and who reported on these activities in *QN* for the information of the wider membership.

c) Publications

Quaternary Newsletter:

3 issues: 123 (Feb 2011), 124 (June 2011), 125 (October 2011)
Editor: Dr Mark Bateman (University of Sheffield)

Journal of Quaternary Science (<http://www3.interscience.wiley.com/journal/2507/home>)
Volume 26, 8 issues, containing 85 research papers (including 9 rapid communications).
Editor: Professor Antony Long (University of Durham)

QRA Field Guides

Two field guides were published in 2011: *The Quaternary of the Exe Valley and Adjoining Areas* (Basell et al.) and *Glaciotectonics Field Guide* (Phillips, Lee & Evans) were produced to accompany QRA field meetings in 2011.

The publication of field and technical guides continues to form an important part of the Association's activities and play a major role in raising the profile of the QRA and promoting Quaternary science research. Suggestions for topics for new technical guides or localities for field meetings and accompanying guide books and volunteers to write/edit them are most welcome.

See the Publications Secretary's report for further details.

d) QRA Grants and Awards

During 2011, **£35,480** was disbursed by the QRA to its members under its awards schemes.

| Fund | No. of applications | | No. funded | Total monies requested (£) | Total monies awarded (£) | % funded ¹ |
|--------------------|---------------------|-----------|------------|----------------------------|--------------------------|-----------------------|
| | | | | | | |
| NRWA | Jan | 8 | 8 | 3955 | 3370 | 85 |
| | May | 5 | 5 | 3000 | 2650 | 88 |
| | Sept | 4 | 4 | 2424 | 1970 | 81 |
| | Total | 17 | 17 | 9379 | 7990 | 85 |
| QCF | Jan | 6 | 5 | 1673 | 1525 | 91 |
| | May | 2 | 1 | 700 | 330 | 47 |
| | Sept | 2 | 2 | 802.19 | 560 | 70 |
| | Total | 10 | 8 | 3175.19 | 2415 | 76 |
| QRF | Jan | 6 | 6 | 3040 | 2165 | 71 |
| | May | 3 | 3 | 1762 | 1590 | 90 |
| | Sept | 5 | 4 | 2086.6 | 1825 | 87 |
| | Total | 14 | 13 | 6888.6 | 5580 | 81 |
| | | | | | | |
| Subtotal | 41 | | 38 | 19442.79 | 15985 | 82 |
| | | | | | | |
| ADM 12 | 7 | | 7 | 1015 | 1015 | 100 |
| FM 12 | 0 | | 0 | 0 | 0 | |
| Bishop | 2 | | 1 | 1548 | 800 | 52 |
| RLAHA | 0 | | 0 | — | — | - |
| C14 Bursary | 5 | | 3 | - | - | - |
| Penny 11 | 3 | | 2 | - | 200 | - |
| Croll 11 | 1 | | 1 | - | - | - |
| | | | | | | |
| INQUA 2011 | 87 | | 38 | 70,006 | 17,480 | 25 |
| Total | 147 | | 89 | 92971.79 | 35480 | 38 |

¹ Refers only to eligible applications

Special grants

The **Bill Bishop Award** was awarded to Ginny Benardout (Queen Mary) who requested assistance to undertake a palaeoenvironmental investigation of MIS 11 lake sediments at Marks Tey, Essex.

QRA Prizes

Drs Ian Candy (Royal Holloway) and Sven Lukas (Queen Mary) have been awarded **Lewis Penny medals**.

Professor Chris Stringer (Natural History Museum) has been awarded the **James Croll 2011 medal**.

INQUA 2011

Thirty eight awards were made to members to fund their attendance of the XVIII INQUA Congress in Bern. 87 applicants were received totalling £70,006 funding. Royal Society funding amounted to £16,000 and an additional £3000 was cleared for INQUA, following consultation with the Executive.

Applications for funding were as follows:

| Total requested by category | Amount requested | Number of applications | Applicants awarded | Amount awarded |
|------------------------------------|-------------------------|-------------------------------|--|-----------------------|
| Total Requested Prof. | £6,403 | 8 | 4 | £1840 |
| Total Requested SL/Reader | £7,336 | 9 | 5 | £2300 |
| Total Requested Lec. | £18,460 | 22 | 11 (1 removed from eligibility due to receiving RS funding) | £5060 |
| Total Requested PhD. | £12,271 | 14 | 5 (4 removed from eligibility due to receiving RS funding) | £2300 |
| Total Requested PG. | £22,300 | 29 | 14 (1 removed from eligibility due to receiving RS funding) | £6440 |
| Total Requested Other | £3,236 | 5 | 2 | £920 |
| Totals | £70,006 | 87 | 41 | £18,860 |

In order to derive a fair assessment system for judging applications points were awarded taking into consideration all aspects of the application material. Points were awarded for:

- 1. Presenting a first paper**
- 2. Presenting a first poster**
- 3. Presenting an additional paper or poster**
- 4. Convening a session**
- 5. Qualitative criteria: Value for money and overall strength of application –**

Applications were separated by category and points awarded using the above criteria. In each category a bar was set whereby the upper 50% of applications were funded. The points bars were as follows:

| Category | <u>Mean points allocation</u> |
|------------------|--------------------------------------|
| Prof | 8 |
| SL/Reader | 8 |

| | |
|------------------|----------|
| Lecturer | 6 |
| Postdoc. | 4 |
| Postgrad. | 4 |
| Other | 7 |

In total 41 people were offered £460 each. Due to personal circumstances, three were unable to attend the Congress and declined the award (there was insufficient time to re-allocate the funds).

| | |
|-------------------------------------|------------------|
| <u>Results</u> | |
| Total applications received | 87 |
| Not awarded a grant from QRA | 46 |
| <u>Awarded grant</u> | <u>41</u> |

Full details of all QRA grants and awards are available on the QRA website:

<http://www.qra.org.uk/grants>

AWARDS 2011

| NRWA | | | Awarded (£) |
|-----------------------|----------------|--|-------------|
| Thomas Bishop | Southampton | Itrex (x-ray fluorescence) scanning of lake sediments from Chilean Patagonia. | 425 |
| Rory Clisby | Swansea | Does CO2 fertilisation affect climate reconstructions using dendrochronological data from Californian bristlecone pines? | 500 |
| Robert Davis | Reading | New investigations of the Bournemouth Terraces | 475 |
| Ed Garrett | Durham | Late Holocene perspectives on the seismic segmentation of the Chilean subduction zone | 400 |
| William Hughes | Queen Mary | Reconstruction of Younger Dryas glaciers in the Lochnagar area, Scottish Highlands | 310 |
| Lisa Orme | Exeter | The North Atlantic Oscillation (NAO) and storminess in the Late Holocene. | 310 |
| Adam Trueman | Newcastle | Landscape Evolution Model (LEM) used to assess drainage evolution of the Gediz River system in western Turkey | 350 |
| Amy Prendergast | Cambridge | Late Quaternary seasonality in North Africa: isotopic analysis of molluscs | 600 |
| Robyn Inglis | Cambridge | Early modern human behavioural responses to marginal landscapes: Middle Stone Age geoarchaeology in highland Lesotho | 530 |
| Robert Barnett | Plymouth | Postglacial relative sea-level change in Arctic Norway | 530 |
| Lucy Flower | Royal Holloway | To visit Somerset County Museum, Taunton, Torquay Museum and Wells Museum in order to measure, describe morphology and photograph wolf teeth, cranial and post cranial material from important cave sites in the south west of Britain | 530 |
| Sarah-Jane Phelan | Exeter | The quantification of the impact of climate change on landscape evolution as mediated by plant community dynamics | 530 |
| Kelly Louise Ann Ross | Keele | Holocene sea-level change in the Dyfi estuary, west Wales, UK | 530 |
| Emma Gatti | Cambridge | Innovative geochemical approach to determine the aggradation time-scale of tephra in fluvial hydrological contexts | 500 |
| Alessa Geiger | Glasgow | Thickness constraints of the Patagonian Ice Sheet over the last glacial cycle using in situ produced surface exposure dating | 500 |
| Matthew Standell | Loughborough | The pattern and timing of deglaciation in the Eastern Highlands, Scotland | 500 |
| Joseph Pomeroy | Loughborough | The character and extent of subglacial deformation in the Tarfala basin, northern Sweden | 470 |
| QCF | | | |
| Clare Boston | Queen Mary | EGU General Assembly 2011, Vienna. | 300 |
| Tim Daley | Plymouth | EGU General Assembly 2011, Vienna | 325 |
| Julie Durcan | Aberystwyth | 13th International Conference on Luminescence and Electron Spin Resonance Dating (LED 2011); Torun, Poland | 300 |
| Matteo Spagnolo | Aberdeen | EGU General Assembly 2011, Vienna. | 300 |
| Lorna Linch | Queen Mary | 2011 Ice Scour Workshop: Impact of Climate Change on Ice Scouring/Gouging Processes in Sea-Ice Regimes of the Canadian and U.S. Beaufort and Chukchi Shelves | 300 |
| Rosemary Stirling | Aberystwyth | International Conference on Luminescence and Electron Spin Resonance Dating - Nicolaus Copernicus University, Toruń, Poland. | 330 |
| Kate Smith | Edinburgh | Nordic Geological Winter Meeting, Reykjavik January 2012 | 280 |
| Francis Mayle | Edinburgh | QRA Annual Discussion Meeting 2012 | 280 |
| QRF | | | |
| John Hiemstra | Swansea | The extent and chronology of the last Scottish Ice Sheet: testing the Atlantic Shelf model on St Kilda | 515 |
| Phillip Hughes | Manchester | Glacial geomorphological research in the Călimani Mountains, Transylvanian Alps, Romania. | 450 |
| Neil Loader | Swansea | Sample collection of natural growth native Scots Pine trees (Pinus sylvestris L.) from the Cairngorms, NE Scotland for dendrochemical analysis | 300 |
| Suzanne Palmer | Chester | Late-Holocene records of marine washover events from coastal lagoons in Jamaica, West Indies | 300 |
| Tim van der Schriek | Newcastle | Palaeo lake Prespa: evaluating past lake level change using geomorphological stage indicators | 300 |
| Amanda Williams | Chester | Contribution towards costs for 2-week field-expedition to Jostedal ice cap, Norway | 300 |
| Mick Frogley | Sussex | Rapid Holocene climate change: evidence from the Balkans | 530 |

| | | | |
|-------------------------------|--------------------------------|--|-----|
| Claire Twiddle | Aberdeen | Reconstructing 8000 years of Environment and Landscape change In the Cairngorms. | 530 |
| Mary Gagen | Swansea | Developing high-resolution palaeoclimate records from tropical trees using stable isotope dendroclimatology | 530 |
| Tony Brown | Southampton | Fluvial Terraces of the Kagera River and Pleistocene History of Lake Victoria | 500 |
| Matt Telfer | Plymouth | Dating of interglacial raised beach sediment of Godrevy, west Cornwall. Field and laboratory costs associated with providing age constraint for the Godrevy formation raised beach sediments, west Cornwall | 500 |
| Eline van Asperen | Liverpool John Moores | Faunal dynamics in the later Pleistocene – investigating competition between forest rhinos and steppe rhinos | 325 |
| Geoff Smith | Independent | Did Neanderthals hunt mammoths on Jersey? A reinvestigation of the 'bone heaps' from La Cotte de St Brelade. | 500 |
| PMA (ADM 2012) | | | |
| Samantha Allcock | Plymouth | Regional integration of lake sediment and archaeological archives: Holocene climate variability and socio-evolutionary pathways in Cappadocia, central Turkey. | 145 |
| Buba Apagu Anikdawa | Brunel | Determination of the Suitability of Hand Drilling for Water Abstraction in Lowland Areas of Yola, Adamawa State, Nigeria | 145 |
| Safiyeh Haghani | Brunel | Preliminary sampling and coring in wetlands and lakes in Northern Iran: results from a first field campaign | 145 |
| Jennifer Sherriff | Royal Holloway | The climatic structure of the latter stages of Marine Isotope Stage 11: Examples from Britain | 145 |
| Gareth Tye | Royal Holloway | An annually resolved climate record for the closest analogue to the Holocene | 145 |
| Eliza Cook | Swansea | Tracing and constraining LGIT tephras within the NEEM and NGRIP records | 145 |
| Faith Cairns | Bath Spa | | 145 |
| BILL BISHOP | | | |
| Ginny Benardout | Queen Mary | A palaeoenvironmental investigation of MIS 11 lake sediments at Marks Tey, Essex | |
| C14 BURSARY | | | |
| Mark Grosvenor | Exeter | Early human occupation of Cumbria, Northwest England during the mid-Holocene | |
| | | | |
| Thomas Bishop | Southampton | Regional temporal variations in temperature and moisture in Southern South America during the Lateglacial (c.17-12 ka BP) and early Holocene (c.12-8 ka BP) using chironomid and oxygen isotope analysis from lacustrine records | |
| Nicole Kahn | Pennsylvania, USA | Holocene sea-level change in the Thames River Estuary | |
| LEWIS PENNY MEDAL 2011 | | | |
| Ian Candy | Royal Holloway | | 100 |
| Sven Lukas | Queen Mary | | 100 |
| JAMES CROLL MEDAL 2011 | | | |
| Chris Stringer | Natural History Museum | | |
| INQUA 2011 | | | |
| Robert McCulloch | Stirling | | 460 |
| Philip Hughes | Manchester | | 460 |
| Jason Kirby | Liverpool John Moores | | 460 |
| Colm O'Cofaigh | Durham | | 460 |
| Anna Godlewska | Maria Curie-Skłodowska, Lublin | | 460 |
| Kathryn Adamson | Manchester | | 460 |
| Simon Armitage | Royal Holloway | | 460 |
| William Austin | St Andrews | | 460 |
| Philip Barratt | Queens Belfast | | 460 |
| Michael Bentley | Durham | | 460 |

| | | |
|----------------------|---------------------|-----|
| Clare Boston | Queen Mary | 460 |
| Becky Briant | Birkbeck | 460 |
| Jane Bunting | Hull | 460 |
| Siwan Davies | Swansea | 460 |
| Claire Gallant | Royal Holloway | 460 |
| Roland Gehrels | Plymouth | 460 |
| Michael Grant | Wessex Archaeol Ltd | 460 |
| Richard Gyllencreutz | Stockholm | 460 |
| Matthew Jones | Nottingham | 460 |
| Natalie Ludgate | Open | 460 |
| Sven Lukas | Queen Mary | 460 |
| William Marshall | Plymouth | 460 |
| Charlotte Miller | Open | 460 |
| | | |
| Alice Milner | UCL | 460 |
| Danni Pearce | Worcester | 460 |
| Benjamin Petrick | Newcastle | 460 |
| Amy Prendergast | Cambridge | 460 |
| Hazel Reade | Cambridge | 460 |
| Vincent Rinterknecht | St Andrews | 460 |
| | | |
| Natalie Russell | Royal Holloway | 460 |
| James Scourse | Bangor | 460 |
| Mark Tarplee | Queen Mary | 460 |
| David Vaughan-Hirsch | Southampton | 460 |
| Jessie Woodbridge | Plymouth | 460 |
| Iain Leighton | Swansea | 460 |
| Darren Jeffers | Oxford | 460 |
| Heather Channon | Queen Mary | 460 |
| Abi Stone | Oxford | 460 |

e) Research Groups and Study Groups

The Research Group scheme is designed to provide a small quantity of start-up funding over a three year period for specialist Quaternary research groups, with the aim to bring research communities together, foster communication and provide an opportunity for new research projects to be formulated. The scheme has launched a number of significant research collaborations. The QRA currently supports two research groups: GLWG and TIQS:

Glacial Landsystems Working Group (GLWG): GLWG is an informal working group which aims to act as a catalyst for research on palaeoglaciological reconstructions, focusing specifically on landform/sediment associations and their application to glaciated landscapes. The group organises a range of field meetings at various locations in glaciated Britain.

http://www.dur.ac.uk/geography/qec/research_groups/glwg/

Tephra in Quaternary Science (TIQS): Recent developments in tephrochronology have heralded a new wave of research initiatives that utilise it to tackle significant scientific issues which, hitherto,

have been unachievable with the traditional dating techniques. This group brings together individuals and groups with wide-ranging expertise in order to promote cross-group collaborations for optimising and advancing tephrochronology.

<http://www.swan.ac.uk/geography/Research/EnvironmentalDynamics/TephraInQuaternaryScienceTIQS/>

New proposals for research groups are invited at any time. Ideas and proposals for new research groups may be discussed with the Secretary. These will be put to the membership for approval at the Annual General Meeting.

Study Groups were established with the purpose of enabling small groups of researchers to be associated with the QRA. Study Groups do not receive any funding from the QRA. Anyone interested in forming such a group should contact the Secretary.

f) Outreach

As a registered charity outreach is an important part of our activities and David Anderson, our Outreach Officer continues to make considerable progress with this area of QRA activity. The outreach web pages are being continually improved and updated and now contains an 'on the map' feature plus many other aspects related to outreach (<http://qra.org.uk/outreach.htm>). David finishes his term of office at the AGM, and the Association thanks him for all his excellent efforts in really developing the Outreach activities.

QRA Undergraduate Dissertation Prize

This year there were 14 entries, which is really healthy for the prize. The winner was Richard Smith (Southampton) for his study "Surface sediment Chironomidae (Insecta: Diptera) Analysis and Their Potential Link to Methane Content within 30 Alaskan Lakes". An abstract of the winning dissertation will be published in a forthcoming *Quaternary Newsletter*. The Association wishes to thank the examiners Geoff Thomas and Colin Whiteman, and the continuing support of Catherine Souch and others at the RGS for the administration side of the prize. Geoff Thomas has completed his 3 year stint examining for the prize and so the Association will require a new examiner for next year.

Outreach co-sponsorship

The Association co-sponsored the GeoSuffolk 10th Anniversary volume to be published in 2012 which contains several Quaternary-related chapters.

National Curriculum for Geography

David Anderson was able to attend a consultation meeting at the RGS in November about RGS-IBG proposals to the government Department for Education as to what content should be included in a revised National Curriculum for Geography (to take effect from September 2013). David made a strong pitch for including the Ice Age and aspects of Quaternary science (such as longer-term climate and environmental changes) to be represented in the curriculum.

g) Executive Committee

Four members of the Executive committee complete their terms of office in January 2012.

Professor Mark Bateman (Editor Quaternary Newsletter)

Dr Fabienne Marret (Publicity Officer)

Dr David Anderson (Outreach Officer)

Professor Chris Turney (Ordinary Member)

The Executive Committee extends great thanks to both for their hard work and significant contributions they have made to the running of the Association throughout their periods in office.

We also welcomed a new postgraduate representative on to the Executive Committee in September, Danielle Pearce (Worcester), who will represent the QRA postgraduate community for the next two years.

h) Postgraduate activities

Postgraduate activities continue to be an important part of the activities of the Association. The annual postgraduate symposium series continued, with the 2011 event held at the University of Durham at the end of August. The meeting ran very well and a full write-up will appear in QN in 2012. Postgraduates are represented on the Executive Committee and make an important contribution to the Executive on behalf of the postgraduate community.

i) Publicity

The majority of Publicity work has been on the website this year and the Association is very grateful for all the excellent work Fabienne Marret has put into this in her last year on Executive Committee. Although there were some long delays at the start of the year (due to problems with our service provider- OsbourneBrook) the QRA website now has a much improved functionality. Key improvements include:

- i. A map function, which displays locations of field guides, meetings, talks, photos and resources with links to metadata.
- ii. An online store, through which you can buy QRA publications.
- iii. A large range of education resources available through our outreach pages.
- iv. A members directory where you can find members details. This includes a section for postgraduate members, including a postgraduate blog.

The database management of the website has also been improved and the QRA has produced an annual membership card which has been sent to each QRA member. This is necessary for any of the membership who wants to visit and use the facilities at the RGS, with whom we are now affiliated.

j) Conservation

The Conservation Officer, Cynthia Burek, has undertaken a range of activities to forward the understanding and raising awareness of the importance of Geoconservation to Quaternary Science:

- i. An article was written as requested and is to be published on this topic in the early New Year 2012 in Quaternary Newsletter.
- ii. A review article was also written on Norfolk's Earth Heritage – Valuing our Geodiversity by Tim Holt-Wilson for Quaternary Newsletter.
- iii. Continued attachment to the Irish Sea Conservation Zone Stakeholders Group to the completion of the work on 31st August 2011 allowed for certain features on the seabed to be named including Drumlins off the North West coast of Anglesey. This is a first as the features are actually named in the Science Advisory Panel recommendations to government. Recommendations to government for all 4 areas of the UK for geology and geomorphology from the final report can be viewed at:
<http://www.defra.gov.uk/publications/2011/11/15/pb13680-sap-mcz-assessment/>
- iv. A letter was sent to Chichester District Council on the Bracklesham Bay Beach management situation supporting the recommendation that geologists and geomorphologists should be allowed to visit the SSSI without hindrance from Kite surfers. Although this was primarily fossil hunting activities that were affected it was the principle that was in question. This was highlighted by both the GA and GeoconservationUK.
- v. Many conferences and research meetings have been attended and Conservation of Quaternary features was also highlighted in forthcoming media programmes to be presented by the BBC.

The Secretary's report was accepted by the membership.

7. Treasurer's Report

This Report covers the period 1 August 2010 to 31 July 2011

A deficit was anticipated and planned for. A similar deficit will occur every four years as we fund delegates to the INQUA conference. Money is set aside annually to meet this contingency.

a) Income

Income from membership subscriptions shows a decline to £15,362 (from £16,043). The figure is an under-representation in that the switch from payment from some members from credit card to PayPal was not smooth and some members were not able to pay within the financial year. The Association usually collects over £1000 by this means.

Royalties from Wiley rose by nearly £1253, to £43,055 (from £41,802), again a pleasing and welcome increase.

Banking interest has plummeted to £44 (from £80 last year).

The total income of £67,222 is a decrease of c.£3,000 (from £70,334), but when factors such as the delay in some subscription payments (above) and bank errors (below) are taken into account, the situation is stable.

b) Expenditure

Day-to-day running costs have reduced to £14,717 (from £16,879) due to lower postage costs and lower Executive Committee costs. The cost of running the Executive (travel, room hire) was £1638, which is approximately 2% of total expenditure.

Our usual support activities through grants, awards and sponsorship rose by £3,000 to £22,122 (from £19,071). It is notable that the QRA Conference Fund, designed to assist post-graduate members attend QRA meetings, again was not used during the financial year, though subsequently there has been a good take-up. Eligible members are encouraged to use this fund. In addition £18,449 was awarded to delegate to attend the INQUA Congress. £16,000 was initially allocated and further monies were released when the usual Royal Society grant did not come through.

No INQUA subscription needed to be paid this year as it had been forward-paid the previous year.

An item of £4,905.24 appears in the bank statements for 2009-10 and various items amounting to £1,879.92 in the year 2010-11. These are not relevant to the QRA's activities and the Treasurer is pursuing the matter with the Bank of Scotland. Although refunds have been promised, these have not materialised and the matter is still active.

c) Income vs Expenditure

Running income (£15,363) against running expenditure (£14,718) shows a welcome change to a positive balance.

Our running costs in relationship to membership income have much improved and the Treasurer proposed that subscription fees do not need to be increased.

| Quaternary Research Association (Registered Charity No. 262124) | | | | | | |
|---|---------------|------|--|------------------|------------------|-------------------|
| Income and expenditure on Treasurer's Account for 1 August 2010 - 31 July 2011. | | | | | | |
| | | | | £ | £ | |
| INCOME | | | | 2009 - 10 | 2010 - 11 | |
| Member subs (Treasurer's acct only) | | | | 14507.40 | 15362.80 | |
| Member subs (Publications acct only) | | | | 1536.00 | | |
| Total Running Income | | | | 16043.40 | 15362.80 | 15362.80 |
| Book sales | | | | 5440.65 | 3253.95 | |
| Total Publications Income | | | | 5440.65 | 3253.95 | 3253.95 |
| Surplus on Meetings | | | | 1916.52 | 500.00 | |
| Interest Received on Treasurer's + Publications accts | | | | 80.38 | 44.62 | |
| Royal Society: INQUA Subscription Support | | | | 4704.50 | 4292.00 | |
| Royal Society: support for delegates to INQUA Conf | | | | 0.00 | 0.00 | |
| Publisher's Royalties Received | | | | 41802.00 | 43055.00 | |
| Donations | | | | 346.44 | 346.44 | |
| Other income | | | | 0.00 | 338.98 | |
| Total Other Income | | | | 48849.84 | 48577.04 | 48577.04 |
| TOTAL INCOME | | | | 70333.89 | | 67193.79 |
| EXPENDITURE | | | | | | |
| Newsletter & Circular printing and postage | | | | 5857.80 | 6259.26 | |
| Admin support | | | | 6500.00 | 6000.00 | |
| Postage & stationery | | | | 1431.92 | 191.79 | |
| Executive Committee Costs | | | | 2459.18 | 1637.72 | |
| Insurance | | | | 630.00 | 630.00 | |
| Total Running Expenditure | | | | 16878.90 | 14718.77 | 14718.77 |
| Publications Account | | | | | | |
| Printing | | | | 3899.36 | 5485.00 | |
| Bank charges | | | | 417.64 | 529.19 | |
| Total Publications Expenditure | | | | 4317.00 | 6014.19 | 6014.19 |
| Grants/Awards/Support | | | | | | |
| Research Grants | NRWA | | | 5500.00 | 7165.00 | |
| | QRF | | | 4193.00 | 6450.00 | |
| | QCF | | | 4195.00 | 3155.00 | |
| | QRA Conf Fund | | | 0.00 | 0.00 | |
| Support for delegates to INQUA Congress, Australia | | | | 0.00 | 18449.00 | |
| C14 bursaries | | | | 0.00 | 641.25 | |
| Lewis Penny Award | | | | 0.00 | 244.70 | |
| Bill Bishop Memorial Fund Award (inc. bank transfer fee) | | | | 793.65 | 800.00 | |
| Postgraduate Conference | | | | 500.00 | 0.00 | |
| Postgraduate Meetings Award | | | | 0.00 | 0.00 | |
| Outreach - Undergraduate Dissertation Award | | | | 250.00 | 650.00 | |
| Outreach | | | | 1290.00 | 586.97 | |
| Sub-group support | | IBiS | | 0.00 | 0.00 | |
| | | GLWG | | 500.00 | 0.00 | |
| | | TIQS | | 0.00 | 500.00 | |
| Conference support/sponsorship | | | | 1850.00 | 1000.00 | |
| Total Grants/Awards/Support | | | | 19071.65 | 39641.92 | 39641.92 |
| Refund/reimbursement | | | | 0.00 | 140.00 | |
| Meetings expenditure | | | | 364.00 | 0.00 | |
| INQUA subscription | | | | 28515.92 | 0.00 | |
| Web Site costs | | | | 0.00 | 10557.38 | |
| Other expenditure | | | | 0.00 | 241.93 | |
| Medals - striking/engraving | | | | 0.00 | 5664.00 | |
| Total other expenditure | | | | 28879.92 | 16603.31 | 16603.31 |
| Bank errors | | | | 4905.24 | 1879.92 | 1879.92 |
| TOTAL EXPENDITURE ON BOTH ACCOUNTS | | | | 74025.71 | - | 78858.11 |
| NET SURPLUS(+)/DEFICIT(-) | | | | + 1186.42 | - | - 11664.32 |

d) Year-end financial status

At the end of July 2010, we held

£ 3,354.66 in our BoS Treasurer's Account,
£20,300.05 in the BoS Publications Account,
£ 7,508.51 in our HSBC Community Account,
£26,068.35 in the HSBC Manager's (savings) Account and
£30,000 .00 in an HSBC bond

We started the 2011-12` financial year with £99,021.72 (last year £98,915.89). The Treasurer indicated that we are in a sound situation financially.

£15,254.52 is held in trust for the Bill Bishop Awards. Further sums are ring-fenced: £5000 for the Lewis Penny Medal, £30,000 to meet any unexpected liabilities.

e) Future initiatives

The Treasurer reported that we have taken over a trust fund of £85,000 from the Royal Society, intended to support delegates attending the INQUA Congress. This sum will be invested partly to allow the capital sum to grow and partly to provided funding, in addition to the £16,000 already budgeted, for delegates to attend the four-yearly INQUA Congress.

The membership should note that we shall be starting the applications round for the next INQUA meeting shortly. We anticipate making £16,000 available to send delegates to the 2011 meeting, in addition to monies received from the Royal Society.

f) Auditing

The finances have been audited internally by Mr T. White, but await external auditing and are submitted to this meeting subject to the approval of the external auditor.

g) Assets and Liabilities at 31 July 2011

ASSETS

31 July 2010

£ 19,546.11 Bank of Scotland Treasurer's Account
17,303.66 Bank of Scotland Publications Account
10,306.99 HSBC Community Account
51,759.13 HSBC Money Manager's (Savings) Account
HSBC Bond

£ 98,915.89 Total assets

31 July 2011

£ 3,354.66
20,300.05
7,508.51
26,068.35
30,000.00

£ 87,231.57

LIABILITIES

£ 3,663.02 Uncashed cheques

£ 3,663.02 Total liabilities

£ 4,309.65

£ 4,309.65

NET ASSETS

£ 83,391.37 Unrestricted
15,524.52 Restricted

£ 98,915.89 TOTAL NET ASSETS

£ 71,707.05
15,254.52

£ 87,231.57

The Treasurer's report was accepted by the membership.

8. Publications Secretary Report

- a) *QRA Guide Sales* - See Attached Table (Guides listed as grey mean sold out).
- b) *QRA Field Guide production 2011* – Two field guides were produced in 2011 (see below). Authors/Editors have been encouraged to use increasing amounts of colour particularly as the cost of colour production is becoming cheaper all the time. The Glaciotectonics Field/Technical guide had approximately 50 pages of colour and cost ca £3000 for 250 copies of a ca 260 page guide. The production quality is excellent and shows what can be achieved but still be affordable.

Basell et al “Exe Valley and Surrounding areas” (Spring field meeting)

Phillips et al “Glaciotectonics” (September short field meeting)

- c) *QRA Field Guide production 2012* – Currently field guides are planned for the first of the two scheduled field meetings for 201. The “Cumbria and Yorkshire Dales Field Meeting” joint with British Cave Research Association (BCRA) organised by Hannah O'Regan and Trevor Faulkner. Currently no discussion has been held with the organiser of the Iceland field meeting but IC will discuss the possibilities of a field guide in the next month
- d) *Technical Guides update – Fungal Spores* – A print ready version of this has now been supplied to IC (Jan 2012) and production should be late spring/summer 2012
- e) *History of the QRA* – As part of the 50 year anniversary Prof John Catt has been asked to produce a “History of the QRA” book. Prof Catt has produced a near complete draft but the QRA membership will be asked for contributions.
- f) *Digitisation* – 10 out of print field guides are in the process of being digitised. These have been delayed because of problems with the indexing of the chapters. This is currently being corrected and these should available online during spring 2012.
- g) *Next publications sub-committee* – The next meeting will be held at the end of Jan.

2010 - Sales

| | TOTAL | Current Stock |
|--|-------|---------------|
| Glacitectonics | 27 | 133 |
| Exe Valley & Adjoining area | 3 | 197 |
| Solway Lowlands & Pennine Escarpment | 3 | 184 |
| Western Sutherland and Adjacent area | 34 | 140 |
| The Trent Valley and Adjoining Regions | 12 | 150 |
| Solent Basin&W Sussex Raised Beaches | 15 | 139 |

| | | |
|---|-----------|------------|
| Northern East Anglia | 9 | 113 |
| Glen Roy & Vicinity | 12 | 124 |
| North of Ireland | 5 | 85 |
| Brecon Beacons | 15 | 184 |
| Quaternary of Somerset | 6 | 184 |
| The Isles of Scilly | 3 | 166 |
| Quaternary of Rossendale Forest & Gt. Manchester | 1 | 194 |
| Quaternary of Central Western Ireland | 3 | 87 |
| Nene Valley | 2 | 185 |
| Quaternary Mammals of S & E England | 4 | 89 |
| Central Grampian Highlands | 4 | 204 |
| Isle of Man & North West England | 8 | 209 |
| Glen Affric & Kintail | 8 | 241 |
| W. Highland Boundary | 2 | 90 |
| South-West Ireland | 2 | 137 |
| Central Germany (Thuringia) | 0 | 50 |
| East Yorkshire & North Lincolnshire | 14 | 93 |
| West Wales | 1 | 54 |
| Banffshire Coast and Buchan | 2 | 98 |
| Norfolk & Suffolk | 0 | 0 |
| Dumfries & Galloway | 1 | 109 |
| West Cornwall | 1 | 49 |
| North East England | 45 | 72 |
| Kent & Sussex | 1 | 94 |
| Eastern Yorkshire Dales (no copies held) | 0 | 0 |
| South Midlands & Welsh Marches | 2 | 164 |
| Islay & Jura | 1 | 104 |
| Devon & East Cornwall | 1 | 112 |
| Cairngorms | 4 | 210 |
| Orkney Isles | 0 | 0 |
| Assynt & Coigach (no copies held) | 0 | 0 |
| Lower Reaches of the Thames | 0 | 0 |
| Cumbria | 4 | 28 |
| Jersey | 1 | 147 |
| Shetland Isles | 0 | 0 |
| South West Scottish Highlands | 0 | 0 |
| Central East Anglia & the Fen Basin | 1 | 10 |

| | | |
|--------------------------|----------|----------|
| Beaulieu to Nairn | 1 | 1 |
|--------------------------|----------|----------|

| | | |
|--|-----------|--------------------|
| Technical Guides | 0 | |
| No. 6 Environmental Magnetism - A practical guide | 0 | 0 |
| No.4 Quaternary Dating Methods | 0 | 0 |
| No.8 Non-marine ostracods and Quaternary Palaeoenvironments | 8 | 350 |
| No.9 The Identification of Testate Amoebae in Peats | 29 | 227 |
| No. 10 - Chironomids | 68 | 15 |
| QP 6 Mountain Glaciation | 3 | 149 |
| No.7 Description & Analysis of Quat. Stratigraphic Field Sections | 23 | 149 |
| No. 5 Statistical Modelling of Quat. Science Data | | 0 |
| | | total sales |
| | | 393 |

The Publication Secretary's report was accepted by the membership.

9. Journal of Quaternary Science Report

The Editor thanked all the contributors to JQS, the reviewers, Wiley and the co-editors Chris Turney and Jason Briner. He then outlined key points relating to the journal development over 2011:

- The impact factor has been raised to 3.19, which is competitive with other mainstream Earth Science journals.
- There is a key focus on improving turnaround times and reducing the word limit on papers through online supplementary information.
- Driving down the time to review – an average first decision is 46 days after submission and final decisions in 71 days. Time to publication in print once accepted is typically 6-7 months.
- Rapid communications can be published within 2 months of submission.

The Journal of Quaternary Science Editor's report was accepted by the membership.

10. Quaternary Research Association meeting programme

The following meetings have been arranged or are proposed:

June 2012 Field Meeting: Caves of Northern England (Jointly with the British Cave Research Association)

Venue: Dalesbridge Centre, Austwick near Settle

Organisers: Hannah O'Regan and Trevor Faulkner

Contact: Hannah J. O'Regan

School of Natural Sciences and Psychology

Liverpool John Moores University

Byrom Street

Liverpool

L3 3AF

Tel: +44 (0) 151 231 2180

E-mail: h.j.o'regan@ljmu.ac.uk

Web: <http://www.ljmu.ac.uk/NSP/83856.htm>

E-mail: h.j.o'regan@ljmu.ac.uk

Details: 22 – 25 June 2012. Dalesbridge (near Settle). Cumbria and the Dales

September 2012 QRA Postgraduate Symposium

Venue: University of Aberdeen

Organisers: Anke Kuttner, Paul Ledger & Ilse Kamerling

Contact: qra2012@abdn.ac.uk

Details: 11 – 13 September 2012

September 2012 Field Meeting: Iceland

Venue: Iceland

Organisers: James Scourse/Jon Eiriksson

Contact: James Scourse oss048@bangor.ac.uk

Details: 15 – 21 September 2012. Holocene Tephrochronology and its Applications in SW Iceland. 5 days in the field (7 days including one day's travel at either end). Travel by bus. Limit of 40 participants.

September 2012 Workshop: Extinctions

Venue: Natural History Museum

Organisers: Adrian Lister and Tony Stuart

Contact: Adrian Lister

Department of Palaeontology

The Natural History Museum

Cromwell Road

London SW7 5BD, UK

Tel: +44 (0)20 7942 5398

fax: +44 (0)20 7942 5546

Email: A.Lister@nhm.ac.uk

Details: 1 day meeting in September 2012 (date TBC), Natural History Museum, London

2013 Meetings

January 2013 Annual Discussion Meeting: Leads and lags: correlation, comparison and causation

Venue: Great North Museum, Hancock <http://www.twmuseums.org.uk/greatnorthmuseum/>

Organisers: Steve Juggins, Takeshi Nakagawa, Emma Pearson (Newcastle University), John Woodward (Northumbria University)
Contact: Steve Juggins
Newcastle University
stephen.juggins@newcastle.ac.uk

Details: Dates TBC (early January 2013)

April/May 2013 Field Meeting: Monadhliath Mountains, Central Highlands, Scotland

Venue: Fort Augustas

Organiser: Clare Boston (QMUL), Sven Lukas (QMUL), Jon Merritt (BGS Edinburgh)

Contact: Clare Boston [c.boston@qmul.ac.uk]

Details: Glacier dynamics, geomorphology and sedimentology of the Monadhliath Mountains.

Limit of 40 participants. Date TBC.

September 2013 Field Meeting: Quaternary of Northumberland, Durham and Yorkshire

Venue: Durham University

Organisers: Lynda York, Bethan Davies, David Roberts, David Bridgland, David Evans, Colm Ó Cofaigh

Contact: Dr. Lynda Yorke

Institute of Geography & Earth Sciences

Aberystwyth University

Llandinam Building, Penglais Campus

Aberystwyth

SY23 3DB Tel: +44 (0)1970 622 580

Details: 35 – 40 participants. Early September 2013.

2014

ADM: 50th Anniversary of the QRA

Venue: London TBC

Organisers: TBC

Contact: Dan Charman [D.J.Charman@exeter.ac.uk]

Details: TBC

The Meeting Programme was accepted by the membership.

11. Election of new Executive members

The following people have been nominated to succeed retiring members of the Executive Committee. Nominations were published in the June 2011 Circular. No other nominations were received by the closing date and so the following were duly elected:

| | |
|--|------------------------------------|
| Editor Quaternary Newsletter: | Dr Sven Lukas (Queen Mary, London) |
| Publicity Officer: | Dr Richard Waller (Keele) |
| Outreach and External Liaison Officer: | Dr Barbara Silva |
| Ordinary Member: | Dr Emrys Phillips (BGS) |

12. Any other business

None was forthcoming.

The meeting finished at 18.55.

Minutes taken by Dr Pete Langdon (Secretary)

4th January 2012