



Quaternary Research Association

Minutes of the 50th Annual General Meeting of the Quaternary Research Association held at *Our Dynamic Earth*, Edinburgh on 7th January 2015 at 13:15 hours.

The President, Professor Pete Coxon, chaired the meeting, which was attended by 43 members of the Association:

Clive Auton, Mark Bateman, Clare Boston, Eleanor Brown, Richard Chiverrell, Chris Clark, Rodger Connell, Pete Coxon (Chair), Chris Darvill, Bethan Davies, Geoff Duller, Dave Evans, Derek Fabel, Trevor Faulkner, Andrew Finlayson, Mick Frogley (minutes), Geoff Garbett, John Gordon, Wim Hoek, Harry Langford, Jonathan Lee, Stephen Livingstone, Antony Long, John Lowe, Barbara Mauz, Erin McClymont, John Merritt, Lisa Moffett, Colm O'Cofaigh, Adrian Palmer, Doug Peacock, Dave Roberts, Jim Rose, Margot Saher, Alan Saville, Danielle Schreve, James Scourse, Anthony Spencer, Charles Turner, Richard Waller, Tom White, Colin Whiteman, Rew Williams

1. Welcome and apologies for absence

The President welcomed members to the meeting. Apologies were received from Colin Ballantyne, Keith Barber, Stewart Campbell, Jack Lacey, Sven Lukas, Emma Pearson and Barbara Silva.

2. Minutes of the 49th 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

a. Honours. The President began his report by recounting details of his attendance at the Geological Society of London President's Day in June, to which all Specialist Group chairs had been invited. Maureen Raymo (Lamont-Doherty; nominated by the QRA) was honoured with the Wollaston Medal (the highest award of the Society) and Paul Butler (Bangor) was awarded the Lyell Fund.

b. INQUA 2019. The President confirmed submission of the IQUA notice of intention to bid to host the 2019 INQUA Congress in Dublin and reported on progress with regard to arranging a venue, securing sponsorship and the establishment of both a Local Organising Committee and a Scientific Programme Committee.

c. QRA Undergraduate Dissertation Prize. The winner of the 2014 prize was announced as Jonathan Kitchen (University of Stirling) for his dissertation entitled *Palaeoecological Evidence for Vegetation Change and Fluctuations in the Westerlies During the Holocene, Lago Blanco, Tierra del Fuego*. An abstract of the winning dissertation will be published in a forthcoming issue of *Quaternary Newsletter (QN)*.

d. Deceased members. The President sadly reported the deaths in 2013 of T.C. Hill and Martin Whyte (only recently brought to the attention of the Association) and, in 2014, of Kingsley Gregory, John Newbury, Derek Roe and Graham Jardine (a former Secretary of the Association). A full obituary of Graham Jardine by Jim Rose had appeared in issue 134 of *QN* (October 2014).

e. QRA Executive Committee. The President noted several personnel changes to the Executive Committee. Postgraduate Representative Julia McCarroll had completed her term of office in September and had been replaced by Jack Lacey (Nottingham), who had been voted in at the Exeter Postgraduate Symposium. Several committee members were completing their terms of office at this AGM, namely Eleanor Brown (Meetings), Emrys Phillips (Ordinary Member) and Rich Waller (Publicity); all were thanked on behalf of the membership for their considerable efforts over the past three years. The President also thanked Antony Long, who was stepping down from his editorship of the *Journal of Quaternary Science* (being succeeded by Geoff Duller) and highlighted the astonishing 798 papers that he had handled since 2005.

5. Honorary Members of the QRA

The President announced that three members had been nominated by the Executive Committee to receive Honorary Member status: Colin Ballantyne (St Andrews), Stewart Campbell (Natural Resources Wales) and Charles Turner (Open University). These nominations were accepted unanimously by the membership and were announced at the meeting with citations that will subsequently appear in a forthcoming issue of *QN*.

6. Annual Report of the Secretary

This report covers the period January – December 2014.

a. Membership

Total membership of the Association currently stands at **1237**, continuing the upward trajectory over the past five years.

Census date Category	01/01/08	01/01/09	21/12/10	19/12/11	29/12/12	27/11/13	4/12/14	Change (13–14)
Ordinary Members	573	545	575	581	602	598	636	+38
Postgraduate Members	269	269	275	331	343	344	368	+22
Unwaged/Retired Members	137	140	145	149	141	145	146	+1
Honorary members	19	22	28	28	29	31	35	+4
Institutional members*	41	33	29	29	29	37	29	–8
Corresponding members	14	16	19	19	20	19	23	+4
Total Membership	1053	1025	1071	1137	1164	1174	1237	+63

*Includes copyright members

Subscriptions for 2014 were unchanged at £20, with a reduced rate of £10 for students and unwaged members. The institutional membership rate is £35. On behalf of the membership, the Executive Committee once again thanks Val Siviter for all the hard work she does for the Association, notably with management of the membership database.

Honorary Members

Four distinguished scientists were elected as Honorary Members of the Quaternary Research Association at its AGM, held at the RGS-IBG in London in January 2014; John Andrews (Colorado), Clive Auton (BGS), Andy Currant (NHM) and John Matthews (Swansea). Citations were published in *QN* issue 132 (February 2014). A current list of Honorary Members of the QRA can be found in the members' area of the website.

b. Meetings

i) Annual Discussion Meeting: Quaternary Revolutions QRA@50 6–9 January 2014.

RGS-IBG, London

Organisers: Dan Charman, James Scourse, Antony Long, Danielle Schreve, John Catt, Catherine Souch, Tom Hill and Danni Pearce

Report: *Quaternary Newsletter* no. 133 (June 2014)

- ii) **19th Annual QRA Postgraduate Symposium** 27–29 August 2014.
University of Exeter
Organiser: Nicole Sanderson
- iii) **Field Meeting: The Quaternary of the Lower Thames** 3–5 October 2014.
Organisers: Peter Allen and David Bridgland
- iv) **Joint QRA/GLWG Field meeting: The Glaciation of Dartmoor** 23–26 October 2014.
Organisers: Dave Evans and Stephan Harrison

The QRA also co-sponsored two events in 2014:

- i) **Chronology & Climate of the Last Interglacial** 15 May 2014.
Geological Society of London, Burlington House, London
Organisers: Mark Chapman and Bill Austin
- ii) **From Fossils to the Genome: the 150th anniversary of the naming of *Homo neanderthalensis* by William King** 23–25 May 2014.
NUI Galway, Ireland
Organiser: John Murray

The **Wiley-Blackwell Annual Lecture** for 2014 was delivered during the Annual Discussion Meeting held at the RGS-IBG by Maureen Raymo (Lamont-Doherty Earth Observatory) on *The Oceans, CO₂, Sea Level and Ice: Four Million Years of Natural Climate Variability*.

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

Three issues: **132** (Feb 2014), **133** (June 2014), **134** (October 2014)
Editor: Dr Sven Lukas (Queen Mary, University of London)

Journal of Quaternary Science

Volume **29**: 8 issues, containing 76 research papers (including 3 rapid communications, 2 review articles and 1 themed collection on *Sea-Ice, Glaciers and Climate Dynamics of Baffin Bay and the NW Passage*).
Editor: Professor Antony Long (University of Durham)

QRA Field Guides

Two field guides were published in 2014: *Quaternary Glaciations of Dartmoor* (Evans & Harrison) and *The Quaternary of the Lower Thames and Eastern Essex* (Bridgland *et al.*), both produced to accompany QRA field meetings in 2014.

Technical Guides

Due to heavy demand, a second print run of TG10 (*Chironomids* by Brooks, Langdon & Heiri) was approved.

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 2014, £25,853 was disbursed by the QRA to 56 of its members under its awards schemes (see table).

Competition for the New Research Worker's Award (NRWA) increased again in 2014, and was most pronounced in the May round. To ensure that successful applicants received a meaningful contribution towards their projects (in line with previous QRA awards rounds) we rejected 5 NRWA applications and provided feedback to unsuccessful applicants.

Fund	No. of applications		No. funded	Total monies requested (£)	Total monies awarded (£)	% funded¹
NRWA	Jan	2	1	2,000	700	35
	May	13	9	12114.5	5480	45
	Sept	5	5	4950	2100	42
	Total	20	15	19064.5	8280	43
QCF	Jan	14	11	5,617	4930	88
	May	6	4	3340	1560	47
	Sept	5	5	2500	£1,780	71
	Total	25	20	11457	8270	72
QRF	Jan	7	4	6,615	3100	47
	May	3	3	3000	2190	73
	Sept	8	8	7423.5	3750	51
	Total	18	15	17038.5	9040	53
Subtotal	63		50	47560	25590	54
ADM 14	3		3	394.48	263	67
FM 14	0		0	0	0	–
Bishop	0		0	0	0	–
RLAHA	0		0	–	–	–
QUB_C14²	4		2	–	–	–
Total	70		56	47954.48	25853	54

¹ Refers only to eligible applications

² Refers to number of applicants not the number of dates requested

Special Grants

- Two QRA-14CHRONO radiocarbon dating awards were made, to Cyler Conrad (University of New Mexico) and Christine Hamilton (Durham).
- Three Postgraduate Meetings Awards (PMA) were made, all to support attendance at the 2015 Annual Discussion Meeting in Edinburgh: Sebastian Gibson (Cambridge), Francis Rowney (Plymouth) and Astrid Ruiters (BGS / QMUL).
- There were no applications for either the Bill Bishop Award or the QRA-RLAHA Luminescence Dating Award in 2014.

QRA Prizes

- The 2014 James Croll Medal was awarded to Phil Gibbard (University of Cambridge).
- The 2014 Lewis Penny Medal was awarded to Bethan Davies (Royal Holloway).
- Citations will appear in an issue of *QN* in due course.

Online applications and updates to the Awards pages on the QRA website

In collaboration with the Publicity Officer, the Awards information hosted on the QRA website has been updated through 2014, but the release was delayed until the new website was launched, leading to some out-of-date information being present over the summer and autumn.

Among the new functionality in the website will be the option of for applying for awards online. The 15th January 2015 round will be the first to use the online system, and will include applications for the INQUA 2015 Travel Fund. Downloadable application forms will also be available for members who wish to send their application to the Awards Officer by email or post.

Full details of all QRA grants and awards are available on the QRA website: qra.org.uk/grants-awards-prizes and advice may be sought from the Awards Officer, Erin McClymont (awards@qra.org.uk).

QRA Awards Summary 2014

Name	Institution	Project title	Awarded (£)
<u>New Research Workers Award (NRWA)</u>			
Benjamin M.P. Chandler	Durham University	Assessing recent ice-marginal fluctuations of Skálafellsjökull, SE Iceland	700
Jennifer Adams	University College London	Pollution and climate change impacts on productivity and biodiversity in the Selenga River Delta, Lake Baikal: a Siberian Ramsar wetland of international importance	700
Sian Brewer	Royal Holloway University of London	The Lateglacial mammalian assemblage from Bridged Pot Shelter, Somerset: taphonomy, palaeoenvironment and age	350
Jennifer Campbell	University of Manchester	Two late Holocene terrestrial sites, Col du Zad in the Middle Atlas Mountains, and Oukaimeden in the High Atlas Mountain	670
Debra Colarossi	Aberystwyth University	Developing the use of luminescence chronometers to establish the timing of late Quaternary environmental changes in central southern Africa	730
John Groves	Queen Mary, University of London	Quantifying fabric evolution in a glacial land system	640
Melanie Kingsbury	University of Stirling	Coring Lake Sediments on Shetland	700
Emma Loftus	University of Oxford	Fieldwork and stable isotope analysis of archaeological shells	720
Crystal Smiley	University of Glasgow	Greenland fieldwork	720
Cianna E. Wyshnytzky	Queen Mary, University of London	Timing and processes of annual moraine formation in high-mountain environments: Implications for glacier dynamics and climatic drivers	250
Alistair Monteath	University of Southampton	Two days' use of the electron microprobe facility at the University of Oxford	600
Helena White	University of Leicester	Magnetostratigraphy to aid palaeoenvironmental reconstruction of Lake Megafazzan, Libyan Sahara.	750
Barbora Wouters	Vrije Universiteit Brussel	Thin section manufacturing of samples from Haithabu (Germany)	750

Quaternary Conference Fund (QCF)

Kathryn	Adamson	Queen Mary, University of London	European Geosciences Union General Assembly 2014	450
Natasha	Barlow	Durham University	Seismic and Non-seismic Influences on Coastal Change in Alaska, 5th International Conference of IGCP 588 and Fieldtrip, South Central Alaska, USA	450
Laura	Basell	Queen's University Belfast	Society for American Archaeologists AGM, Austin, Texas	450
S. Louise	Callard	Durham University	European Geosciences Union General Assembly 2014	280
Melissa	Chapot	Aberystwyth University	14th International Conference on Luminescence and Electron Spin Resonance Dating, Montreal, Canada	400
Julie	Durcan	University of Oxford	14th International Conference on Luminescence and Electron Spin Resonance Dating, Montreal, Canada	400
Alessa	Geiger	Glasgow University	XIX Argentinean Geological Congress, Cordoba, Argentina	400
John	Gordon	Retired	European Geosciences Union General Assembly 2014	450
Sarah	Kneen	University of Manchester	Culture, Climate and Environment Interactions at Prehistoric Wetland Sites. University of Bern, Switzerland	450
Daniel	Schillereff	University of St Andrews	European Geosciences Union General Assembly 2014	350
Ian	Shennan	University of Liverpool	IGCP 588, Alaska	450
Rachel	Smedley	Durham University	14th International Conference on Luminescence and Electron Spin Resonance Dating, Montreal, Canada	400
Thierry	Fonville	University of Southampton	23rd International Diatom Symposium, Nanjing, China	390
Emma-Jayne	Hopla	University of Southampton	9th European Palynology and Palaeobotany Conference, Padova, Italy	390
Sayantani	Neogi	University of Cambridge	9th International Soil Congress	390
Danni	Pearce	University of Aberdeen	AGU Fall Meeting 2014, San Francisco	390
Edwin	Baynes	University of Edinburgh	AGU Fall Meeting 2014, San Francisco	260

Amy	Jeffrey	University of Liverpool	AfQUA January 2015, Cape Town	380
Rachael	Lem	Queen Mary, University of London	Workshop of Coastal Ecology (CEW) 2014 in Saint Malo (Brittany, France).	380
Catherine	Martin-Jones	Aberystwyth	AfQUA January 2015, Cape Town	380
Alex	Rowell	University of Oxford	AfQUA January 2015, Cape Town	380

Quaternary Research Fund (QRF)

Peter	Abbott	Swansea University	Tephrochronological Investigations of a c. 9000 year record of marine environmental change from the Limfjord, Denmark	450
Georgina	King	Université de Lausanne	Exploring interplays between volcanism and climate, Kamchatka, 0.5 Ma to present.	900
Anna	Pienkowski	Bangor University	The effects of permafrost disturbance on high-latitude aquatic ecosystems	850
Phillip	Toms	University of Gloucestershire	Optical dating of blocked-valley lacustrine archives in eastern South Africa	900
Wim	Hoek	Utrecht University	Deep lake coring of laminated lake sediments at Llangorse Lake, Wales and Rostherne Mere, Cheshire	730
Pete	Langdon	University of Southampton	Examining the biogeography and biodiversity of chironomid communities across Islands of the South Pacific: experiments in space and time.	730
Graeme	Swindles	University of Leeds	Examining hydrological change and functioning in a tropical peatland	730
Tom	Hill	The Natural History Museum, London	Palaeoenvironmental Investigations of a late-glacial sequence in the Gordano Valley, North Somerset	600
Jim	Innes	Durham University	Field survey of peat deposits in the Lammermuir Hills, southeast Scotland, and laboratory preparation of a peat profile of Late Mesolithic age	750
James	Lea	Stockholm University	Millennial timescale controls on Greenlandic tidewater glacier dynamics	800
Sven	Lukas	Queen Mary, University of London	The timing of 'Little Ice Age' fluctuations and implications for the erosive power of Hornkees, an Alpine valley glacier, Zemmgrund, Austria	800

Eileen	Tisdall	University of Stirling	Late-Glacial and early Holocene transition in Tierra del Fuego, Patagonia – climate definition	800
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Postgraduate Meetings Award (PMA) for field meetings

Sebastian	Gibson	University of Cambridge	QRA 2015 Annual Discussion Meeting: The Quaternary Geology of the North Sea and Adjacent Areas (Edinburgh)	100
Francis	Rowney	Plymouth University	QRA 2015 Annual Discussion Meeting: The Quaternary Geology of the North Sea and Adjacent Areas (Edinburgh)	65
Astrid	Ruiter	British Geological Survey / Queen Mary, University of London	QRA 2015 Annual Discussion Meeting: The Quaternary Geology of the North Sea and Adjacent Areas (Edinburgh)	98

Bill Bishop Award

No applications in 2014

QUB ¹⁴CHRONO Award

Cyler	Conrad	Plymouth University	A Chronological, Zooarchaeological and Paleoenvironmental Reinvestigation of Banyan Valley Cave, Mae Hong Son Province, Northwest Thailand	3 dates
Christine	Hamilton	Durham University	Testing geophysical models with Lateglacial to Holocene relative sea-level change in Assynt, North-west Scotland	3 dates

QRA-RLAHA Luminescence Dating Award

No applications in 2014.

Lewis Penny Medal, 2014

Bethan	Davies	Royal Holloway, University of London
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James Croll Medal, 2014

Phil	Gibbard	University of Cambridge
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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 in the past. The QRA currently supports one research group, TIQS, which completes its three-year period of funding at the end of 2014.

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.

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, as our Outreach and External Liaison Officer, Barbara Silva has been pro-active in pushing forward our activities on this front.

QRA Undergraduate Dissertation Prize

The winner of the 2014 prize was Jonathan Kitchen (University of Stirling), with a dissertation entitled *Palaeoecological Evidence for Vegetation Change and Fluctuations in the Westerlies During the Holocene, Lago Blanco, Tierra del Fuego*. An abstract of the winning dissertation will be published in a forthcoming issue of *QN*. The Association wishes to thank the examiners, Ian Candy and Ian Evans, and to acknowledge the continuing support of Catherine Souch, Lucy Allen and others at the RGS for the administration of the prize.

Top 50 Quaternary Sites

This year saw the launch (at the ADM in London) of the *Top 50 Quaternary Sites* initiative, coordinated by Barbara Silva and Emrys Phillips. The membership have nominated more than eighty different UK sites; a printed document and a set of associated webpages are in preparation with a view to making them available early in 2015.

QRA Outreach Award

The QRA encourages its members and others to promote and foster engagement between Quaternary science and a wide and diverse audience. In support, we offer an annual Outreach fund from which grants will be awarded. Awards are normally made of up to £750, although larger requests will be considered – please see the QRA website for a list of previously funded projects. For more details please contact the Outreach Officer (outreach@qra.org.uk).

g. Executive Committee

Six members of the Executive Committee completed their terms of office:

- September 2014: Julia McCarroll (Postgraduate Representative)
- December 2014: Professor Antony Long (Editor of *JQS* and *ex officio* member of the Executive Committee)

- January 2015: Dr Eleanor Brown (Meetings Officer); Dr Emrys Philips (Ordinary Member); Dr Barbara Silva (Outreach & External Liaison Officer); and Dr Rich Waller (Publicity Officer).

The Executive Committee extends its thanks to all these individuals on behalf of the membership for their hard work and contributions towards the running of the Association throughout their periods in office.

We also welcomed a new postgraduate representative on to the Executive Committee in September, Jack Lacey (University of Nottingham), who will represent the QRA postgraduate community for the next two years.

h. Postgraduate activities

Postgraduate events continue to be an important component of the activities of the Association. The Annual Postgraduate Symposium series continued, with the 2014 event being held at the University of Exeter at the end of August. The meeting was a success and a full write-up of the event will appear in *QN* in 2015. Postgraduate interests are represented on the Executive Committee by two members, who are elected at the Annual Postgraduate Symposium (both posts last for two years). The PG representatives also maintain the social media accounts of the Association.

i. Publicity

This year has seen a significant technology project come to fruition for the Association, namely the redesign and launch of our new website. Whilst increasingly important for the QRA, the out-of-date architecture of the old version had rendered it obsolete and too inflexible for our requirements. The Publicity Officer, Rich Waller, has put an enormous effort into overseeing the re-design and implementation of the new site, as well as acting as liaison between the developers and the members of the Executive Committee. The result is a website that is efficient and cost-effective to run, intuitive to edit and provides an enhanced experience for users (including a members-only area, a more streamlined bookstore experience and the ability to apply for grants and awards online). Further expansion of the website functionality is already in the pipeline. The Executive Committee thanks Rich on behalf of the membership for all his hard work on this initiative.

j. Conservation

The QRA recognises that geoconservation is particularly important at a time when Quaternary sites are under increasing pressure from development and other human impacts. Recognition of the value of conserving Quaternary sites is vital both for the field-based research and education that are essential to advance the science, and also for the wider benefits for the environment and society. The QRA and its members already carry out many activities that support and promote geoconservation, particularly through field and discussion meetings, as well as offering practical support and working with local groups. The role of QRA Conservation Officer on the Executive Committee is to support and encourage these activities, as well as to present the QRA's position on conservation issues. To this end, our Conservation Officer, John Gordon, has been extremely busy on the Association's behalf during 2014. Two of the most important initiatives he has been involved with have been:

- Drafting the QRA's detailed position statement on geoconservation, which can now be viewed on our website (qra.org.uk/geoconservation);
- Coordinating the support of the QRA for the Geodiversity Charter for England, launched by the English Geodiversity Forum at a Parliamentary Briefing during October. Note: the QRA signed up to the Scottish equivalent in 2013.

k. QRA Archives

Work has continued throughout the year on the QRA archive project, currently hosted in hard-copy and electronic formats by the RGS-IBG. Several members have been instrumental in pushing this initiative forward, though John Catt in particular is owed a huge debt of thanks by the Association for overseeing a major part of the archival work and for completing it with such thoroughness. The Executive Committee intends to make large parts of this valuable resource available online in due course via the members-only section of the new website.

The Secretary's report was ACCEPTED by the membership.

7. Treasurer's Report

This Report covers the period 1 August 2013 to 31 July 2014

a. Introduction

The Association's financial activities have been comparable to previous years, although there has been a further increase in expenditure on Awards. The QRA's finances remain healthy and stable, although increasing financial pressures mean that it will be necessary to raise subscriptions in the near future (see below). Improvements to the running of the Association's finances include the introduction of electronic banking through HSBC, which has streamlined the process of making payments; this has largely negated the use of cheques, which have posed numerous problems over the past couple of years.

b. Income

Income from membership subscriptions, paid directly into our main subscription account, was £11,991.58 and remains similar to that of 2012-13. This figure is bolstered by a windfall of money liberated from our PayPal account, which had accrued a total of £24,141.24; some of this is attributable to online book sales, and income paid directly into our publications account (£2718.90) remains an under-representation of income from this source. Royalties from Wiley rose from £45,057 to £45,304, a further small but welcome increase.

Banking interest remains similar to previous years at £38.56.

The £30,000 invested in a fixed-term bond since 2011 matured in April 2014 has yielded interest of £5,427.54. This is a pleasing yield, and the £30,000 lump sum has been re-invested in a similar bond, although the nature of financial products of this sort means that a similar return cannot be guaranteed.

c. Expenditure

Day-to-day running costs have decreased slightly from £21,228.30 to £18,685.08; this can be attributed to the printing costs of four editions of *Quaternary Newsletter* appearing in the 2012-13 financial year. The cost of running the Executive (travel, room hire) was significantly lower than last year, falling to £1,523.14 from £2,648.11. As always, this expense reflects the current distribution of the Executive.

Our budget to support activities through grants, awards and sponsorship was increased to ~£25,000, in response to the increase in high-quality applications received in the previous year. This increase appears to be a continuing trend, so careful monitoring of awards expenditure will be required in future, especially with 2015 being an INQUA year. The increase in spending on grants and awards is welcome, and has doubled since 2011-12, but this level of expenditure cannot be sustained without increasing our income (see below).

Quaternary Research Association (Registered Charity No. 262124)

Income and expenditure on Treasurer's Account for 1 August 2013 - 31 July 2014.

	£	£	£
INCOME	2011 - 12	2012 - 13	2013 - 14
Subscriptions	12998.65	11744.13	36132.82
Total Running Income	12998.65	11744.13	36132.82
Book sales	1688.85	615.80	2718.90
Total Publications Income	1688.85	615.80	2718.90
Surplus on Meetings	0.00	1563.80	1782.67
Interest Received	53.55	42.27	38.56
Royal Society: INQUA Subscription Support	5414.00	5500.00	5230.30
Publisher's Royalties Received	44386.00	45057.00	45304.00
Donations	346.44	346.44	646.44
ADM 2014 income	0.00	0.00	37585.65
ADM sponsorship	0.00	0.00	1500.00
Bond maturation	0.00	0.00	5427.54
Other income	200.00	600.00	0.00
	85500.00	460.00	600.00
	6898.86	0.00	9453.44
Total Other Income	142798.85	53569.51	107568.60
TOTAL INCOME	157486.35	65929.44	146420.32
EXPENDITURE			
Newsletter & Circular printing	2640.40	5857.40	4252.40
Newsletter postage	3928.74	5637.40	5134.86
Admin support	6000.00	6000.00	6000.00
Postage & stationery	2023.31	344.71	806.92
Executive Committee Costs	1502.69	2648.11	1523.14
Insurance	689.00	740.68	967.76
Total Running Expenditure	16784.14	21228.30	18685.08
Publications Account			
Printing	4725.00	3095.00	20218.00
Bank charges	0.00	0.00	673.12
Total Publications Expenditure	4725.00	3095.00	20891.12
Grants/Awards/Support			
Grants			
NRWA	6175.00	11465.00	12620.00
QRF	3680.00	3900.00	7725.00
QCF	1835.00	7084.00	9880.00
PGMA	1701.00	220.00	0.00
Outreach Award	0.00	0.00	1200.00
Support for delegates to INQUA Congress	1027.85	0.00	0.00
C14 bursaries	0.00	1212.00	0.00
Lewis Penny Award	591.40	236.00	0.00
Bill Bishop Memorial Fund Award (inc. bank transfer fee)	800.00	800.00	0.00
Croll Medal (Travel)	49.80	128.30	0.00
Postgraduate Conference	500.00	613.80	500.00
Poster prizes	0.00	0.00	100.00
Sub-group support			
IBiS	0.00	0.00	0.00
GLWG	0.00	500.00	0.00
TIQS	0.00	0.00	0.00
	16360.05	26159.10	32025.00
Outreach			
Undergraduate Dissertation Award	250.00	250.00	250.00
S. Senk	0.00	500.00	0.00
Other	1644.95	0.00	0.00
	1894.95	750.00	250.00
Other	1250.00	1000.00	0.00
	1250.00	1000.00	0.00
Total Grants/Awards/Support	19505.00	27909.10	32275.00
Refund/reimbursement	105.00	19.39	0.00
Meetings expenditure	1000.00	1000.00	2000.00
INQUA subscription	11164.59	11253.67	10797.96
Web Site costs	4330.00	600.00	2760
Other expenditure	358.80	0.00	200.00
Medals - striking/engraving	1460.16	2976.48	53.04
ADM 2014 costs	0.00	0.00	38280.75
ADM 2015 deposit	0.00	0.00	6960
Total other expenditure	18418.55	15849.54	61051.75
Bank errors	0.00	0.00	0.00
Refused cheques	0.00	0.00	9453.44
TOTAL EXPENDITURE	59432.69	68081.94	142356.39
NET SURPLUS/DEFICIT	£98,053.65	-£2,152.49	£4,063.93

d. Income versus Expenditure

Running income (£38,851.72) against running expenditure (£18,685.08) shows a significant surplus, although this is attributable to the windfall from the PayPal account – excluding this, the Association acquired a surplus of £5456.16. However, this calculation accounts only for the publication of *QN* and the basic operation of the Association and excludes expenditure on grants and awards. This aspect of the QRA's activities relies entirely on other sources of income, primarily the royalties from the publication of *JQS*. Although a surplus of £4063.93 was achieved for the year, this would have been a deficit were it not for the income from the maturation of a three-year bond. I therefore recommend that subscriptions should rise to £30 for ordinary members and £15 for student and retired members, which will safeguard the Association's financial reserves (see below).

e. Year-End Financial Status

At the end of July 2014, we held:

£ 46,254.38	in our Bank of Scotland Treasurer's Account;
£ 24,539.95	in our Bank of Scotland Publications Account;
£ 41,053.59	in our HSBC Community Account;
£ 40,457.73	in our HSBC Manager's (savings) Account; and
£ 35,427.54	in the HSBC bond.

We started the 2013-14 year with £187,544.93 and ended with £187,733.19. The QRA's overall holdings have remained stable, with various outstanding sources of money having been consolidated into the five main accounts.

Ring-fenced sums within our holdings include £15,254.52 held in trust for the Bill Bishop Awards, £85,500 for INQUA delegates, £5000 for the Lewis Penny Medal and £30,000 to meet any unexpected liabilities. This leaves ~£50,000 to carry forward, in addition to an anticipated income of £60,000 derived from subscriptions, book sales and royalties. Anticipated expenditure for the 2014-15 financial year includes ~£18,000 for running costs, £10,500 INQUA subscription, £25,000 to support attendance of the INQUA congress and £25,000 for our usual grants/awards/support, totalling ~£80,000. This amount falls short of anticipated income from subscriptions and book sales, the *JQS* royalty and the Royal Society contribution to our INQUA subscription, which total ~£67,000. Although it is usual for there to be a shortfall during an INQUA year, the burden on the Association is sufficient that an increase in income is required to safeguard our financial reserves, and this would be best achieved by raising subscriptions to £30 for ordinary membership and £15 for student and retired members. This change would also be beneficial in that it would allow us to move our accounts from the Royal Bank of Scotland, which has no branches in England and is difficult to use. In the past this has not been attempted because members would have to reinstate their membership standing orders; however, since these would have to be altered to facilitate the change in subscription rate, such a move would be much easier.

Following discussion, the proposal to raise subscription fees from 2016 onwards, as outlined above, was put to the membership for a vote and CARRIED UNANIMOUSLY.

f. Auditing

The finances have not yet been audited due to the Treasurer's absence on fieldwork for a long period at the end of 2014 and are submitted to this meeting subject to approval by the external auditor.

The Treasurer's report was ACCEPTED by the membership.

8. Publications Secretary's Report

a. New and upcoming titles

Two new Field Guides were published during 2014 relating to Field Meetings held during the autumn and both are now available for sale: (1) *Quaternary Glaciations of Dartmoor* (Evans & Harrison); and (2) *The Quaternary of the Lower Thames and Eastern Essex* (Bridgland *et al.*). Due to heavy demand, a second print-run of the *Chironomids* Technical Guide (No.10) has been completed and copies are now on sale.

Currently, there are two publications in the pipeline for 2015: a Field Guide to accompany the Spring Field Meeting to the Lake District (McDougall & Evans); and the long-awaited second edition of the *Clast Lithological Analysis* (Bridgland *et al.*).

b. New online bookshop

As part of the new QRA website we have taken the opportunity to give the online bookshop and the pricing structure of QRA publications an overhaul. This has been undertaken to make pricing simpler and more transparent, whilst offering a clear and consistent cost-benefit to members.

All-inclusive (item + P&P) prices are now listed for members and non-members, with members receiving a 20% discount at checkout. Discounted rates for bulk-orders have also been implemented. International orders, as previously, carry a surcharge. The 'all inclusive' rate for members is about the same as previously, but the non-members rate is higher. The new website will also offer us the opportunity to provide limited-period sale-offers, which will be advertised to members in due course.

Over the course of 2015 we hope to introduce the online download of QRA Field Guides and Technical Guides. This will initially be for 'out-of-print' publications. Currently, all of the QRA publications have been scanned, but the main technical issues relating to automating downloads and security functions still have to be resolved.

Any feedback on the new bookstore and pricing structure is greatly appreciated.

c. Publishers Licensing

The QRA has recently signed-up to the Publishers Licensing scheme which, as a publisher, enables us to collect copyright licensing revenue relating to third-party use of our publications (excluding *JQS*). Back-dated copyright licensing revenue totals about £8,500 and this has recently been paid to us; annual payments to be received in the future will probably in the region of £500-£1,000 per annum.

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

9. Meetings Officer's Programme

2015 Meetings

21–24 May QRA Field Meeting: The Quaternary of the Lake District
Venue: Blencathra Field Studies Centre, Threlkeld, Keswick, Cumbria
Organisers: Des McDougall (Worcester) and Dave Evans (Durham)
Contact: d.mcdougall@worc.ac.uk

2–4 June QRA Short Discussion Meeting: The Quaternary of southern South America
Venue: Durham University, UK
Organisers: Chris Darvill (Durham), Alessa J. Geiger (Glasgow), Tom Roland (Southampton) and
Neil Glasser (Aberystwyth)
Contact: QSSA15@gmail.com

2–4 Sept. QRA Postgraduate Symposium

Venue: University of Cambridge, UK
Organiser: Jenny Roberts (Cambridge)
Contact: jr451@cam.ac.uk

25–29 Sept. QRA/IQUA Joint Field Meeting: Quaternary of SE Ireland

Venue: Dublin, Wexford, Waterford and Cork
Organisers: Pete Coxon (TCD), Colm O’Cofaigh (Durham), Dave Evans (Durham), Bettina Steffanini (NUIM)
Contact: pcoxon@tcd.ie

2016 Meetings**6–8 January QRA Annual Discussion Meeting: FASTER-Q: Forcing Agents, System Transitions & Environmental Responses during the Quaternary**

Venue: Royal Holloway, University of London
Organisers: Danielle Schreve, John Lowe, Ian Candy and Simon Blockley (RHUL)
Contact: danielle.schreve@rhul.ac.uk

17–20 May QRA Field Meeting: The Quaternary of the Isle of Skye

Venue: Portree, Isle of Skye
Organisers: Colin Ballantyne (St Andrews) and John Lowe (RHUL)
Contact: ckb@st-and.ac.uk

Autumn 2016 QRA Short Discussion Meeting: New approaches, new insights: how developments over the last 30 years have changed our understanding of the palaeoecology of the British Isles during the Holocene

Venue: National Museum of Wales, Cardiff (dates tbc)
Organiser: Heather Pardoe
Contact: heather.pardoe@museumwales.ac.uk

New Meetings Proposals

QRA meetings are organised for QRA members by QRA members with support from the QRA Meetings Officer. We aim to have a varied meetings programme which reflects the needs and interests of QRA members. Our flagship meetings are the Annual Discussion Meeting (usually held over 2 or 3 days in early January) and the QRA Postgraduate Symposium. Annual Discussion Meetings are centred on a key scientific theme and draw national and international interest, with keynote speakers from around the world. Otherwise the format of QRA meetings is very flexible and can take the form of:

- a single or multi-day field meeting;
- a half, one or multi-day indoor workshop or conference;
- a combined workshop and field meeting.

QRA meetings can also help deliver outreach (including pathways to impact plans) or communicate new research related to the conclusion of RCUK grants. The QRA also supports meetings arranged by current and former QRA Research Groups.

Field meetings are usually held in the UK or Europe, and indoor meetings can be on any Quaternary topic or area of the world. We also help to run, and participate in, meetings abroad. We simply ask that QRA meetings are open to all and are not invitation only. Organisers of QRA meetings can apply to the QRA for financial support. To propose a QRA meeting, please contact the Meetings Officer

(meetings@qra.org.uk) for a proposal form. Approval for QRA meetings proposals is given by the QRA Executive Committee at their meetings in April and September.

The QRA also co-sponsors meetings run by other associations where the content of the meeting is likely to be of interest to QRA members. Again we ask that meetings are open to all and not invitation only. We usually co-sponsor up to two meetings per year. To apply for co-sponsorship, please contact the QRA Meetings Officer for an application form. We have two deadlines a year, on 1 March and 1 September, and decisions about co-sponsorship are made by the QRA Executive Committee. For further details about co-sponsorship, please see the meeting pages on the QRA website.

If you have a bright idea for a meeting or workshop or would like to offer to lead a field meeting, please contact the QRA Meetings Officer, Dr Clare Boston (meetings@qra.org.uk)

To discuss any outreach ideas please contact the Outreach Officer, Dr Barbara Silva (outreach@qra.org.uk).

Further details about future QRA meetings can be found on the QRA web site at qra.org.uk/meetings.

11. Election of new Executive Committee members

The following people have been nominated to succeed retiring members of the Executive Committee. Nominations were published in the October 2014 Circular. No other nominations were received by the closing date and so the following were duly elected:

Meetings:	Clare Boston (Portsmouth)
Publicity:	Bethan Davies (RHUL)
Outreach & External Liaison:	Barbara Silva
Ordinary Member:	Andrew Finlayson (BGS)

12. Any other business

Harry Langford sought support for a potential new Research Group focussed on the development of age-estimate and palaeotemperature techniques that had particular application to the pre-radiocarbon British Pleistocene terrestrial record. Interested parties were asked to contact Harry directly (h.e.langford@ntlworld.com).

The meeting finished at 14:15 hours.
Minutes taken by Dr Mick Frogley (Secretary)
7th January 2015