

AGENDA

58th Annual General Meeting of the Quaternary Research Association

Thursday, 5th January 2023 at 4.15 pm online

Hosts: Geological Society of London (Use Zoom Link highlighted on next page to join meeting at 4.15 pm)

Chair: Professor Simon Lewis (President)

1. Welcome and apologies for absence
2. Minutes of the 57th Annual General Meeting
3. Matters arising from the minutes
4. Annual report of the President (SL)
5. Annual report of the Secretary (AP)
6. Annual report of the Treasurer (RH)
7. QRA Meetings programme 2023–24 (EP)
8. Quaternary Newsletter (SW)
9. Subscription changes (RH)
10. Constitution Updates (AP)
11. Announcement of new Executive Committee members (below)
12. Break
13. Honorary Members of the QRA
14. Award of Prizes and Medals

Item 11: Announcement of new Executive Committee members

The following people have been nominated to succeed retiring members:

President:	Jane Hart (University of Southampton)
Publicity Officer:	Jenni Sherriff (King's College London)
Ordinary Member:	Katy Roucoux (St Andrews University)

Adrian Palmer
Honorary Secretary
12th December 2022
a.palmer@rhul.ac.uk

Access link for delegates

You are invited to a Zoom webinar.

When: Jan 5, 2023 09:00 AM London

Every day, until Jan 6, 2023, 2 occurrence(s)

Jan 5, 2023 09:00 AM

Jan 6, 2023 09:00 AM

Please download and import the following iCalendar (.ics) files to your calendar system.

Daily: https://us02web.zoom.us/webinar/tZAufu6qpj0rE9Q5AlZCZbQfdPPcg22XK17N/ics?icsToKen=98tyKuGsrTItGNyTsRCHRpWIA4r4KOrxiCFcj_psyT7pQQNpYDLwMtJyMbUtQuD7

Topic: 2023 Quaternary Research Association Annual Discussion Meeting

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/84397286190>

Or One tap mobile :

United Kingdom: +441314601196,,84397286190# or +442034815237,,84397286190#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

United Kingdom: +44 131 460 1196 or +44 203 481 5237 or +44 203 481 5240 or +44 203 901 7895 or +44 208 080 6591 or +44 208 080 6592 or +44 330 088 5830

Webinar ID: 843 9728 6190

International numbers available: <https://us02web.zoom.us/j/84397286190>

**MINUTES OF THE 57TH ANNUAL GENERAL MEETING OF THE
QUATERNARY RESEARCH ASSOCIATION, HELD ONLINE (via Zoom)
6 JANUARY 2022**

The President, Simon Lewis, chaired the meeting, which was attended by 75 members of the Association and 14 non-members (denoted by *), including:

Kathryn Adamson, Rosie Archer*, Cristina Balaban, Colin Ballantyne, Natasha Barlow, Mark Bateman, Anna Beckett, Louise Best, Sinead Birks, Clare Boston, Geoffrey Boulton, Anna Bourne, Becky Briant, Eleanor Brown, Alice Carter-Champion*, Benjamin Chandler, Chris Clark, Pete Coxon, Alastair Curry, Charlotte Curry, Chris Darvill, Stephen Davison, Cathy Delaney, Michael Dempster, Nico Dewald*, Kevin Edwards, Jeremy Ely, Ian Evans, Derek Fabel, Trevor Faulkner, Paul Fish, Will Fletcher, Mick Frogley, Phil Gibbard, Terence Hackwill, Connie Harpur*, Jane Hart, Tim Heaton*, Slyvie Hodgson*, Dave Horne, Rupert Housley, Anna Hughes, Andrew Jones, Peter Jones, Sharman Jones, Sam Kelley*, James Kirkham*, Harry Langford, Tim Lawson, Daniel Le Heron, James Lea, Simon Lewis, Stephen Livingstone, Jan Mangerud, Anna March*, Fflyff McClaren, Des McDougall, Della Murton, Jacob Noble, Adrian Palmer, Violet Patterson*, Danni Pearce, Kirsty Penkman, Emrys Philips, Barbara Preece*, Richard Preece, Paula Reimer, Benedict Reinardy, Ed Rhodes, David Richards, Gwyneth Rivers, Neil Roberts, Helen Roe (minutes), Jim Rose, Ann Rowan*, Hugh Saxby, James Scourse, Ian Shennan, David Shirley, Alan Smith, Antony Stevens, Chris Stokes, Abi Stone, Rob Storrar, Max Van Wyk de Vries*, Emily Watt, Dorothy Weston, Brian Whalley, Sarah Woodroffe.

1. WELCOME AND APOLOGIES FOR ABSENCE

The President welcomed everyone to the meeting. Apologies were received from Danielle Schreve and Katherine Selby.

2. MINUTES OF THE 56th ANNUAL GENERAL MEETING

These were accepted as a correct record of the meeting.

3. MATTERS ARISING FROM THE MINUTES

There were no matters arising.

4. PRESIDENT'S REPORT

The President began by thanking the organisers of the 2022 Annual Discussion Meeting (University of Sheffield) for hosting the AGM and for providing technical support.

a. Deceased Members. Rob Westaway had sadly passed away in August 2021. The President described his significant body of work on river terrace systems and his contributions to the QRA's Fluvial Archives Group, amongst other contributions. A short silence was held by way of remembrance.

b. Croll Medal Presentation to 2021 recipient. The President had recently met with Richard Preece to present him with his medal, which had not been possible due to the online format of the 2021 AGM. A nicely illustrated book, "*James Croll and his Adventures in Climate and Time*" by Jo Woolf, had also been published in 2021 to mark the bicentenary of Croll's birth (Publishers: RSGS). This had received support from a QRA Outreach award.

c. Covid-19 Pandemic. The pandemic had continued to have significant impacts on the Association during 2021 and the Executive had continued to have meetings online. The President thanked the Executive for their efforts to ensure that business had continued.

d. Finances and JQS Matters. The President reported that the QRA's finances remain in a state of good health and that the Association continues to meet its charitable objectives, as detailed in annual reports to the Charities Commission (see *Item 6, Treasurer's Report*). Royalty payments from *Journal of Quaternary Science (JQS)* continue to allow the Association to support a wide range of research activities. The journal is now in its 37th year of publication and continues to provide an outlet for high quality, internationally significant research papers (*Item 5d*). On behalf of the QRA, the President thanked both new and retiring members of the *JQS* Editorial Board for their contributions to the continued success of the journal.

e. Equality & Diversity Working Group. Following on from discussions at the 2021 AGM, the President confirmed that a new Equality and Diversity Issues (EDI) Working Group was established in 2021 led by Vice President Jane Hart (see *Item 8 below*). Jane and other members of the working group were thanked for their consideration of this important matter, which will continue to be a priority in the years ahead.

f. QRA website. The President confirmed that the Executive have agreed to move forward with a website overhaul which will involve engaging a new hosting provider. The Publicity Officer, Chris Darvill, has set out an timetable to develop this in 2022 (see *Item 5i*). A priority will be simplicity and efficiency in design and operation so that the Publicity Officer and others are able to maintain and update the site on a day-to-day basis. Chris Darvill was thanked for his hard work and willingness to lead on this important project.

g. Executive Sub-committees. To help manage an increasingly large volume of business, the President announced that the Executive have agreed to establish four sub-committees covering the following areas: Finance & related matters; Publications & Communications; Grants, Outreach & Conservation, and Equality & Diversity. All Executive members will participate (as appropriate) and each sub-committee will meet at least once a year. The sub-committees will report to the Executive committee.

h. Executive Committee retirements. The President thanked five retiring members for their work during their terms in office: Jane Hart, Helen Roe, Kathryn Adamson, Katherine Selby and Eleanor Brown (for roles see *Item 5g*). Dale Tromans was thanked for completing his term as Postgraduate Representative in Autumn 2021 and Sinead Birks was welcomed as his replacement.

5. ANNUAL REPORT OF THE SECRETARY

a. Membership.

Table 1. Summary of membership data as of 1 December 2021. *Includes copyright members

	2014	2015	2016	2017	2018	2019	2020	2021	Change (20–21)
Ordinary Members	636	656	615	682	677	592	616	617	+1
Postgraduate Members	368	358	289	369	395	321	343	295	-48
Unwaged/Retired Members	146	147	134	137	137	118	123	130	+7
Honorary members	35	38	38	41	40	40	42	44	+2
Institutional members	29	26	21	22	17	17	16	16	-
Corresponding members*	23	23	23	23	24	24	23	23	-
Total Membership	1237	1248	1120	1274	1290	1112	1163	1125	-38

Total membership of the Association currently stands at **1125** (see Table 1). A small decline from 2020 may reflect new measures put in place to follow up on lapsed members. Subscriptions for 2021 were unchanged at £20, with a reduced rate of £10 for students and unwaged members. On behalf of the membership, Val Siviter was thanked for her ongoing work for the Association, particularly management of the membership database.

b. Meetings.

i) Annual Discussion Meeting 2021

Landscapes of Change: past, present and future perspectives.

University of Portsmouth, 6th - 8th January 2021 (hosted online)

Organisers: Timothy Barrows, Clare Boston, Laura Cunningham, David Giles, Mark Hardiman, Harold Lovell, Sabine Wulf

Attendees: 275 (approximately 50:50 M:F⁺). Report: *QN* 153.

iii) **26th Annual QRA Postgraduate Symposium**

University of St Andrews, 30th - 31st August 2021 (hosted online)

Organiser: Willem Koster

Attendees: 12; Report: *QN* 155 (*forthcoming*)

iii) **QRA / Quaternary Engineering Research Group**

Quaternary Engineering Geology for Offshore Renewables and Careers Event.

Date: 14th October 2021; Format: 1/2 day online event

Organisers: Claire Mellett, Mike Clare, Simon Price and Leah Arlott

Attendees: 95

iv) **QRA Field Meeting**

Nature and Timing of the Deglaciation of the SW Scottish Highlands

Date: 15th-19th September 2021.

Location: Fort William, Scotland

Organisers: Adrian Palmer, John Lowe

Attendees: 29 (approximately 50:50 M:F) *QN* 155 (*forthcoming*)

v) **Co-Sponsored Meeting**

'James Croll – from Janitor to Genius'

Date: 17th-18th April 2021 (held online)

Organisers: Kevin Edwards, Mike Robinson

+ non-binary gender not included; work is ongoing to consider how to most effectively collect this data based on self-identification

The **Wiley Annual Lecture** for 2021 was delivered during the ADM by Kim Cobb (Georgia Institute of Technology, USA) entitled '*Climate Resilience for the 21st Century - Smart Sea Level Sensors*'.

The people who had organised and participated in the above meetings, and who had prepared reports for *QN* were thanked.

c. Grants and Awards.

During the 2020-21 financial year, **£21,825** was awarded by the QRA to members under the standard awards schemes (*see Item 7a*). Details of all QRA grants and awards are available on the QRA website: qra.org.uk/grants

d. Publications.

Quaternary Newsletter

3 issues: 152 (Feb 2021), 153 (June 2021) and 154 (October 2021).

Editor: Dr Sarah Woodroffe (Durham)

The Editor reported that *QN* had returned to full strength in 2021 following a disrupted year in 2020 due to Covid-19. Three 'bumper' issues had been published, with contributions coming from many different parts of the Quaternary community. These had included several reports from virtual meetings. She urged members to continue to consider *QN* for rapid discussion pieces that focus on issues of interest to the Quaternary science community. *Quaternary Newsletter* also provides a great opportunity for authors to trial new perspectives and present new results that may later become highly-cited research papers. Early career researchers (including PhD students) were encouraged to consider using *QN* to develop their skills in article writing and to continue to write reports about meetings and other events of interest.

Journal of Quaternary Science

Volume 36 (2021): containing 94 items across eight issues (1447 pages).

Editor-in-Chief: Professor Neil Roberts (University of Plymouth)

Key developments in 2021 included:

- **Published pages & Submissions:** All eight issues of Volume 36 (2021) were published on time. This volume included 1477 pages, in comparison to 1099 in 2020 (a 31% increase), with 94 items (articles plus editorials, book reviews, correspondence) compared to 90 in 2020. There was a small decrease in manuscript submissions from 2020, possibly related to research delays caused by Covid-19.
- **Special Issues:** Two special issues were published: '*BRITICE-CHRONO reconstructions of the last British-Irish Ice Sheet*' (Guest Editor: Arjen Stroeven; Issue 5, July 2021); and '*Geoarchaeological and palaeoenvironmental research in European loess*' (Guest Editors: Janina Nett & Wei Chu; Issue 8, November 2021). Two other special issues are in progress.
- **Open Access:** JQS publisher Wiley have made 'Transitional Deals' with several European countries, including the UK, which will provide UK universities access to Wiley's full portfolio of journals. This will also enable their staff to publish open access in JQS without charge (until 2023). The corresponding author affiliation defines eligibility. *The deal provides a very strong incentive for UK-based QRA members to publish their work in JQS as their journal of choice.*
- **Impact Factor:** The latest 2-year Impact Factor, for citations during 2020 based on articles published in 2018 and 2019, rose from 2.377 to 2.738. Whilst some of this increase may reflect a change in the way that the impact factor is calculated, the rise was higher than in several competitor journals.
- **Editorial Advisory Board (EAB):**
 - There was a major 'refresh' of the board membership in early 2021 when 15 of the 41 members either stepped down or moved to the new category of Editor Emeritus. Fifteen new members joined, which has improved the gender and age balance.
 - The annual EAB meeting was held online in November 2021, allowing participation for non-UK based members. At this meeting, it was agreed to establish an **Early Career Researcher Advisory Board** for JQS, as a way to engage more closely with the ECR community and give them experience of the editorial world. One of the ECR members will represent the QRA.
- **Outstanding ECR paper award:** A new annual award has been launched for an outstanding paper by an ECR published in JQS. This will take the form of a public award, along with free QRA membership for a year. It will provide recognition of the recipient's work to add to their CV/professional profile. The award will use a maximum of 7 years between PhD completion and the date of initial manuscript submission as the definition of ECR eligibility, allowing for career breaks. For details of the first winner see *Item 14*.

The JQS Editor encouraged members to think about ideas and proposals for future special issues. Members were thanked for their continued support to the journal, both as authors and referees.

QRA Field & Technical Guides - See Item 9

e. Research Groups.

Members were reminded to support the three QRA research groups which were established in 2021:

- *Quaternary Engineering Geology*: Leads: Paul Fish, Becky Briant and others
- *Peatland Ecosystems and Time (PEaT)*: Leads: Graeme Swindles and others.
- *Virtual Palaeoscience Project (ViPs)*: Leads: Jane Bunting and others.

New proposals for research groups are invited at any time and should be discussed with the Meetings Officer in the first instance (meetings@qra.org.uk).

f. Outreach.

- *QRA Undergraduate Dissertation Prize*

Twelve entries were submitted for the 2021 prize. The winner was Sylvie Hodgson Smith (University of Cambridge) (*see Item 14 below*). An Abstract will be published in *QN*. The judges Mary Edwards and Gill Plunkett were thanked for their work in reviewing the entries. The continuing support of Catherine Souch and others at the RGS who administer the prize was acknowledged.

- *QRA Outreach Award*

During 2021 one project was allocated funds:

'Essex Rock – Geology Beneath the Landscape' - funds are being used to support illustration costs associated with the publication of this book which is aimed at the general public, using accessible language. It contains more than 350 photos and figures to reveal how the rocks and landscapes of Essex have developed. Discussions are ongoing regarding how to offer QRA members a discount on the book. Supported illustrations will also be available to members for general use free of charge.

Whilst activities for two further projects were suspended in 2021 ('Girls into Geoscience Wales'; 'VR Glaciers and Glaciated Landscapes'), a final report was received for the 'College Lake Geology Project (Pitstone Quarry SSSI, Marsworth)'. The award was used to open a new quarry section, install an interpretation board and open a new path with disabled access. These initiatives will allow visitors, including school groups and academics, to view and understand the Quaternary deposits, adding to the history of the site and inspiring future generations.

Outreach Awards are normally up to £1000, although larger requests will be considered – please see the QRA website for a list of previously funded projects or contact the Outreach Officer (outreach@qra.org.uk).

g. Executive Committee.

The following members completed their terms of office between January 2021 and January 2022 and were thanked on behalf of the membership for their hard work and contributions towards the smooth running of the Association:

- September 2021: Dale Tromans (*Postgraduate representative*)
- January 2022: Jane Hart (*Vice President*), Helen Roe (*Honorary Secretary*), Kathryn Adamson (*Awards Officer*), Katherine Selby (*Publications Secretary*) and Eleanor Brown (*Conservation Officer*).

h. Postgraduate activities.

- The Executive welcomed Sinead Birks as a new Postgraduate representative in September 2021.
- *26th Annual Postgraduate Symposium 2021*: This was hosted by University of St Andrews (30th - 31st August) as an online meeting. The number of followers of the QRA PG Symposium account increased by 12 (to 348) over this period, and there were ca. 2500 profile visits. A write-up will appear in *QN*.
- *Social Media activities*: The postgraduate representatives also maintain the **social media** accounts of the Association. The number of followers on the accounts as of late 2021 was as follows: Twitter: 2996; Facebook: 1980 page likes and 2054 followers; Instagram: 175 followers. Members are encouraged to promote activities and discussions on Quaternary-related themes via these social media platforms. For further details, members should check the website or contact the Postgraduate Representatives.

i. Publicity.

- **Email Newsletters**: In 2021, the Publicity Officer, distributed regular E-mail Newsletters to members approximately once a week. These remain an effective means of advertising positions, events and news across the membership. The Publicity Officer currently schedules these for 3 pm on Fridays and requests that the relevant announcements are sent to publicity@qra.org.uk by Thursday for circulation that week.
- **QRA website - updates**: Some minor changes were made to the website during the year: (i) the Stripe payment system was checked to comply with changes to European SCA payments; (ii) workflow was streamlined and improved to allow members to access *JQS* content on the Wiley website via the membership page; (iii) Postage costs were updated to reflect higher costs. Two further changes requested in summer 2021 from the website management company (*Focal Strategy*) are still outstanding (the documentation relating to orders and text-boxes relating to amended postage costs both require updates).
- **Commissioning of a new QRA website 2022-23**: Due to protracted difficulties with gaining access to regular maintenance support from the website management company and other long-standing problems (e.g. issues with membership updates), the Executive agreed in October 2021 that the website is no longer fit for purpose and a **new website should be commissioned**. The main objectives in 2022-23 are to establish a specification for the new website, commission quotes and approve a re-design. The Publicity Officer, Chris Darvill, is co-ordinating the implementation, with input moving forward from the new Publications & Communications sub-committee (see *Item 4g above*). Members will be kept updated on progress.

The Secretary's report was ACCEPTED by the membership.

6. ANNUAL REPORT OF THE TREASURER

a. Introduction. The report covers the period between 1 August 2020 to 31 July 2021. Accounts are detailed in Table 2. The Association's financial activities have picked up from the COVID-19 impacted situation reported in last year's accounts. The aim is to break-even within a financial year and in 2020-21 this was achieved. Overall, the finances of the Association remain healthy and stable. All values stated here are rounded up to the nearest pound. The figures and accounts presented remain provisional until checked by an independent auditor.

b. Income. In total, the Association's income from subscriptions and book sales amounted to £16,479. This comprises £8,242 from membership subscriptions paid via standing order, £464 from book sales, and £7,773 from undifferentiated subscriptions and book sales via the Stripe online payment system. The Association received an important contribution of £73,830 from Wiley as a profit-share from the publication of *JQS*. This is 1.5% less than last year (2019-20: £74,963). *JQS* subscription revenue decreased by 6%, but this was countered by growth in Open Access revenue. Other royalties from the Publisher's Licensing Society amounted to an additional £1,597. *The Royal Society* continues to support the UK's membership of INQUA via the QRA, providing a contribution of £6,279 towards our subscription. The QRA Treasurer also administers the *JQS* Editorial Board fund, provided by Wiley and ring-fenced for *JQS* expenses (honoraria and meeting expenses). The payment from Wiley for 2020-21 was £16,054. Overall, the Association's working income (subscriptions, book sales, royalties) for financial year 2020-21 was £91,905, and total income was **£116,380**.

c. Expenditure. Day-to-day running costs of the Association (primarily payment of our Administrator, funding meetings of the Executive, postage and website maintenance) were somewhat reduced in comparison to previous years at £10,944. This reflects a move to holding committee meetings online. At £40,054, the Association's spending on Grants, Awards, and Meeting Sponsorship has started to return to a more normal level compared with last year's low total of £27,877. Whilst in-person conference attendance remains low, applications for other research-related activity is picking up. The UK subscription to INQUA for 2019 (£13,498), 2020 (£13,764) and 2021 (£13,500) all appear in this report showing that the QRA is continuing to support a comprehensive programme of international research activities and collaborations. Overall, expenditure for 2019-20 was **£111,835**.

d. Year-end financial status.

As of 31st July 2021, the Association held:

- £116,979.91 in our Bank of Scotland Treasurer's Account
- £27,583.52 in our Bank of Scotland Publications Account [estimate]
- £ 123,506.87 in our HSBC Community Account
- £ 40,708.75 in our HSBC Manager's (savings) Account

The Association started the 2020-21 financial year with total funds of £304,233.60 and ended with £308,779.05. As always, the aim was to break-even within the financial year and it is clear from these figures that this was achieved. Reserves are being held to cover increased expenditure in 2023 when the next INQUA Congress is planned. Ring-fenced sums within our holdings include £15,455 held in trust for the Bill Bishop Award, £85,500 for the INQUA fund, £5,000 for the Lewis Penny Medal, ~£34,600 for administering the *JQS* Editorial Board, and £30,000 designated to meet any unexpected liabilities.

e. Plans for the next financial period. The QRA continues to receive a 20% gross profit share from the publication of *Journal of Quaternary Science*. Book sales returns have increased due to the recent production of two field guides / technical reports. The high level of reserves means that spending on standard awards and activities can be maintained at the higher level of ~£50k trialled for the 2017-18 financial year, including additional funding for Geoconservation awards and the prestigious £5k QRA Research Award. As always, this spending should be closely monitored in order to ensure reserves are replenished ahead of the next INQUA Congress awards round in 2023.

f. Auditing. As noted above, the finances have not yet been audited and are submitted to the AGM subject to approval by the external auditor.

Table 2: Income and expenditure on the Treasurer's account for 1 August 2020 to 31 July 2021.

INCOME	2018-19	2019-20	2020-21
Subscriptions	£9,309	£8,298	£8,241.59
Book sales	£1,125	£609	£464.20
Subs/book sales (Stripe payments)	£8,173	£4,925.59	£7,773.42
Total Subs/Book Sales	£18,607	£13,832.59	£16,479.21
Publisher's Royalties (JQS)	£73,785	£74,963	£73,830
Publisher's Royalties (PLS)	£883	£951.65	£1,596.52
Royal Society: INQUA Subscription Support	£5,825	£6,279	£6,279
Surplus on Meetings	£149	£2,079.98	£431.08
Bank refunds	£0	£4.86	£0
INQUA Field trip subscriptions	£19,311	£331.43	£0
Advertising	£0	£0	£0
Returned awards	£1,020	£0	£1,606.39
Donations	£1,000	£1,000	£0
Interest Received	£22	£76.88	£4.07
Total Other Income	£101,995	£85,686.80	£83,747.06
JQS Editorial Board (ring-fenced budget)	£0	£31,879	£16,154
TOTAL INCOME	£120,581	£131,398.39	£116,380.27
WORKING INCOME	£98,935	£93,240.39	£93,947.27
EXPENDITURE			
Newsletter & Circular printing	£1,159	£1,062	£821
Newsletter postage	£1,821	£934.13	£2,075.33
Admin support	£6,000	£6,000	£6,000
Postage & stationery	£0	£0	£136.96
Executive Committee Costs	£3,347	£3,659.68	£749.67
Insurance premium	£1,180	£1,233.06	£1,160.78
Total Running Expenditure	£13,508	£12,888.87	£10,943.74
Printing (Field Guides & Books)	£3,310	£2,355	£5,174
Total Publications Expenditure	£3,310	£2,355	£5,174
JQS Editorial Board Costs (ring-fenced budget)			
Editors' honoraria	£9,000	£12,000	£11,001.50
Exec. INQUA costs	£0	£220	£0
Board meeting travel	£1,113	£1,513	£0
Total JQS Editorial Board Costs	£10,113	£13,732.74	£11,001.50
Grants/Awards/Support			
NRWA	£19,005	£11,890	£16,066
QRF	£19,495	£8,470	£13,235
QCF	£5,334	£2,800	£0
QRA Research Fund	£4,260	£0	£4,960

INQUA Fund	£30,620	£2,155.86	£0
PGMA	£0	£0	£1,489
Outreach Award	£0	£0	£1,500
Geoconservation Award	£1,805	£1,000	£1,004
Undergrad dissertation prize	£250	£0	£300
ADM Poster prizes	£0	£0	£0
Support for delegates to INQUA Congress	£0	£0	£0
C14 bursaries	£1,297	£0	£0
Bill Bishop Memorial Fund Award	£0	£800	£0
Croll and Lewis Penny Medals (ADM Travel)	£163	£461.32	£0
Postgraduate Conference	£500	£0	£0
Research sub-group support	£0	£0	£1,500
Total Grants/Awards/Support	£82,766	£27,877.18	£40,054.40
Refunds/reimbursements (subs/postage errors)	£8	£0	£0
Refund (ADM subs etc)	£0	£0	£0
Cancelled INQUA fieldtrip reimbursements	£0	£1,050	£0
Meetings expenditure	£1,700	£2,000	£1,025
Catering (meetings)	£387	£0	£0
INQUA subscription	£12,842	£0	£40,761.24
Web Site costs	£450	£450	£450
Dissertation Prize admin (RGS)	£200	£300	£200
Medals - striking/engraving	£3,000	£0	£37.68
RGS Archives	£0	£0	£0
Bank charges	£281	£176.96	£187.26
Earth Heritage Magazine online publishing	£0	£0	£2,000
Total Other Expenditure	£18,860	£3,677.96	£44,661.18
TOTAL EXPENDITURE	£139,111	£60,530.75	£111,834.82
NET SURPLUS/(DEFICIT)	-£18,488	£70,867.64	£4,545.45

The Treasurer's report was ACCEPTED by the membership.

7. ANNUAL REPORT OF THE AWARDS OFFICER

a. Standard Awards.

In the Standard Awards rounds for financial year 2020-21 **£21,825** was distributed. This was less than in the 2019-20 financial year (£33,205). This year, application numbers were much reduced (Total: 22) compared to the previous financial year (43). This is most likely a result of the on-going impacts of Covid-19-related restrictions on travel, laboratory access, fieldwork logistics, and academic workloads. Nonetheless, overall success rate of applications was very good (average 94%).

Table 3: Summary of Standard and Special Awards 2020-2021. Award holders are given in Table 4.

Fund	Round	No. of applications ¹	Total monies requested (£)	No. funded	Total monies awarded (£)	% Funded
NRWA	May-21	3	4450	3	4450	100%
	Jan-21	4	5516	4	5516	100%
	Sep-20	4	5900	3	4500	75%
	Total	11	15866	10	14466	92%
PQCF	May-21	1	740	1	740	100%
	Jan-21	0	0	0	0	0
	Sep-20	1	749	1	749	100%
	Total	2	1489	2	1489	100%
QCF	May-21	0	0	0	0	0
	Jan-21	0	0	0	0	0
	Sep-20	0	0	0	0	0
	Total	0	0	0	0	0
QRF	May-21	3	4050	3	4050	100%
	Jan-21	0	0	0	0	0
	Sep-20	3	3300	2	1820	67%
	Total	6	7350	5	5870	84%
Bill Bishop		0	0	0	0	0
¹⁴ C short course		-	-	-	-	-
¹⁴ C Chrono ²	May-21	1	-	1	-	100%
	Jan-21	2	-	2	-	100%
	Total	3	-	3	-	100%
	TOTAL	22	24705	20	21825	94%

¹ Refers only to eligible applications² Refers to number of applicants not the number of dates requested

QCF= Quaternary Conference Fund; PQCF=Postgraduate Quaternary Conference Fund; QRF=Quaternary Research Fund; NRWA= New Research Worker's Awards. Note- the Geoconservation, Outreach Awards and prizes are not listed here

b. Special grants. The QRA would like to acknowledge the continued support of the ¹⁴CHRONO Centre for Climate, the Environment and Chronology, Queen's University Belfast, for an annual allocation of radiocarbon determinations for New Researchers.

c. Notices and Activities 2020-2021.

The new application forms continue to work well, and there are currently no imminent plans to implement online only submissions. This will continue to be reviewed in the future, in line with on-going website updates.

Disclaimers continue to be added to all application forms, to ensure that all QRA-funded activities comply with institutional/national/international Covid regulations. All recipients of QRA awards are requested to inform the QRA if their activities are delayed or cancelled.

Table 4. Standard Awards - Award holders

Name	Institution	Title	Award (£)
NRWA			
Holly Norton	University of Lincoln	<i>Disentangling Climate-Disease Interactions in Lincolnshire, UK</i>	1450
Shuang Zhang	Royal Holloway University of London	<i>Developing a dating and correlation framework for palaeoclimate and archaeological records in the Eastern Mediterranean region over the Late Quaternary</i>	1500
Wouter Bonhof	University of Exeter	<i>Variable migratory behaviour in Late Pleistocene reindeer and bison from Arctic Siberia.</i>	1500
Josh Pike	Royal Holloway University of London	<i>Developing a robust Last Glacial-Interglacial Transition Tephrostratigraphic Framework for Patagonia</i>	1500

Alvaro Beltran	University of Southampton	<i>Assessing anthropogenic impacts on the endemic-rich forests of São Tomé Island</i>	1500
Jesse Hennekam	University of York	<i>Morphological divergence of the island ruminant <i>Myotragus balearicus</i></i>	1500
Aashna Tandon	Gujarat University	<i>Understanding the Late Pleistocene-Holocene terrace development in the Northeast Himalayan Frontal Thrust zone, India</i>	1330
Ewan Shilland	University College London	<i>What has driven long-term aquatic plant change in upland lakes and streams and do plant eDNA, sediment trap sedDNA and sediment core sedDNA match known assemblages and historical change?</i>	1200
Katie Gunning	University of Lincoln	<i>Understanding the impacts of desilting agent on aquatic ecosystem health and sustainability</i>	1486
Emma Cooper	Royal Holloway University of London	<i>The deglaciation of central-Patagonia (44 – 45°S) during the Last Glacial-Interglacial Transition</i>	1500
PQCF			
Laura Hunt	University of Nottingham	<i>Human and climate impacts on Ugandan crater lake hydrology</i>	749
Kenta Sayama	University of Oxford	<i>Expanding the scope of geoheritage conservation in Arabia: Protecting Quaternary Palaeoenvironmental sites as geocultural sites in the UAE and Oman</i>	740
QRF			
Carla Ferreira	Queens University Belfast	<i>At the edge of Europe: climate, land-use and fire histories of an European Atlantic upland from a palaeoecological perspective</i>	1200
Becky Briant	Birkbeck, University of London	<i>Investigating potential C14-contaminants during processing and storage of archaeological plant and insect samples</i>	1500
Nick Loughlin	Northumbria University	<i>Reconstruction of an Indigenous Domesticated Ecosystem (RIDE)</i>	1350
Lorna Linch	University of Brighton	<i>The micromorphology of periglacial ramparted depressions</i>	1400
Aayush Srivastava	University of St Andrews	<i>Environmental change along the River Dee from the Late Upper Palaeolithic to the Neolithic Periods</i>	420
¹⁴CHRONO			
April Howden	Liverpool John Moores University	<i>Understanding the retreat of the North American Ice Sheet</i>	3 dates
Mai Walker	Durham University	<i>Building an environmental model and assessing possible human impact through palynology at Loch Nan Eala, North-west Scotland</i>	3 dates
Olivia Shepherd	Manchester Metropolitan University	<i>Reconstructing the paleoenvironment in Northwest England, using lipid biomarker analysis.</i>	3 dates
Annie Murray	University of Southampton	<i>Dating the greening of the Sahel during MIS3</i>	3 dates

8. EQUALITY & DIVERSITY (EDI) WORKING GROUP REPORT

The Vice President informed members that the new EDI working group (sub-committee) had met twice (22nd September and 18th November 2021) and had held numerous smaller meeting on specific topics. Three strands had been determined for focus: *Policy*; *Change in Culture* and *Specific Actions*, with the aim of building up to the QRA ADM in 2025 with a 'gold standard' of inclusivity. A draft EDI Policy had been developed which was outlined to members.

Specific Actions include:

- *Look at the images on the website and investigate the policy wording for fieldtrips and conferences.* The sub-committee had investigated the images and these are fine, but had noted that future website updates or major re-designs must be subject to continued scrutiny in relation to EDI objectives. The group are currently working on an ADM and Field meeting guide, which includes the 2019 INQUA Code of Conduct. A QRA Code of Conduct is planned which will be based on the RGS version.
- *Data collection in order to establish a base line for future improvements.* This has been completed and was enabled for the Sheffield ADM meeting (Jan 2022).
- *Caring support* – Caring costs will now be an eligible cost within all the QRA grants. The value of the grants will be increased to make this feasible.
- *Positive action for better inclusion from unrepresented groups* – The sub-committee will investigate ways that the QRA could support the “pipeline” by funding (in part) national EDI postgraduate initiatives.

9. ANNUAL REPORT OF THE PUBLICATIONS SECRETARY

This item was presented by the Secretary on behalf of the Publications Secretary.

a. QRA Book Publications: Two new guides were published in 2021:

- **Technical Guide:** *A Practical Guide to the Study of Glacial Sediments* (2021). Evans, D. & Benn, D. (Eds).
- **Field Guide:** *The Quaternary of the West Grampian Highlands* (2021), Palmer, A., Lowe, J. & Matthews, I. (Eds).

b. Book Sales and Stock: Book sales in 2021 totalled 272, compared to 136 in 2020. The current book stock held by Val Siviter is *ca.* 3220 (compared to 2877 in 2020) and includes both Field and Technical Guides.

c. Out of print publications: The following guides are now out of print: Glacitectonics; Assynt and Coigoch; Brecon Beacons; Central East Anglia and the Fen Basin; Cumbria; Devon and Cornwall; East Yorkshire Dales; Isle of Man and NW England; Kent and Sussex; Lower Reaches of the Thames; Norfolk and Suffolk; Orkney; Shetland Isles, SW Scottish Highlands; Teesdale & North Pennines, West Wales.

d. Postage costs: A small increase in P&P charges was implemented in 2021 due to rising costs. Import tax/duty now also has to be paid on books sent overseas. This cost needs to be paid by the recipient.

10. ANNUAL REPORT OF THE CONSERVATION OFFICER

The QRA and its members carry out many activities that support and promote geoconservation, particularly through field and discussion meetings, offering practical support and working with local groups. The QRA Conservation Officer (conservation@qra.org.uk) supports and encourages these, as well as promoting the QRA's position on conservation issues. Some of the initiatives in 2021 included:

a. The QRA's continued support for *Earth Heritage*, *The Geological and Landscape Conservation Magazine* (www.earthheritage.org.uk). Issue 55 was published in 2021 and Issue 56 is about to be published. This free-to-download publication is produced twice a year by the *Geologists' Association* (GA), the QRA, *Natural England*, *Natural Resources Wales* and *NatureScot*, with major contributions from others in the voluntary geoconservation sector. QRA members can suggest articles and news items to the Conservation Officer and receive email notifications of new issues by subscribing on the *Earth Heritage Magazine* homepage.

b. Liaison with geological organisations and input into conservation policy matters. The conservation officer had liaised regularly with geological organisations on conservation matters through membership of the *Geological Society of London's Geoconservation Committee*. The President had also responded to a Defra consultation on *Local Nature Recovery Strategies*. In 2020 the President wrote in support of an *International Geodiversity Day*. This has now been endorsed by UNESCO and will take place on 6 October 2022. The Conservation Officer will plan the QRA's contribution to this event.

c. Advising on conservation matters notified by QRA members. Advice was provided to a member on a minerals planning application affecting a local Quaternary site. Members are encouraged to consult the QRA Conservation Officer if conservation advice on Quaternary sites in the UK is required.

d. The QRA Geoconservation Award. No awards were made in 2021, although several enquiries were received. Two Geoconservation Award funded projects from 2019 were completed and articles on their outcomes published in *Earth Heritage Magazine*. Herne Bay Museum received funding for curating Palaeolithic and Pleistocene collections from sites in Kent, whilst Pitstone Quarry SSSI at College Lake Nature Reserve, Marsworth, received funding for an interpretation panel, a new section and path installation as noted under *Item 5f* above (this project also received a QRA Outreach Award). Two further projects in receipt of a QRA Geoconservation Award are ongoing.

The 2022 application deadlines for the QRA Geoconservation Award are 1 March and 1 September. Please contact the Conservation Officer (conservation@qra.org.uk) for further details and an application form.

11. QRA MEETINGS PROGRAMME 2022-2023

a. Forthcoming meetings in 2022

(i) Field Meetings

QRA/Quaternary Engineering Research Group Field Meeting 2022: *The Quaternary Engineering Geology of the West Cumbria region*.

Date: 17th-20th March 2022.

Location: Santon Bridge, West Cumbria

Organisers: Nick Smith, Chris Coleman and Paul Fish (Jacobs), Jon Merritt and Emrys Phillip.

Contact: jwm@bgs.ac.uk

(ii) 27th Annual Postgraduate Symposium - 2022

Date: TBC

Location: Sheffield Hallam University/Online (TBC)

Organiser: Sarah Walton

b. Forthcoming meetings in 2023

QRA 2023 Annual Discussion Meeting: *'Applications of Quaternary Geoscience to Engineering: Process, Properties and Behaviour'*.

Date: 5th-7th January 2023

Venue: Burlington House, Geological Society of London

Organisers: John Davis, Becky Bryant, Simon Price, Julian Murton, Paul Fish, Claire Mellett.

Contact: TBC

Field meeting: *The Quaternary of Wester Ross: glacier dynamics and post-LGM evolution of glaciated mountainous terrain*

Date: 25th-28th May 2023

Location: Kinlochewe Hotel and Bunkhouse

Organisers: Colin Ballantyne and Doug Benn.

Contact: ckb@st-andrews.ac.uk

c. Meetings postponed due to COVID-19 that have yet to be rescheduled

Co-sponsored meeting: *'Cryogenian glaciation: the extraordinary Port Askaig record and its comparators'*

Venue: University of St. Andrews (*new date tbc*)

Organisers: Anthony Spencer, Catherine Rose, Ian Fairchild, Roger Anderton, Doug Benn, Bruce Levell, Mike Hambrey

The Meetings Officer thanked those who had offered meetings, and reminded members that a grant of £500 is available for running QRA sponsored meetings. Members were encouraged to think about hosting short (e.g. one day) meetings or overseas meetings with other Quaternary organisations; all types of meetings that promote Quaternary science are welcomed. Published field guides are not obligatory for field meetings.

12. ELECTION OF NEW EXECUTIVE COMMITTEE MEMBERS

The following people had been nominated to succeed retiring members of the Executive Committee. Details of the posts had been given in the June and October 2021 Circulars and deadlines announced. No other nominations has been received for the posts so the following were duly elected:

Vice President: Dave Roberts (Durham)

Honorary Secretary: Adrian Palmer (Royal Holloway, University of London)

Awards Officer: Will Fletcher (University of Manchester)

Publications Secretary: Cathy Delaney (Manchester Metropolitan University)

Conservation Officer: Michael Dempster (Northern Ireland Environment Agency)

13. HONORARY MEMBERS

The President announced that Dave Horne, Kevin Edwards and Pete Coxon had been nominated by the Executive Committee to receive Honorary Member status. These nominations were accepted unanimously by the membership; full citations will appear in *Quaternary Newsletter*.

14. AWARD OF PRIZES AND MEDALS

The President announced the winners of the Association's prizes and medals for 2021/2022:

a. Undergraduate Dissertation Prize - 2021:

Slyvie Hogson Smith (University of Cambridge) for her thesis entitled '*Reconstructing the global climate effects of the volcanic eruption of Mt. Samalas, 1257 AD*'. Runners Up: Tom Garrod (University of Sheffield), Catherine Dorey (University of Nottingham) and Jack Crouch (Royal Holloway, University of London).

b. Outstanding Paper in *Journal of Quaternary Science* by an Early Career Researcher - 2021:

Francesca Pasquetti (PhD candidate, University of Pisa). Title: '*On the chronology of the Mediterranean sea-level highstand during the Last Interglacial: a critical review of the U/Th-dated deposits*'. Special commendations were received by Marina Morlock and Alejandro Cisneros de León.

c. Quaternary Research Award - 2021:

Tim Lawson and Tim Atkinson for a project entitled '*Speleothem dating and the onset of ice-sheet deglaciation in NW Scotland*'.

d. Lewis Penny Medal - 2022:

Ben Chandler (University of Nottingham).

e. James Croll Medal - 2022:

Paula Reimer (Queen's University Belfast).

Full citations will appear in a future issue of *QN*.

15. ANY OTHER BUSINESS

There was no other business.

The meeting started at 3.30 pm and ended at 5.30 pm

Minutes taken by Helen Roe (Secretary)

2 February 2022

Updated 5 December 2022

ANNUAL REPORT OF THE SECRETARY - 2022

a. Membership. Total membership of the Association currently stands at **966** (Table 1).

	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change (21–22)
Ordinary Members	636	656	615	682	677	592	616	617	533	-84
Postgraduate Members	368	358	289	369	395	321	343	295	217	-78
Unwaged/Retired Members	146	147	134	137	137	118	123	130	134	+4
Honorary members	35	38	38	41	40	40	42	44	46	+2
Institutional members	29	26	21	22	17	17	16	16	15	- 1
Corresponding members*	23	23	23	23	24	24	23	23	21	- 2
Total Membership	1237	1248	1120	1274	1290	1112	1163	1125	966	-159

Table 1. Summary of membership data as of 1 December 2022. *Includes copyright members

Membership numbers have fallen again this year, in real terms for both the Ordinary and Postgraduate Members. Whilst there has been a new system for the following up on lapsed members, it is hoped that the new website subscription arrangements will enable a more efficient renewal process for members and for its administration.

Val Siviter retired as QRA Administrator and will be formally handing over the role at the end of December 2022. Val is our first QRA Administrator and will be familiar to many through membership enquiries, website log-in details and online book sales. Her contribution to the QRA over two or more decades has been profound and we thank her for all her hard work and gracious support.

The selection process for a new Administrator was undertaken in the summer of 2022 and we welcome Lucy Engelhart as the new QRA Administrator. Val and Lucy have been working together through a two-month handover from November and Lucy will be taking over fully on January 1st 2023.

Subscriptions for 2022 were unchanged at £20, with a reduced rate of £10 for students and unwaged members. The institutional membership rate is £35. The future subscription rates will be discussed later in the AGM in conjunction with proposed Constitutional amendments.

b. Meetings

i) QRA Annual Discussion Meeting 2022

5th-8th January 2022. Quaternary Glaciations: Processes, environments and reconstructions.

Location: The University of Sheffield (online)

Meeting Organisers/Leaders: Jeremy Ely, Chris Clark, Ann Rowan, Mark Bateman, Jennifer Doole, Stephen Livingstone, Grant Bigg, Darrel Swift.

Attendees: 205 (data forthcoming) Report: QN 156.

ii) 26th Annual QRA Postgraduate Symposium

Sheffield Hallam University, Friday 1st and Friday 9th September 2022 (hosted online)

Organiser: Sarah Walton and Gwyn Rivers

Attendees: 15. Abstracts in QN 157 and report forthcoming.

iii) QRA/Quaternary Engineering Research Group field meeting to West Cumbria 2022

17th-20th March 2022. The Quaternary engineering geology of the West Cumbria region.

Location: Santon Bridge, West Cumbria

Meeting Organisers/Leaders: The trip leaders were Jon Merritt and Emrys Phillips (British Geological Survey), Paul Fish and Chris Coleman (Jacobs), Nick Smith (National Nuclear Laboratory), with contributions from Sinead Birks (Imperial College), Dave Evans (Durham University) and Keith Nicholls (Network Rail).

Attendees: 30 (approximately 23% F and 77 % M)

University (13 incl. 3 PhD); Industry (12) Gov't Agency (3) Retired/Unwaged (2)

Report: *QN 156*

iv) QRA/Quaternary Engineering Research Group/Glacial Landforms Working Group field meeting to Anglesey and North Wales 2022

27th-30th October 2022. Field training course in sedimentology, engineering geology and geohazard significance of glacial and periglacial sediments

Location: The Conway Centre, Llanfairpwllgwyngyll, Anglesey.

Meeting Organisers: David Evans (University of Durham), Paul Fish (Jacobs), Julian Murton (University of Sussex), Simon Price (Arup)

Field trip leaders: Dave Evans (Durham University), Emrys Phillips (British Geological Survey), and Julian Murton (University of Sussex).

Attendees: 44 (approximately 11:33 F:M).

University (10); Industry (27) Gov't Agency (5); Retired (2)

Report: *forthcoming*

+ non-binary gender not included; work is ongoing to consider how to most effectively collect this data based on self-identification

The Executive Committee extends its thanks to the organisers of these meetings, the participants, and to those who have prepared reports on the meetings for *Quaternary Newsletter*.

The **Wiley Annual Lecture** for 2022 was delivered by James Scourse (University of Exeter) during the Annual Discussion Meeting hosted by University of Sheffield. The talk was entitled: "*BRITICE-CHRONO: what next? Problems, ideas, applications.*"

The Meetings Officer is always happy to receive offers of meetings from all members including ECRs. We are flexible on dates and formats and do not necessarily require the production of field guides to accompany field meetings. Updated guidelines for meetings are now available and provide excellent support for those wishing organize meetings.

➤ For further details of the above meetings and forthcoming meetings in 2023/2024 please see the Meeting's Officer's Annual Report.

c. QRA Grants and Awards

During the 2020-21 financial year, **£28,905** was awarded by the QRA to members under the standard awards schemes. This reflects a higher number of applications because of reduced travel restrictions after COVID-19 to enable fieldwork and conference attendance. This year the value of all awards was raised by £150 to reflect eligibility of carer-support costs. In the case of the Quaternary Research Award this amount would increase by £500.

The Awards Officer has rationalized the nomenclature for some of the categories to provide greater distinction between Awards and Grants. For example, the New Research Workers Award (NRWA) will be renamed the New Research Workers Grant, although the Bill Bishop Award will retain its original name established by the Bill Bishop Memorial Trust.

From the Financial Year 2023-2024, the funding rounds will be reduced to two from three. This is to reduce the administrative load and ensure a competitive number of applications. The total amount of funds will remain the same in a financial year. The new deadlines will be 15th September and 15th February. Details of the complete portfolio of QRA grants and awards are available on the QRA website: gra.org.uk/grants

- For further details of these awards please see the Awards Officer's report.

d. Publications

Quaternary Newsletter

3 issues: 155 (Feb 2022), 156 (June 2022) and 157 (October 2022) Editor:
Dr Sarah Woodroffe (Durham)

QN will be made more accessible in 2023 by providing a link via the weekly email circular and it will be made available to all visitors to the new QRA website. A new presentation of the QN will allow individual articles to be downloaded alongside the whole issue. All members of the QRA are encouraged to present articles to the QN. A small change will be the discontinuation of the Circular insert to the QN as only three hard copies of the QN are now sent out to members and the information is widely distributed via the weekly email circular.

- See the QN Editor's report for further details.

Journal of Quaternary Science

Volume 37 (2022): eight issues containing 99 articles (1479 pages). Editor-in-Chief: Professor Neil Roberts (University of Plymouth)

The inaugural JQS outstanding ECR paper award was made at the 2022 QRA AGM to Francesca Pasquetti (PhD candidate, University of Pisa) for her article entitled "On the chronology of the Mediterranean Sea-level highstand during the Last Interglacial: a critical review of the U/Th-dated deposits".

- See the JQS Editor's report for further details.

QRA Guides

One new field guide was published in 2022:

Glacial and Periglacial Materials: A field-based sedimentology and engineering geology workshop, North Wales. Evans, D.J.A. (ed.)

The bookstore has now been consolidated in Durham with Lucy Engelhart (QRA Administrator). Attempts to reduce the book stock have been made through an online sale in the autumn. The online availability of Field Guides and QN has been discussed in detail particularly with respect to potential copyright issues. The Publication Secretary would like to ask for donations from the membership of issues from 1 to 54 and individual issues of 66, 116, 120, 123, 127 and 128 if possible. Scanning of field guides before 2010 is also ongoing, although we do not have electronic copies of out-of-print guides from the early 1990's, 1980's and 1970's.

- See the Publications Secretary's report for further details and information on book stocks and sales.

e. Research Groups and Study Groups

The Association continues to support the following new QRA research groups, which were formally initiated early in 2021 and continue until the end of 2023. Please contact the lead organisers if you would like to get involved.

- ***Quaternary Engineering Geology***: Members: Paul Fish (Lead), Becky Briant, Tom Berry, Julian Murton, Jonathan Lee, Dave Evans, Dave Giles and others.
- ***Peatland Ecosystems and Time (PEaT)***: Members: Graeme Swindles (Lead), Angela Gallego-Sala, Tom Roland, Alice Milner, Paul Morris, Helen Roe and Gill Plunkett.

- **Virtual Palaeoscience Project (ViPs):** Members: Jane Bunting (Lead), Kim Davies, Simon Hutchinson, Fabienne Marret-Davies, Elizabeth Hurrell, Des McDougall, Danni Pearce, Irene Torereggiani, Nicki Whitehouse and others.

A new QRA Research Group has been approved to start in 2023 called **SLaCC: Sea Level and Coastal Change**, which will be organised by Louise Best (University of Gloucestershire) and Sarah Woodroffe (Durham University). The group's remit will be to address "*How can palaeo sea level and coastal data contribute to next generation UK Climate Projections and UK Climate Risk Independent Assessments?*". For further details please contact the leaders.

New proposals for research groups are invited at any time and should be discussed with the Meetings Officer in the first instance.

f. Outreach

As a registered charity, outreach is an important part of our activities and, as our Outreach and External Liaison Officer, James Lea, has been pro-active in promoting our activities.

(i) QRA Undergraduate Dissertation Prize

A total of 5 entries were submitted for consideration this year. The winner of the 2022 dissertation prize will be announced during the AGM in January and an abstract of the winning dissertation will be published in *QN*.

The Association thanks the judges Mary Edwards and Gill Plunkett for their work in reviewing the entries and acknowledges the continuing support of Catherine Souch and others at the RGS for the administration of the prize.

(ii) QRA Outreach Award

Two projects that were suspended during the pandemic are now reactivated (Girls into Geoscience Wales, 2023-2026; and VR Glaciers and Glaciated Landscapes). New awards have been made to *Essex Rock – Geology Beneath the Landscape* the QRA have solicited a book review to be included in in Spring issue of *QN*. QRA members will also be eligible to buy the book at a discount secured as part of the terms of funding from the QRA. Funds have been allocated to 'PalaeoPERCs', an international organization which showcases early career research through online seminars to support seminar and outreach activity. Further details can be found at <https://paleopercs.com>

(iii) Polar Environments Day

A Polar Environments Day, a free event supported by the QRA, was held at Royal Holloway, University of London on the 31st March 2022 with the event being attended by 150 students from under-served schools about polar research. It received positive feedback from the students. The QRA supported with a stand that advertised the role of Quaternary research in addressing modern climate issues. All volunteers wore QRA branded t-shirts. A report is available in *QN* 157.

○ For further details please see the Outreach and External Liaison Officer's report.

g. Executive Committee

Four members of the Executive Committee have completed or will complete their terms of office by January 2023:

- Simon Lewis (*President*)
- Kirsty Penkman (*Ordinary Member*)
- Chris Darvill (*Publicity Officer*)
- Emily Watt (*Postgraduate Representative – September 2022*)

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

There have been some challenging terms of office due to the pandemic and grappling with some significant changes to the QRA's organization.

h. Postgraduate activities

We welcomed a new postgraduate representative on to the Executive Committee in December 2022, Laura Boyall (Royal Holloway), who will represent the QRA postgraduate community for the next two years.

Postgraduate events continue to be an important component of the activities of the Association. The Annual Postgraduate Symposium series continued this year and was hosted online by Sarah Walton and Gwyn Rivers (Sheffield Hallam University) over consecutive Fridays at the start of September. The meeting was a success and a full write-up of the event will appear in a forthcoming issue of *QN*. 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).

Social Media interaction

The postgraduate representatives also maintain the social media accounts of the Association. The number of followers on the QRA Social Media accounts as of late 2021 was as follows: Twitter: 3140; Facebook: 2465 followers; Instagram: 180 followers. Twitter remains the most popular form of social media interaction. Please check the QRA website (homepage) for further details or contact the Postgraduate representatives (postgrad@qra.org.uk)

○ See the Postgraduate Representatives' report for further details.

i. Publicity

In 2021, the Publicity Officer, distributed regular E-mail Newsletters to members approximately once a week (members can opt out at any time in compliance with GDPR rules). These remain an effective means of advertising positions, events and news across the membership. They were also used to inform members of changes to QRA activities associated with Covid-19 disruption. The Publicity Officer currently schedules these for 3 pm on Fridays and requests that the relevant announcements are sent to publicity@qra.org.uk by Thursday for circulation that week. This email Circular will now replace the paper copy that was posted with the hard copy of the QN.

Significant progress has been made to redesign and upgrade the QRA website, which has become a key resource for the management of QRA Administration and the interface with members and beyond. Several challenges had developed with the old website and consequently the Executive supported the Publicity Officer's recommendation of redesign and support from a new agency. We have secured the services of LUV Design to initiate and discuss the design process, which is ongoing. Completion of the new website is currently scheduled for the 10th February 2023 and we may ask for feedback from user groups during the design phase.

○ See the Publicity Officer's report for further details.

j. Geoconservation

The work on Geoconservation continues within the QRA under Michael Dempster. We would like to highlight the QRA Geoconservation Award, which was not awarded in 2022 and the next deadline is 1st March 2023. Please contact conservation@qra.org.uk for further details.

Adrian Palmer
Honorary Secretary
15th December 2022

4. Treasurer's Report and Financial Review, 2021-22

4.1. Introduction

This Report covers the period 1 August 2021 to 31 July 2022. Accounts are detailed in Table 1. The Association's financial activities were relatively stable with the focus on preparing for the enhanced expenditure associated with the INQUA Congress in 2023. The QRA is in a good position to give significant financial support to UK delegates attending the meeting in Rome next year. Income remains steady and expenditure is in line with the period before Covid-19 impacted on research, field meetings, conferences, and outreach events.

All values in the text below are rounded to the nearest pound. The figures have been checked and approved by an independent financial examiner. The Association's audited accounts are with the Charity Commission.

4.2. Income

In total, the Association's income from subscriptions and book sales amounted to £16,685. This comprises £8,085 from membership subscriptions paid via standing order, £537 from book sales, and £8,063 from undifferentiated subscriptions and book sales via the Stripe online payment system. The Association received a payment of £79,049 from Wiley as a profit-share from the publication of *Journal of Quaternary Science* (JQS). This is an important increase on the funds received last year (2020-21: £73,830). Other royalties from the Publisher's Licensing Society amounted to an additional £803. The Royal Society continues to support the UK's membership of INQUA via the QRA, providing a contribution of £6,529 towards our subscription. The QRA Treasurer also administers the JQS Editorial Board fund, provided by Wiley and ring-fenced for JQS expenses (honoraria and meeting expenses). The payment from Wiley for 2021-22 was £16,978. Overall, the Association's working income (subscriptions, book sales, royalties) for financial year 2021-22 was £96,537, and total income was £123,353.

4.3. Expenditure

As in the previous two years (2019-20 and 2020-21) the day-to-day running costs of the Association (primarily payment of our Administrator, funding meetings of the Executive, postage, and website maintenance) were reduced, coming to a total of £9,669. This reflects a move to holding committee meetings online with Zoom compared to physical meetings and a more competitive public liability insurance policy. At £32,627 the Association's spending on Grants, Awards, and Meeting Sponsorship has been impacted by a delay in paying the headline QRA research fund award (typically £5k). Postgraduate conference and outreach awards are returning to a more normal level following the enforced break caused by the pandemic. The UK subscription to INQUA for 2022 will appear in the 2022-23 accounts of the Association. Overall expenditure for 2021-22 was £66,857.

4.4. Year-end financial status

As of 31st July 2022, the Association held:

- £ 125,107.71 in our Bank of Scotland Treasurer's Account
- £ 27,583.52 in our Bank of Scotland Publications Account [estimate]
- £ 171,865.83 in our HSBC Community Account
- £ 40,717.73 in our HSBC Manager's (savings) Account

The Association started the 2021-22 financial year with total funds of £308,779.05 and ended with £365,274.79. Ring-fenced sums within our holdings include £14,655 held in trust for the Bill Bishop Award; £85,500 for the INQUA fund; £5,000 for the Lewis Penny Medal; £43,233 for administering the JQS Editorial Board; and £30,000 designated to meet any unexpected liabilities.

4.5. Plans for the next financial period

The QRA continues to receive a 20% gross profit share from the publication of *Journal of Quaternary Science*. This is a fundamental element of the QRA's financial position for it underpins the grants, outreach events, and prizes which the Association gives out. Next year there will be a programme of enhanced spending associated with a new QRA administrator post, the replacement of the current website with an updated and enhanced product, the costs associated with new storage of the stock of technical and field guides which the Association holds, and support for numerous UK delegates who wish to participate in the summer 2023 INQUA Congress. To further diversity and equality, within our existing programme of awards the QRA is making additional funds available to applicants who act as carers. The funds will be provided where activities require time away from home on fieldwork or when participating in conferences.

4.6. Financial Examination

The finances have been approved by the external financial examiner. Table 1:

INCOME	2019-20	2020-21	2021-22
Subscriptions	£8,298	£8,241.59	£8,085.29
Book sales	£609	£464.20	£536.50
Subs/book sales (Stripe payments)	£4,925.59	£7,773.42	£8,062.88
Total Subs/Book Sales	£13,832.59	£16,479.21	£16,684.67
Publisher's Royalties (JQS)	£74,963	£73,830	£79,049
Publisher's Royalties (PLS)	£951.65	£1,596.52	£803.04
Royal Society: INQUA Subscription Support	£6,279	£6,279	£6,529
Surplus on Meetings	£2,079.98	£431.08	£2,000
Bank refunds	£4.86	£0	£0
INQUA Field trip subscriptions	£331.43	£0	£0
Advertising	£0	£0	£0
Returned awards	£0	£1,606.39	£1,300
Donations	£1,000	£0	£0
Interest Received	£76.88	£4.07	£8.98
Total Other Income	£85,686.80	£83,747.06	£89,690.02
JQS Editorial Board (ring-fenced budget)	£31,879	£16,154	£16,978
TOTAL INCOME	£131,398.39	£116,380.27	£123,352.54
WORKING INCOME	£93,240.39	£93,947.27	£99,845.69

EXPENDITURE			
Newsletter & Circular printing	£1,062	£821	£949
Newsletter postage	£934.13	£2,075.33	£1,725.54
Admin support	£6,000	£6,000	£6,000
Postage & stationery	£0	£136.96	£0
Executive Committee Costs	£3,659.68	£749.67	£182.97
Insurance premium	£1,233.06	£1,160.78	£811.42
Total Running Expenditure	£12,888.87	£10,943.74	£9,668.93
Printing (Field Guides & Books)	£2,355	£5,174	£1,174
Total Publications Expenditure	£2,355	£5,174	£1,174
JQS Editorial Board Costs (ring-fenced budget)			
Editors' honoraria	£12,000	£11,001.50	£13,500
Exec. INQUA costs	£220	£0	£0
Board meeting travel	£1,513	£0	£0
Total JQS Editorial Board Costs	£13,732.74	£11,001.50	£13,500
Grants/Awards/Support			
NRWA	£11,890	£16,066	£11,995
QRF	£8,470	£13,235	£10,312
QCF	£2,800	£0	£1,500
QRA Research Fund	£0	£4,960	£0
INQUA Fund	£2,155.86	£0	£0
PGMA	£0	£1,489	£3,170
Outreach Award	£0	£1,500	£3,000
Geoconservation Award	£1,000	£1,004	£0
Undergrad dissertation prize	£0	£300	£350
ADM Poster prizes	£0	£0	£0
Support for delegates to INQUA Congress	£0	£0	£0
C14 bursaries	£0	£0	£0
Bill Bishop Memorial Fund Award	£800	£0	£800
Croll and Lewis Penny Medals (ADM Travel)	£461.32	£0	£0
Postgraduate Conference	£0	£0	£0
Research sub-group support	£0	£1,500	£1,500
Total Grants/Awards/Support	£27,877.18	£40,054.40	£32,627.33
Refunds/reimbursements (subs/postage errors)	£0	£0	£20
Refund (ADM subs etc)	£0	£0	£0
Cancelled INQUA fieldtrip reimbursements	£1,050	£0	£0
Meetings expenditure	£2,000	£1,025	£6,694
Catering (meetings)	£0	£0	£0
INQUA subscription	£0	£40,761.24	£30.62
Web Site costs	£450	£450	£600

Dissertation Prize admin (RGS)	£300	£200	£200
Medals - striking/engraving	£0	£37.68	£129.34
RGS Archives	£0	£0	£0
Bank charges	£176.96	£187.26	£192.52
Earth Heritage Magazine online publishing	£0	£2,000	£1,000
Independent Examiner's fee (financial audit)	£0	£0	£1,020
Total Other Expenditure	£3,677.96	£44,661.18	£9,886.54
TOTAL EXPENDITURE	£60,530.75	£111,834.82	£66,856.80
NET SURPLUS/(DEFICIT)	£70,867.64	£4,545.45	£56,495.74

Rupert Housley, 28th November 2022

5. Annual report of the Awards Officer 2022

a. Standard Awards

In the Standard Awards rounds for the financial year 2021-22 **£28,905.33** was distributed. This was substantially higher than in the financial year 2020-21 (£21,825). This year, application numbers were higher with 32 total applications compared to 22 in the previous financial year. The healthy increase in applications may reflect the progressive resumption of diverse research activities following the lifting of Covid-19 restrictions on travel, conference attendance, laboratory access, fieldwork, etc. Nevertheless, the total value of awards and number of applications remain somewhat lower than in the financial year 2019-2020 (£34,205 awarded, 43 applications). The overall success rate of applications was very good (average 85%).

Fund	Round	No. of applications ¹	Total monies requested (£)	No. funded	Total monies awarded (£)	% funded
NRWA	May-22	5	7545	4	5995	80%
	Jan-22	0	0	0	0	na
	Sep-21	3	4500	3	4400	100%
	Total	8	12045	7	10395	88%
PQCF	May-22	5	3320.33	5	3170.33	100%
	Sep-21	2	1305	0	0	0%
	Total	7	4625.33	5	3170.33	71%
QCF	May-22	1	750	1	750	100%
	Jan-22	1	750	1	750	100%
	Sep-21	0	0	0	0	na
	Total	2	1500	2	1500	100%
QRF	May-22	4	4940	4	4940	100%
	Jan-22	1	1500	1	1500	100%
	Sep-21	2	3000	2	3000	100%
	Total	7	9440	7	9440	100%
QRA	Sep-21	2	8200	1	3600	50%
Bill Bishop	Jan-22	1	800	1	800	100%
¹⁴ C Dating Short Course	Jan-22	0	0	0	0	na
¹⁴ C Chrono ²	May-21	3	-	2	-	67%
	Jan-21	2	-	2	-	100%
	Total	5	-	4	-	80%
	TOTAL	32	36610.33	27	28905.33	85%

¹ Refers only to eligible applications

² Refers to number of applicants not the number of dates requested
Note- the Geoconservation, Outreach Awards and prizes are not listed here

Table 1: Summary of Standard and Special Awards 2021-2022. For details of award holders, please see Appendix 1 below.

b. Special grants

- The QRA would like to acknowledge the continued support of the Queens University Belfast ¹⁴CHRONO Centre for Climate, the Environment and Chronology for an annual allocation of radiocarbon determinations for New Researchers.

c. Notices and Activities 2021-2022

In the financial year 2021-22, the maximum value of all awards was raised by £150 to reflect the eligibility of carer support costs (by £500 for the Quaternary Research Award).

QRA funding currently falls into different categories of “grants”, “prizes” and “special grants” without a clear rationale. To streamline online funding information under a single banner of “Grants”, the names of awards will be changed to “Grants”, without impacting on the nature or values of those awards. For example, the New Research Workers’ Award (NRWA) will be renamed the New Research Workers’ Grant (NRWG). An exception is the Bill Bishop Award, retaining the original name established by the Bill Bishop Memorial Trust.

The Executive Committee proposes that as of next financial year (2023-2024) the number of main funding rounds will be reduced from three to two per year. This change is to reduce the administrative burden on the Awards Panel and to ensure that each funding round has a competitive number of applications. From September 2023, funding rounds will have deadlines of 15th September and 15th February. Upcoming funding rounds will have deadlines of 15th January 2023, 15th May 2023, 15th September 2023, 15th February 2024, 15th September 2024, and so on.

William Fletcher
December 2022

Appendix 1 - STANDARD AWARDS - Award holders

Award	Name	Institution	Title	Awarded (£)
NRWA	Daniel Parkes	Royal Holloway, University of London	Investigating the cause and structure of abrupt climate change events during MIS 11c	1500
NRWA	Dylan Gaffney	University of Cambridge	Tropical plant processing behaviours during the northern colonisation of Sahul (Pleistocene New Guinea and Australia)	1400
NRWA	Sarah Walton	Sheffield Hallam University	Holocene Climate and Environmental Change in South East Iceland	1500
NRWA	Conner Morison	Edinburgh University	Environmental and Societal Impacts of the 939 AD Eldgjá Fissure Eruption, Iceland	1500
NRWA	Charlie Rex	University of Glasgow	A comparison of deglacial monsoon evolution at Lake Suigetsu, Japan	1500

NRWA	Tom Thorne	University of Aberystwyth	Role of climate change in depositional features in an active glacial region	1500
NRWA	Maria Zicos	Natural History Museum	Diet reconstruction of the extinct ground sloth <i>Myiodon darwini</i> at Cueva del Milodón, Chile, from the DNA of coprolites	1495
Bill Bishop Award	Kathryn Price	University of Reading	Ancient rivers, early humans: The River Thames, 500,000–1 million years ago	800
PQCF	Shashank Nitundil	University of Manchester	Investigating records of dune activity in the western Thar desert of India by combining field and laboratory techniques	500
PQCF	Nataschia Pannozzo	University of Liverpool	Testing luminescence as a tool to investigate erosional/depositional processes in salt marsh settings	500
PQCF	Sophie Williams	Durham University	Relative sea-level changes in Australia over the 19th and 20th centuries	670.33
PQCF	Nina Atae	University of Aberystwyth	Using polymineral fine grains to date Chew Bahir lake core from East Africa	750
PQCF	Annabel Everard	University of Aberdeen	Scotland's Ancient Woodlands: Palaeoecological insights into woodland restoration	750
QCF	Bethan Davies	Royal Holloway, University of London	Topographic controls on ice flow and recession for Juneau Icefield (Alaska/British Columbia)	750
QCF	Laura Basell	University of Leicester	Exploring the realms of virtual reality: New Survey Results from Mwanampambe Cave, Kajengwa, Unguja	750
QRA	Tim Atkinson	University College London	Speleothem dating and the onset of ice-sheet glaciation in NW Scotland	3600
QRF	James Bendle	University of Birmingham	Unlocking New Palaeolimnology Proxies	1500
QRF	Ben Chandler	University of Nottingham	Testing the limits: luminescence dating of inferred Younger Dryas glacier limits in the Central Scottish Highlands	1500
QRF	Lauren Davies	University of Cambridge	Modelling and mapping historical volcanic ash dispersal: Katmai 1912	1500

QRF	Kathryn Adamson	Manchester Metropolitan University	Reconstructing palaeoenvironmental conditions in the Egyptian Nile Valley using rhizolith micro-morphology	1440
QRF	Ian Candy	Royal Holloway, University of London	Is there isotopic evidence for a Little Ice Age in Southern England	1500
QRF	Charlotte Spencer-Jones	Durham University	Environmental Reconstruction of Paleo-Mega Lakes: The Makgadikgadi Basin	1500
QRF	Aidan Starr	Rutgers University	The Antarctic Circumpolar Current in the Glacial Southeast Indian Ocean: A Multi-Site Flow Speed Reconstruction	500
¹⁴ C Chrono	Junglas Solveig	Oxford University & British Museum	Establishing a use chronology of Buddhist Cave Temples through stratigraphic paint sampling	3 dates
¹⁴ C Chrono	Sally Derrett	University of Sheffield	Future fens: using palaeoecology to inform restoration and conservation of the Lincolnshire Fenlands	3 dates
¹⁴ C Chrono	Jessica Gauld	University of Manchester	Learning from the Past: A Palaeoecological Study to Inform Restoration of Greater Manchester's Peatlands	2 dates
¹⁴ C Chrono	Naima Harman	Royal Holloway, University of London	Extending coupled cryptotephra and palaeoclimatic analysis of marine cores to the Eastern Mediterranean over the last ~200ka	2 dates

Prepared by William Fletcher, Awards Officer

7. Quaternary Newsletter Editor's Report 2022 (for ADM January 2023)

We have had three bumper issues of *QN* in 2022 with contributions coming from many different parts of the Quaternary community. *QN* continues to be an outlet for discussions within the Quaternary community. A highlight for me this year has been the running debates about the River Trent and Lincoln Gap during the Quaternary – which culminated in three articles on the issue in *QN*157 in October, “*Palaeodrainage reconstruction of the River Trent: new evidence from Google Earth imagery*” by Colin Baker, “*Final thoughts on the Lincoln Gap problem*” by Allan Straw and “*Thoughts on the Trent “Trench” and the Lincoln and Chopwell Butler Gaps: discussions of contributions by Allan Shaw and Colin Baker*” by David Bridgland.

This year we have hopefully made *QN* more accessible by providing a link directly to the newsletter in the weekly QRA email newsletter when it is published. We plan to go further in 2023 by making *QN* freely available on the new QRA website for all to view and download (not just QRA members). At the same time we plan to update the way *QN* is presented to allow individual articles to be downloaded alongside the whole issue. I have attached to this report a mock-up of what *QN* will look like going forward. The newsletter will retain its traditional front cover but each article will now have it's own header to ensure it retains its identity when downloaded separately (see attached mock-up).

I want to reiterate the request for researchers to please continue to consider *QN* when thinking where to publish rapid discussion pieces that focus on issues of interest to our community. *QN* should be a place where authors can trial new perspectives and introduce new results that may later become highly-cited research papers. I also continue to encourage Early Career Researchers (including PhD students) to use *QN* as a way of developing their skills in article and report-writing by submitting articles based on their recent results and to continue to write excellent reports about meetings of interest to the Quaternary community.

Sarah Woodroffe
Editor of *QN*
06/12/2022

8. Publicity Officer's Report 2022 (for QRA AGM 2023)

In 2022, the Publicity Officer compiled and edited E-mail Newsletters to QRA members approximately once a week. These remain a popular and effective means of advertising positions, events and news across the membership and are typically scheduled for 3pm on Fridays.

Website redesign (and associated systems)

The significant task this year has been initiation of a much-needed, complete overhaul of the QRA website and associated systems. The Committee decided in May to divorce itself from the previous web-management company (Focal Strategy, currently still operating the existing website), after a deterioration in communications and lack of action from the start of the pandemic in 2020.

Web redesign is a large undertaking and an important one to get right given reliance on the website and associated systems in running the QRA today. Key issues with the current web systems are:

- Unresponsive web management company
- Inability for executive committee members to (easily) change content
- Steep learning curves for handover of executive roles (e.g. most roles last ~3 years)
- Issues managing and updating online shop / delivery costs
- Major issues with membership details and updates, especially:
 - Does not sync with Mailing List used in MailChimp
 - Contains unresolved bugs associated with login and membership renewal
- No system for submitting or logging grant applications online

The aim is to have a new website that is:

- Simple and clean
- Sustainable, requiring minimal technical upkeep
- Easily transferrable to new web support team, if required
- Fully editable and simple to hand-over between publicity officers (3-year terms)
- Editable by multiple executive committee members
- Able to integrate membership database and mailing list

Importantly, the web systems need to manage:

- **Login for members** to keep membership details and payments up-to-date and to access members-only systems
- **Online shop** with **secure online payment** linked to bank accounts for selling hard copy field / technical guides, and for membership payments / renewal / direct debit:
 - Current system is Stripe integration (not currently set up for Direct Debit initiation)
 - Must meet EU regulations
- **Membership database** integrating Login, Member Details, Membership & Renewal and Mailing List (below):
 - Current system contains bugs, does not sync well with membership status, and does not integrate with MailChimp Mailing List
 - Must meet GDPR regulations
- **Mailing List** system that updates with Membership database, preferably synced to existing, external MailChimp account:
 - Must sync with membership status (new members added, lapsed removed)
- **Events listing** system for meetings:
 - Basic dates, listings, etc. Does not need to include registration / payment system as these are generally hosted externally
- **Trusted Proxy Server link** so that logged-in members can access full Journal of Quaternary Science. This link has been established in the existing website and can be co-ordinated with the Wiley web team.
- **PDF document hosting** for viewing / download and archiving
- **Basic forms system** for Grant Applications (text responses to questions, archived)

- Not essential; could use external forms system if required

There is also an intention to include an **open access system to archive Quaternary Newsletter**.

Timeline

May 2022 Outline specification: approved by Executive Committee prior to seeking quotes.

Jun 2022 Detailed specification: outlining our current system and requirements for redesign; confirmed by President and Secretary.

Jul 2022 Tenders: Five potential design companies were contacted for quotes. One company who provided a quote in 2018 of £4,800 (+ hosting + support) did not respond. Of the four who did, two arranged meetings with the Publicity Officer to discuss requirements and then provided quotes:

- LUV design: £8,950 + annual licenses + plugins + hosting (recommended by BGS)
- Brightminded: min. £40,000 (recommended by BES)

Both companies were impressive during discussion and prompt with communication, offering appealing design ideas. The significant difference in price largely reflected the use of publicly-available plug-ins versus bespoke systems.

Aug 2022 QRA Coms and Pubs Sub-Committee Meeting: Progress confirmed.

Sep 2022 Executive Committee approval: Both quotes discussed by whole committee. LUV selected as redesign company because they offered a substantially cheaper quote and because preference was for a more portable website (not bespoke) based on publicly-available systems.

Oct–Nov 2022 Discovery phase: Key Executive Committee members met with LUV team to initiate and discuss design process. Since then, the following stages have been completed: Identify content layout / Navigation and labelling / Information analysis / Creating lists of user types and browsing behaviour / Contact with Wiley for JQS integration / Member login demo / Project preparation

Next phases

- **UX/UI design:** Theme research / Design concepts / Quality assurance / Review meeting / Refinement
- Client review / Client sign off
- **Development:** Developer preparation / Theme installation / Plugin installation / Content template key pages set up / Refinement / QA / Client review / Client sign off
- **Content migration:** Execute content migration and input / Refinement / Accessibility QA / Functionality QA / UAT (user acceptance testing) / Client final review / Pinpoint launch date / Sign off for launch
- **Website deployment and support:** Launch preparations / Final QA and UAT / Launch (TBD) / Post launch health monitoring / Tutorial documentation preparation / Tutorial workshop / Project handover / Commence support SLA

Feb 10 2023 Scheduled completion

Publicity Officer tenure ends at January 2023 AGM. Current officer will hand-over the role, including website redesign process shortly after that time.

Christopher Darvill, Publicity Officer

12/2022

9. Annual Report of the Publications Secretary 2022

A. QRA Book Publications

(i) One new field guide was produced by the field trip organisers and published this year; 6 copies sold so far (sales for one month only):

Evans, D.J.A. (ed.) Glacial and Periglacial Materials: A field-based sedimentology and engineering geology workshop, North Wales.

B. Planned Publications

The Wester Ross field guide (ed. Colin Ballantyne) is now complete; quotes for printing have been obtained and the guide will be sent to the printers this month.

C. Reprints of guides

Three out-of-print guides were reprinted, at 50 copies each, and are now on sale. They are:

- Quaternary of the Lake District
- Quaternary of Teesdale and the North Pennines
- Glacitectonics Technical Guide.

Since October, a total of 9 guides have been sold, lower than hoped. It is unlikely we will reprint further guides.

D. Book sales and stock

Book sales so far this year have totalled 271 (to the start of December), like 2021(272 books sold). This included 129 guides in October and November, during the book sale.

Current stock is c.3189, compared to c.3220 in 2021. The new administrator, Lucy Englehart, is intending to undertake a full stocktake soon and further book sales are planned to reduce storage space needed.

E. Postage issues

Changes to postage requirements, related to the introduction of bar codes and misunderstandings about this requirement in other countries, have meant that the administrator has had to stop sending books overseas, as the franking machine could not produce bar codes. However, we have now switched to using Parcelforce and this issue should be resolved. Postage abroad will resume once the new website is active; a warning that recipients will be required to pay for any import duties will be prominent on the new website.

F. Online availability of QRA publications

The possibility of making field and technical guides and older issues of Quaternary Newsletter available on the website as downloadable, searchable pdfs has been investigated. After obtaining quotes from three companies, the most cost-effective approach to scanning results in the destruction of the book spine (3p per page vs 49p for b&w; 7p vs 85p per page for colour). After discussion at the Executive Committee, we have decided to proceed with destructive scanning where unwanted copies of QN and the guides are available. Progress is as follows:

(i) Quaternary Newsletter:

The administrator, Val Siviter, has kept a single copy of each issue from issue 23. However, we are reluctant to destroy these, as this is effectively the QRA's archive, so are looking for donations of past issues from members.

Issues from 2013 on (No. 129) were already available as pdfs. So far, issues 54 to 126 (excepting 66, 116, 120, 123) have been added to the online document archive at www.qra.org.uk/documents, using the Publications Secretary's old copies.

We are therefore asking members to donate unwanted copies of issues 1 to 55, 66, 116, 120, 123, 127 and 128, if possible.

(ii) Field and Technical Guides:

Due to issues with copyright, it is not currently possible to proceed with selling guide pdfs online unless permissions have been obtained explicitly, as there is a risk that guides may contain diagrams that had previously been published elsewhere. However, the Executive Committee have discussed the possibility of making older guides available for free download from the website and have concluded that under the concept of fair dealing (i.e. whether the copyright owner would suffer a financial loss, and whether the amount of work used is reasonable and appropriate), this should not present a copyright issue for the QRA. Accordingly, it has been agreed to try to make guides printed prior to 2010 available to download in pdf form.

Copies of many older guides are available in the book store and these have been supplemented by the purchase of guides left by the late Prof. John Catt to the Hertfordshire Geological Society. We are interested in obtaining spare copies of out-of-print guides, particularly from the early 1990s, 1980s and 1970s. If any members have guides they would like to donate for scanning, they should contact the publications secretary in the first instance.

Cathy Delaney

Publications Secretary

6th December 2022

10. QRA Meetings Officer Annual Report 2022

Although there were continuing restrictions due to the COVID-19 pandemic earlier in the year a number of meetings have been held during 2022 (see below). As would be expected the number of meetings over the past two years has declined due to the pandemic. However, the Quaternary Engineering Research Group led by Paul Fish (Jacobs) have been very active this past year. They have not only organised the 2022 QRA ADM, but also two very successful field meetings base in Western Cumbria and Anglesey/North Wales. The following “advert” will be sent to all QRA members early in 2022 encouraging more people to become involved and offer to lead field trips, workshops and discussion meetings.

“The QRA organises a range of meetings each year including our Annual Discussion Meeting held in early January, as well as field meetings, workshops and the Postgraduate Symposium. After the restrictions of the pandemic, we would very much welcome offers from researchers to run field meetings related to any aspect of Quaternary science in the UK or Europe. Offers to organise specialist one- or two-day workshops and/or discussion meetings, which focus on any aspect of Quaternary science worldwide, are also very welcome. These workshops and discussion meetings can either be on-line or in-person. In particular we would especially welcome offers to run a meeting from a diverse range of early career scientists as a QRA meeting is a great way to show case your research. If you would like to find out more or submit an offer to run a QRA meeting then please email meetings@qra.org.uk”

Meetings held in 2022:

QRA Annual Discussion Meeting 2022

5th-8th January 2022. Quaternary Glaciations: Processes, environments and reconstructions.

Location: The University of Sheffield

Meeting Organisers/Leaders: Jeremy Ely, Chris Clark, Ann Rowan, Mark Bateman, Jennifer Doole, Stephen Livingstone, Grant Bigg, Darrel Swift.

The 2022 QRA ADM took place on the 5th to the 7th of January 2022, hosted by the Department of Geography, The University of Sheffield. We held out optimism for a hybrid in-person and online event. However, the rise in COVID-19 cases caused by the Omicron variant meant that in December 2021 the decision was made to host an online-only event. Zoom was used to host discussions, whilst a bespoke conference website hosted posters and discussions (via www.padlet.com). Despite the change of format, attendance remained high throughout the conference (>100 attendees in each session; Table 1) and 205 people registered for attendance. The conference comprised of 48 presentations, split evenly between posters and oral formats. Talks were given a 15-minute slot (12 minutes talking, 3 for questions). In each poster session, the zoom attendance was split into two rooms. Posters had a 2-3 minute introduction each at the start of the dedicated poster session, before circulating between the six posters in each virtual room.

QRA/Quaternary Engineering Research Group field meeting to West Cumbria 2022

17th-20th March 2022. The Quaternary engineering geology of the West Cumbria region.

Location: Santon Bridge, West Cumbria

Meeting Organisers/Leaders: The trip leaders were Jon Merritt and Emrys Phillips (British Geological Survey), Paul Fish and Chris Coleman (Jacobs), Nick Smith (National Nuclear Laboratory), with contributions from Sinead Birks (Imperial College), Dave Evans (Durham University) and Keith Nicholls (Network Rail).

The west Cumbria QRA meeting was based in the village of Santon Bridge, with the village hall used for evening talks and discussion and the village pub used for meals. The village hall was also used for budget accommodation, with others staying in local B&Bs, camping or staying in motor homes. The trip was attended by 30 people (77% male) with a good mix of backgrounds (10 academics, 3 unwaged

PhD students, 3 from BGS, 12 from industry and a further 2 recently retired from industry). Industry representation was from Sellafield, the Low-Level Waste Repository, National Nuclear Laboratory, Network Rail, Jacobs and Arup). It was good to see the first QRA Engineering Group so well supported by industry colleagues.

COVID did not impact the trip. Attendees tested prior to travelling to site and no illness was reported after the trip. Car sharing was employed where-ever possible to minimise traffic on small local roads and ensure sufficient space in car parks.

Since attendees covered their own accommodation and meals, costs associated with the trip were limited to hire of the village hall and provision of drinks and snacks for evening talks. This was covered by the QRA meeting grant.

A field guide was not issued for this event, but field notes were provided to attendees by email.

QRA/Quaternary Engineering Research Group/Glacial Landforms Working Group field meeting to Anglesey and North Wales 2022

27th-30th October 2022. Field training course in sedimentology, engineering geology and geohazard significance of glacial and periglacial sediments

Location: The Conway Centre, Llanfairpwllgwyngyll, Anglesey.

Meeting Organisers: David Evans (University of Durham), Paul Fish (Jacobs), Julian Murton (University of Sussex), Simon Price (Arup)

Field trip leaders: Dave Evans (Durham University), Emrys Phillips (British Geological Survey), and Julian Murton (University of Sussex).

The course attracted 47 delegates and was aimed at a broad audience including students, industry geoscience professionals and researchers with backgrounds in geomorphology, sedimentology and engineering geology/geoscience. The course will also benefit established engineering geologists, hydrogeologists and other geoscientists working in formerly glaciated or periglacial terrains who need greater detail than standard engineering soil and rock descriptions defined by BS5930 (2015).

The field training course will elaborate on published guidance with practical field- and laboratory-based exercises led by experts in the field drawn from academia, civil engineering industries and the British Geological Survey. The course included: stratigraphic principles; engineering ground models and geohazards; glacial and periglacial process sedimentology and sedimentary structures; sediment description, vertical profile logging, section sketching and core logging; sediment consolidation and shear strength; clast microfabric, shape, lithology and geochemistry; micromorphology and geophysical investigations.

Future Meetings:

QRA field meeting to Wester Ross 2023

18th-28th May 2023 The Quaternary of Wester Ross: glacier dynamics and post-LGM evolution of glaciated mountainous terrain

Location: Ullapool

Meeting Organisers/Leaders: Colin Ballantyne.

Details of the meeting and how to register will be posted on the website and emailed to members early in 2023.

QRA Annual Discussion Meeting 2024

January 2023. 60th Anniversary of the QRA.

Location: Manchester Metropolitan University

Meeting Organisers/Leaders: Cathy Delaney, Kathryn Adamson, Iestyn Barr at Manchester Metropolitan University and Chris Darvill and Anna Hughes at University of Manchester.

Dates and details of the meeting are to be confirmed.

Emrys Phillips

December 2022

11. Outreach Officer's Report 2022.

(i) QRA Outreach Award

The QRA outreach officer encourages members and others to promote and foster engagement between Quaternary science and a wide and diverse audience. We maintain an annual Outreach fund from which grants are awarded. While activities this year are still recovering from the impacts of COVID, we have received two applications which are currently under review. Activities for two projects that were awarded pre-pandemic and initially suspended have been re-activated (Girls into Geoscience Wales, 2023-2026; and VR Glaciers and Glaciated Landscapes).

The QRA made two Outreach Awards in the last year. In lieu of a report for *Essex Rock – Geology Beneath the Landscape* the QRA have solicited a book review to be included in the Spring issue of QN. QRA members will also be eligible to buy the book at a discount secured as part of the terms of funding from the QRA. The QRA is also supporting the *PalaeoPERCS* series of online talks focussed at early career researchers, which is currently ongoing.

Outreach Awards are normally up to £1000, larger requests will be considered. For more details please contact the Outreach Officer (outreach@qra.org.uk).

(ii) QRA Undergraduate Dissertation Prize

A total of 5 entries were submitted for consideration this year, down from 12 in 2021, and 18 in 2020. Though judges noted that entries this year were of a high quality, the year on year reduction in submissions is a concern. Enquiries by the Outreach officer with colleagues as to why this may be has raised the possibility that this may be due to this year's student cohort needing to undertake project planning during the height of COVID meaning that fewer field based projects (normally typical of submissions) are likely to have been either encouraged by supervisors or allowed by universities. There is some evidence of this in the types of submissions received this year, in that two of five projects were entirely desk based, and three of five were laboratory based using pre-collected material. None of the projects submitted involved the students undertaking their own fieldwork.

For next year's application round there will be multiple notices included in the QRA weekly circular, and the Outreach officer will also liaise with Catherine Souch at the RGS on how to improve the number and range of universities submitting projects for consideration. The winner of the 2022 dissertation prize will be announced at the QRA AGM and an abstract of the winning dissertation will be published in QN.

The Association gives thanks the examiners Mary Edwards and Gill Plunkett and acknowledges the continuing support of Catherine Souch and others at the RGS for the administration of the prize. The 2022-23 iteration of the award will be the final year of the current judge's term, and two new judges are sought in 2023 to commence a 3 year term for 2024-2027. Any QRA member who has familiarity assessing undergraduate level dissertations is eligible, and those who are interested should get in touch with the Outreach officer (outreach@qra.org).

(iii) Exploring Polar Environments Day, Royal Holloway, March 2022

In March the QRA supported the running of a *Exploring Polar Environments* Day targeted at under-served high school students in the broader London area. It was designed to build on the significant work carried out by British Antarctic Survey, the Polar Regions Department of the FCDO and Polar community including UK Polar Network in encouraging greater equality, diversity, and inclusion. Support from the QRA funded speaker travel and subsistence costs, in addition to QRA publicity material and freebies for attendees to remind and encourage participation in Quaternary related study. The Outreach Officer represented the QRA at the event, delivering a talk attended by all participants and answering questions at a QRA poster during break sessions. Other talks and student activities also emphasised Quaternary angles providing visibility to Quaternary polar research. A full report is published in QN 157.

James Lea

Outreach Officer 15/12/2022

12. Postgraduate Representatives Report 2022

Postgraduate events continue to be an important component of the activities of the Association. The Annual Postgraduate Symposium took place in September 2022, the symposium was hosted online by Sheffield Hallam University. The meeting was successful again in the online format, however, if possible, the event would revert to in person.

The postgraduate representatives also maintain the **social media** accounts of the Association. The number of followers for the QRA's Social Media accounts in 2022 was reported as follows: *Twitter*: 3,140; *Facebook*: 2,465; *Instagram*: 180. Twitter remains the most popular. Members were encouraged to promote activities and discussions on Quaternary-related themes via these social media platforms. For further details, members should check the website or contact the Postgraduate Representatives (postgrad@qra.org.uk).

13. QRA Conservation Officer Report 2022 for the 2023 AGM

Conserving our Quaternary geoheritage is vital for science and society. The QRA and its members carry out many activities that support and promote geoconservation, particularly through field and discussion meetings, offering practical support and working with local groups. The role of the QRA Conservation Officer (conservation@qra.org.uk) is to support and encourage these activities, as well as to promote the QRA's position on conservation issues. This includes:

i) *The QRA's continued support for Earth Heritage – The Geological and Landscape Conservation Magazine* (www.earthheritage.org.uk). Issue 57 was published in summer 2022 and at the time of writing, Issue 58 is about to be published. This free-to-download publication is produced twice a year by the Geologists' Association, QRA, Natural England, Natural Resources Wales and NatureScot, with major contributions from others in the voluntary geoconservation sector. QRA members can suggest articles and news items to the QRA Conservation Officer, and also receive email notifications of new issues by following the instructions on the Earth Heritage Magazine homepage.

ii) *The QRA's liaison with other geological organisations on conservation matters* through membership of the Geological Society of London's Geoconservation Committee.

iii) *The QRA's input on conservation policy matters and liaison with the national Geodiversity Forums and on international matters.* The QRA is a supporting organisation of International Geodiversity Day, proclaimed by UNESCO in 2021. The first International Geodiversity Day took place on October 6th 2022.

iv) *Advising on conservation matters notified by QRA members.* QRA members are encouraged to consult the QRA Conservation Officer if conservation advice on Quaternary sites in the UK is needed.

v) *The QRA Geoconservation Award.*

The QRA Conservation Award is open to individuals and organisations to deliver conservation projects, activities and organise conservation themed events, as well as share good practice on Quaternary geoconservation. No applications were received for the award were received in 2022.

The next application deadline for the QRA Geoconservation Award is 1 March 2023. Please contact the QRA Conservation Officer (conservation@qra.org.uk) for details.