

DIARY

Animal, Vegetable, Mineral and ... Dr John Addenbrooke's Cabinet of *Materia Medica*

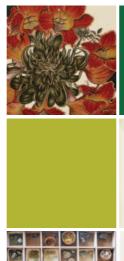
UCL School of Pharmacy London, UK

14 October 2019 See page 23

Collecting and Collections Digital Lives and Afterlives

The Royal Society London, UK

14–15 November 2019 See page 24













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Trading Nature Meeting at The King's Manor, York





Left: The King's Manor, York. *Above:* Enjoying an evening get together.



Paolo Viscardi, Rachel Jennings, Jo Hatton and Emma Nicholls.



SHNH medal winners Henry Noltie and David Mabberley.



Past President Hugh Torrens and Vice President Bill Noblett.



Conference dinner at Ask Italian.

First and Foremost





Many of you will have welcomed the news about the UK's new target to cut emissions to "net zero" by 2050 to combat global warming. While the announcement was largely welcomed, climate experts and activists warn that this target is inadequate in the face of a climate emergency. I'm sure all of you are aware that destruction of the natural world continues apace; climate change is not just an issue for nature of course, communities worldwide face problems of

inundation, drought, soil erosion and crop failures linked to dramatic changes in weather patterns.

I have been heartened recently by the fact that museums and other guardians of natural history collections and archives have begun to respond in a very practical way to the complex problems of climate change. Museums have a wealth of resources that can contribute positively towards climate action. Geological collections span millions of years and speak of former variations to Earth's climate and the impacts of those changes. Similarly, biological collections help us to detect the changes in distribution of species over time and place. Museums' archaeological and ethnographic collections enrich our thoughts about other cultures, past and present, their adaptations to different environments. All these collections provide inspiration, a wealth of ideas and possible alternatives for action. If museums make collections more available to researchers, they can help advance our understanding of the impacts of climate change and contribute to actions to promote environmental and societal resilience.

There is still a long way to go before museums recognise that climate change and environmental destruction belong in the same category as other societal concerns. However, recent initiatives such as the formation of the museums and climate change network (https://mccnetwork.org/climate-museums), the creation of a museum dedicated to climate (https://climatemuseum.org) and the Happy Museum Project (happymuseumproject.org) indicate museums are taking their role seriously. The Manchester Museum held the first International Symposium on Climate Change and Museums in April 2018 and the Natural History Museum's website (https://www.nhm.ac.uk/discover/climate-change.html) unravels many of the key issues in relation to the impact of climate change on biodiversity.

Museums have the benefit of being regarded as trusted institutions and are appropriate venues to place societal wellbeing within an environmental and forward-looking frame. They can play a role in creating more resilient communities, places and natural environments through the wise use of their collections and exhibitions, helping people make meaning and sense of their world. A better understanding of the issues can lead to the promotion of climate action through the sharing of ideas. Yet, it is something of a paradox that as natural history museums and their collections continue to face withdrawal of financial support and loss of personnel, in the face of climate change, their collections, archives and their history have never been more relevant to society.

SHNH President

2. From the Editor

Welcome to the Summer edition of the Newsletter and a warm welcome to all our new members. It has been a busy Spring and early summer with members attending the NHM Student Conference in London in March, followed in May by the NatSCA Meeting in Dublin, the SPNHC meeting in Chicago and our own joint meeting with the Geological Curator's Group in June. It has been lovely to meet up with so many members and many thanks go to the NatSCA and NHM conference organisers for enabling us to have a place of contact to talk to members and to display our publications and notices.

Our joint conference in York on 'Trading Nature' was attended by over 70 delegates. There were two days of inspiring talks and a visit to the Yorkshire Museum Collection Store and our warmest thanks go to Jo Hatton, Helen Cowie and Emma Nicholls for arranging such a memorable meeting. Many thanks also to the many participants who shared news and information live from the meeting on Twitter using the hashtag #TradingNature, enabling those who could not attend to follow online.

Earlier in the year, Peter Davis appeared in the television programme A House Through Time. The programme followed the history of the inhabitants of a house in Newcastle, and Peter was interviewed for the programme's first episode, speaking about Joshua Alder (1792-1867), who, with Albany Hancock (1806–1873), was a founder member of the Natural History Society of Northumberland. Durham and Newcastle upon Tyne in 1829. He gained international recognition for his work on nudibranchs (sea slugs) and molluscs. The Society also appeared in the magazine Current Archaeology in April.

SHNH is delighted to welcome its new Editorial Advisory Board for *Archives of Natural History* and Herman Reichenbach has written an introduction to the new Board.

Edinburgh University Press (EUP) have updated our leaflets for distribution at conferences and many have been circulated this year – including for the Maritime Animals Conference in London and the NatSCA meeting. Do let us know if any of you are attending or speaking at conferences in the future and we can liaise with EUP to make our leaflets available and/or included in the delegates' packs [email newsletter@shnh.org.uk].

SHNH has been working closely with EUP on membership matters and we hope that the joining and renewing process has become easier. As always, if you have membership queries, do contact our Membership Coordinator, Miranda Lowe.

I should like to thank everyone for their contributions to *Newsletter* which I have very much enjoyed receiving.

I wish you all an enjoyable Summer.

*Elaine*Elaine Shaughnessy

Society News & Announcements

3. SHNH AGM 2019

The SHNH AGM took place on 4 June 2019 at the King's Manor, University of York. Vice President Bill Noblett presented the Thackray Medal to Professor David Mabberley for his publication *Painting by Numbers: The life and art of Ferdinand Bauer*, and whose work on Ferdinand Bauer was outlined by Elaine Shaughnessy. Gina Douglas then summarised the citation for the Founders' Medal which Bill Noblett presented to Dr Henry Noltie.

Society members approved the reelection of the Officers who had all agreed to continue as follows: Peter Davis (President), William Noblett (Vice President and Treasurer), Herman Reichenbach (Editor), E. Geoffrey Hancock (Secretary) and Joanne Hatton (Meetings Secretary). A vote of thanks for the work of the Editor, Herman Reichenbach who could not be present, came from the floor.

Jack Ashby and Clemency Fisher retire from Council and are thanked for their contributions over the previous three years. Ann Sylph, Jan Freedman, Stanislav Strekopytov and Geraldine Reid were proposed and seconded as new members of Council.

4. John Thackray Medal



The Thackray Medal was instituted in 2000 to commemorate the life and work of John Thackray, a past President and Secretary of the Society. It is awarded for significant achievement in the field of the history and/or bibliography of natural history.

The Adjudicators of the Society's Thackray Medal awarded the prize to David Mabberley for his book *Painting by numbers: The life and art of Ferdinand Bauer* (Sydney, New South Publishing, 2017). It is a marvellous work that has answered, with great conviction, a long-standing unanswered question. How did Bauer manage to achieve, in his

final finished works, such beautiful colour accuracy, given that some of his field sketches had been made many years previously. The answer is that Bauer annotated his field drawings with a colour-coding system of up to a thousand different shades. David compared unfinished drawings in Vienna with finished works in the Natural History Museum to show, in the most compelling way, how Bauer achieved this. Moreover, as one of the judges remarked, not only did he solve this conundrum, the work is a "unique source of accumulated information on Bauer's life, art and field work during expeditions, viewed against the artistic techniques of his time". This research is presented in a lavishly-produced work with superb colour reproductions, and is clearly written and accessible.

David Mabberley, in accepting the award, said: "I am very honoured that the selection panel and Council considered my book worthy of the Thackray Medal. I am particularly touched to have a medal struck in honour of my late friend and colleague, John Thackray, who was Secretary whilst I was President some years ago. I remember with affection John's work for the Society, his enthusiasm and laughter – and, not least, his telling me that our journal was the only one he read cover to cover.

"The second thing I want to say is that my book, like most, rests on the support of many people, in this case Peter and Sally Crossing's Belalberi Foundation, besides work of many others in the past, in this case a lifetime of collaboration and publication with colleagues, of whom I would like to acknowledge – Walter Lack (Berlin), Erika Pignatti-Wikus (Trieste, Roma) and Marion Westmacott (Sydney), but especially Christa Riedl-Dorn (Vienna) who, with son Dominic, facilitated my

being able to examine all the Ferdinand Bauer holdings in Vienna.

"Finally, I would like to extend that last experience to a more general observation. For all sorts of reasons it is becoming increasingly difficult for scholars to get such access to the materials they need to advance their disciplines, not least in the increasingly frequent ban on 'browsing' in herbaria and other collections, besides libraries and archives. This of course means that access to what is already catalogued correctly and often digitized, is easy - the 'known unknowns'; but what is really critical is examination of the unrecognised (to follow Donald Rumsfeld) 'unknown unknowns', and I hope the Society can take on championing the crucial cause of winding back policies that hinder scholarship".

5. Founders' Medal

Founders' Medals are awarded on the nomination of Council to persons eminent in the fields of the history and/or bibliography of natural history. Council has awarded the Founders' Medal to Henry John Noltie.

Henry worked at Royal Botanic Garden Edinburgh (RBGE) from 1986 until retiring in 2017, first in the Exhibitions team, then within Science. He continues as a Research Associate. His career spans taxonomic botany and the history of science, focusing on India and surrounding countries. Twenty years ago he embarked a project delving into the archives of botanical art at RBGE, identifying priceless originals works of art which had been included within the Library's "cuttings collection", recomposing them into sets of drawings, and thus demonstrated to be of major historical importance. Working with archives and drawings in many other organisations (notably British Library, Natural

History Museum London, and RBG Kew), he has resurrected lost interconnections. His expertise in botanical art, herbarium collections and manuscript archives brings these together and interprets their importance.

Henry's first book on the history of natural history was *Indian Botanical Drawings* (1999), followed by one on John Hutton Balfour's *Botanical Teaching Diagrams* (2000) and another on



the Dapuri Drawings (2002). His scholarly work on the Botany of Robert Wight (2005) combined historical research with critical analysis in systematic botany. Henry was awarded the 2005 Stafleu Medal by the International Association of Plant Taxonomists for this monumental publication. His continued interest in Wight lead to the publication of the richly-illustrated three-volume Robert Wight and the Botanical Drawings of Rungiah Govindoo (2007), which included a highly personal and engaging account of Noltie's own journeys in search of this great man.

His attention then turned to Hugh Cleghorn's achievements and impact in Indian Forestry against the background of his biography and collections, culminating with the recent publication of three major books. He interspersed these with books on the collections of the Walkers of Cevlon, the botanical sketchbook of Charles and John Raven, the botanical drawings of Sir Thomas Raffles. Hooker & Arnott's commentary on Captain Beechey, the life of Prof. John Hope and others. In his retirement, Henry revised his 1999 book, now Botanical Art from India: from the Collection of the Royal Botanic Garden Edinburgh (2017).

Highly regarded amongst his peers in botany, history of science and collection curation for his deep knowledge and expertise in the history of natural history make him a worthy recipient of the SHNH Founders' Medal.

Henry, acknowledging his award, writes: "In April I received an email from Geoff Hancock informing me that I had been awarded the Founders' Medal of the SHNH. My initial reaction was that there must have been some mistake and that the message had been sent to the wrong person. A little research was called for. I realised that I had no idea by whom, or even when, the Society had been founded, and what was the reason for the position of the apostrophe? It turned out, appropriately for what is still a particularly sociable society, that its origins were indeed plural, started by a group of librarians and naturalists at what, in 1936, was the British Museum (Natural History). Of these worthies the only names I recognised were John Ramsbottom (then Keeper of Botany), familiar from his books on fungi (not least the King Penguin pair on the edible and poisonous species) and B. H. Soulsby, for his great catalogue of the publications of Linnaeus. It was when I came to the list of previous recipients of the medal that my sense of disbelief reached stratospheric levels - bibliographers and historians such as W. T. Stearn. David Allen, H. Walter Lack and Charles Nelson. Their collective productivity casts my own into deepest shade. And there was Ray Desmond, whose work on the history of Indian botany has been a foundation and inspiration for my own; not to mention the national treasure who is the Society's current Honorary Patron. A phone call to Gina Douglas confirmed that there had been no mistake, and all I could do was to add a feeling of profound gratitude to the still

gnawing feeling of doubt as to worthiness. Then came an email from David Mabberley with the enigmatic message "Will you be at the SHNH York Meeting for the joint-crowning?". Consulting the agenda for the AGM I was delighted to find the explanation – and that there would be some moral support. The recipient of this year's Thackray Medal was none other than by far the most inspirational of my tutors at Oxford, in a now rather dim and distant, earlier era of the Anthropocene. His medal was for his latest book on the work of Ferdinand Bauer and I will never forget the thrill as an undergraduate of being shown Bauer's Flora Graeca sketches and finished drawings in the Botany School library. The 'crowning' has now taken place, and though dumb-struck at the event itself, I can now record my profound thanks to the Society for choosing to honour me in this way."

6. Patron's Review

In 2017, Susannah Gibson was invited to write the Patron's Review at the invitation of our Patron Sir David Attenborough OM CH FRS. Her paper "The careering naturalists: creating career paths in natural history, 1790–1830 was published in *Archives of Natural History*, Oct 2017, Vol. 44, No. 2: pp. 195–214.

Susannah holds a PhD from Cambridge on the history of the life sciences of the eighteenth century, a master's degree in the history of nineteenthcentury science, and a bachelor's degree in experimental physics. She is the author of Animal, Vegetable, Mineral? How eighteenth-century science disrupted the natural order (OUP, 2015), which was well reviewed in The Telegraph, The TLS, and The Independent, amongst other publications. She was formerly Manager of the Cambridge Literary Festival, and remains interested in both introducing new audiences to the history of science, and in bridging the gap between academic and popular writing. Susannah is an Affiliated Scholar of the Department of History and Philosophy of Science at the University of Cambridge.

its modest size Despite the Cambridge Philosophical Society has played a monumental role in the history of science. To mark the bicentenary of its founding in 1819, Susannah has written a vivid account of the illustrious (and sometimes eccentric) members of the society, their breakthrough discoveries, and the forging of modern science. The Spirit of Enquiry: How one extraordinary society shaped modern sci-(OUP, 2019) was launched in ence March at the Cambridge University Library, together with the opening of the Library's exhibit "Discovery: 200 Years of the Cambridge Philisophical Society".

The Society sends it warmest congratulations to Susannah. For more information on *The Spirit of Enquiry* see p 37.

7. General Data Protection Regulation (GDPR)

The Society (SHNH) has signed a Data Processing Agreement with Edinburgh University Press (EUP). This comprehensive legal document sets out the responsibilities of each party under the General Data Protection Regulation, a European Parliament and Council directive. SHNH is defined as the Data Controller and EUP the Data Processor. EUP gathers members' names and details of postal and email addresses (when agreed) and discloses it to SHNH under our instructions in order to provide members with the services expected from their subscriptions. These include receiving the Archives of Natural History and the Newsletter by post, being

able to access free downloads of the Journal and receiving notices of meetings of the Society whether by post or email. The Agreement imposes statutory duties on the employees of EUP who process members' data and supply the database to SHNH on request. Specified subcontractors are listed, such as the journal printer who posts the Journal directly, and the details of how subscription payments are processed.

It is the case that of more than 360 members about 25 either have no email address or do not wish to divulge it. The ability to send out notices of meetings and other information to the majority by email saves SHNH a considerable sum in postage costs. The Agreement with EUP and the necessary protection given by the GDPR is a valuable development in the administration of the Society's service to members. Under this Agreement it is now unnecessary for anyone to sign any separate permission(s) in order to continue to receive their membership services.

8. In Memorium

We are sad to announce the loss of the following members: John Cresswell and Anne S. Troelstra.

John Cresswell (1939-2019)



John Cresswell (1939-2019) with a Passenger Pigeon. Image courtesy of Bournemouth Natural Science Society.

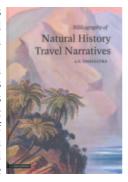
John was born in Southborne, Dorset. On leaving school he worked in the drawing office of the de Havilland Aircraft Company in Christchurch. He then moved to London and worked in the drawing office of the Chemistry Department of University College for 33 years. During this time he met his wife Pat and they were married in 1977. He retired in 1998 and moved to Bournemouth in the year 2000.

John joined the Bournemouth Natural Science Society (BNSS) in 2000 and soon immersed himself in its activities. From 2006–10 he became the Society's Curator, served as a Trustee from 2006–2010, and was Chairman of the Society in 2007–8.

As well as the natural sciences, John was also very interested in history, particularly that of the local area, and he researched many areas of interest. John belonged to many local societies and organisations, including volunteering at Hengistbury Head, part of Christchurch Harbour SSI and a site of international importance in terms of its archaeology and supporting the Friends Fisherman's Walk, a historic green space in Southbourne. John also had articles published on local topics in the Bournemouth Echo. The Society extends its condolences to John's wife Pat and sister Margaret.

Anne S. Troelstra (1939-2019)

Prof Troelstra was a world-renowned researcher and an inspiring teacher. He held a chair in pure mathematics and foundations of mathematics at the University of Amsterdam from 1970 to 2000, and published more



than 80 mathematical papers and six mathematical monographs. He was a member of the Royal Dutch Academy of Sciences and a corresponding member of the Bavarian Academy of Sciences. In 1996 he received the F. L. Bauer Prize of the Technical University of Munich for his contributions to theoretical computer science.

All his life, Anne had a deep interest in natural history and a wide knowledge of the plants of The Netherlands and abroad. His annual linocuts of plants discovered on his travels in Europe were famous. This year, an article by him will appear on new species of blackberry, his special interest.

On his retirement, he turned his attention to the history and social significance of Natural History, devoting much of his time to the study of natural history travel narratives. He published two books in Dutch: Tijgers op de Ararat [Tigers on Mount Ararat] in 2003 and Kolibries in de oren [Hummingbirds in the ears] in 2009, as well as an anthology of Dutch natural history travel narratives, Van Spitsbergen naar Suriname [From Spitsbergen To Suriname], in 2007. His major Bibliography of Natural History Narratives (Zeist, KNNV Publishing) was published in 2017. With over four thousand detailed entries, ranging over four centuries and all major western European languages, the narratives are drawn from a wide range of sources including both printed books and periodical contributions. There are also extensive indexes, biographies, and a full list of bibliographical and biographical sources used in compiling the bibliography.

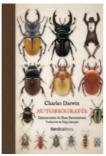
The Society extends its condolences to Anne's wife Olga and to his daughters Willemien and Catharine (Ine).

9. News from our Representatives

Our Representative's Coordinator, Malgosia Nowak-Kemp, reported on news received from our Representatives to Members in the AGM papers recently circulated. We were delighted to welcome our North American Representative, Leslie Overstreet, to the AGM and SHNH/GCG meeting in York on #TradingNature.

Margarita Hernandez-Laille (Spain) has sent a recent update. In February

she organized a reading of the works of Darwin and Wallace at the National Museum of Natural Sciences (NMCN). It was attended by scientists, intellectuals and the general public. In March,



Margarita attended, as a member of the Spanish Association for the Advancement of Science (AEAC), the First International Forum on Citizen Science. The event was held at MediaLab Prado, Madrid, Spain. In April, Margarita was asked by the National Museum of Natural Sciences (NMCN) to do a presentation of a new edition of Darwin's autobiography Charles Dawin: Autobiografía (Nórdica Libros, 2019). Many people attended the event. Lastly, Margarita has been on a wonderful trip to the Arribes del Duero Natural Park and the Villafafila Lagoons in Zamora where she has seen bustards, royal milanos, black storks and many other native birds, in spite of Springtime not being the best time to see them there.

Email: mhernandez@bec.uned.es

10. Book Reviews

Do alert the Book Reviews Editor, Maggie Reilly, with news of any new titles suitable for review. To contact Maggie, please use the contact details below:

Email address: books@shnh.org.uk

Zoology Curator The Hunterian (Zoology) Graham Kerr Building University of Glasgow Glasgow G12 8QQ United Kingdom

The following titles have been reviewed for the Autumn 2019 issue of SHNH *Archives of Natural History* **46** (2). Reviews received for the Spring 2020 issue of *ANH* will be announced in the next newsletter.

BAIJNATH, Himansu & McCRACKEN, Patricia A. *Strelitzias of the World. A Historical and Contemporary Exploration*. Durban Botanic Gardens: 2018. ISBN: 978-0994722126 (hb).

BLEICHMAR, Daniela. *Visual Voyages: Images of Latin American Nature from Columbus to Darwin*.Yale University Press: 2017. ISBN: 978-0300224023 (hb).

CAMPBELL, Mungo & FLIS, Nathan (editors). *William Hunter and the Anatomy of the Modern Museum*. Yale University Press: 2018. ISBN: 978-030023665 (hb).

CURRY, Helen Anne, JARDINE, Nicholas, SECORD, James A. & SPARY, Emma (editors). *Worlds of Natural History*. Cambridge University Press: 2018. ISBN: 978-1316649718 (pb).

DIETZ, Bettina. Das System der Natur. Die kollaborative Wissenskultur der Botanik im 18. Jahrhundert [The System of Nature: The Collaborative Knowledge Culture of Botany in the 18th Century]. Böhlau, Cologne: 2017. ISBN: 978-3412507398. EKLUND, Hillary (editor). *Ground-Work: English Renaissance Literature and Soil Science*. Duquesne University Press: 2017. ISBN: 978-0820704999 (hb).

FLANNERY, Michael A. Nature's Prophet: Alfred Russel Wallace and His Evolution from Natural Selection to Natural Theology. University of Alabama Press: 2018. ISBN: 978-0817319854 (hb); 978-0817391874 (eb).

GROOM, Angelica. Exotic Animals in the Art and Culture of the Medici Court in Florence. Brill: 2018. ISBN: 978-9004368989.

GROUW, Katrina van. *Unnatural Selection*. Princeton University Press: 2018. ISBN: 978-0691157061(hb).

HODACS, Hanna, NYBERG, Kenneth & VAN DAMME, Stéphane (editors), Linnaeus, Natural History and the Circulation of Knowledge. Voltaire Foundation: 2018. ISBN: 978-07294 12056 (pb).

MacGREGOR, Arthur (editor). Naturalists in the Field: Collecting, Recording and Preserving the Natural World from the Fifteenth to the Twenty-First Century. Brill: 2018. ISBN: 978-90043238434 (hb). E-ISBN: 978-900432384.

McCORMACK, Helen. William Hunter and His Eighteenth-century Cultural Worlds: The Anatomist and the Fine Arts. Routledge: 2017. ISBN: 978-1472424426 (hb).

OLINA, Giovanni Pietro. *Pasta for Nightingales: A 17th-Century handbook of bird-care and folklore*. Yale University Press: 2018. ISBN: 978-0300232882 (hb).

PEARMAN, David A. *The Discovery of the Native Flora of Britain and Ireland*. Botanical Society of Britain and Ireland: 2017. ISBN: 978-0901158529 (pb).

PRESTON, Christopher D. & HILL, Mark O. *Cambridgeshire's Mosses and Liverworts – A Dynamic Flora*. Nature

Bureau: 2019. ISBN: 978-1874357896 (pb).

SLEIGH, Charlotte. *The Paper Zoo: 500 Years of Animals in Art.* University of Chicago Press: 2017. ISBN: 978-02264 47124 (hb).

STERBA, Thomas. Die Süßwasserfische des Karl von Meidinger – mit naturhistorischen Illustrationen aus vier Jahrhunderten [The freshwater fish of Karl von Meidinger: with natural historical illustrations from four centuries]. Basilisk Press: 2018. ISBN: 978-39413 65575.

WILLIAMSON, Tom, BARNES, Gerry & PILLATT, Toby. *Trees in England: management and disease since 1600*. University of Hertfordshire Press: 2017. ISBN: 978-1909291966 (pb).

Archives of Natural History book reviews are open access. To see more, please visit the ANH page of the Edinburgh University Press website at:

https://www.euppublishing.com/loi/anh

11. Archives of Natural History

The following papers and short notes have been accepted for publication in *Archives of natural history* **46** (2) due to be published in October 2019.



"Tibetan Mastiff Extra Mammal Sheet LVII.
Tibetan Mastiff black var." Fully coloured,
watercolour, double page spread (Mammals of
India [and Nepal] Volume 1, 1829–40, Brian
Houghton Hodgson, ZSL Archives reference
no. ART10000106: 159).

- P. G. OLIVER: John Adams FLS of Pembroke (1769–1798): a forgotten Welsh naturalist and conchologist.
- J. HOLLIER, A. HOLLIER & A. CIBOIS: Building the collections of the Musée académique de Genève: the contribution from Odessa of Léonard Revilliod. D. LOWTHER, A. SYLPH & M. F. WATSON: Brian Hodgson's Tibetan Mastiffs: twice presented to the Zoological Society of London.
- T. R. BIRKHEAD & J. E. THOMPSON: Wade's *Birds of Bempton Cliffs* and his observations on Guillemot (*Uria aalge*) eggs.
- M. R. GRAHAM: Professional fossil preparators at the British Museum (Natural History), 1843–1990.
- C. H. SMITH, J. T. COSTA and M. GLAUBRECHT: Alfred Russel Wallace's "Die Permanenz der Continente und Oceane".
- J. A. COOPER: Edward Neale (1833–1904), bird illustrator.
- H. J. NOLTIE: A Scottish daughter of Flora: Lady Charlotte Murray and her herbarium portabile.
- R. BRUZZONE: A vernacular late Renaissance manuscript herbal from the eastern Ligurian Apennines.
- P. A. MORRIS: Taxidermy undertaken by Sheals of Belfast.
- C. CHEW: The ant as metaphor: Orientalism, imperialism and myrmecology [W. T. Stearn Student Essay].

The new ANH Advisory Board

Members may notice in the next issue of the *Archives of Natural History* inside the front cover a list of members of the journal's new Advisory Board. The new body replaces the Editorial Panel with a wider remit. Whereas the Editorial Panel served the editors primarily as advisors on peer-review, the new Advisory Board will advise on promoting the interests of the Society and the

history of natural history in general, as well as assisting the editors with peer-review and encouraging young scholars to contribute to our journal and conferences. The 18 members of the new Advisory Board represent all fields of natural history and a representative cross-section of nationalities (not all of which are correctly reflected by places of residence or institutional affiliation listed below). They are:—

- Herpetologist Dr Kraig Adler is
 Professor Emeritus in the Department
 of Neurobiology and Behavior at
 Cornell University, Ithaca, New York; in
 2018 he was awarded the Society's
 Founders' Medal.
- Historian of geology and vertebrate palaeontology Dr Paul D. Brinkman is Head of the History of Science Research Lab and Curator of Special Collections at the North Carolina Museum of Natural Sciences, and Adjunct Associate Professor in the Department of History, North Carolina State University.
- Ms Gina Douglas is Librarian, retired, and Honorary Archivist of the Linnean Society of London, and Honorary Editor of *The Linnean*.
- Ornithologist Dr Clemency T. Fisher is Emeritus Senior Curator of Vertebrate Zoology at National Museums Liverpool and a Scientific Associate at the Natural History Museum, London; she was awarded the Society's John Thackray Medal in 2003.
- Malacologist Dr Matthias Glaubrecht is Director of the Centrum für Naturkunde [Natural History Museum) and Professor of zoological biodiversity at the Universität Hamburg.
- Dr Sachiko Kusukawa is Professor and Fellow in History and Philosophy of Science at Trinity College, University of Cambridge.
- Botanist Dr Hans Walter Lack is a for-

- mer director of the Botanischer Garten und Botanisches Museum Berlin and Professor in biology at the Freie Universität Berlin; he was awarded the Society's Founders' Medal in 2009.
- Society President 2006–2009, Dr Arthur M. Lucas is Professor, retired, of Science Curriculum Studies at King's College, University of London, of which he was the 18th Principal 1993– 2003.
- Historian of science Dr Robert
 McCracken Peck is Curator of Art and
 Artifacts and Senior Fellow of the
 Academy of Natural Sciences of Drexel
 University, Philadelphia.
- Mammalogist and historian of taxidermy Dr Pat Morris is Senior Lecturer in Zoology, retired, of Royal Holloway, University of London; he was awarded the Founders' Medal in 2012.
- Historian of science Dr Harriet Ritvo is Arthur J. Conner Professor of History at the Massachusetts Institute of Technology.
- Molecular biologist Dr Anna Marie Roos is Professor in the History of Science and Medicine, University of Lincoln, and Editor of Notes and Records: the Royal Society Journal of the History of Science; she was awarded the Society's John Thackray Medal in 2017.
- Historian of science Dr Anne Secord is an Editor at the Darwin Correspondence Project and an Affiliated Research Scholar in the Department of History and Philosophy of Science, University of Cambridge.
- Ichthyologist Dr Geoffrey N. Swinney is Curator of Lower Vertebrates, retired, at National Museums Scotland.
- Society President 2012–2015, Dr Hugh Torrens is Emeritus Professor of the History of Science and Technology, University of Keele; he was awarded the Society's Founders' Medal in 2009 and

- the inaugural Tikhomirov Award for the History of Geology by the International Union of Geological Sciences in 2012.
- Dr Fernando Vega is Research
 Entomologist at the Sustainable
 Perennial Crops Laboratory of the US
 Department of Agriculture in Beltsville,
 Maryland.
- Historian of science Dr John van
 Wyhe is founder and Director of the
 Darwin Online and Wallace Online
 projects and Senior Lecturer in the
 Department of Biological Sciences,
 University of Singapore; he was awarded the John Thackray Medal in 2009.
- Veterinary parasitologist and marine biologist Dr Ray Williams, Tring, has been Visiting Professor at the College of Veterinary Medicine, China Agricultural University, Beijing, since 2006; he was awarded the Founders' Medal in 2009.

The Honorary Editor is privileged to welcome these scholars – all, of course, members – to the new Advisory Board, and looks forward to a fruitful and mutually stimulating exchange of ideas, suggestions and encouragement promoting our journal and the history of natural history.

Charles Nelson retiring as copy-editor

With great regret, the Honorary Editor must announce that our copy-editor, Dr Charles Nelson, is stepping down after seven years of staunch and conscientious service. Charles, of course, really needs no introduction: he was Honorary Editor from 1999 through 2012, and before that served as Book Reviews Editor from 1988 until 1993. For more than a quarter-century, Charles has served the *Archives of Natural History* and our Society as an

editor with unstinting loyalty, acumen and common sense. Since 1976, Charles also contributed over 150 research papers, short notes and book reviews to the *Archives*. Only the late Wyn



Wheeler enjoyed an equally long tenure as an editor, albeit with 'only' 42 contributions of his own.

The good news is that Charles has agreed to stay on as an Associate Editor; the Honorary Editor is grateful to know that Charles's experience, discernment and good humour will remain only an e-mail or call away. At the time of writing, a successor to Charles as copy-editor has not yet been appointed, but the transition will run smoothly. Not that Charles's shoes will be easy to fill.

Herman Reichenbach Honorary Editor

12. Celebrating Women in Natural History

March 2019 celebrated women in natural history with the aim of increasing awareness of, and information about, women in the biodiversity sciences. #HerNaturalHistory month saw the sharing of stories, collections, publications, artworks, archival materials, exhibits, and other resources highlighting women and their contributions to natural history.

To accompany SHNH's meeting on "Women in the History of Natural Sciences" (2017) Gina Douglas and EUP created a new virtual issue celebrating and making available the achievements of women from papers published in *Archives of Natural History*. This virtual issue has proved very popular with

more than 1,000 downloads to the end of 2018. The issue is free to view or download at: https://www.euppublishing.com/anh/virtualissues.

For SHNH's contribution to #HerNaturalHistory month, Charles Nelson worked with the Newsletter Editor on creating a new blog on the SHNH website

[https://shnh.org.uk/2019/03/celebrating-women]. Charles identitifed a number of additional articles which could be included under this theme. All articles are listed and linked to the EUP website from the blog. Some highlights include:

- E. Charles Nelson, 2019. Katherine Sophia Baily (Lady Kane) and *The Irish Flora* (1833) 46 (1), pp. 44–57.
- David Symon, 2003. Wild Flowers of South Australia (1861) by Fanny De Mole 30 (1), pp. 139–148.
- Leonie Paterson and P. G. Moore, 2006. Victorian natural scientists overlooking the Firth of Clyde: Marion Spottiswood Balfour the photographer. 33 (1), pp. 172–174.
- Sara Albuquerque, 2012. Watercolours of orchids native to British Guiana at the Royal Botanic Gardens, Kew, attributed to Hannah Cassels im Thurn (1854–1947) 39 (2), pp. 344–347.
- Christine E. Jackson, 2011. The painting of hand-coloured zoological illustrations 38 (1), pp. 36–52.
- A. Bryant, H. Plaisier, L. M. Irvine, A. McLean, M. Jones and M. E. Spencer Jones, 2016. Life and work of Margaret Gatty (1809–1873), with particular reference to *British seaweeds* (1863) 43 (1), pp. 131–147.

13. Accessing Archives of Natural History online

The full content of *Archives of Natural History* dating back to 1936 is available to SHNH members freely online.

Electronic copies of new issues are available in advance of the printed version. To activate your free access, please activate the 2019 token, even if you have previously registered. If you have any queries, please contact EUP by email: *Journals@eup.ed.ac.uk*. For more information see the EUP website.

14. Copies of the *Journal of the Society for the Bibliography of Natural History* available

Charles Nelson has surplus copies of the *Journal of the Society for the Bibliography of Natural History* in original wrappers available on first-come, first-served basis, or in exchange! The issues are:

- Volume 4 part 5 February 1966: included obituary of A. C. Townsend; Jahn on "The Old Ashmolean Museum and the Lhuyd collection", "G. B. Sowerby the first and his correspondents part 2".
- Volume 4 part 7 January 1968: included "Sir Hugh Low [biogrphy]", "A bibliography of aboriginal whaling", and a bibliography of Agnes Arber, E. A. N. Arber and Ethel Sargant, as well as a paper on butter-fly wing-prints.

Charles is also looking to complete his set with the issues noted below:

 Journal of the Society for the Bibliography of Natural History volume 1 part 7 (1939) and volume 4 part 1 (1963).

For more information please contact Charles on his email at tippitiwitchet@phonecoop.coop.

Society Events News

15. Trading Nature The King's Manor, University of York 4–5 June 2019

SHNH summer meeting and AGM in association with the Geological Curators' Group



Helen Cowie, Jo Hatton, SHNH Meetings Secretary and Jack Ashby.

This year's summer meeting and AGM was held in the King's Manor at the University of York, a group of beautiful Grade I listed buildings dating back to the medieval period. Located quite close to York Minster, York Art Gallery and the Yorkshire Museum, the meeting was held in association with the Geological Curators' Group, and explored the multifaceted theme of Trading Nature.

The meeting opened with a warm welcome from SHNH Vice President and Honorary Treasurer, **Bill Noblett**, who handed over to **Clem Fisher** to chair and introduce the first of three speakers from Australia, all part of the collaborative research network 'Merchants and Museums' exploring the global business of natural history *c*.1800–1920. **Simon Ville**, Senior Professor of Economic and Business History, at the University of Wollongong, set the scene with his paper 'The exchange, finance and logistics of the natural history trade in the nineteenth century', comparing global

trade in commodities such as wool, cotton and coffee for example, with the unique challenges and logistics facing the trade in natural history in the 19th century. Simon was swiftly followed by Vanessa Finney from the Australian Museum, whose paper 'Collection Building at the Australian Museum', provided a fascinating insight into the lives, personalities and collecting practices of two early curators, Gerard Krefft (1859–1874) and Edward (1874–1894). This was followed by **Deidre Coleman**, from the University of Melbourne, who brought to life the story of Frederick Parkhurst Dodd: 'Butterfly Man of Kuranda', North Queensland in Mid-Nineteenth-Century Entomology. Dodd was an important Australian insect breeder. collector and dealer from North Queensland who collected, bought and sold many thousands of tropical butterflies and moths to museums and collectors in the mid-nineteenth to earlytwentieth century. Deidre outlined the many tensions and interactions inherent between self-taught bush collectors like Dodd and the rising class of museum professionals during this period.

After the refreshment break, Jo Hatton chaired a session that continued the entomological theme with a paper from Leore Joanne Green, PhD student at the University of Cambridge who provided a unique insight into the contribution of one of the few female entomologists active in late 19th century, Emily Mary Bowdler Sharpe (born 1869). Mary was able to make a living as an intermediary between buyers, sellers and museums, specialising in collections made by travellers and colonial officials who collected insects around the empire, whilst working for many years in an unofficial capacity cataloguing and describing insect species in the Natural History Museum. Matthew

Wale, historian of print and science followed with his paper, 'Infinite Bartering': The Controversy Specimen Exchange'. Matthew provided insight into the role of the weekly perithe Entomologist's *Intelligencer* (1856–61) in the promotion and interchange of information and the exchange and sale of specimens amongst a wide range of contributors during that period. Rachel Jennings, from the Powell-Cotton Museum in Birchington, Kent, then illuminated us about the life and sometimes questionable activities of Frederick George Merfield (1889–1960), English hunter and animal dealer based in Cameroon, in her paper 'Fred Merfield and the Powell-Cotton Museum: A trading partnership'. Merfield met Percy Powell-Cotton, traveller, collector, and museum proprietor in 1927, with Powell-Cotton acting as his sole agent in the procuring and selling of natural history specimens (particularly primates) through his extensive network of contacts with museums, private collectors, taxidermists, and other dealers in Europe and North America. This resulted in a mutually beneficial relationship for them both. Elle Larsson, PhD Student at King's College London and the Natural History Museum then gave her paper "The animals went in four by four": Collection-building at Rothschild's Zoological Museum, Tring', a reexamination of the building of Walter Rothschild's collection, the largest private natural history collection the ever seen, had exploring Rothschild's process of acquisition and the social, material and epistemological factors which influenced him, which showed Rothschild's collection-building to have been a personal, commercial, social and scientific endeavour in equal measure. The final presentation of the morning 'Between barter economy and gift economy. The intermediary role of traders of zoological specimens in the correspondence of Barbosa du Bocage' was given by Catarina Madruga, PhD student at the University of Lisbon. Catarina reminded us how collection building was integrally linked to nation building in the nineteenth-century and explained how the building of collections at the Lisbon zoological museum (mostly destroyed in the devastating fire of 1978), can be traced through the correspondence and activities Barbosa du Bocage, the director of the Lisbon zoological museum at that time.

The SHNH AGM was held following a brief break for lunch. Four new Council members were elected and the John Thackray and Founder's medals were presented to **David Mabberley** and **Henry Noltie**. Non-members had the opportunity to mingle and view the poster by **Andreia Salvador** from the Natural History Museum on 'Stevens' Auction Rooms: The Shell Sales at 38 King Street', outlining its distinguished history and listing some of the most important shell sales which took place there over many years.



Lithograph of 'The Geological Lecture Room, Oxford' with Dr. William Buckland lecturing on February 15, 1823.

Following the AGM, Matthew Parkes, Chair of the Geological Curators' Group introduced a series of geoscience themed presentations. Beginning with a paper from Susan

Newell, PhD student at the University of Leeds and Oxford University Museum of Natural History 'Building a teaching collection for Oxford: William Buckland's sourcing of specimens and visual materials, c. 1815–1845', Susan examined Buckland's pioneering objectbased approach to teaching during his tenure as first Reader in Geology at Oxford University and the sourcing of the materials he used. Dean Lomax, Palaeontologist (Visiting Scientist) at The University of Manchester followed with a lively and comprehensive review of the discoveries and contribution of Anning Palaeontologist Extraordinaire, to the discipline of palaeontology in the early-mid 1800s. From the ichthyosaurs and plesiosaurs she first brought to the attention of the scientific community, to the first British pterosaur and even fossilised faeces (coprolites) Mary discovered, Dean showed Mary not simply to be a 'fossil hunter' or 'just a dealer', but an expert and critical thinker and pioneering palaeontologist, who is now finally receiving the recognition and attention she deserves. Peter Davidson at the National Museum of Scotland, presented his paper 'A Fair Deal: A short study on the role of dealers in the History of Mineralogy'. Peter described the contribution of dealers to the historical development of mineralogy collections at the National Museum of Scotland and elsewhere, focussing on two family firms that made significant contributions in the nineteenth century. Frantz in Germany, founded by Adam August Frantz and the Bryce Wright's (Senior and Junior), two of the most important British mineral dealers of the mid- to late-nineteenth century.

Following the afternoon refreshment break, **Sarah King**, from the Yorkshire Museum chaired the final session of the day, introducing **Emma Bernard** from the Natural History Museum with her paper on 'The foundations of the fossil fish collection at the Natural History Museum, and the ethics of modern collecting'. Emma outlined how the fossil fish collections at the NHM were built from the large collections collected by Sir Philip Maples de Grey Egerton and William Willoughby Cole, the 3rd Earl of Enniskillen who set out on a 'Grand Tour' of Europe in the 1830's to collect fossils and whose large collections were offered and acquired by the British Museum in the 1880's. Emma compared acquisition methods of the past to collecting today, including the role played by fossil fairs and the ethics and legalities of international field collecting today. John Faithfull at the Hunterian Museum, Glasgow followed in a similar vein, exploring the world of 'Artisanal and Small-Scale Mining, Geological Specimens, and the Role of Specimen Preservation in Improving Lives', arguing that artisanal and small-scale mining (ASM) despite its critics, can benefit local communities, and that there are many historical, and contemporary examples of good practice. John noted that there is increasing recognition nationally, and internationally that ASM can play a key part of communitybased economic and social development for marginalised groups with big potential to improve the lives of marginalised people. The day ended with a lively and informative presentation by geologist, Mike Howgate, 'Selling Prehistory – the Vernon Edwards experience', Mike told the story of amateur sculptor Vernon Edwards. In the early 1920's, Edward's began to make prehistoric reconstructions for the Natural History Museum's geology displays. This lead to making three dimensional plaster casts of dinosaurs, Tertiary mammals and fossil fish commercially. Marketed widely, at

first by Edwards himself, and then via the geological suppliers and publisher Murky and Co. and mineral and fossil dealership Gregory, Bottle and Co., advertisements for models could also be seen in the *Museums Journal* with many being acquired by museums in the UK and further afield, some of which can be still be seen today. Later that evening, the Conference dinner was held at *Ask Italian* in the Grand Assembly Rooms, York.

'The Fountain Aquarium', illustration featured in *The Aquarium: an unveiling of the wonders of the deep sea (1856, 2nd edition).*



Day two was chaired by Miranda Lowe from the NHM who introduced Helen Cowie from the University of York, who presented her insightful paper 'Animals Wholesale and Retail: Exotic Animal Dealers in 19th-Century Britain'. Helen took a critical look at the thriving trade in exotic animals that existed in nineteenth-century Britain and its contribution to the study of natural history. Lead by two prominent Victorian animal dealers, Charles Jamrach (London) and Edward Cross (Liverpool), the trade involved huge logistical challenges, catching and transporting animals, marketing them once in Britain, and the high mortality rates amongst the animals involved both during transport and once they arrived in Britain. Mareike Vennen, Researcher at Humoldt-Universität zu Berlin, then followed with her paper exploring 'The Aquarium Complex. Trading living marine animals, 1850-

1910' from the early attempts by British naturalist Philip Henry Gosse to collect and keep marine animals alive indoors to the commercial dealings of London based engineer William Alford Lloyd, the first professional aquarium dealer who set up a commercial network of collectors and clients extending to the colonies overseas. Mareike demonstratdrawing on correspondences, reports, order catalogues and the material culture of aquarium keeping and trade, how aquatic animals became objects of scientific and commercial trade throughout the nineteenth century involving many different networks, eventually reaching a global scale, sometimes to the detriment of many local species. Paolo Viscardi at the National Museum of Ireland then presented a joint paper on 'The Blaschka business network' outlining how father and son team Leopold and Rudolf Blaschka, based in Dresden, manufactured glass models of mainly marine invertebrates between the years 1863 and 1890. Their models were sold all over the world for display and teaching. Outlining their business arrangements and practice, Paulo demonstrated the building of their business network and showed how they transported and sold their models through at least three different dealers, creating a wide reaching global network from their small workshop in Europe.

Following refreshments, Helen Cowie introduced the final speakers of the day, Douglas Russell, from the Natural History Museum, Tring, reviewing 'The formation and dispersal of 19th century natural history specimens collected by Captain C. C. Abbott in the Falkland Islands'. This involved considerable detective work, but the authors were eventually able to unravel the origins of birds' eggs (in this case a 'Patagonian Ostrich' egg previously

attributed to Charles Darwin) and other ornithological material that turned out to be collected by Captain Charles Compton Abbott (1823-1887).Compton Abbott commanded the Falkland Islands Detachment of the British Army from March 1858 to early 1861. Using correspondence in the NHM and documents held by The Army Museums Ogilby Trust, the team were able to deduce that the specimens followed a circuitous route, first sent to dealer Charles Jamrach, and then sold to ornithologist John Gould before ultimately arriving in the Natural History Museum collections and had no connection to Darwin at all. Graham Oliver, Research Fellow at Amgueddfa Cymru – National Museum Wales then discussed 'Trading in Conchology: The blurred distinction between dealer, collector, conchologist', showing with several examples, how the convoluted activities of shell collecting, dealing and describing in the 18th and 19th centuries by collectors such as the Duchess of Portland and others, still contribute to complexities that often hinder taxonomic research today. Geraldine Reid of National Museums Liverpool then introduced us to the wonderful world of diatoms in her paper 'Diatom mounters: trade in the microscopic world'. During the Victorian era the study of diatoms as a hobby was a fashionable pursuit for the wealthy. Geraldine provided a unique insight into some of the main diatom mounters of the period including Gottlob Ludwig Rabenhorst (1806-1881), Albert Grunow (1826-1914) and Per Teodor Cleve (1840-1905), how the slides were used and how they mounted and sold their slides around the world. Mike Buttolph, Honorary Research Associate University College London drew the meeting to a close with his presentation on 'The contributions of commercial

breeders to early genetics'. Explaining how two commercial dealers in horticultural seeds and plants – Edward Ashdown Bunyard (1878–1939) at The Royal Nurseries at Maidstone, and Charles Chamberlain Hurst (1870–1947) at Burbage Nurseries, Leicester contributed to the early growth and application of genetics to the breeding of new varieties of plants.

Bill Noblett formally closed the meeting, thanking the participants and those organising such a very enjoyable and stimulating multidisciplinary meeting. Thanks are extended to GCG for all their help 'behind the scenes' with everything from marketing to registration and delivery on the ground. We look forward to working with GCG again in the future.

Post lunch, a small number of delegates met **Sarah King**, Curator of Natural Sciences for a tour of the Yorkshire Museum collections at their off-site store. Others took the opportunity to visit the Yorkshire Museum or nearby cultural institutions before heading off home.

Jo Hatton Meetings Secretary

16. Geological Curators' Group



The joint meeting of the Society for the History of Natural History and the Geological Curators' Group was felt to be a tremendous success. GCG thor-

oughly enjoyed working with a sister Subject Specialist Network to deliver such a fascinating conference. The diversity of the talks, under the banner 'Trading Nature', demonstrated that the conference theme caught the interest and attention of academics, scientists, amateur enthusiasts from a great many backgrounds, bringing us all together in what was a friendly, engaging, and inspiring atmosphere.

The session on geosciences, chaired by the Geological Curators' Group, explored a number of famous figures in our history, including palaeontologist Mary Anning, geologist Buckland, and artist Vernon Edwards. It also gave us an insight into the collections held at institutions such as the Natural History Museum London, the Oxford University Museum of Natural History, and Doncaster Museum where a new ichthyosaur species was discovered in the collections. Presentations inspired rich debate over the ethics of collecting and the use of dealers to provide new acquisitions of fossil material and mineral specimens to collections. Whilst some of the conference delegates with a direct connection to the Geological Curators' Group may have been attracted to the conference for this particular session, it is clear from the feedback I have received that members thoroughly enjoyed the conference as a whole, getting perhaps as much from the other talks as they did from those focussed on the geological sciences.

The Geological Curators' Group is open to anyone with an interest in geosciences; including but not limited to areas such as palaeontology, geology, mineralogy, and planetary sciences. Our website is a wealth of information, and for just a nominal fee per annum you can become a member, enabling you to access even more online content and resources. Members also receive a copy

of our journal *Geological Curator*, as well as other fantastic membership benefits. For more information on membership, resources, and our events listings, please visit our website:

https://geocurator.org/.

Many thanks go to the Society for the History of Natural History for inviting us to work with them on a wonderful event, and we look forward to crossing paths again in the future.

Dr Emma Nicholls GCG committee representative for the *Trading Nature* conference

Other Events

17. Thinking 3D
The Botanist's Library Magdalen
College Library
Oxford, UK
1 June–31 August 2019

This exhibition explores an individual at the heart of a growing network of botanists across Europe at the opening of the 17th century, John Goodyer (1592-1664). Goodyer was never formally trained, but by the end of his life he was the most respected and well-connected botanist in England. His collection of books and manuscripts were left to Magdalen College on his death, and they provide a unique window on to the state of plant sciences in the early modern period — a time in which images of plants were recycled across numerous editions, and in which the definition of what a book of plants was actually used for had begun to change. Images and indexes were of particular interest to Goodyer, and his surviving books are full of his own notes comparing information and illustrations across multiple texts.

The exhibition is in the Old Library at Magdalen College and is open each Wednesday afternoon (2–4:30p.m.) or

by prior appointment (please email library@magd.ox.ac.uk). For more information see:

http://www.magd.ox.ac.uk/librariesand-archives/news/new-exhibitionthinking-3d-the-botanists-library/.

"Thinking 3D: the botanist's library" is part of the international *Thinking 3D* network and is paired with an exhibition at the Oxford Botanic Garden, "Thinking 3D: Flower to Framel" which opened on 1 June. This second exhibition explores the evolution and techniques of botanical illustration through the centuries. See: https://www.thinking3d.ac.uk/obgaexhibit/.

18. Discovery
200 Years of the Cambridge
Philisophical Society
Cambridge University Library
Cambridge, UK
Through August 2019

The exhibition charts two centuries of the Society's key role in some of the most significant scientific advances of the day, including Darwin's theory of evolution, Cambridge's first Nobel Prize winner Lord Rayleigh's seminal work on waves, and the birth of 'Big Data' experiments from the 19th century.

The exhibition is free and open Monday – Friday 09.00–18.00, Saturday 09.00–16.30. For more information see: https://exhibitions.lib.cam.ac.uk/.

19. The Nature of Friendship Gilbert White's House Selborne, UK Though August 2019

Edward Lear (1812–1888) enjoyed a fifty-year friendship with Thomas Bell (1792–1880), one of the leading zoologists of the Victorian era. Bell lived for many years in Gilbert White's former home at Selborne, where Lear was a regular visitor. The two men collaborated

on Bell's *History of British Quadrupeds*, to which Lear contributed charming illustrations, and later on Bell's *Monograph of the Testudinata* (Tortoises and Turtles), for which Lear supplied brilliantly characterful lithographs.

This exhibition explores the passion for natural history Lear and Bell shared and the exquisite artwork Lear created to illustrate Bell's zoological books. It also draws on Lear's letters and diaries to conjure aspects of village life in Selborne in the nineteenth century, and how these two energetic, enquiring Victorians spent their time together, sharing Lear's nonsense songs, experimental botany, and even discussing colour photography. For more information see:

https://gilbertwhiteshouse.org.uk/exhibition-the-friendship-of-nature/?event_date=2019-06-21.

20. Evolution as Inspiration University Museum of Zoology Cambridge, UK Through 15 September 2019

Evolution is constantly producing incredible structures, shapes and patterns – both in the inner workings of animal bodies and in their external appearances. This exhibition of artworks by Jonathan Kingdon showcases a lifetime of observations in nature, through stunning paintings, sculptures and drawings, displayed amongst specimens of the animals that inspired them.

Scientists continuously ask how species come to be unique, but few go beyond using words to explain their theories. In exploring meaning behind the visible appearance of bones, muscles, feathers and fur, Kingdon uses art to communicate his science.

As well as being one of the world's greatest naturalists – having produced some of the most important studies of



Beaks as Flags: Steps between Toco Toucan and a Barbet ancestor (2010) by Jonathan Kingdon. © O. Negra, MUSE – Science Museum. The 30 species of living toucans have attention-grabbing bills, as visual flags, weapons and sound-resonators. This is Kingdon's interpretation of the evolutionary journey of the largest-beaked of all toucans, the toco, from a small ancestral species.

African mammals and biodiversity -Kingdon has developed a wealth of artistic practices which seek to explore and explain some of the hows and whys of animal evolution. This exhibition is a biologist's effort to understand the evolutionary pressures that create visual signals nature. Sir David Attenborough said of the exhibition; "There is a new dimension to the Museum's exhibits... in this amazing, unprecedented, unique and unforgettable exhibition. It's a joy."

More details can be found on the Museum's website: https://www.muse-um.zoo.cam.ac.uk/news/new-summer-artwork-exhibition-evolution-inspiration-opens-17-may.

21. Expeditions and Endeavours Images of Nature Gallery Natural History Museum London, UK Through October 2019

This exhibition has aimed to take visitors on an illustrated journey through all of the world's continents, bringing together a selection of original drawings that were created as a result of some of the greatest voyages and personal expeditions of natural history discovery. The exhibition has now entered its final rotation. The highlights case showcases the talents of the gifted naturalist artist on board the *Endeavour* Sydney Parkinson (1743–1771) who tragically died just six months before the voyage arrived back in England, but whose legacy lives on in the collections.

Additional highlights include depictions of African flora and fauna by Thomas Baines and Margaret Fountaine, a seventeenth-century watercolour from the Museum's collection of Cape plants illustrations, and botanical and zoological illustrations from the Museum's Thomas Hardwicke collection.

The accompanying publication *Expeditions and Endeavour* is available from the NHM Shop and online at http://www.nhmshop.co.uk/expeditions-and-endeavours-images-of-nature.html, priced £12.99.

22. 16th International Exhibition of Botanical Art & Illustration The Hunt Institute for Botanical Documentation Pittsburgh, USA 17 September–18 December 2019

The Institute established the *International Exhibition of Botanical Art & Illustration* series in 1964 with the aim of supporting and encouraging contemporary botanical artists from around the world. Collectively, the International series catalogues are the most comprehensive record available of contemporary botanical artists. For the 16th International a full-colour, illustrated catalogue is available in print and as a database on the website. This exhibition includes 41 artworks by 41 artists who

reside in 14 countries (Australia, Brazil, England, France, Germany, Ireland, Italy, Japan, Scotland, South Korea, Spain, Turkey, the United States and Wales).

The reception on 17 October (6:00–8:00p.m.) is open to the public. At 6:30 p.m. in the gallery the curators will introduce the exhibition and the 16th International artists in attendance.

The exhibition will be on display on the 5th floor of the Hunt Library building at Carnegie Mellon University and will be open to the public free of charge. Hours: Monday–Friday, 9:00a.m.–noon and 1:00–5:00p.m. (except 28–29 November). Because hours of operation are occasionally subject to change, please call or email before your visit to confirm. For further information, contact the Hunt Institute at ++1 412-268-2434.

23. Drawn from Nature Art Space, Cass Art The Angel, Islington, London, UK 3–16 December 2019

An exhibition of new and recent work by Sandy Ross Sykes and Rebecca Jewell, including watercolour flower paintings, printed feather collages, and nature studies. The exhibition will be in the Art Space of the Cass Flagship Store in Islington.

Sandy and Rebecca will also be running some art workshops in the space during the exhibition. For more details email rebecca@pageslane.co.uk.

Private View: Thursday 5th December 6–8p.m.

Venue: *Art Space*, Cass Art, 66-67 Colebrooke Row, The Angel, London N1 8AB.

Rebecca and Sandy also run very popular art classes at the Linnean Society of



Sandy Ross Sykes. Crashing waves on the shore. Walks by the sea Cap d' Antibes 2019. Watercolour.

London. Upcoming classes include: Shells and Pebbles (8 August, 10-4), Mindfulness and Mandalas September, 6-8), Wonderful Wings (2-day, 2-3 October, 10-4), Nature Printing with Leaves (17 October, 6–8), Ghostly Gouache (30 October 10-4), Butterflies and Moths (14 November, 1-4)and Christmas Cards (27)November, 10-4).

For more information and to book visit:

https://www.linnean.org/workshops.

Rebecca Jewell. *Owl Feather* hand-printed feather, mounted on archival paper. 2018.



24. Magnificent obsessions
Why we collect
Smithsonian Libraries Gallery
National Museum of American
History Washington, DC, USA
Through June 2020

The impulse to collect is human. We collect for many reasons: to gather information about the world, to preserve the past, or to follow our interests and desires. Pioneering collectors have long shaped Smithsonian Libraries. Each had their own unique passions,

from hot-air balloons to seashells, from Japanese prints to world's Together, these diverse collections form network of knowledge. Smithsonian Libraries continues to build upon the work of these curious collectors and share its collections with the world to inspire curiosity and spark new ideas. Like a modern day cabinet of curiosity, Smithsonian Libraries collections span eras and disciplines, enabling discovery, inspiring creativity, and illuminating history.

See: https://library.si.edu/exhibition/magnificent-obsessions.

Also showing at the Smithsonian Libraries through February 2020 is: *Game change: Elephants from prey to preservation.*

Americans were once enthralled by the legends of big game hunters who pursued elephants, lions, and other large animals for sport. These explorers traveled to exotic lands and returned with trophies and tales of daring pursuits. Once popularly seen as objects of prey, elephants are today the focus of global conservation efforts. Through rare books, photographs, manuscripts, artwork, and objects dating from the late 1800s to today, including a rare ca. 1909 toy set and a modern elephant radio collar, this exhibition traces this shift in public attitudes about elephants from the late 19th century to the critical conservation concerns of today. See: https://library.si.edu/exhibition/gamechange.

25. Some more events of interest

The NHM London's Dippy the *Diplodocus*, which is touring the UK, has arrived at the Great North Museum: Hancock, Newcastle upon Tyne, where it features in an exhibition called *Dippy on Tour: A Natural History Adventure*. The

exhibition runs until 6 October 2019. See: https://greatnorthmuseum.org.uk/whats-on/dippy-on-tour.

The exhibition *British Dinosaurs: From Fossils to Feathers* has opened at Tring Natural History Museum. 'Explore the surprising diversity of British dinosaur species and find out about the dinosaurs that still live among us in our gardens and parks'. Open until 11 October 2019. See: https://www.nhm.ac.uk/visit/tring/exhibitions-at-tring.html.

The Fossil Swamp is a new exhibition at National Museum Cardiff, part of Amgueddfa Cymru – National Museum Wales, which is due to run until 17 May 2020. "This new exhibition reveals a snapshot in time from 300 million years ago – when a vast tropical swamp covered what is now Wales. The Fossil Swamp had monster plants, giant insects, thunderstorms and floods." See: https://museum.wales/cardiff/whatson/10676/The-Fossil-Swamp/.

Meetings News

26. Animal, Vegetable, Mineral and ... Dr John Addenbrooke's Cabinet of *Materia Medica* UCL School of Pharmacy London, UK Monday 14 October 2019 at 5.30p.m.

Henrietta McBurney Ryan will be giving a talk on her work relating to Dr John Addenbroke's *Materia Medica* cabinet in the Maplethorpe Lecture Theatre, UCL, as part of the British Society for the History of Pharmacy's series of events [https://www.bshp.org/].

In 1711 Dr John Addenbrooke, founder of the now famous Cambridge hospital, gave his *Materia Medica* cabinet to St Catharine's College, Cambridge. The cabinet survives to this



Drawer of crystals, Sir John Addenbroke's Cabinet of *Materia Medica*.

day, housed in one of the fellows' rooms in the college. In 2016 it was the subject of a study involving an inventory and identification of its contents. While much of these contents were the animal, vegetable and mineral substances typical of remedial medical practice of the mid-seventeenth to early-eighteenth centuries, some unexpected objects were found to be part of Addenbrooke's cabinet.

This talk will describe the contents and use of the cabinet in the context of other medical cabinets and collections of the period, highlight some of the more surprising objects discovered, and discuss the importance of this rare object in the history of collecting.

Refreshments will be served from 5.00p.m. Non-Members of BSHP are welcome to attend. For more information contact Chris Duffin, BSHP Programme Secretary email: events@bshp.org

Porcupine Fish, Sir John Addenbroke's Cabinet of Materia Medica.



27. Collecting and Collections Digital Lives and Afterlives The Royal Society, London, UK 14–15 November 2019

shift from disordered The the Kunstkammer or curiosity cabinet of the Renaissance to the ordered Enlightenment museum is well known. What has to be explored fully is the process through which this transformation occurred. Collective Wisdom, funded by an AHRC International Networking Grant, explores how and why members of the Royal Society, the Society of Antiquaries of London Leopoldina (in Halle, Germany) collected specimens of the natural world, art, and archaeology in the 17th and 18th centuries.

In three international workshops, we are analysing the connections between these scholarly organisations, natural philosophy, and antiquarianism, and to what extent these networks shaped the formation of early museums and their categorisation of knowledge.

Workshop III, concerning the afterlives, use and reconstruction of early modern collections is designed to benefit scholars interested in digital humanities. We will explore digital approaches to survey collections over time, assisted by the Royal Society-Google Cultural Institute partnership. How can we datamine and use tools to integrate extant databases? How did the norms of early modern academies of scientific journal publication, priority of discovery and 'matters of fact' shape the organisation of knowledge? How do we consider those early modern models in digital reconstructions of early collecting?

Speakers include: Min Chen (Oxford), Mary-Ann Constantine (Wales), Natasha David (Google), Michelle DiMeo (Hagley), Louisianne Ferlier (The Royal Society), Rainer Godel

(Leopoldina), Rob Iliffe (Oxford), Neil Johnston (TNA), Suhair Khan (Google), Nigel Leask (Glasgow), Miranda Lewis (Oxford), Alice Marples Alessio Mattana (Turin), Iulianne Nyhan (UCL), Torsten Roeder (Leopoldina), Anna Marie Roos (Lincoln), Giacomo Savani (University College Dublin), Cornelis (Oxford), Tom Scott (Wellcome), Aron Sterk (Lincoln), Matthew Symonds (CELL, UCL).

- £100 registration fee, full (includes lunches, coffees and music concert)
- £50 registration fee, students and concessions (includes lunches, coffees and music concert)

Registration, programme, and abstracts: https://royalsociety.org/science-events-and-lectures/2019/11/collecting-and-collections/

Free registration for music concert following the workshop https://royalsociety.org/science-events-and-lectures/2019/11/collecting-for-charity/

For more information about the Collective Wisdom project see https://collectivewisdom.uoregon.edu/

28. Some more Meetings of Interest

The Museums Association
 Conference and Exhibition is taking
 place in Brighton, from 3 – 5 October
 2019 with the theme "Sustainable
 and Ethical Museums in a Globalised
 World" which will explore current
 social and political upheaval, demographic changes, rising inequalities
 and climate change. Early Bird
 Registration closes on the 31st July.
 See: https://www.museumsassociation.org/conference?utm_campaign=1479934_Conference%202019

%201&utm_medium=email&utm_so urce=Museums%20Association&dm_i =2VBX,VPXA,52SJQV,3ASQQ,1.

- The 8th Symposium on Dinosaur Palaeontology and their Environment is taking place in Burgos, Spain from 5–7 September. See:
 - https://dinosaurioscyl.blogspot.com/p/documentos-documents.html.
- The Society for the Preservation of Natural History Collections [SPNHC] have announced that they are holding their next annual meeting in Edinburgh (7–13 June 2020) in association with the International Council of Museums (ICOM). For updates visit the SPNHC website at: http://www.spnhc.org/ and follow @SPNHC on Twitter.

A Good Read

29. Type & Forme Rare Books & Manuscripts Grantham, Lincs, UK

A partnership of two Fellows of the Linnean Society, the antiquarian bookshop *Type & Forme* (est. 2018) specialises, among other subjects, in travel and exploration, and natural



history. Within these subjects is covered a broad range, including botany, zoology, and entomology, in printed, manuscript, and graphic form.

For example, at this year's London International Book Fair, 'Firsts' in June, we exhibited a three-volume herbal from the turn of the eighteenth century, compiled in part for medical purposes, from the library of the late Stephen Keynes OBE FLS. Our exhibition at last year's Gravity Fields Science Festival – a festival under the aegis of the Royal Society that attracted *c*. 80,000 visitors – included the rare Alecto Historical Edition prints from Sir Joseph Banks' *Florilegium*, which will also feature in our forthcoming exhibition and talk at the Stamford Georgian Festival (26–20 September 2019).

Type & Forme may be a young company, but between us we have some 50 years of experience with rare books: Mark James spent 14 years in the book departments of both Christie's and Sotheby's, latterly as an Associate Director at Christie's King Street. He was then the Head of Travel Department at both Henry Sotheran Ltd (2007–2013) and Bernard Quaritch Ltd (2013-2017). He has a particular interest in the works of Charles Darwin and Margaret Mee, having sold both books from Mee's library and her own watercolours on behalf of her estate.

Dr Anke Timmermann is a historian of science and manuscript scholar (PhD Cantab 2007) whose international career included positions Chemical Heritage Foundation (now Science History Institute), Philadelphia and the Max Planck Institute in Berlin before she was awarded the Munby Fellowship in Bibliography Cambridge University Library, where she compiled a catalogue of alchemical manuscripts. In 2014 Anke decided to follow her bibliophile interests further by joining the book trade, becoming a bookseller at Bernard Ouaritch Ltd. She has since then maintained close connections with libraries and museums, and recently joined the Linnean Society's Collections Committee.

Our book room is open by appointment. A selection from our stock is list-

ed on our website, and we issue both digital and printed catalogues. We further provide consultancy services for private individuals and institutions (collection development, commission bidding at



auction, and valuations), and we exhibit at major book fairs and festivals. We are members of the Provincial Booksellers Fairs Association (PBFA), the Antiquarian Booksellers' Association (ABA) and the International League of Antiquarian Booksellers (ILAB). For any enquiries, or to join our mailing list, please contact us.

Type & Forme ABA PBFA ILAB enquiries@typeandforme.com 07933 597 798 / 07513 104 628 www.typeandforme.com @typeandforme

Image Captions

(1). Rupert, A. (compiler). *Herbarium vivum* ... 1698–1700 [-1700-Seq.]. [Germany: c. 1698–1702]. [With:] [ANON.] Medicinal Herbarium. [Germany: early 18th century.] 3 volumes. *Provenance*: Stephen John Keynes OBE FLS.

This three-volume German herbarium contains c. 1,300 plant specimens, among them 'Aloe Americana sobilifera', below which the compiler, Rupert, records famous flowering of the plant in the cultivated baroque garden of Castle Salzdahlum, then under the auspices of Wolfenbüttel dukes Anton Ulrich and Rudolph August, in 1701. The 'Aloe' (actually 'Agave americana' of the Asparagaceae family, native to Mexico) had flowered for the first time in 23 years and grown to a height of 36 feet with 40 branches and, reportedly, 6,166

flowers, of which Rupert's specimen may be one.

(2). Parkinson, S. (c. 1745–1771) and Frederick Polydore Nodder (fl. 1770–c. 1800) (artists). 'Clerodendrum paniculatum, Linnaeus (Verbenaceae). Java. Plate 380'. London: Alecto Historical Editions in association with the British Museum (Natural History), 1980–1990. Engraving by Daniel MacKenzie, printed à *la poupée* by Alecto Historical Editions. Limited to 116 impressions.

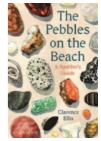
This shrub, now commonly called 'Pagoda Flower' and known to attract butterflies with its nectar, was first described by Carl Linnaeus in 1767, and is widespread in subtropical and tropical eastern Asia. It was observed by Banks and his party at Jakarta between 11 October 1770 and 24 December 1770, while the *Endeavour* was repaired, before the return journey which began on 26 December and reached England on 12 July 1771.

30. John E. Ruitta talks about "The Pebbles on the Beach"

The Pebbles on the Beach: A Spotter's Guide by Clarence Ellis, Foreword by Robert MacFarlane (Faber & Faber, 2018). ISBN: 978-0571347933 (pb).

The geology of pebbles and the poetry of onshore phenomena in a beautifully produced guide, first published in 1954.

When it comes to geology, I have long had what you might call "a bit of block."



For years I've tried to find the proper lever to shift that block out of my way in order to allow me to progress in my understanding – and enjoyment – of the

subject, but nothing has quite been able to serve. Until very recently, that is, when my attention was piqued by news of the re-publication of a small book whose length of existence exceeds my own by just over a decade: Clarence Ellis' *The Pebbles on the Beach: A Spotter's Guide*.

Originally published in 1954, and – as is made clear in the new foreword by Robert MacFarlane, when he opens by referring to it as "the stone-book of my childhood" – long known to those who appreciate the simple joy and beauty to be found in pebbles (as well as in searching for them), *The Pebbles on the Beach* seems to be one of the books you know about if your interested in the subject upon which it treats.

However to say that it is a book about geology would not be quite correct. While Mr. Ellis does delve into geology, he by no means limits himself to it. The same can be said of mineralogy, as it can about hydrology, oceanography, and half a dozen other fields of study. For while all of these – and a wide range of other topics as well – are incorporated into his absolutely charming, delightfully conversant prose, his topic, at its core, is the sheer enjoyment of a nice leisurely stroll more or less regularly punctuated by the discovery of an interesting pebble.

It's really not very much more complex than that. Clarence Ellis enjoyed discovering pebbles; they appear to have been the doorway through which he found his enjoyment and understanding of this massive, ever-changing ball upon which we all live. Yet rather than scaling cliffs, diving into the ocean's depths, or standing in contemplation of vast mountain vistas, he strolled along the shingle beaches for which Britain is well known and found satisfaction in the stones just beneath his feet. Would that we all could be so

fortunate in our own quests.

Not a great deal appears to be known about Mr. Ellis. The book's publisher sums up his life in a few short sentences. Born in Holyhead in 1889, he studied history at the University of Bangor, served in the First World War, and following that worked in "further education." I'm not entirely sure just what "further education" means in the life of Mr. Ellis, but what he has written in this little book has most certainly furthered the education of countless readers.

In Mr. Ellis' words, the core geological triad of igneous - sedimentary metamorphic is not a lifeless description of the basic types of rocks found on the planet, rather it is a palette of base colors, red-vellow-blue if you will, from which he can go on to paint descriptions of more varied hues derived from these basic three. The reader, rather than struggle through the geologic vocabulary, is guided gently and amiably along through beautifully crafted, down-to-earth explanations of basalt, limestone, gneiss, and all the rest so that they become far more than just names. Indeed, he takes towering seaside cliffs and places them literally in the palm of one's hand.

Now, it is to be acknowledged that the prime pebble-finding grounds of which Mr. Ellis writes are in Great Britain, and a full seventy pages of the book is dedicated to a guided tour around that Scepter'd Isle's coastline. However, this by no means makes it in any way less valuable a book to those in other parts of the world. Indeed, in my own home state of Oregon, there is but one shingle beach - a sea-tumbled basalt masterpiece named Black Pebble Beach (also called Cobble Beach) in the Yaquina Head Outstanding Natural Area and I was moved to visit it at the first opportunity following my completion of the book. The experience was sublime, and although I have resided in the state all my life, I did not know of the existence of this remarkable place until Mr. Ellis's book inspired me to go find it.

As The Pebbles on the Beach so astutely points out, a pebble is a mid-way point in a long and cyclical existence, it is perhaps most appropriate to conclude this review at the end of the book's beginning. In the final paragraph of his introduction to the book, Mr. Ellis writes, "With understanding will come still greater enjoyment. To all who engage in this fascinating quest the author wishes good hunting, an insatiable curiosity and an ever-widening knowledge." How could any naturalist ever even dare hope to be wished anything better than these three things?

[Editor's note: John has also reviewed the following new titles on his website: Thomas Harriot: A Life in Science by Robyn Arianrhod (OUP, 2019). ISBN: 978-0190271855 (hb). http://www.wellreadnaturalist.com/2019/06/designated-smart-person/; and Dante and the Early Astronomer: Science, Adventure, and a Victorian Woman Who Opened the Heavens by Tracy Daugherty (Yale University Press, 2019). ISBN: 978-0300239898 (hb). http://www.wellreadnaturalist.com/2019/05/a-cross-cultural-life/.]

News & Information

31. 19th-Century Manuscript of Cuba's flora now online

A three-volume manuscript containing vivid colour drawings of Cuban flora has been made available online through the HathiTrust digital library, by way of Cornell University's Library Division of Rare and Manuscript Collections. "Specimens of the Plants and Fruits of the Island Cuba" (1826) is considered to be one of the most comprehensive works on Cuba's flora during the colonial period. The 121 watercolour drawings accompanied by an analysis of the plants, nous applications,

their biology, historical facts, indigepoetry, and personal observations.

The work was created by Nancy



Hand-drawn illustration of a blue passion flower. Image courtesy of the Division of Rare and Manuscript Collections, Cornell University Library.

Anne Kingsbury Wollstonecraft (1791-1828), who moved to Cuba after the death her husband Charles of Wollstonecraft (brother of Mary and uncle of Mary Shelley) in 1817. She began documenting the plant life in the region of Matanzas through the 1820s and published some of her botanical discoveries under the pseudonym D'Anville. She also wrote in support of women's rights, including "The Natural Rights of Women," published in the Boston Monthly Magazine. Wollstonecraft sent the manuscript of "Specimens of the Plants and Fruits of the Island of Cuba" to a publisher shortly before her death but it was never published. Emilio Cueto, the scholar most familiar with the manuscript's place in history, had searched for it for 20 years before locating it at Cornell in 2018, where it had lain since 1923 after being received from a faculty member and descendant of the author.

32. Record sale price for *On the Origin of Species*

A first edition copy of Charles Darwin's On the Origin of Species (1859) has recently been sold by the auction house Bonhams for a record \$500,075 (€445,000). The book was originally owned by German botanist Robert Caspary (1818–1897), who received the book from Darwin. The book was among a number of first edition presentation copies that were sent to family and friends shortly after it was published and bears the inscription "Professor Caspary / Koenigsberg / from the author."

The book was purchased in the early 20th century by Edward Bradford Titchener, an English-born psychologist and professor at Cornell University, and had been held in a private collection for almost 100 years.

33. Gilbert White Tercentenary



2020 is the tercentenary of the birth of Gilbert White (1720–1793). The Reverend Gilbert White, author of one of the most popular books in the English language – *The Natural History and Antiquities of Selborne* (1789) – was a pioneering naturalist who hugely influenced the development of the science of natural history.

The Gilbert White & The Oates Collections are planning a series of events and activities in Hampshire and beyond, including with nature institutions, nature conservation NGOs and local partners in Hampshire.

34. Progress of the A. R. Wallace Correspondence Project

Phase 2 of the A. R. Wallace Correspondence Project (WCP) began in December 2017 and it has been running smoothly thanks to considerable help from The Charles Darwin Trust (http://www.charlesdarwintrust.org) who helped to set the project up and who are managing our grant from the John Templeton Foundation.

So far we have discovered and obtained scans of about 400 letters and other manuscripts which were new to us, and we are using 'detective work' to try and track down others. The new letters include some real gems. For example, we have found the earliest known of all Wallace's letters (from 1836 when he was aged 13), and a letter from his brother John to their mother which reveals the hitherto unknown fact that Alfred was planning to get married whilst in Brazil (see https://tinyurl. com/yyhxrl34). We are currently trying (probably in vain) to locate the 'Holy Grail' of Wallace letters – his legendary 1858 "letter from Ternate" which may be buried somewhere in the huge archive of geologist Charles Lyell's manuscripts which is currently being sold (see https://tinyurl.com/y5oh bq9d).

Our wonderful volunteers have so far transcribed c. 1,400 letters and by the end of our current grant in August next year we should have basic transcripts of all the 6,500 documents we have copies of, including Wallace's notebooks. We aim to also have carefully edited transcripts with scholarly annotations of at least the c. 350 letters which will be included in Volume 1 of The Correspondence of Alfred Russel Wallace. This volume will contain all of Wallace's early letters, from his teenage years up until March 1862, when he returned to England from his eight-year expedition to the "Malay Archipelago". The big job of editing the book for publication will take place after the end of our current grant, and we will soon need to look for additional funding to ensure that this and our work on his many other letters continues.

The WCP has decided to use Epsilon Web data portal (see https://tinyurl.com/yyguvqo9), and migration of our metadata and transcripts will take place in the next few months. Epsilon has been developed by the Darwin Correspondence Project in association with the Cambridge Digital Library, The Royal Institution, and The Royal Society of London. It aims to bring the correspondence of nineteenth century scientists together into one centralised online resource, allowing users to search and view the metadata and transcripts created by a variety of correspondence projects

2019 sees the 150th anniversary of the publication of Wallace's book The Malay Archipelago which is still widely read today, and as a result there is heightened interest in him especially in South-East Asia. In February, a very impressive monument featuring a 1.5 metre tall bust of Wallace was inaugurated at Tangkoko Nature Reserve in Sulawesi, Indonesia (see https://tinyurl.com/ y47335vk), and in August, life-size bronze statues of him and his trusted assistant Ali will by unveiled at the new Lee Kong Chian Natural History Museum in Singapore (https://tinyurl. com/yxsfo33x). In the first half of November Wallace-related conferences will take place in Makassar, Sulawesi and at the Linnean Society of London. Details of these have yet to be announced, but when they are we will post them on our Wallace Facebook (https://www.facebook.com/1stJuly185 8) and Twitter (https://twitter.com/ ARWallace) sites.

George Beccaloni Director Wallace Correspondence Project Email: g.beccaloni@wallaceletters.org

35. Unofficial Norwich blue plaques recognise Women

In May, eight unofficial blue plaques were put up on buildings in Norwich to "to balance the lack of commemorations" to the city's women.



The signs were made as a protest by the Common Lot theatre group after it discovered only 25 of 300 blue plaques in Norwich were dedicated to women. The originators were initially only identified on Twitter @rosiesplaques but have now come forward. Siobhan O'Connor, in speaking about the plaques, said they discovered the lack of female commemorations while researching for a show. Information from the Norfolk Record Office revealed "hundreds of notable women" but they chose eight, mainly because the plaques take so long to make. The plaques were hand-made, using a silicon mould filled with clay and hair in which lettering was impressed in reverse before being left to dry, painted and lacquered.

The unofficial plaques include tributes to:

- Emma de Gaudar, who at the age of 16 was said to have held Norwich Castle against a siege by William the Conqueror
- The butterfly collector and diarist Margaret Fountaine (1862–1940) whose collection of over 22,000 specimens are held in Norwich Castle Museum

- Mabel Clarkson, who became a Lord Mayor of Norwich and a city councillor before women achieved the vote
- Dorothy Jewson, the first female Labour MP

People have really embraced the plagues and over 1,800 people have followed @rosiesplaques on Twitter. "It's a transient project really, the plagues can be removed in five minutes," Ms O'Connor said, but she was hoping they would not be taken down. spokeswoman for Norwich City is reported as having said that they were enjoying the temporary art installation and they would consider any application from anyone wanting something more permanent.

36. Unearthed!

In celebration of the opening of the David H. Koch Hall of Fossils at the National Museum of Natural History, the Smithsonian Libraries has curated an online collection of important and beautiful selections from the Libraries' Paleobiology literature "Unearthed!". The digitized books are hosted on the Biodiversity Heritage Library (BHL). As part of this celebration, renowned scientists and librarians have been invited to discuss the collection and identify their favorite books in a series of blog posts that will be released throughout the year. See: (https://blog.biodiversitylibrary.org/tag/ smithsonian-libraries-unearthed). For more information see: https://www.biodiversitylibrary.org/collection/unearthed.

37. Transcribers needed for RBG Kew Herbarium

The herbarium and fungarium at Kew together hold more than 8 million pressed plant and fungal specimens,

which are thought to represent over 90% of all known plant genera, that is to say 70% of known plant species, and around 60% of known fungal species from all around the world. One of RBG Kew's priorities is to make their collections accessible online. This involves imaging the specimens and displaying them online with their accompanying label information. It is a relatively fast process to image specimens but to find the specimen images searching by country, collector or species names, images must be accompanied by the information from their specimen labels. Transcribing this information (which is often hand written) to make it searchable is the most time- consuming step in making the collections available online.

RBG Kew is asking for help in transcribing the information on the specimen labels. This can be done from home and you do not need any prior experience as tutorials will be provided. To have a go, create an account on the DigiVol portal (https://volunteer. ala.org.au/) and go to Kew's institution page (https://volunteer.ala.org.au/institution/index/17296011).

38. Transcribers needed for The Royal Society

The Royal Society have begun to digitise their archival holdings, starting with items related to the *Philosophical Transactions*, the *Proceedings* and certain other reports published by the Society. The Royal Society would also welcome transcribers.

This is a pilot project, seeking to demonstrate proof of concept for further funding. The material ranges from the 1660s to the 1960s. It includes correspondence; original manuscripts submitted to the journals, some of which were ultimately published and others

not; and referee reports. There are particular collections of documents associated with Thomas Henry Huxley, with the 1901–04 Antarctic Expedition, and with the science of colours. For more information see:

https://makingscience.royalsociety.org/s/rs/page/welcome.

39. Hist-Nat-Hist discussion list

HIST-NAT-HIST is the SHNHs discussion list, hosted by Jiscmail. It is designed to promote enquiries and discussion relating to any aspect of the history of natural history. As well as requests for information or answers to other people's enquiries, the list welcomes notices and reviews of conferences, meetings, publications and exhibitions.

There is more information about the list and how to join on our website at: https://shnh.org.uk/hist-nat-hist-discussion/. For those already registered, you can log in directly at:

http://www.jiscmail.ac.uk/lists/hist-nat-hist.html.

Notes & Queries

40. Miss Elizabeth Hill (1754–1843)

Hugh Torrens seeks help with his work on the extraordinary Miss Elizabeth Hill (1758–1843) of Devon, who had worked across the whole of Natural History. She was active mostly as a collector, as befitted her gender, or, more limitedly, as an author, despite having only one eye. She started in the 1780s with:

- a) mineralogy, as her brother John Hill (1760 1807) had been the true discoverer of the mineral now called Wavellite, then with
- b) coleoptera for Thomas Marsham, then both
- c) algae and
- d) fossils for James Sowerby.

She was also active in:

- e) botany and
- f) conchology

The main problem is that her date of death has been wrongly recorded twice, once before the true date (1843) and once after it. This has confused all before, and sent people hunting for other, wrong, women having such a common name. Any references to her work which Hugh might have missed will be much appreciated.

Finally, in a letter relating to about the year 1805, in her work on Insects, is this mystery reference:

Dr [Samuel] Goodenough (Bishop of Carlisle) [10 May [O.S. 29 April] 1743 -12 August 1827) who educated several of our nobility, corresponded for upwards of 30 years circa 1795 to 1827] with my Aunt [E. H.] on scientific subjects. He once complimented her in a Latin preface which he wrote for a publication on insects, "as having benevolently contributed thereto, and our friend Mr Coleridge (the late poet Samuel Taylor's brother) who enjoyed a joke with those he loved, altered the word of benevolent Latin 'Malevolent' on account of the destruction of the poor insects".

If any one can identify this publication, or the member of the Coleridge family involved, Hugh would be most grateful.

> Hugh Torrens h.s.torrens@keele.ac.uk

41. William James Welch (1841–1933), engraver

William James Welch's signature usually in the form "W. J. Welch Sc[ulpsit]" appears on numerous images including portraits of horticulturists, plants and garden views, printed in the leading late nineteenth-century horticultural peri-

odicals *The Gardener's Chronicle* and *The Garden*. Engravers often receive little credit and they tend not to be recorded in the same ways as the artists who created the images in the first place. Welch is one example of an individual poorly recorded in standard biographical sources.

William James Welch was born in Bexley Heath, Kent, and was baptised on 14 November 1841. His parents were Eliza and William James Welch. When the 1851 Census was taken, the Welch family lived at 2 Chapel Street, St Pancras, Marylebone, a house apparently shared with three other families. William Welch senior (33) was then working as a tailor. He and Eliza (32) then also had two daughters: Eliza (6) and Ann (4). By the 1861 Census, William James Welch junior had become an "engraver on wood". His father was listed as a porter, and the family were all together living at 140 Strand. Westminster.

William junior married in the third guarter of 1864 at Guildford; the official marriage record gives her Christian names as MaryAnn (née Lambert) but in census returns she is named as Mary (or May) Louise. By the next Census the couple had set up home at 95 Burton Road, Brixton. He gave his profession as "Artist & Engraver on Wood". By 1871, they had had two children: William (4) and Ernest (3). Within the next decade. the Welches had six more children and the family moved to 80 Angell Road, Brixton. They were evidently sufficiently well off to have a domestic servant and a cook living in the house. Ten years later, in the 1891 Census, William J. Welch is recorded as an "Engineer" almost certainly a mistake by the census enumerator misreading engraver for engineer. By 1911, still living at 80 Angell Street, Brixton, the Welch household consisted of only a servant, and

one of their daughters, Rose Emmeline (35), who was not married. The rest of the family had moved elsewhere.

William James Welch died on 5 November 1933 aged 92. His estate was valued at £6,129 7s. 0d.



As an indication of the range of work Welch undertook, he engraved Gertrude Hartland's portraits of her uncle's daffodil cultivars for printing in an elabocatalogue. William Hartland's Floral album of Conference Daffodils issued in Cork in 1892. In November 1892, a full-page wood engraving of the gardens of the Alcazar, Seville, was issued as a supplement to The Gardeners' Chronicle. He also engraved a photographic portrait of the plantsman Thomas Frederick William Burbidge, marking the conferring of an honorary masters degree on Burbidge by the University of Dublin on 27 June 1889. Earlier still, his wood engraving illustrated, for example, Trevithick's Life of Richard Trevithick, with an account of his inventions (1872), The Glyptic; or, Musee Phusee Glyptic: A Scrap Book of Jottings from Stratford-On-Avon ... by John W. Jarvis (1875), and The late Dr. Charles Beke's Discoveries of Sinai in Arabia and of Midian edited by his widow (1878).

E. Charles Nelson tippitiwitchet@phonecoop.coop

Publisher's Announcements

42. Nature's Explorers Adventureres who recorded the Wonders of the Natural World

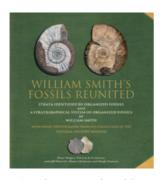
Nature's Explorers is a new publication shortly to be published by the Natural History Museum celebrating the individuals who made great personal endeavours to document the natural world. The contributors all either work for the Museum or are closely associated with it and their choice of subjects reflects their own areas of expertise. Superb artworks and photographs spanning three centuries have been chosen to illustrate each essay. For more information see page 48.

43. William Smith's Fossils Reunited

Peter Wigley (editor) with Jill Darrell, Diana Clements and Hugh Torrens Halsgrove, 2019 160pp., illus.

ISBN: 978-0857043375 (hb)

£34.99.



William Smith is considered by many to be the Father of English Geology and is best remembered for his remarkable geological map of England and Wales, made in 1815. From an early date, Smith recognized that many of the strata which he showed on his map were characterized by the fossils they contained. In 1816 he started a book called "Strata Identified by Organized Fossils" which, although unfinished, was a fundamental work in establishing the science of stratigraphy. In this book Smith figured fossils from each stratum. The fossil plates were exquisitely engraved by the renowned illustrator, naturalist and mineralogist, James Sowerby, from fossils provided by Smith. Although a brilliant geologist, Smith was an unlucky business man and because of his precarious financial position he was forced to sell his extensive fossil collection to the British Museum.

In William Smith's Fossils Reunited. the authors have included new photographs of fossils from Smith's Collection, now housed at the Natural History Museum. These photographs have been arranged next to the original engravings, and in some cases, Smith's sketches. Smith's original texts for both "Strata Identified" and a later work Stratigraphical System of Organized Fossils, which catalogued the fossils, have been reprinted within the book. As Smith roamed the English countryside collecting fossils he was careful to note the exact geographical location of each fossil and also the rock layer from which it came. In this book these locations are shown on copies of Smith's own geological maps. With a Foreword by Sir David Attenborough, William Smith's Fossils Reunited is intended both for the William Smith enthusiast and also for those with a more general interest in the work of this remarkable pioneering geologist. The fossil illustrations and maps in this exquisite volume are aesthetically pleasing in their own right and demonstrate the extraordinary skill of early nineteenth-century engravers and map makers.

44. Florida Explored The Philadelphia Connection in Bartram's Tracks

Thomas Peter Bennett
Mercer University Press, 2019
544pp.

ISBN: 978-0881466935 (hb)

US\$40.

This unique natural history exploration of Florida by members and correspondents of America's first research natural history museum, Philadelphia's Academy of Natural Sciences, reveals the science of discovery and collection of unknown plants, animals, fossils, and artifacts of ancient peoples. The early naturalists, Thomas Say, Titian Peale, Thomas Nuttall, John James Audubon, John LeConte, John Torrey, Hardy Croom, Alvan Chapman, Asa Gray, Clarence Moore, Henry Fowler, Henry Pilsbry, Francis Harper, and others were inspired to explore Florida in the tracks of William Bartram, the colonial explorer of British East and West Florida and author in 1791 of *Travels*. The godfather of the Academy, Bartram was elected to membership shortly after its founding in 1812 by his students. The discoveries and collections, new plants and animals, fossils, and artifacts of ancient peoples, made by Bartram and those who followed him created databases for research and understanding Florida's natural heritage, current, and future ecosystems. Written in the narrative style, notes provide annotations and details for novices and academic references for students and scholars interested in specific areas such as botany, ornithology, and Florida natural history.

45. Alfred Russel Wallace Companion

Charles H. Smith, James Costa & David A. Collard (editors) Chicago University Press, 2019 416pp., illus. ISBN: 978-0226622101 (hb) £45, US\$60.



Although Alfred Russel Wallace (1823–1913) was one of the most famous scientists in the world at the time of his death at the age of ninety, today he is known to many as a kind of "almost-Darwin," a secondary figure relegated to the footnotes of Darwin's prodigious insights. But this diminution could hardly be less justified. Research into the life of this brilliant naturalist and social critic continues to produce new insights into his significance to history and his role in helping to shape modern thought.

Wallace declared his eight years of exploration in southeast Asia to be "the central and controlling incident" of his life. As 2019 marks one hundred and fifty years since the publication of The Malay Archipelago, Wallace's canonical work chronicling his epic voyage, this collaborative book gathers an interdisciplinary array of writers to celebrate Wallace's remarkable life and diverse scholarly accomplishments. Wallace left school at the age of fourteen and was largely self-taught, a voracious curiosity and appetite for learning sustaining him throughout his long life. After years as a surveyor and builder, in 1848 he left Britain to become a professional natural history collector in the Amazon, where he spent four years. Then, in 1854, he departed for the Malay Archipelago. It was on this voyage that he constructed a theory of natural selection similar to the one Charles Darwin was developing, and the two copublished papers on the subject in 1858, some sixteen months before the release of Darwin's *On the Origin of Species*.

But as the contributors to the Companion show, this much-discussed parallel evolution in thought was only one epoch in an extraordinary intellectual life. When Wallace returned to Britain in 1862, he commenced a career of writing on a huge range of subjects extending from evolutionary studies and biogeography to spiritualism and socialism. An Alfred Russel Wallace Companion provides something of a necessary reexamination of the full breadth of Wallace's thought - an attempt to describe not only the history and present state of our understanding of his work, but also its implications for the future.

46. Georg Forster Voyager, Naturalist, Revolutionary

Jürgen Goldstein Chicago University Press, 2019 240pp. ISBN: 978-0226467351 (hb) £34, US\$45.

Georg Forster (1754–1794) was in many ways self-taught and rarely had two cents to rub together, but he became one of the most dynamic figures of the Enlightenment: a brilliant writer, naturalist, explorer, illustrator, translator and a revolutionary. Granted the extraordinary opportunity to around the world as part of Captain James Cook's fabled crew, Forster touched icebergs, walked the beaches of Tahiti, visited far-flung foreign nations, lived with purported cannibals, and crossed oceans and the equator. Forster recounted the journey in his 1777 book A Voyage Round the World. A superb essayist, Forster made lasting contributions to our scientific – and especially botanical and ornithological – knowledge of the South Seas.

Having witnessed more egalitarian societies in the southern hemisphere, Forster returned after more than three years at sea to a monarchist Europe entering the era of revolution. When, following the French Revolution of 1789, French forces occupied the German city of Mainz, Forster became a leading political actor in the founding of the Republic of Mainz – the first democratic state on German soil.

Forster claimed a deep connection between nature and reason, nature and politics, nature and revolution. His politics was radical in its understanding of revolution as a natural phenomenon, and in this often overlooked way his many facets – as voyager, naturalist, and revolutionary – were intertwined.

Yet, in the constellation of the Enlightenment's trailblazing naturalists, scientists, political thinkers, and writers, Forster's star remains relatively dim today: the Republic of Mainz was crushed, and Forster died in exile in Paris. This book is the source of illumination that Forster's journey so greatly deserves. Tracing the arc of this unheralded polymath's short life, *Georg Forster* explores both his contributions to literature and science and the enduring relationship between nature and politics that threaded through his extraordinary four decades.

47. The Spirit of Enquiry How one extraordinary society shaped modern science

Susannah Gibson Oxford University Press, 2019 400pp., illus. ISBN: 978-0198833376 (hb) £25.



Cambridge is now world-famous as a centre of science, but it wasn't always so. Before the 19th century, the sciences were of little importance in the University of Cambridge. But that began to change in 1819 when two young Cambridge fellows took a geological fieldtrip to the Isle of Wight. Adam Sedgwick and John Stevens Henslow spent their days there exploring, unearthing dazzling fossils, dreaming up elaborate theories about the formation of the earth, and bemoaning the lack of serious science in their ancient university. As they threw themselves into the exciting new science of geology - conjuring millions of years of history from the evidence they found in the island's rocks - they also began to dream of a new scientific society for Cambridge. This society would bring together like-minded young men who wished to learn of the latest science from overseas, and would encourage original research in Cambridge. It would be, they wrote, a society "to keep alive the spirit of inquiry".

Their vision was realised when they founded the Cambridge Philosophical Society later that same year. Its founders could not have imagined the impact the Society would have: it was responsible for the first publication of Charles Darwin's scientific writings, and hosted some of the most heated debates about evolutionary theory in the 19th century;

it saw the first announcement of x-ray diffraction by a young Lawrence Bragg a technique that would revolutionise the physical, chemical and life sciences; it published the first paper by C.T.R. Wilson on his cloud chamber – a device that opened up a previously-unimaginable world of sub-atomic particles. 200 years on from the Society's foundation, this book reflects on the achievements of Sedgwick, Henslow, their peers, and their successors. Susannah Gibson explains how Cambridge moved from what Sedgwick saw as a "death-like stagnation" (really little more than a provincial training school for Church of England clergy) to being a world-leader in the sciences. And she shows how science, once a peripheral activity undertaken for interest by a small number of wealthy gentlemen, has transformed into an enormously well-funded activity that can affect every aspect of our lives.

48. Hunters on the Track William Penny and the Search for Franklin

W. Gillies Ross
McGill-Queen's University Press, 2019
536pp.
ISBN: 978-0773552838 (hb)
£33, US\$39.95.

Captains of whaling vessels were experienced navigators of northern waters, and William Penny was in the vanguard of the whaling fraternity. Leading the first maritime expedition in search of Sir John Franklin, he stood out not just for his skill as a sailor but for his curiosity about northern geography and his willingness to seek out Inuit testimony to map uncharted territory.

Hunters on the Track describes and analyzes the efforts made by the Scottish whaling master to locate Franklin's missing expedition. Bookended by an account of Penny's whaling career, including the rediscovery of Cumberland Sound, which would play a vital role in British whaling a decade later, W. Gillies Ross provides an in-depth history of the first Franklin searches. He reconstructs the brief but frenetic period when the English-speaking world was preoccupied with locating Franklin, but when the means of that search – the ships chosen, the route taken, the evidence of Franklin's traces were contested and uncertain. Ross details the particularities of each search at a time when no fewer than eight ships comprising four search expeditions were attempting to find Franklin's tracks. Reconstructing events, relationships, and decisions, he focuses on the work of Penny as commander of HMS Lady Franklin and HMS Sophia, while also outlining the events of other expeditions and interactions among the officers and crews.

William Penny is respected as one of the most influential and innovative figures in British Arctic whaling history, but his brief role in the Franklin expedition is less known. Using primary sources, notably private journals from each of the expeditions, *Hunters on the Track* places him at the forefront of a critical chapter of maritime history and the geographical exploration that began after Franklin disappeared.

49. The Sea Journal Seafarers' Sketchbooks

Hugh Lewis-Jones Thames and Hudson, 2019 304pp., illus. ISBN: 978-0500021279 (hb) £29.95.

The sea has been an endless source of fascination, at once both alluring and

mysterious, a place of wonder and terror. *The Sea Journal* contains first-hand records by a great range of travellers of their encounters with strange creatures and new lands, full of dangers and delights, pleasures and perils.

In this remarkable gathering of private journals, log books, letters and diaries, we follow the voyages of intrepid sailors, from the frozen polar wastes to South Seas paradise islands, as they set down their immediate impressions of all they saw. They capture their experiences while at sea, giving us a precious view of the oceans and the creatures that live in them as they were when they were scarcely known and right up to the present day. In a series of biographical portraits, we meet officers and ordinary sailors, cooks and whalers, surgeons and artists, explorers and adventurers. A handful of contemporary mariners provide their thoughts on how keeping a journal remains integral to their voyaging lives.

Often still bearing the traces of their nautical past, the intriguing and enchanting sketches and drawings in this book brilliantly capture the spirit of the oceans and the magic of the sea.

The seafarers include: Jeanne Baret, William Bligh, Francis Chichester, Vasco da Gama, Francis Drake, Zheng He, Horatio Nelson, Antonio Pigafetta, Piri Reis, Georg Steller, Bartholomew Sharp, Tupaia, and Susan Veeder.

50. The Landscape Studies of Hayman Rooke (1723–1806) Antiquarianism, Archaeology and Natural History in the Eighteenth Century

Emily Sloan
Boydell Press, 2019
232pp., illus.
ISBN: 978-1783274192 (hb)
£60.

After his military career, Major Hayman Rooke (1723–1806) undertook detailed studies of landscape, ancient trees, natural history, meteorology, and ancient and Roman Britain. He was linked into a broad network of friends and correspondents, including landowners such as Earl Bathurst and the Duke of Portland, and their agents (among them Humphrey Repton); he was also connected to numerous learned societies. Information from these sources, coupled with his wide-ranging reading and first-hand observations, gave him a unique perspective on the landscape.

This book examines Rooke's work, showing how landscapes were interpreted and understood in the eighteenth century; more broadly, it offers new insights into the antiquarian movement of the time. It is richly illustrated, making use of many of Rooke's own sketches and drawings.

51. The Extraordinary Story of the Apple

Barrie E. Juniper & David J. Mabberley Kew Publishing, 2019 260pp., illus. ISBN: 978-1842466551 (hb)



The story of apples begins in an unexpected place: with bears. While popular culture likes to link honey with these creatures, DNA evidence shows that it might be more accurate for Winnie the Pooh to be munching on an ancestor of Red Delicious. And while apples are modern America's second favorite fruit (after "berries"), their origins lie in ancient China. These are just some of the remarkable details that arise from Barrie E. Juniper and David J. Mabberley's *The Extraordinary Story of the Apple*.

Written by two leading botanical experts, it's a complete natural and cultural history of the apple. Using DNA evidence, Juniper and Mabberley trace the fruit's geographical journey through time and across countries. They show how the apple has long been one of the most important fruits in the temperate regions of the world, and that it has been beloved since the times of the Persians, Greeks, and Romans, Its reach grew thanks to its reputation as a highly nutritional food source as well as one that is remarkably convenient, as the apple can be stored throughout a harsh winter or easily transported over long distances. The authors also examine the apple's global influence on human culture: it is the fruit that played a key role in the fall of Adam and Eve, the inspiration for Newton's Law of Gravity, and the rise of a tech behemoth. With a nod to this book's roots with the Roval Botanic Gardens, Kew, chapters also cover types of apple and apple crops, grafting techniques over time, archaeological discoveries, use as a food and in cider making, as well as the latest research in apple biology.

It is illustrated throughout with colour illustrations, paintings, photographs, and line drawings, and will make the ideal read for gardeners, growers, botanists, historians, archaeologists and zoologists alike.

52. Capturing Nature Early Scientific Photography at the Australian Museum 1857–1893

Vanessa Finney
University of New South Wales, 2019
192pp., illus.
ISBN: 978-1742236209 (pb)
A\$49.99.

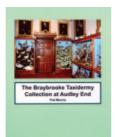
In the mid-nineteenth century, some of the earliest adopters of the revolutionary new art form of photography were scientists. Museums around the world were quick to see the huge potential for capturing fleeting moments of life, death and discovery. At the Australian Museum, curator Gerard Krefft and taxidermist Henry Barnes began to experiment with photography in the 1860s, preparing and staging their specimens – from whales and giant sunfish to lifelike lyre bird scenes and fossils – and capturing them in thousands of beautiful and arresting images.

Capturing Nature reveals this fascinating visual archive for the first time, profiling the remarkable partnership of Krefft and Barnes, their innovative work and the Australian Museum's urgent quest to become more scientific in its practices.

53. The Braybrooke Taxidermy Collection at Audley End

Pat Morris
2019
40pp., illus.
£7.50 (includes postage)
£12 for both this title and the title below (includes postage).

The taxidermy at Audley End (Essex) is one of the largest and best country house collections to survive the ravages of time and it is one of the two largest collections in a domestic set-



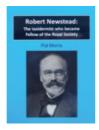
ting on view to the public in Britain. It is cared for by English Heritage.

The massive Jacobean house has two long galleries flanked by cases of British and foreign birds, with various other examples around the house. The huge collection was begun by the Hon. Richard Neville (1820-1861) when he was 15. His taxidermy was originally installed in the Picture Gallery, but later spilled over into other parts of the house. A bird of paradise that had belonged to William IV was given to the young Neville, no doubt to encourage his youthful enthusiasm and became a prized item. By the 1840s there were already 99 cases of birds, supplemented by a shipment from Australia. In 1858, Richard Neville (by now having become the 4th Lord Braybrooke) commissioned a full-scale rearrangement by the London taxidermist George F. Butt. The species were now grouped, with all the owls together, all the ducks and so on, as was often the fashion in such grand collections. Sadly, Lord Braybrooke died young before his rearrangement was finished and his brother Charles (now the 5th Lord Braybrooke) completed the job, creating more space for taxidermy by enclosing the patio to form the Lower Gallery with an extensive display of colourful foreign birds by another London taxidermist, John Leadbeater. Several of the rearranged cases contain more than 50 individual specimens, others remain in their original state including a spectacular group of great bustards.

This booklet (A5, softback 40 pages, full colour) is intended as a visitor's guide, drawing attention to the most interesting items and encouraging closer inspection of them. Payable via Paypal (to pat.morris5@outlook.com) or cheque payable to MPM, West Mains, London Road, Ascot SL5 7DG.

54. Robert Newstead The Taxidermist who became a Fellow of the Royal Society

Pat Morris
2019
48pp., illus.
£7.50 (includes
postage)
£12 for both this title
and the title above
(includes postage).



Robert Newstead is the only taxidermist ever to reach the highest echelons of the scientific community by being elected a Fellow of The Royal Society. He is best known for his entomological work, specialising in insect-borne diseases, but his professional career began in 1886 as Taxidermist and Natural History Curator at the newly-founded Grosvenor Museum in Chester. This brief memoir (A5, softback, 48 pages) is intended to record that aspect of his life and preserve a record of his taxidermy, much of it now lost. He created taxidermy displays of birds set up in habitat groups that were highly regarded in their day, but mostly no longer exist.

Habitat groups and dioramas take up space, often more than can be afforded in a developing museum. They also get dusty and quickly deteriorate as their preserved vegetation becomes brittle and easily broken. Moreover, they are often regarded as obsolete because their educational messages can now be delivered more persuasively via other media. However, habitat groups are an art form that had significant educational value, especially in industrial towns and cities whose inhabitants lived remote from wildlife and natural habitats. Habitat groups represent a stage in the evolution of museum display methods. They form a significant part of the history of natural history.

This book attempts to preserve a

small record of Newstead's taxidermy and his efforts to create what was once a notable and much appreciated civic facility. It notes the career of the only taxidermist ever to join the highest ranks of British scientists, but also explores his involvement with a highly controversial specimen of the Kermadec petrel whose origins remain an enduring mystery to this day. Payable via Paypal (to pat.morris5@outlook.com) or cheque payable to MPM, West Mains, London Road, Ascot SL5 7DG.

55. Assembling the Dinosaur Fossil Hunters, Tycoons, and the Making of a Spectacle

Lukas Reippel Harvard University Press, 2019 336pp., 46 illus. ISBN: 978-0674737587 (hb) US\$29.95, £21.95, €27.

Although dinosaur fossils were first found in England, a series of dramatic discoveries during the late 1800s turned North America into a world centre for vertebrate paleontology. At the same time, the United States emerged as the world's largest industrial economy, and like Tyrannosaurus, creatures Brontosaurus, and Triceratops became emblems of American capitalism. Large, spectacular, fierce. and American dinosaurs dominated the popular imagination, making front-page headlines and appearing in feature films.

Assembling the Dinosaur follows dinosaur fossils from the field to the museum and into the commercial culture of North America's Gilded Age. Business tycoons like Andrew Carnegie and J. P. Morgan made common cause with vertebrate paleontologists to capitalize on the widespread appeal of dinosaurs, using them to project American exceptionalism back into prehistory. Learning from the show-stop-

ping techniques of P. T. Barnum, museums exhibited dinosaurs to attract, entertain, and educate the public. By assembling the skeletons of dinosaurs into eye-catching displays, wealthy industrialists sought to cement their own reputations as generous benefactors of science, showing that modern capitalism could produce public goods in addition to profits. Behind the scenes, museums adopted corporate management practices to control the movement of dinosaur bones, restricting their circulation to influence their meaning and value in popular culture.

Tracing the entwined relationship of dinosaurs, capitalism, and culture during the Gilded Age, Lukas Rieppel reveals the outsized role these giant reptiles played during one of the most consequential periods in American history.

56. Audubon in Nova Scotia An Excerpt from the Journals of John James Audubon With Wood Engravings by Wesley Bates

Eric Mills (editor) Gaspereau Press, 2018 61pp., illus. ISBN: 978-1554471829 (pb) Can\$21.95.

In August 1833, American artist and adventurer John James Audubon came



ashore near Pictou, Nova Scotia, on his way home from three months exploring the Labrador coast – part of the ongoing research for his famous multivolume work, *The Birds of America*. Audubon spent eight days touring the province, visiting with local people (like the naturalist Thomas McCulloch) and collecting specimens, recording a wide range

of observations in his journal. These journal entries provide context to one of Audubon's important scientific relationships, as well as insights into life and travel in colonial Nova Scotia. The text is introduced and extensively annotated by Eric L. Mills, with original illustrations by Wesley Bates.

57. Mark Catesby's Legacy Natural History Then and Now

Alan Brush (author) & M. J. Brush (illustrator)

Catesby Commemorative Trust, 2018 192pp., illus.

ISBN: 978-0692104194 (pb)

US\$29.95.

Alan Brush, Emeritus Professor of Physiology & Neurobiology at the University of Connecticut, provides an important historical perspective on the scientific discoveries made by the Englishman Mark Catesby (1683–1749), who traveled in the Carolinas, Florida and the Bahamas three centuries ago. Professor Brush's observations are complemented by the delicate, contemporary paintings (inspired by Catesby's own beautiful drawings of fauna and flora) by his wife, M. J. Brush, a professional illustrator.

Mark Catesby's Legacy answers a question every Mark Catesby enthusiast must at some point ask: What has become of the natural world Catesby so uniquely chronicled in the early 18th century? This is a question the Brushes are qualified to address. Like Catesby, they have traveled throughout the Carolinas, Florida and Bahamas - primarily by sailboat - and have described and painted many of the plants and animals featured in Catesby's magisterial two volume folio The Natural History of the Carolinas, Florida and the Bahamas first published in London in 1731. It was so popular that it went through several editions in 1754 and 1771 and remaining in print at least until 1815. It influenced the works of Edwards, Linnaeus, Gould, Audubon and even Charles Darwin. It was used by President Jefferson and also by Lewis and Clark in planning their exploration to the West Coast.

While many of the species Catesby illustrated and described are still here in abundance, others face serious challenges to their survival, or are now extinct: sadly, for example, the Ivory-Woodpecker, the Carolina billed Parakeet and the Passenger Pigeon are no longer with us. Mark Catesby's Legacy: Natural History Then and Now provides a fresh look at the rich diversity of life in a complex and enchanting part of the world in the early 21st century and a must read for all naturalists and admirers of the work of Mark Catesby worldwide.

New & Recent Publications

Many thanks to everyone who contributes material to this section. May I just remind you to forward details of your own publications as well as those of general interest. Please include as many publication details as possible: such as publisher, date and ISBN.

Almeroth-Williams, T. (2019) City of Beasts: How Animals Shaped Georgian London. Manchester UP. 328pp. ISBN: 978-1526126351 (hb). £25.

Anemaat, L. (2019) Aylmer Bourke Lambert & his Natural History Circle. *The Linnean* **35** (1): 11–18.

Armstrong, P. (2019) Alfred Russel Wallace. Reaktion Books. 208pp. ISBN: 978-1789140859 (hb). £11.99.

Baijnath, H. & McCraken, P. A. (2018) Strelitzias of the World. A Historical and Contemporary Exploration. Durban Botanic Gardens. 300pp., illus. ISBN:

978-0994722126 (hb). £24.99.

Baldassarri, **F.** (2019). The mechanical life of plants: Descartes on botany. *The British Journal for the History of Science* **52** (1): 41–63.

DOI:10.1017/S000708741800095X.

Baldassarri, F. & Matei, O. (2018) Manipulating Flora: Seventeenth-Century Botanical Practices and Natural Philosophy. Introduction. *Early Science* & *Medicine* 23 (5–6): 413–419. DOI: 10.1163/15733823-02356P01.

Baldassarri, F. & Matei, O. (eds.) (2018) Manipulating Flora: Seventeenth-Century Botanical Practices and Natural Philosophy. *Early Science & Medicine* 23 (5–6): 413–587. [Special issue which aims to explore the philosophical investigations of flora in the seventeenth century.] Bennett, T. P. (2019) *Florida Explored: The Philadelphia Connection in Bartram's Tracks.* Mercer University Press. 544pp. ISBN: 978-0881466935 (hb). US\$40.

Birkhead, T. R., Attard, M., & Pilastro, A. (2019) Subtle egg-shell membrane structures in birds' eggs. *Molecular Reproduction and Development* **86** (4): 353–353. DOI: https://onlinelibrary.wiley.com/doi/full/10.1002/mrd.23103. Birkhead, T. R. & Pilastro, A. (2018) Three early books on birds' eggs:

Three early books on birds' eggs: Marsili's *Danubius Pannonico-Mysicus* (1726), Zinanni's *Delle Uova de dei Nidi degli Uccelli* (1737) and Klein's *Ova avium plurimarum ad naturalem magnitidinem delineata et genuinis coloribus picta* 1766. *The European Zoological Journal* 85 (1): 428–445. DOI:

10.1080/24750263.2018.1549277.

Block, E. (2019) Echo of the quagga: the captive history of one of the world's best known extinct animals. *Zoo Grapevine & International Zoo News* **50**: 28–34.

Brinkman, P. D. (2019) Valuable so far as it goes: establishing zoology at Chicago's Field Columbian Museum, 1893–1894. *Journal of the History of Collections* 31 (1): 93–109. DOI:

https://doi.org/10.1093/jhc/fhy004.

Brixius, D. (2018). A hard nut to crack: Nutmeg cultivation and the application of natural history between the Maluku islands and Isle de France (1750s–1780s). *The British Journal for the History of Science* 51 (4): 585–606. DOI: 10.1017/S0007087418000754.

Brush, A. (author) & Brush, M. J. (illustrator) (2018) *Mark Catesby's Legacy: Natural History Then and Now.* Catesby Commemorative Trust. 192pp., illus. ISBN: 978-0692104194 (pb). US\$29.95.

Bucklow, S. (2018) *The Anatomy of Riches: Sir Robert Paston's Treasure.* Reaktion Books. 288pp., illus. ISBN: 978-1780239798 (hb). £20.

Burger, R. M. (2018) The dragon traders: a collective history of the reptile trade in America and the Age of Herpetoculture. Parador Press. 473 pp; illus. ISBN: 978-0692126981 (pb). US\$59.95.

Connelly, C. & Warrior, C. (2019) Survey stories in the history of British polar exploration: museums, objects and people. *Notes and Records: the Royal Society Journal of the History of Science* **73** (2). DOI: https://doi.org/10.1098/rsnr.2018.0038.

Cornish, C. & Driver, F. (2019) 'Specimens Distributed': The circulation of objects from Kew's Museum of Economic Botany, 1847–1914, *Journal of the History of Collections*. DOI: https://doi.org/10.1093/jhc/fhz008 (published online 13 May 2019).

Crawforth, A. (2019) What was Inside the Zinc Trunk? (A Tale of Lepidochromy). *The Linnean* 35 (1): 19–22.

Dietz, B. (2017) Das System der Natur. Die kollaborative Wissenskultur der Botanik im 18. Jahrhundert [The System of Nature: The Collaborative Knowledge Culture of Botany in the 18th Century]. Böhlau, Cologne. 240pp. ISBN: 978-3412507398. €35.

Eklund, **H.** (ed.) (2017) *Ground-Work:* English Renaissance Literature and Soil

Science. Duquesne University Press. 308pp. ISBN: 978-0820704999 (hb). £38.64.

Ette, O. & Maier, J. (2018) *Alexander Von Humboldt: The Complete Drawings from the American Travel Journals.* Prestel. 736pp., illus. ISBN: 978-3791383545 (hb). £160, US\$195.

Finney, V. (2019). Capturing Nature: Early Scientific Photography at the Australian Museum 1857–1893. University of New South Wales. 192pp., illus. ISBN: 978-1742236209 (pb). A\$49.99.

Fulford, T. (2019) The Role of Patronage in early nineteenth-century science, as evidenced in letters from Humphry Davy to Joseph Banks. *Notes and Records: the Royal Society Journal of the History of Science*. DOI:

https://doi.org/10.1098/rsnr.2018.0057 (published online 30 April 2019).

Gibson, S. (2019) The Spirit of Enquiry: How one extraordinary society shaped modern science. OUP. 400pp., illus. ISBN: 978-0198833376 (hb). £25.

Gillies Ross, W. (2019) Hunters on the Track: William Penny and the Search for Franklin. McGill-Queen's University Press. 536pp. ISBN: 978-0773552838 (hb) £33, US\$39.95.

Goldstein, J. (2019) Georg Forster: Voyager, Naturalist, Revolutionary. Chicago UP. 240pp. ISBN: 978-0226467351 (hb). £34, US\$45.

Groom, A. (2018) Exotic Animals in the Art and Culture of the Medici Court in Florence. Brill. 364pp. ISBN: 978-9004368989 (hb). £112.12.

Heumann, I., Stoecker, H., Tamborini, M. & Vennen, M. (2018) Dinosaurier-fragmente – Zur Geschichte der Tendagura-Expedition und ihrer Objekte, 1906–2018 [Dinosaur Fragments: The History of the Tendaguru Expedition and Its Objects, 1906–2018]. Wallstein, Göttingen. 311pp., illus. ISBN: 978-3835332539 (softcover with flaps). €26.90.

Juniper, B. E. & Mabberley, D. J. (2019) The Extraordinary Story of the

Apple. Kew Publishing. 260pp., illus. ISBN: 978-1842466551(hb). £40.

Kabat, A. R. & Coan, E. V. (2019) John Clarkson Jay (1808–1891): his life and malacological contributions. *Malacologia* 69 (2): 257–309.

Lack. H. W. (2018, new edition) Alexander von Humboldt: And the Botanical Exploration of the Americas. Prestel. 280pp., illus. ISBN: 978-3791384153 (hb). £45, US\$60.

Lackstein, P. M. (2019) Natural History on the Shelf. *The Linnean* **35** (1): 23–25. [F. S. Bodenheimer (1897–1959), entomologist, & his *Animal Life in Palestine* (1935).]

Lester, V. (2018) Marvels: The Life of Clarence Bicknell, Botanist, Archaeologist, Artist. Troubador Publishing. 304pp. ISBN: 978-1789014945 (hb). £25. Lewis-Jones, H. (2019) The Sea Journal: Seafarers' Sketchbooks. Thames and Hudson. 304pp. ISBN: 978-0500021279 (hb). £29.95.

Maier-Wolthausen, C. (2019) Hauptstadt der Tiere – die Geschichte des ältesten deutschen Zoos [Capital of Animals: The Story of the Oldest German Zoo]. Ch. Links, Berlin. 280pp; 283 illus. ISBN: 978-3962890407 (hb). €30.

Mason, P. & Pardo-Tomás, J. (2019) Bringing it back from Mexico: Eleven paintings of trees in *I cinque libri delle piante* of Pier'Antonio Michiel (1510–1576). *Journal of the History of Collections*. DOI: https://doi.org/10.1093/jhc/fhy062 (published online 18 January 2019).

McCracken Peck, R. (2019) Foreword in Bennett, T. P. Florida Explored: The Philadelphia Connection in Bartram's Tracks. Mercer University Press.

Mills, E. L. (ed.) (2018) Audubon in Nova Scotia. An Excerpt from the Journals of John James Audubon. With Wood Engravings by Wesley Bates. Kentville, Nova Scotia: Gaspereau Press. 61pp., illus. ISBN: 978-1554471829 (pb). Can\$21.95.

Morris, P. (2019). The Braybrooke Taxidermy Collection at Audley End. 40pp., illus. £7.50 including postage; £12 for both titles including postage.

Morris, P. (2019). Robert Newstead: The Taxidermist who became a Fellow of the Royal Society. 48pp., illus. £7.50 including postage; £12 for both titles including postage.

Naylor, S. & Schaffer, S. (2019) Introduction. Nineteenth-century survey sciences: enterprises, expeditions and exhibitions. *Notes and Records: the Royal Society Journal of the History of Science* 73 (2): 135–147. DOI:

https://doi.org/10.1098/rsnr.2019.0005. [[A special issue 'Nineteenth-century survey sciences: enterprises, expeditions and exhibitions' organized and edited by Simon Naylor & Simon Schaffer.]

Orchard, A. E. & T. A. (2018) The Australian Botanical Journals of Allan Cunningham: The Oxley and early King Expeditions, October 1816–February 1819. The Allan Cunningham Project. 309pp. illus. ISBN: 978-0994150530. £65.99. [Provides, for the first time, a complete transcription of Allan Cunningham's [1791–1839] personal journals, commencing in 1814.]

Orchard, A. E. & T. A. (2018) *The Australian Botanical Journals of Allan Cunningham: The later King Expeditions, February 1819–September 1822.* The Allan Cunningham Project. iv + 431pp. ISBN: 978-0994150547. £74.99.

Pearman, D. A. (2017) *The Discovery of the Native Flora of Britain and Ireland.* Botanical Society of Britain and Ireland. 488pp. ISBN: 978-0901158529 (hb). £19.99.

Preston, C. D. & Hill, M. O. (2019) *Cambridgeshire's Mosses and Liverworts – A dynamic flora*. Pisces Publications. 326pp. ISBN: 978-1874357896 (pb). £25.

Ravalli, R. (2018). *Sea otters: a history.* Nebraska UP. Studies in Pacific Worlds. 216pp., illus. ISBN: 978-0803284401

(hb). US\$45, £37.

Raye, L. (2018) Robert Sibbald's *Scotia Illustrata* (1684): A faunal baseline for Britain. *Notes and Records: the Royal Society Journal of the History of Science* **72** (3). DOI: https://doi.org/10.1098/rsnr.2017.0042.

Read, G. B. (2019). A history of Annelida research in Purschke, G., Westheide, W., Böggemann, M. (eds). *Handbook of Zoology. Annelida Volume 1: Annelida Basal Groups and Pleistoannelida, Sedentaria I*, pp. 1–55. Walter de Gruyter, Berlin, Germany. E-ISBN: 978-3110291582. DOI: https://doi.org/10.1515/9783110291582-001.

Reid, L. & Panciroli, E. (eds.) (2019) *Conversations in stone: a celebration of Hugh Miller's legacy.* Scottish Geodiversity Forum and The Friends of Hugh Miller, Edinburgh and Cromarty. ISBN: 978-1912804719. £7.99 + £1.40 postage.

Reippel, L. (2019) Assembling the Dinosaur: Fossil Hunters, Tycoons, and the Making of a Spectacle. Harvard UP. 336pp., 46 illus. ISBN: 978-0674737587 (hb). US\$29.95, £21.95, \in 27.

Rose, E. (2019). From the South Seas to Soho Square: Joseph Bank's Library, Collection and Kingdom of Natural History. *Notes and Records: the Royal Society Journal of the History of Science*. DOI: https://doi.org/10.1098/rsnr. 2018.0059 (published online 31 May 2019).

Ruxton, G. D. (2019) Nature's Giants: The Biology and Evolution of the World's Largest Lifeforms. Yale UP. 224pp., illus. ISBN: 978-0300239881 (hb). US\$35.

Schell, P. (2019) Natural history values and meanings in nineteenth-century Chile. *Notes and Records: the Royal Society Journal of the History of Science* **73** (1): 101–124. DOI:

https://doi.org/10.1098/rsnr.2017.0051. Shteir, A. & Cayouette, J. (2019) Collecting with "Botanical Friends": Four Women in Colonial Quebec and Newfoundland. *Scientia Canadensis* 41

(1): 1-30. DOI:

https://doi.org/10.7202/1056314ar. [Focuses on four known female contributors to W. J. Hooker's *Flora Boreali-Americana*: Christian Ramsay (Lady Dalhousie), Anne Mary Perceval, Harriet Sheppard, and Mary Brenton. Using correspondence between Hooker and these four women, the authors explore the history of women in science and the important role that female friendships and trans-imperial networks played in the social, cultural, and scientific life of the North American British elite in the early nineteenth century.]

Seltzer, A. (2019) Catesby's Eclecticism and the Origin of his Style. 1650–1850 24: 263–286. [Published by Bucknell UP.] Smith, C. H., Costa, J. & Collard, D. A. (eds.) (2019) An Alfred Russel Wallace Companion. Chicago UP. 416pp., illus. ISBN: 978-0226622101 (hb). £45, US\$60. Sterba, T. (2018) Die Süßwasserfische des Karl von Meidinger – mit naturhistorischen Illustrationen aus vier Jahrhunderten [The freshwater fish of Karl von Meidinger: with natural historical illustrations from four centuries]. Basilisk Press. 660pp. ISBN: 978-3941365575 (hb). €149.

Tanghe, K. B. (2019) On The Origin of Species: The story of Darwin's title. *Notes and Records: the Royal Society Journal of the History of Science* **73** (1). DOI: https://doi.org/10.1098/rsnr. 2018.0015.

Taylor, M. A. (2019) Hugh Miller's Palace of Printing in Reid, L. & Panciroli, E. (eds) *Conversations in stone. A celebration of Hugh Miller's legacy* (pp. 41–53). Scottish Geodiversity Forum and The Friends of Hugh Miller, Edinburgh and Cromarty.

Taylor, M. A. & Anderson, L. I. (2019) A note on Alfred Tennyson and Hugh Miller. *Tennyson Research Bulletin* 11: 176–179.

Thompson, C. (2019) Women Travellers, Romantic-era science and the Banksian empire. *Notes and Records: the Royal Society Journal of the History of Science.* DOI:

https://doi.org/10.1098/rsnr.2018.0062 (published online 30 April 2019).

Thompson, K. (2018) Darwin's Most Wonderful Plants: Darwin's Botany Today. Profile Books. 256pp. ISBN: 978-1788160285 (hb). £10.99.

Tsjeng, Z. (2018) Forgotten Women: The Scientists. Cassell. 224pp. ISBN: 978-1844039838 (hb). £15. [Includes Mary Anning (1799–1847) and Ynés Mexía (1870–1938), the Mexican-American botanist who discovered over 500 new plant species.]

Turner, L., Sellbach, U. & Broglio, R. (2018) *The Edinburgh Companion to Animal Studies* (Edinburgh Companions to Literature). Edinburgh UP. 576pp. ISBN: 978-1474418416 (hb). £150.

Uglow, J. (Oct 2019; Main edition 2017) *Mr Lear: A Life of Art and Nonsense.* Faber & Faber. 608pp. ISBN: 978-0571269556 (pb). £12.99.

van Driem, G. G. (2019) The tale of tea: a comprehensive history of tea from prehistoric times to the present day. xx + 904 pp; c. 450 illus. ISBN: 978-9004386259 (hb). €249.

van Wyhe, J. (2019) Why there was no 'Darwin's Bulldog': Thomas Henry Huxley's Famous Nickname. *The Linnean* 35 (1): 26–30.

Vennen, M. (2018) Das Aquarium – Praktiken, Techniken und Medien der Wissensproduktion (1840–1910) [The Aquarium: Practices, Techniques and Media of Knowledge Production (1840–1910)]. Wallstein, Göttingen. 423 pp; 72 illus. ISBN: 978-3835332522 (cloth). €37.

Werrett, S. (2019) Introduction: rethinking Joseph Banks. *Notes and Records: the Royal Society Journal of the History of Science*. DOI https://doi.org/10.1098/rsnr.2018.0064 (published online 12 June 2019). [Following a series of workshops funded by AHRC

(Arts and Humanities Research Council), the papers in this special issue provide new perspectives on the naturalist Sir Joseph Banks (1743–1820).]

Wess, J. A. & Withers, W. J. (2019) Instrument provision and geographical science: the work of the Royal Geographical Society, 1830–ca 1930. Notes and Records: the Royal Society Journal of the History of Science 73 (2). DOI: https://doi.org/10.1098/rsnr.2018.0034.

Wigley, P. (ed.) with Darrell, J. Clements, D. & Torrens, H. (2019) William Smith's Fossils Reunited. Halsgrove. 160pp., illus. ISBN: 978-0857043375 (hb). £34.99.

Williams, R. B. (2019) Bibliographical descriptions and dating of the original parts and consolidated volumes of H. T. Stainton's *A Manual of British Butterflies and Moths*, with dating and combined order of precedence of some relevant contemporaneous literature. *Zoological Bibliography* 6: 55–102.

Williamson, T., Barnes, G. & Pillatt, T. (2017) *Trees in England: management and disease since 1600*. University of Hertfordshire Press. 240pp. ISBN: 978-1909291966 (pb). £16.99.

Wills. H. (2019) Joseph Banks and Charles Blagden: cultures of advancement in the scientific worlds of late eighteenth-century London and Paris. Notes and Records: the Royal Society Journal of the History of Science. DOI: https://doi.org/10.1098/rsnr.2018.0060 (published online 20 February 2019). Yoo, G. (2018). Wars and wonders: The inter-island information networks of Georg Everhard Rumphius. The British Journal for the History of Science, 51 (4): 559–584. DOI:10.1017/S000708741800 0742.

Stop Press: More News

58. Francisco Arruda Furtado Disciple of Darwin National Museum of Natural History and Science Lisbon, Portugal Through 31 December 2019

Francisco Arruda Furtado (1854-1887), disciple of Darwin is the title of an exhibition of the National Museum of Natural History and Science of the University of Lisbon (MUHNAC) conceived in partnership with the Carlos Machado Museum and the National Theater of São Carlos.

Micaelense of origin, Arruda Furtado devoted his studies to molluscs and anthropology. A contemporary of Charles Darwin, he correspondend with Darwin in the exchange of ideas and asking for advice and books.

Furtado moved to Lisbon in 1885 to join the staff of the Zoological Section of the National Museum of Lisbon. For two years, until he returned to Ponta Delgada, he dedicated himself to the study and cataloging of the collection of shells and molluscs of the museum. He died aged 33, leaving a vast work, and dozens of unfinished works, mostly still unpublished.

The exhibition examines the richness and uniqueness of the scientific work of a character who, despite being self-taught, was notable in his time. It is in the drawing that focuses the exhibition, highlighting a common and permanent point in the various phases of Arruda Furtado's work: the use of illustration. For more information see:

https://www.museus.ulisboa.pt/pt-pt/exposicao-arruda-furtado and https://www.wilder.pt/divirta-se/o-quetemos-em-comum-com-o-naturalista-acoriano-que-escrevia-a-darwin/.

59. Nature's Explorers Adventureres who recorded the Wonders of the Natural World

Natural History Museum Natural History Museum, due September 2019 240pp., illus. ISBN: 978-0565094645 (hb) £19.99.

Nature's Explorers celebrates the individuals who made great personal endeavours to document the natural world. From ground-breaking theorists such as Charles Darwin and Alfred Russel Wallace to evocative artists like Ferdinand Bauer and John James Audubon, these explorers shared an ambition to illuminate new worlds and embodied the spirit of the Enlightenment and the Scientific Revolution. It was not until the early eighteenth century that artists were included on such expeditions, They were called upon to illustrate the new flora and fauna they discovered and in doing so were also able to provide new insights from social, cultural and historical perspectives.

The contributors all either work for the Museum or are closely associated with it and their choice of subjects reflects their own areas of expertise. They include Andrea Hart, Ann Datta, Blanca Huertas, Cam Sharp Jones, David Williams, Douglas Russell, Grace Touzel, Hans Walter Lack, Hellen Pethers, Judith Magee, Lisa de Tommaso, Mary Spencer Jones, Mark Carine, Max Barclay, Paul Cooper, Simon Werrett, Sandra Knapp, Victoria Pickering, and Virginia Mills. Superb artworks and photographs spanning three centuries have been chosen to illustrate each essay.

SHNH SMALL RESEARCH-FUND

The SHNH Small Research Fund is to provide financial support to non-professional members of the SHNH in all fields covered by the society's charitable purpose in carrying out research to benefit the scholarly community. A "non-professional" is regarded as having no gainful specific employment as a historian or bibliographer for the specific purpose of the proposed research.

Application must be made (before incurring the expense requested) using the pro-forma in the newsletter or on the SHNH website. This must be sent to the SHNH Secretary, who will then forward it to the Small Research-Fund Co-ordinator for assessment by the Sub-committee.

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How to apply

 As long as you are not a professional historian or bibliographer (for the purpose of a specific research project), any member of the SHNH may apply for a Small Research-Fund grant, up to £100 (or non-Sterling currency equivalent). Please download the pro-forma application form, complete it and send to the SHNH Secretary at secretary@shnh.org.uk.

Eligibility

 There is no upper age limit; no academic qualification is required; nor is any academic affiliation necessary. But no more than one application per person may be made in any financial year of the SHNH. Non-professional researcher applicants must not already be in receipt of any grant, as a student or otherwise, that would cover the expenses applied for. Application must be made before the requested expense is incurred.

Further conditions

- This funding is a "last-resort" grant. Alternative "free-of-charge" sources of images or information must already have been investigated; if none can be identified, all reasonable efforts must also have been made to obtain funding elsewhere before applying to the *SHNH*.
- It must be the applicant's intention to publish in the scholarly press or on a website any images or information obtained through an award; the SHNH Secretary must be informed of publication when completed.
- Dated receipts must be obtained for expenses.
- Costs involved in attendance at conferences do not qualify.
- Costs of coloured illustrations in the printed Archives of Natural History do not qualify.
- The decision of the SHNH on an application for a Small Research-Fund grant shall be final.



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Please complete and send to SHNH Secretary at secretary@shnh.org.uk or post to The Secretary, The Society for the History of Natural History, c/o the Natural History Museum, London SW7 5BD, UK.

Name and title:		
Address:		
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Telephone:		
Member of SHNH?	Yes	No
Employed as historian/	Yes	No
bibliographer for purposes of this research?	Yes	No
Already receiving a grant covering requested exper	rse? Yes	No 📗
Has this expense already been incurred?	Yes	No
Nature of expense for which funding sought:		
Are there any free-of-charge alternatives?	Yes	No
What other sources of funding have been investigated	nted?	
Amount (£) requested:		
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SHNH – The Society for the History of Natural History welcomes as members everyone with an interest in the history of natural history, natural history collections, exploration, art and bibliography, for all period and cultures.

The Society publishes an internationally respected journal *Archives of Natural History*. It is published for the Society by Edinburgh University Press, a highly respected, independent voice. Members have free online access to all issues of *Archives* published since 1936.

The Society also produces an informative *Newsletter* which announces forthcoming events, provides a forum for notes and queries, offers notice of new publications, and much more.

We design meetings for wide audiences and provide time for discussion, social events and 'behind the scenes' visits. Recent joint meetings have included 'Trading Nature' (York, 2019), 'Bon Voyage? 250 Years Exploring the Natural World (Liverpool, 2018), and the 'History of Women in the Natural Sciences' (Cumbria, 2016).

Our international network of representatives connects the Society with local events and provides regional contacts. Their contact details are provided on our website.

How to join

SHNH has three categories of membership: Individual, Dual and Associate. Subscriptions are managed by Edinburgh University Press. Institutions and Libraries are invited to enquire about print and online subscriptions from EUP.

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Society for the History of Natural History

The Society for the History of Natural History is a friendly international society for everyone who is interested in natural history in the broadest sense. This includes botany, zoology and geology as well as natural history collections, exploration, art and bibliography. Everyone with an interest in these subjects – professional or amateur – is welcome to join.

The Society was founded in 1936 by a small group of scientists, librarians and bibliographers centred on the British Museum (Natural History) in London. The Society is still closely associated with the Museum, now the Natural History Museum, which contains the national collections of natural history specimens and has a strong tradition in the historical study of these collections.

Since its modest beginnings, the Society has grown in membership and international standing. It is known for its friendliness and provides a focal point for the history of all aspects of natural history. The Society also has a thriving international membership and representatives in North America, Europe and Asia organise local meetings. An international meeting is held at regular intervals, the most recent being 'Trading Nature' (York, 2019) and 'Bon Voyage' (World Museum, Liverpool, 2018).

The Society's main publication is *Archives of Natural History*, produced twice a year, and distributed free to all members. It contains refereed, illustrated papers and book reviews and is published for the Society by Edinburgh University Press. All volumes published since 1936 are now available online. A more informal *Newsletter* is published two or three times a year.

All subscription matters are handled for the Society by Edinburgh University Press. For subscription enquiries, including payment methods, please contact the Subscription Administrators at Edinburgh University Press.

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