

## Linking Up

Each year, the Society is proud to participate in the annual meeting of the European Botanical and Horticultural Libraries group (EBHL), a knowledge and skills-sharing event held in different locations, in tandem with the Linnaeus Link Union Catalogue annual partners' meeting. At the end of June, Linnean Society staff Will Beharrell (Librarian), Isabelle Charmantier (Head of Collections), and Gina Douglas (Honorary Archivist) attended the event in Switzerland.

Impeccably organised by Pierre Boillat, Head Librarian at the Geneva Botanical Garden, each morning was dedicated to talks, while afternoons were filled with visits of gardens, as well as highlights of the Swiss Valais region. The conference took place in the beautiful alpine garden of Champex-Lac (Flore-Alpe), founded in 1927 by Jean-Marcel Aubert (1875–1968), a wealthy steel industrialist. Aubert initially developed the garden around his secondary home for his own pleasure, before hiring gardeners and opening it up to the public. These gardeners brought some elements of plant systematics to the project, labelling plants and bringing in exotic species that would thrive in an alpine garden.

EBHL members also visited La Linnaea, a garden situated near the road to the famous Great St Bernard Pass. La Linnaea, run by the Société Académique de Genève since 1915, focuses on indigenous alpine plants, keeping out exotic or invasive species. They also harvest seeds from their plants every year, and contribute to the *Index Seminum*.

Talks focused on alpine plant species and collectors of alpine plants such as Albert Zimmermann (1907–82) in Nepal, or Henry Correvon (1854–1939) and Clarence Bicknell (1842–1918) in Switzerland. The incoming director of the Flore-Alpe garden, Christophe Randin, talked about the value of herbarium sheets and botanical literature in gathering historical data to inform research on plant

distribution and predict the impact of climate change on alpine flora.

The Linnaeus Link partners' meeting welcomed representatives from 12 out of the 16 partners. Being able to meet our partners face to face is vital, as we can work together on effective solutions to problems that are too intricate for email alone.

These EBHL/Linnaeus Link meetings are always productive, and enable Linnean Society staff to meet with colleagues throughout Europe who manage botanical libraries, and encounter some of the same challenges in their collections management. It is also a more 'human' way to keep up-to-date with ongoing projects at other institutions, both at home and abroad. The social programme devised by Pierre Boillat was impressive, with visits to the Aiguille du Midi (3,842m) and the valley glacier of the Mer de Glace in Chamonix. These always provide a great opportunity for informal but productive chats, which only serve to



reinforce the already existing cohesion of this extremely lively and friendly group.

Isabelle Charmantier  
Head of Collections  
isabelle@linnean.org

ABOVE: Champex-Lac.  
© Isabelle Charmantier  
BELOW: Linnaeus Link  
partners in Switzerland.  
Courtesy Pierre Boillat.





## Book Review

# SPECIMENS OF HAIR: THE CURIOUS COLLECTION OF PETER A. BROWNE

by Robert McCracken Peck

This heavily illustrated book starts with a poignant quotation from the lawyer and naturalist Peter Arrell Browne (1782–1860): “It is wisdom to profit by the errors of others.” For as is recounted in the introduction, Browne’s “Collection of Pile” was almost lost in the mid-1970s, when this collection of mounted annotated specimens of hair, wool and fur was put out with the ‘trash’ during a review of the collections of the Academy of Natural Sciences of Philadelphia. Thanks to the efforts of author Robert McCracken Peck the collection was saved, became his passion and was initially given new life through a small temporary exhibition in 2008, and subsequently through this book.

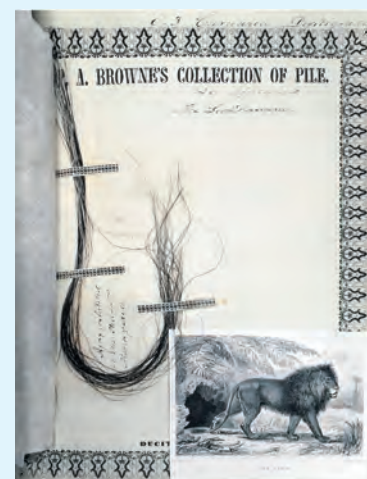
Browne’s collection of pile starts through his desire to improve the economy of the US. He hoped that by collecting samples of wool, and by using the “trichometer” (Browne’s invention to measure the relative strength and elasticity of each sample), it could be determined which sheep breeds would be best suited to produce different commercial products. His first taxonomic hierarchy divided the wool of different sheep breeds into “hairy” and “woolly”. The word he coined to describe his hair and fleece study was “trichology”. From his initial work with sheep he went on to study the fur and hair of many other genera. Willing correspondents from across the globe sent samples of animal hair which were placed into annotated albums the study of which culminated in the publication by Browne of his *Trichologia Mammalium* in 1853.

Alongside the specimens of animal hair were “locks of hair or wool of the heads of persons of all nations, races, sects and varieties”. Like other naturalists of his day, Browne decided to look for similarities and differences between the mass of humanity and those who had attained distinction in society. Browne’s reputation meant that samples of hair from US Presidents: Washington, Jefferson and Adams found their way in to his ‘cabinet’. Hair

samples were often accompanied by letters and other material, and so created a fascinating archive of material. The latter part of the book highlights the stories behind some of these celebrity hair donations, and their donors.

All this makes for an interesting account of one man’s industry to catalogue and order the trichological world into what you might call a ‘hairberium’, and another’s to save it.

Glenn Benson, Curator of Artefacts



2018, New York: Blast Books, 176 pp, col. illustrations. Hardback. USD \$39.95

The collection contains a wide variety samples, from lions to George Washington.

## CELEBRATING ARCHIBALD MENZIES REDEDICATION CEREMONY Tuesday 6 August 2019, 2pm

Quite a number of our past Fellows have journeyed to ‘Paradise by way of Kensal Green’, as the poet G. K. Chesterton described Kensal Green Cemetery in ‘The Rolling English Road’.

Undoubtedly the first of this distinguished throng was the Scottish plant hunter and explorer Archibald Menzies (1754–1842), who famously made a four-year voyage around the globe in 1791 in HMS *Discovery II*, captained by George Vancouver. A portrait of Menzies by Eden A. Eddis hangs in our offices at Burlington House. He died at the grand old age of 88, and his grave was among the first few hundred in the great garden cemetery, which was opened in 1833.

Over the years the grave site had fallen into neglect, and in 2016 the Archibald Menzies Memorial Appeal was set up to raise funds

for its restoration. The work was completed at the end of 2018, with a new headstone of mica schist sourced from the Perthshire estate where Menzies was born.

A celebration of the life of this remarkable Scotsman will be held at his graveside at Kensal Green at which the Revd. Angus MacLeod of St. Columba’s Church, Pont Street will officiate.

Everyone is most welcome to attend this event. For details and a map of the cemetery showing the location of the grave please contact [fran.gillespie@hotmail.com](mailto:fran.gillespie@hotmail.com).



ABOVE: © David Pescod

# HIGHLIGHTING THE OLD AND RARE

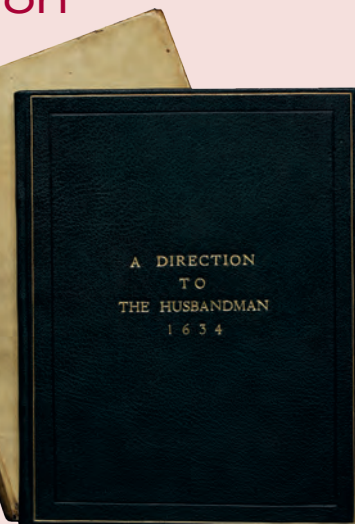
## Auditing the Rare Books Collection

Having been involved in the Linnaeus-Link partnership between the Linnean Society of London and the Berlin Staatsbibliothek, I wanted to take the opportunity to work in one of the most famous scientific societies. So, from 18 March to 12 April, I was based in the Linnean Society's library.

As a curator in the Department of Early Printed Books (<https://staatsbibliothek-berlin.de/de/die-staatsbibliothek/abteilungen/historische-drucke/>) my role is to care for and oversee the books pertaining to natural history and medicine, particularly those in the Staatsbibliothek's Rare Books collection. Alongside research about the history and provenance of our books (inter alia, the naturalist Johann Reinhold Forster, who travelled with James Cook; or the friend and colleague of Alexander von Humboldt, Berlin botanist Carl Ludwig Willdenow), my role also includes publishing short articles in *BibliotheksMagazin*, classifying newly acquired antiquarian books (based on the old Berlin subject catalogue 'Alter Realkatalog'), managing the Linnaeus Link Union Catalogue Project, and working with a publisher to produce natural history-based calendars.

My task at the Linnean Society was to undertake an audit of the Linnean Society's Rare Books collection, which was a challenge! The collection is comprised of approximately 500 volumes published before the year 1750. They are ordered by publishing year and by size, increasing from octavo to quarto, continuing to folio, then finally to the large double folios. Throughout the four weeks that I spent at the Society, I edited, and added to, approximately 200 records within the digital catalogue. Working chronologically, I was only able to audit books up until 1700, but any later works were also audited if they were bound in one volume with earlier material. Some audited books had not been catalogued and other records contained several editions of the same title. As a result, about 90 titles were newly accessioned, and around 40 new catalogue records were created.

Provenance is incredibly important, especially for older societies like the Linnean, who historically expanded their book collection with gifts from Fellows. During the audit I tried to identify former owners of the books and add them to the records. In the 200 titles audited, 45 titles came from Joseph Banks (one of the earliest and most famous patrons of the Society), and 64 came from Society founder James Edward Smith. Other donors included botanists Benjamin Daydon Jackson and Jonas Dryander, former Secretary and Vice President of the Society respectively, or Francis Druce, Treasurer of the Society in the early 20th



century. An example of a donation from Banks is an incunable herbal, printed in Mainz 1484 (class R.484); it is one of the oldest books in the library, though unfortunately it lacks the title leaf and the last 18 folios. However it does contain 20 additional folios with handwritten notes from several early hands.

Possibly one of the rarest books seems to be the 1634 work *A direction to the husbandman...* by Charles Mowet, Edward Keeling and Nathanael Waterhouse (class R.634). It was presented to the library in 1930 by "Mrs. Waterhouse of Banbury", perhaps a descendent of author Nathanael Waterhouse, to whom this copy was "Delivered ... [on] May 2 [1]634".

My time at the Linnean Society flew by; four weeks was unfortunately not long enough to complete the audit of the Rare Books collection. And while my work only managed to resolve one small section, it also highlighted some of the amazing rare items held in the library.

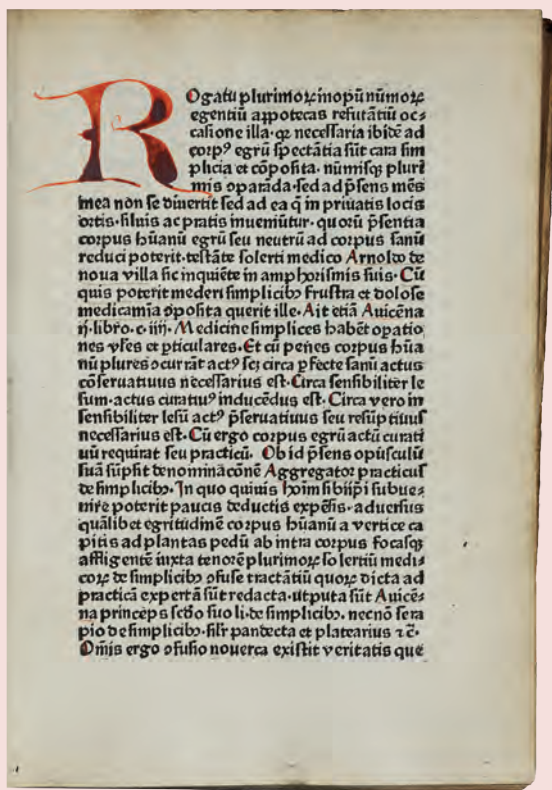
Katrin Böhme  
Curator, Dept. of Early Printed Books  
Staatsbibliothek, Berlin

*Presented to The Linnean Society  
of London on 3rd April 1930  
by Mrs. Waterhouse of Banbury  
and Mr. Joseph Sharp.*

TOP:  
Different book bindings  
within the collection.  
© The Linnean  
Society of London

BELOW LEFT:  
First page of the 1484  
Herbal, which Joseph  
Banks donated to the  
Society in 1797.

BELOW RIGHT:  
One of the rarest books  
in the library, *A direction  
to the husbandman...*,  
was donated in 1930  
by a possible relative  
of the author.





THE LINNEAN  
ZOOLOGICAL CLUB,  
1822–29

# A Most Extensive Department



King's College London student **Fred Yip** spent his internship at the Linnean Society studying archival materials relating to the genesis of the Zoological Club. Fred's project began with cataloguing a manuscript volume entitled 'Correspondence relating to the formation of the Zoological Club', including 47 letters composed by the Club members.

**ABOVE:**

After some persuasion, William Kirby chaired the Linnean Zoological Club's first meeting.

All images

© The Linnean Society of London

## Revolting against the Linnean

It is difficult to imagine writing about the zoological developments of the 1820s without making some reference to the founding of the Linnean Zoological Club. It was a time when other groups engaged with the study of natural history challenged the Linnean Society's perceived monopoly of the subject. Letters in the Society's archive hint at the strained relations among its Fellows in 1822, and how the Linnean zoologists rallied support for changing their position within the Society.

The larger story begins with Frederick William Hope's efforts to establish a self-governing "Entomological Society of Great Britain" in 1822, which was subsequently amalgamated into the Zoological Club of the Linnean Society. He informed William Kirby—who was then a leading entomologist in England—of over 20 entomologists who wanted to splinter from the Linnean Society. To further this new society "yet in embryo", Hope wished to solicit Kirby's assistance and encouraged him taking on the Presidency.

A quiet country parson-naturalist, Kirby was quite isolated from the quarrels in London, and the growing "enmity" to the Linnean Society staggered him. He refused to "become a member of any society, much less president that in any aspect is hostile to the Linnean", fearing the plan would "render the [Linnean] Society unnecessary". However, even Kirby's own correspondence with fellow entomologist William Sharp Macleay (from July 1822 to August 1823) illustrated the quest for a more efficient and legitimate representation of zoology.

In the summer of 1822, Nicholas Aylward Vigors replaced Hope in leading the secessionists and continued to persuade Kirby to accept the office of President. Kirby preferred having "separate committees" within the Linnean orbit and suggested dividing the Society into committees for botany and geology, and three sub-committees in zoology to include vertebrates, invertebrates, and insects. The committees could meet monthly, and the sub-committees weekly. District committees were also considered necessary for "better elucidating the natural history of the kingdom".

The Society's *Transactions* were costly for general circulation, and the zoologists wanted a less costly, more frequent alternative in order to write extensively on the different branches of zoology. Kirby favoured the plan of a *Naturalist's Journal* which would be published quarterly and would include at least three members from each of the committee, the revenue from which could be invested into the Linnean Society's collections. This new journal, however, was not independent, and would have to be recommended by the Society to its members and the public.

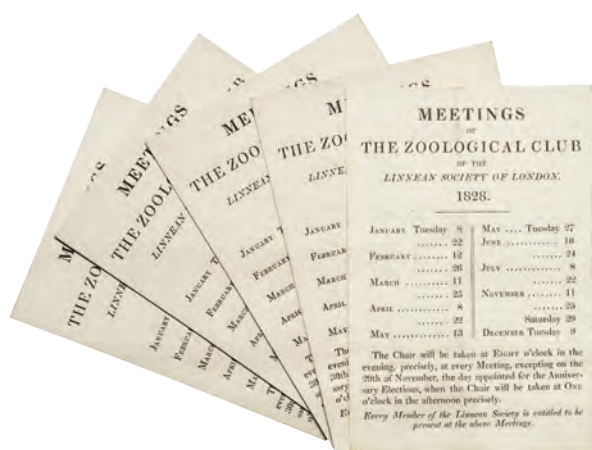
After rounds of negotiation, the secessionists reached a compromise with the Society, and on 27 November 1822, it was resolved that the Club would be formed. On 23 May 1823, Kirby returned to London to chair a landmark meeting to read and adopt the bye-laws, marking the beginning of the Linnean Zoological Club. He stood firm on the criteria for subscription, asserting that none but Fellows and Associates of the Society could be elected to the Club's membership. All original contributions also became the Society's property and thus had to be previously transmitted to the Society, despite the Club's warning of an "immense accumulation of matter". The committee consisted of three positions: Chairman, Treasurer, and Secretary. (Future founders of what would become the Royal Entomological Society of London, James Francis Stephens and Nicholas Aylward Vigors, were Treasurer and Secretary, respectively.)

## Promoting quinarian classification

Many envisioned the Club as a friendly gathering place. The hope was to contribute extensive data according to quinarian classification, first advanced by William Sharp Macleay in *Horae entomologicae* (1819–21), where organisms were arranged into circles of five taxa (though it should be noted that not every member subscribed to this). The meeting minutes offer a quinarian explanation of the terms "natural" and "artificial" system, in that all systems introduced by man:

are artificial and are merely symbolic representations by which the naturalists endeavours to communicate his ideas respecting the groups of nature... All such artificial and symbolic representations must be equally liable to the same objection, and that there is no other mode by which we can communicate our ideas in Natural Science.

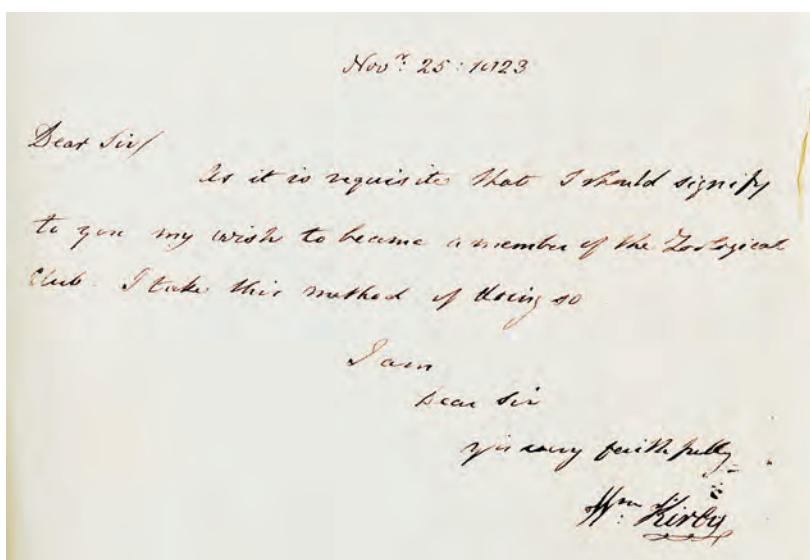
Asserting that each arrangement has its own comparative merits and limitations, the real question, in the eyes of the quinarians, is not whether the system is artificial or natural, but whether it is suited to communicate our knowledge of nature. As Vigors saw it, the linear model only points out the affinities of a group to two other groups; in contrast, the circular succession of affinities demonstrates the immediate affinity of the same group to several others at once.



The quinarians played an active, though not entirely dominant, role in sharing their findings at the fortnightly meetings. A lot of them dealt with the observation of rare birds and exhibited numerous bird specimens. The Club advanced the nomenclature of ornithology by distinguishing the similarities and differences of each divisional groups, and by tracing how the ornithologists separated the groups of birds with reference to wing structure, among other adaptations. To demonstrate the characteristics of two birds under the genus *Cryptonyx*, the absence of the claw from the hind toes, for instance, received some attention at the Club meeting on 9 December 1828.

### A plethora of new data

As the great voyages of the post-Napoleonic period encouraged more regional surveys into Asia, Africa and the Americas, far more species were studied and recorded in 1829 than in 1822. In June 1826, for example, many of Macleay's specimens of Cuban birds were exhibited in Soho Square. The meeting's Chair then read a letter from Macleay, which detailed observations during his voyage to Cuba in the winter of 1825, including comments on the ornithology of the islands of Madeira, Tenerife and Cape Verde, as well as Barbados, Martinique and off the coast of what is now the Dominican Republic. A year later, in November 1826 and then in March 1827, Macleay's paper, 'Remarks on the Comparative Anatomy of certain birds of Cuba, with a view to their respective places in the system of nature, or to their relations with other



animals' was read. Those interested in Caribbean ornithology may find it enlightening to examine Macleay's notes, manuscripts and early drafts in the Society's archived file MS/252.

In addition to the non-indigenous species, zoologists devoted themselves more especially to birds, fishes, insects and worms which were native to Britain. It is noteworthy that J. F. Stephens, who was one of the founders the Royal Entomological Society, exhibited specimens of six species of the genus *Dytiscus* in 1825, of which three of those were unnoticed as natives of the British Islands. William Yarrell exhibited a broad range of drawings and specimens at the Club meetings, including a variety of common fowl, the *Sparus lineatus* (the black seabream), the *Emberiza hortulana* (the ortolan), the *Anas rufina* (the red-crested pochard) from the neighbourhood of Yarmouth and various species of *Clupea* inhabiting the British coasts.

### The beginning of the end

Although there is no direct reference, the foundation of the Zoological Society of London in 1826 was partly responsible for the Club's dissolution. Shortly after in 1827, Vigors submitted his resignation as Club Secretary to become the Secretary of the new Society. As a result of the decreasing income from admission fees during 1828 and 1829, the budget balance of the Club deteriorated. While accounts show there was a financial surplus of more than £28 for the 1824–25 session, by May 1829 there was a deficit of more than £45.

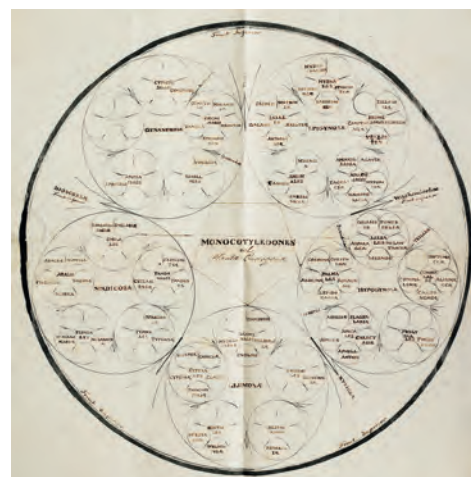
Due primarily to the financial difficulties, the Club added an article in the bye-laws requiring every member residing within five miles of London to pay an annual contribution of one guinea. Its debt situations remained muddled until the last month of its existence, when the Club requested its members to pay their annual subscriptions to clear the debts.

In the end, the Club meetings discontinued after 29 November 1829. The last gathering passed a vote of thanks to the Linnean Council "for to use of the Society's Room, in which members have passed many happy evening during the last six years, in promoting in one of its most extensive departments".

ABOVE:  
Kirby applied for membership of the Club in November 1823.

LEFT:  
The Club's original calendar cards.

BELOW:  
The Club was led by William Sharp Macleay's quinarian system of classification, shown here in his manuscript.



# STIFF COMPETITION

## The Economic Value of Starch from Agricultural Crops



It did not escape our notice that the Linnean Society has recently changed the wrapper used for distribution of its Fellows' publications, from polythene (made from fossil oil), to a starch-based biofilm. This exemplifies how fossil plastics are meeting stiff competition from natural and renewable sources. Starch (*amylum*) is a polymeric carbohydrate formed in certain plants, not least agricultural crops such as wheat, maize, rice and potatoes.

### Starch in history

Starch has been a central food for humans since the dawn of the first agricultural revolution around 10,000 B.C. Pure starch from wheat was extracted in ancient Egypt and used also as a naturally derived glue. However, the extraction of starch was not described in literature until Roman times, most notably in the work *Natural History* by Pliny the Elder in 77–79 B.C. (Trans. Pliny the Elder 1855). The Romans used starch as an additive in cosmetics, as a hair product and as a thickener in sauces.

### Wheat, maize and potatoes in *Systema Naturae*

Of course, Carolus Linnaeus included the aforementioned agricultural crops in his first edition of *Systema Naturae* (Frankelius 2007). Potatoes (*Solanum tuberosum* L.) were categorized as part of class E, Pentandria, and in the order Monogynia.

Maize and wheat were found in class V, Monoecia (androgynous plants, where separate staminate and carpellate flowers are both present) and in the order Triandria. Linnaeus' Latin word for maize was *Thalysia* but he also put the word "Mays T." (*Zea mays* L. is the current name.) Wheat (*Triticum aestivum* L.) was part of the genus "Aegilops S." By *Aegilops*, Linnaeus could have meant the goatgrasses we know today; native to Europe and Western Asia, and an invasive species in North America. Though it is also conceivable that he was referring to what is now known as modern wheat, which is considered to be the result of a cross between earlier wheat species and species within the genus *Aegilops*.

Linnaeus was interested in the many different uses of these crops, visiting a flour mill in Nyköping, Sweden, in 1741 ("The flour from Nyköping is said to be the best in the country") and even visiting a starch plant, as shown in his account of his expedition to Öland and Gotland:

*The starch factory, which has been built by the surgeon, Ziwert, was also visited; a substance was shown to us which was very similar to Prussian blue and made without safflower [Carthamus tinctorius L.].*

(Trans. Åsberg & Stearn 1973.)

In Sweden, research about Linnaeus' struggle to extract economically useful products from agricultural crops is ongoing.

### Starch in plants

The function of starch in plants is to constitute an energy store, which takes place in, for example, the seeds of cereals or the tubers of species like *Solanum tuberosum* L. When a plant requires energy, enzymes divide the large molecules for transportation to the necessary parts of the plant that have energy needs, or to a new place where the components are once again bound into starch for continued storage. In these places, the starch forms tightly packed crystalline grains called granules.

### The chemical structure of starch

Starch consists of molecules in the form of long, twisted, spiral chains made up of thousands of glucose units, joined together by glycosidic bonds. The chains have differing shapes, based on how the glucose units are formed in relation to amylose (unbranched chain parts) and amylopectin (branched chain parts). Depending on the type of plant, the starch demonstrates different properties; for example, the granule size of potato starch is much larger than that of maize starch, and can be gelatinized at a lower temperature because of this (Abdullah *et al* 2018). However, the building blocks are always glucose molecules, which are themselves created by photosynthesis. To say that plants are amazing production units is no exaggeration.

ABOVE:  
Pure starch was extracted from wheat in ancient Egypt, and used as glue. Images courtesy Per Frankelius and Lantmännen

BELOW:  
The final product: processed starch.





## Processing and production

Starch does not dissolve easily in water. In 1811, chemist Edme-Jean Baptiste Bouillon-Lagrange discovered that mildly roasting starch allowed it to be more easily dissolved in water, producing a thick gum that could be used in the production of ink. With gum Arabic being expensive, Bouillon-Lagrange had been seeking a cheaper alternative using starch (Wisniak 2013).

If a starch slurry is heated, the starch is released and reacts with water to form a colloidal solution (a solution where the starch molecules accumulate in groups). The starch molecules can then be decomposed into smaller portions by hydrolysis, catalyzed by hydrogen ions and certain enzymes such as amylase. Different treatment of starch is today an industrial art and there is a variety of creative methods.

By 2011 over 73 million tonnes of starch were being produced globally. Types of starch production can also vary between countries. According to starch.eu, the largest starch producers are China and the USA, both with 30% of the market. The EU is next with 14%; Europe is also the largest producer of potato starch. In contrast, Thailand, the world's fourth largest starch producer, has found success with tapioca, extracted from the cassava plant.

## Economic uses

Today, starch is used for a number of economically important products, such as food, beverages, animal feed, adhesives, fillers for pharmaceuticals and sweets, colors, cosmetics, textiles, biofuel, alcohol and disposable packaging for use (Smith 2001; Jane, Maningat & Wongsagonsup 2010). Starch can also be used as a protective coating for seed in agriculture. The future potential of starch is being investigated as part of the Agtech 2030 initiative, an ongoing programme looking at stimulating "new links between farms, machine manufacturers, technology companies and academic-based technology and business research", hosted by Linköping University in Sweden.



## The 'Prince' and economy

The change of wrapper for the Society's Fellows' publications highlights sustainability, but also the issue of the usefulness and economic value of materials extracted from nature. In fact, the connection between natural resources and economic value was at the core of Linnaeus' mindset (Rausing 2003; Frankelius 2007). Despite this, the economic aspects of Linnaeus' work have potentially been overshadowed by those of taxonomy. While for many Linnaeus is known as 'the Prince of Botany', his work on economics in nature should not be undervalued.

Per Frankelius & Magnus Kagevik

### ABOVE:

A modern starch processing plant; Linnaeus visited an 18th-century equivalent in 1741.

### BELOW:

Starch has a plethora of uses in the food industry, alongside adhesives, pharmaceuticals, and in biodegradable packaging.



## Acknowledgements

The authors are grateful for valuable dialogue with Leonie Berwick at the Linnean Society of London, and Mattias Gustafsson at Lantmännen Reppe.

## References

- Abdullah A.H.D., *et al.* 2018. Physical and chemical properties of corn, cassava, and potato starches. *IOP Conf. Ser.: Earth Environ. Sci.* 160 012003
- Åsberg M. & Stearn W.T. 1973. Linnaeus' Öland and Gotland Journey 1741. *Biological Journal of the Linnean Society* 5(1): 1–107.
- Frankelius P. 2007. *Linné i nytt ljus—Den första översättningen av Systema Naturae samt ny analys av Linnés perspektiv* ('Linnaeus in a new light: The first translation of Systema Naturae and a new analysis of Linnaeus perspective'), Malmö: Liber.
- Jane J.L., Maningat C.C. & Wongsagonsup R. 2010. 'Starch characterization, variety and application' in B. P. Singh, *Industrial crops and uses*, Wallingford: CABI, pp. 207–235.
- Pliny, the Elder. 1855. *The Natural History of Pliny*, Vol. 1 (trans. J. Bostock and H. T. Riley). London: Bohn.
- Rausing L. 2003. Underwriting the Oeconomy: Linnaeus on Nature and mind. *History of Political Economy* 35: 173–203.
- Smith A.M. 2001. The biosynthesis of starch granules. *Biomacromolecules* 2(2): 335–341.
- Wisniak J. 2013. Edme-Jean-Baptiste Bouillon-Lagrange. *Revista CENIC Ciencias Biológicas* 44(1): May-Aug.

# FORTHCOMING EVENTS 2019

**4 Sep**  
Lunchtime  
Lecture  
12.30-13.00

**London National Park City-What if?**  
**Speaker:** Steve Pocock,  
*National Park City Foundation*

**19 Sep**  
Evening Lecture  
18.00-19.00

**Sampling the Deep**  
**Speaker:** Dr Kirsty Kemp,  
*Zoological Society of London*

**19 Sep**  
Discovery  
Workshop  
18.00-20.00

**Mindfulness & Mandalas**  
*Create your own feather mandala*

**25-26 Sep**  
Discovery  
Workshop  
10.00-16.00

**Wonderful Wings**  
*Two-Day Art Class*  
**Tutors:** Rebecca Jewell  
and Sandy Ross Sykes

**2 Oct**  
Lunchtime  
Lecture  
12.30-13.00

**Unravelling the Ecology of Invasive  
Non-Native Species**  
**Speaker:** Professor Helen Roy,  
*Centre for Ecology and Hydrology*

**17 Oct**  
Evening Lecture  
18.00-19.00

**Badgers, Bees and Biodiversity:  
Can we really have an evidence-based  
environmental policy?**  
**Speaker:** Professor Charles Godfray,  
*University of Oxford*

**REGISTRATION IS ESSENTIAL  
FOR ALL EVENTS:**  
<https://www.linnean.org/events>

**Please check our website for  
other events not listed here**

## Welcome to... Will Beharrell



This June we welcomed Will Beharrell to the Society as its new Librarian. Will qualified at University College London, and joins us from Magdalen College, Oxford (where he was Assistant Librarian for two years). He retrained as a librarian following his undergraduate and postgraduate studies in English Literature (both at Merton College, Oxford). He has previously worked for All Souls College (where he did his graduate library traineeship), Merton College, The Bodleian Libraries, and Oxford's English Faculty Library.

Will is responsible for the smooth-running of the Society's library service, supporting our Head of Collections, Dr Isabelle Charmantier. As well as facilitating the use of the collections for research, public engagement, and education, he promotes the collections through international networks, outreach events, publications and social media. He also acts as administrator for the Linnaeus Link project and union catalogue (an international collaboration between institutions with Linnaean material), and sits on the Education and Collections Committees.

In his spare time, Will enjoys walking, reading, cooking, and playing board and video games. He's excited by the prospect of tackling a new collection, and looks forward to meeting you all soon. [will@linnean.org](mailto:will@linnean.org)

ABOVE: © The Linnean Society of London

## BioMedia Preview Workshops

In preparation for our schools' competition later in the year, we are running several fun, try-it-and-see sessions during the school holidays for students aged 11-14. Students will produce a piece of art and learn about science in the process. Workshops include:

- **Splendid Spores:** Learn about spores through felting
- **Twisted Taxonomy:** Use iPads and digital scopes to create a species photo-composite
- **Animal Anatomy:** Explore adaptations using transparencies and pop-up techniques

Workshops take place in our Discovery Room in small groups; each session is £10. Any young students interested

in taking part should visit our website's events page for more details. Come and explore natural history at the Society!  
[www.linnean.org/events](http://www.linnean.org/events)



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