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NEWS FROM THE LINNEAN SOCIETY OF LONDON - A FORUM FOR NATURAL HISTORY

ARCHIBALD MENZIES:

A Botanist in Bronze Arrives at a Scottish Castle

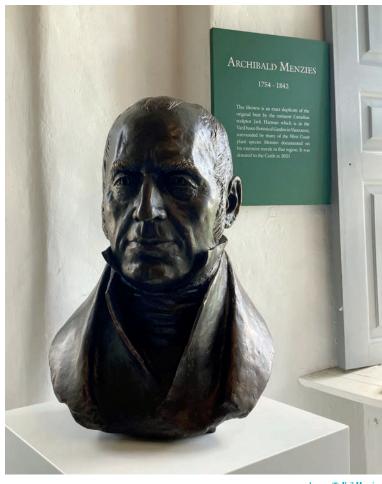


Image © Neil Menzies

bronze bust of Archibald Menzies (1754-1842), Scottish naval surgeon and naturalist on board the HMS Discovery, has been agifted to Castle Menzies, in his birthplace of Weem, Scotland. Menzies was born at Styx in Strathtay (in the parish of Weem), the son of a gardener at the Castle.

Perhaps with botany in his blood, Archibald went with his brother William to work at the Botanic Garden in Edinburgh, where his talent was recognised by John Hope, Professor of Botany at Edinburgh University at that time. He would eventually study medicine there, and would emerge as a qualified surgeon. Later, he joined the Royal Navy and fought in the Caribbean at the Battle of the Saintes (1782). In 1786, as ship's surgeon on board the HMS Prince of Wales, he journeyed to the North Pacific, taking in the west coast of North America, China and Hawaii. Throughout his travels he continued botanising, identifying and collecting new plants to bring back to UK.

On his return in 1789, he was elected a Fellow of the Linnean Society. The next year on HMS Discovery, under Captain George Vancouver, Menzies embarked on a five-year journey around the world, during which he and three other men would make the first recorded ascent to the summit of Mauna Loa, Hawaii. It was also during this voyage that Archibald, having been served them as part of a meal in Chile, retained the seeds of the Chile pine (Araucaria araucana) from which he encouraged several plants to grow on

board the ship. He would bring them back to the UK, and introduce what is better known as the monkey puzzle tree to British shores.

After coming back to the UK, he gained an MD from the University of Aberdeen and took up general medical practice in London, still an active member of the Linnean Society. After retiring to Notting Hill, he died in 1842 and was buried alongside his wife in Kensal Green Cemetery. His herbarium was left to what is now the Royal Botanic Garden in Edinburgh (RBGE), and he left £100 (now c. £6,000) to the Society. Today his name lives on in Banksia menziesii (firewood banksia), Pseudotsuga menziesii (Douglas fir) and Arbutus menziesii (Pacific madrone).

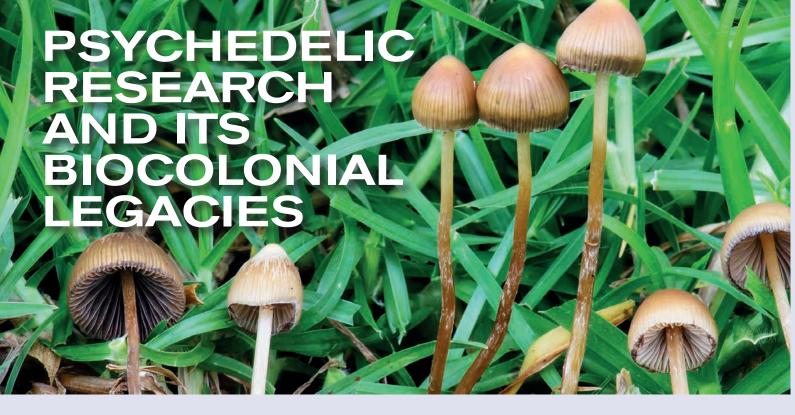
The bronze bust, which is an exact duplicate of the original standing in the VanDusen Botanical Garden (VDBG) in Vancouver, was given to the Castle by a group of Canadian enthusiasts, who wished there to be a memorial to this eminent Scottish plant collector in his home country.

Castle Menzies is in the hands of the Menzies Charitable Trust, and is open to the public (Easter-October): www.castlemenzies.org.

Neil Menzies

References

McCarthy, J. 2008. The Monkey Puzzle Man. Whittles.



María Sabina & R. Gordon Wasson in Mexico

By Ernesto Schwartz-Marin, Osiris Gonzalez-Romero, Patricia Murrieta-Flores, Christine Hauskeller & Maríana Favila-Vázquez

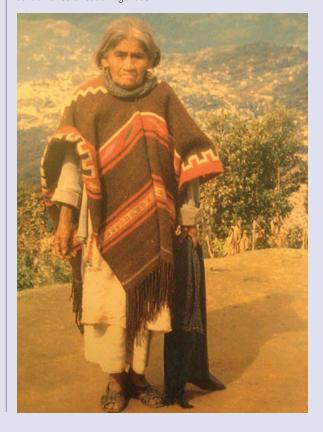
ABUVE: Psilocybe Mexicana, or teonanácatl, like other species in the Psilocybe genus, is known for its psychoactive properties. © Wikipedia/Alan Rockerfeller

BELOW: María Sabina was ill-treated after being seen as 'disclosing' indigenous wisdom. © Flickr

To sit in the library at the Linnean Society and listen to the 70-yearold recordings of María Sabina performing a healing ritual is an experience that pushes any researcher to reflect upon the benefits brought by the global circulation of knowledge. An encounter with Robert Gordon Wasson's beautiful book The Wondrous Mushroom (1980), in which he provides a detailed ethnographic account of a unique ritual encounter (including recording of chants and prayers) with Mazatec ritual healer María Sabina in Mexico, is an aesthetic experience. In this book, Wasson ruminates on the Life article about 'magic' mushrooms he published back in 1957, and the effect it had on the practice of psychedelics and on the Mazatec people that shared with him their knowledge. The story is a reminder of how much of our memory depends on archival practices, but also of the inherent asymmetries inscribed in our historical records. Here, we will briefly explore the encounter between Mazatec ritual master María Sabina and R. Gordon Wasson in order to speak to the larger issue of the colonial practices and ideas that still shape bioprospection, psychedelic research, and engagement with indigenous knowledges today.

Until Wasson published his piece in Life magazine, scientific literature believed that ceremonies involving 'magic' mushrooms had disappeared. In 1939, ethnobotanist Richard Schultes published a paper in which he reported that the mysterious sacrament described in pre-Columbian codices, teonanácatl-flesh of the gods' in Nahuatl-was a psychoactive mushroom (Schultes 1939). This attracted little interest until 1952, when Wasson, an amateur mycologist, received a letter about Schultes' paper on the subject from the poet and scholar Robert Graves (Sheldrake 2020). María Sabina's reputation within her community led to her encounter with Wasson in 1955. Wasson travelled to Oaxaca, Mexico, as well as to Huautla (Huautla de Jimenez) and other villages, asking about the ancient rituals with sacred mushrooms. According to Wasson's memories: 'There is no indication that any white man had ever attended a session of the kind that we are going to describe, nor that white man had ever partaken of the sacred mushrooms under any circumstances' (Wasson 1980: 10). However, these

claims are incorrect, as almost half a millennium prior to Wasson's arrival, various Spanish missionaries had referred to rituals involving sacred plants and fungi (Sahagún 2005, 2000; Glockner 2015). Nonetheless, the claim formed a strategic narrative that reinforced the tropes of *Terra Nullis*, and of the pioneer or explorer. Such framings of intercultural encounters by way of an untouched primal experience with the lands and customs of indigenous 'others' have historically served to legitimise claims of discovery and novelty central for colonisation agendas.



Imbalances of power

The encounter between María Sabina and Wasson was marked by profound imbalances of power. Wasson was a former banker-turned-vice president of J. P. Morgan bank, with considerable resources to finance his ethnographic research trips to Mexico and the Mazatec Sierra. María Sabina was a recognised sage in her village, though she did not charge any fixed amount when she performed her healing ceremonies with sacred mushrooms. The municipal trustee of Huautla had pressured her to agree to meet Wasson. Some years later, in an interview with Alberto Ongaro in 1971, Wasson acknowledged that María Sabina had been asked to perform the ritual by the trustee, Don Cayetano García, and she felt she had no choice—'I should have said no' (Wasson 1980: 8). The pressure put on María Sabina was later evident in an interview she gave to the Mazatec writer Álvaro Estrada in 1976:

It is true that before Wasson, no one spoke so freely about the holy children [sacred mushrooms]. None of our people revealed what they knew about this matter. But I obeyed the municipal trustee. However, if the foreigners had arrived without any recommendation, I would also have shown them my wisdom because there is nothing wrong (Estrada 2005: 42).

Reflecting on the popularity psychedelics had gained after the publication in *Life* magazine, Wasson lamented that the 'activity of the riff-raff of our population that no longer follows, or is even aware of the deep spiritual significance of the consumption of 'magic' mushrooms for the Mazatecs' (Wasson 1980: 17) had launched a banal psychedelic revolution. Nonetheless, Wasson won recognition and worldwide prestige for 'discovering' the sacred mushroom ceremony; in contrast María Sabina was shamed for 'disclosing' indigenous wisdom and secrets. She was not acknowledged for her expertise, and intense anger was directed towards her in Huautla de Jimenez; unknown people burned down her house, and a drunken man shot her and murdered her son. In 1985 she died in impoverished conditions, without having been appropriately credited for her contributions to psychedelic research.

Reinforcing biocoloniality?

Wasson's work constituted another instance of salvage ethnography, a practice that seeks to save vanishing indigenous peoples and disappearing knowledge due to globalisation, which has been criticised as part of neocolonial strategies of extraction, and biopiracy. Wasson was aware that his publications constituted a betrayal of the secrecy and mysticism shrouding 'los niños santos' ('magic' mushrooms) in Mazatec culture. Yet, he also felt it was his duty to share this knowledge with the world before it disappeared in the wake of the relentless advance of modern civilisation (ibid: 17–19). Modern civilisation took notice of 'magic' mushrooms indeed, and:

within two years of the story's publishing, psilocin and psilocybin, the main active compounds in the mushrooms, were isolated, characterized, synthesized, and named by Swiss chemist Albert Hofmann at the Sandoz pharmaceutical company. Sandoz quickly patented the extraction procedure and a method for 'therapeutic tranquilization' marketing pills under the trade name Indocybin (Gerber 2021: 573–577).

References

Estrada, A. 2005. Vida de María Sabina. La Sabia de los Hongos (México: Editorial Siglo XXI) 42.

Gerber, K, et al. 2021. Ethical Concerns about Psilocybin Intellectual Property. ACS Pharmacol Transl. Sci. 4: 573—577.

Glockner, J. 2015. La Mirada Interior: Plantas Sagradas del Mundo Amerindio (Mexico: Debate)

Schwartz-Marin, E. & Restrepo, E. 2013. Biocoloniality, Governance, and the Protection of 'Genetic Identities' in Mexico and Colombia. *Sociology* 47(5): 993–1,010.

Schultes, R. E. 1939. Plantae Mexicanae II. The Identification of Teonanácatl, a Narcotic Basidiomycete of the Aztecs. *Botanical Museum Leaflets, Harvard University* 7: 37–56.

Patenting, appropriation, and pharmaceutical entrepreneurship lie at the heart of the current psychedelic renaissance, which is currently reproducing colonial logics, and scientific agendas that endorse a rationality of 'discovery'. Political and regulatory agendas that seek to protect indigenous communities from the banalisation of psychedelics, amidst the so-called 'psychedelic renaissance', risk reinforcing dichotomies that are constitutive of biocoloniality (Schwartz-Marin & Restrepo). For example, by framing indigenous knowledge as belonging to nature and tradition, but presenting biomedical research as a novel therapeutic intervention fuelled by capitalist investment, and clinical trials.

A new historiography

The authors of this article are currently collaborating to analyse, through natural language processing, key colonial texts in Mexico that provide early ethnobotanical and ethnopharmacological accounts of psychoactive plants. By bringing this knowledge together with anthropology and philosophy of psychedelics, we seek to contribute to a new historiography that is already being crafted by Mazatec indigenous scholars and Mexican anthropologists working with renewed interest in 'los niños santos'. We are acutely aware that, despite our decolonial historiographical efforts, synthetic or genetically modified psilocybin is again being produced to be patented for psychotherapeutic use, as new profits seem to be ripe for the taking.



TOP RIGHT:

The Linnean Society library holds copies of recordings of María Sabina's sacred rituals.

© The Linnean Society of London

ABOVE:

Wasson's article 'Seeking the Magic Mushroom' in *Time*, 1957.

© Wikipedia

Sahagún, fray Bernardino de. 2005. Historia general de las cosas de Nueva España, Biblioteca Porrúa, tomos 8-11, México.

Sahagún, fray Bernardino de. 2000. Historia general de las cosas de Nueva España, tomos I-II, version íntegra del texto castellano del manuscrito conocido como Códice Florentino, studio introductorio, paleografia, glosario y notas de Alfredo López Austin y Josefina Garcia Quintana, Conaculta, Cien de Máxico.

Sheldrake, M. 2020. The enigma of Richard Schultes, Amazonian hallucinogenic plants and the limits of ethnobotany. *Social Studies of Science* 50(3): 345–376.

Wasson, R. G. 1980. The Wondrous Mushroom: Micolatry in Mesoamerica. New York: McGraw Hill Books



Linnaeus in Mårtanberg Or, When Linnaeus was Nearly Axed by a Farmer

by Professor Mats Björklund FLS

ABOVE:
The farm is still there,
but no one has lived at
Slånggården permanently
since the 1990s.

© Mats Björklund

On 3 July 1734, Linnaeus set out on an expedition to Dalarna (Dalecarlia), about 200 km north of Uppsala in Sweden. He started in Falun, the area's capital, and moved northwards. He had gathered a group of eight students from Uppsala to experience the journey, all with varying skills and proficiencies. It is not clear if there were other people to assist with things like the horses; perhaps because they were not academics they were not mentioned in his travel notes. On 4 July, Linnaeus came to the very small village of Mårtanberg, some 40 km north of Falun, and about halfway from their most recent overnight stay (in Bjursås). Mårtanberg was (and still is) very small with around only 25 farms in total, and was surrounded by dense forest; a landscape not really compatible with farming. Upon arrival, the group were all tired and needed to rest, but surprisingly things did not go smoothly. In Linnaeus's words:

The whole trip went happily; the only impediment was that the people [of the village] were not home, leaving our horses stranded. We were finally forced to put them in [the area of] Mârtaberget, where only a boy was present, who we asked to be allowed to tie our horses in the yard for a little rest and refreshment of grass. When we had rested for a while, a bullish farmer from the neighboring farm in Löten by the name of Olof Andersson came wielding an ax, enraged and accusing us as if we were criminals, saying he would soon apprehend us by summoning his friends (to which he had some women in reserve). Neither reason, payment nor [any kind of] agreement helped, just his own principles of pride. Finally, his posturing was settled against a payment of 3 dalers [about £17 today], which he very reluctantly accepted.

Apparently Linnaeus's story could have ended there, at only 27 years of age. It is clear from his writing that he had no understanding of how precious the surrounding grass was around the farms. It was typical in the summer months for the cattle to be taken to 'summer-farms', far away in the forest, in order to preserve the local grass for hay—vital during the long and snowy winter. Seeing eight horses roaming around, eating and trampling this important crop, and complete strangers investigating the houses, was obviously an intolerable offense to Olof Andersson and the other village habitants. As always, farming is very weather dependent; a dry summer impedes the growth of the grass and thus it becomes even more precious. Just a few years earlier in 1725, the crops had failed all over Sweden, with widespread famine as a result. It is likely that this was collectively a bad memory for many people, who were hence very cautious.

A clear divide

The visitors' clothing clearly signaled belonging to the upper classes—and potentially the authorities—there was even more reason to be skeptical. This could have meant new taxes, or conscription to the army, as at that time Sweden had been involved in several devastating wars on the continent.

Linnaeus was apparently also surprised that not even money would help, but since this money could not be used for much, and would certainly not provide hay for the winter, it was of very little comfort. The difference between Linnaeus and his companions, being from a wealthier class, and the poor villagers could not have been larger — a clash may have been inevitable. Linnaeus's attitude did not do

much to help solve the problem, in his assumption that if there was grass his horses could use it for free, and that the villagers were being difficult. This incident has since been retold in the village over the centuries, but with Linnaeus as the villain, not the local farmer, unsurprisingly.

The farm is still present (Slånggården), but no one has lived there permanently since the 1990s. The last occupant was an aunt of the current owner, and the house had remained pretty much the same state as it had been in Linnaeus's time, with no running water and an outhouse close to one of the stables. The farm has been in the same family almost since Linnaeus's visit.

Meteorites and fossils

After Mårtanberg, Linnaeus moved on to the village and church of Rättvik, some 20 km north. This is an area that is characterised by low-fertility forests. However, due to a meteorite that crashed here 377 MYR ago, there are areas with very good growing conditions. The crater is 52 km in diameter and the crater border consists of limestone, mainly from the Ordovician and Silurian. Linnaeus noted that the vegetation is very lush at the crater border, and strikingly meager otherwise. The crater rim is also where all the villages are situated, including Mårtanberg, which is slightly outside the rim but is where limestone was transported in the soil during the ice age. He was shown limestone quarries with lots of fossils, noting that '...the limestone is full of white petrifikations (fossils), indeed so full that not a single one could be added. These are mainly crinoids, but also conspicuous orthoceratites, snails and mussels and, if you are lucky, nice trilobites. I grew up in this area and hunting fossils was a fun game for us youngsters, while my father, a local schoolteacher in biology, spent all his spare time checking out the local flora. There is now a museum in the village centre focusing on the geological history and the impact on the present-day flora.

The limestone has resulted not only in lush vegetation, but also a number of plant species not found elsewhere, such as a large number of orchid species. Linnaeus seemed to have missed all of this, and his notes about plants in this area are surprisingly scant; one reason could be that he was 'late', since the orchids mainly flower in the first three weeks of June, and he was there in July. He also travelled north along an old ice age river delta, with thick sand as the substrate. The vegetation there is dominated

by pine and lingonberries, nothing particularly botanically exciting. However, he did note the strikingly tall pine trees. He did not stay long in the area, only a few days, spending most of the time in the quarries and a silver mine, shown to him by the locals.

Linnaeus travelled widely in Sweden, and it was obviously not without problems. It is also clear that, when it comes to the vegetation, the timing of the trip was not optimal, and the short time spent at each place only gave him a cursory, biased glimpse of the nature he was supposed to describe. His travel notes should perhaps be best seen as very preliminary reports from previously undescribed areas, rather than thorough descriptions.









TOP: Separated pasture on the farm.

MIDDLE LEFT: Dense forest surrounds the Swedish village of Mårtanberg. MIDDLE RIGHT: The house is almost the same as it had been in Linnaeus's time.

BOTTOM: Travelling north from Mårtanberg, Linnaeus wrote of seeing a large area of fossils, mainly crinoids. Perhaps the author is seeing the same fossils Linnaeus did, nearly 300 years ago. All images © Mats Björklund.

'The Most Curious Traveller'

Mark Catesby's Consignment of Plants for Carl Linnaeus

by Henrietta McBurney FLS



RELUM

Fig 1. Catesby's 1745 letter to Linnaeus, informing him that a consignment of 'American plants' was heading to Sweden. © The Linnean Society of London

On 26 March 1745, Mark Catesby (1683–1749) wrote to Carl Linnaeus (1708–78) in Uppsala to tell him that 'A Case of American Plants in Earth ... a present to you from my good friend Dr Lawson' was on board the *Assurance*, bound for Stockholm under the care of Captain Fisher (Fig. 1).¹ From there the consignment would have travelled to Uppsala where Linnaeus was supervisor of the university's botanic garden. Since he had taken it over in 1741, the garden had thrived, and by 1748 it would contain 3,000 species.² When Linnaeus received Catesby's letter, he had recently returned from a journey around Sweden and had begun a new project, his ambitious attempt to catalogue the distinguishing features of all known plant species, the work which was eventually to appear as his *Species plantarum* in 1753.

The consignment consisted of 18 shrubs and other plants. Isaac

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Lawson, a Scots doctor who got to know Linnaeus in Leiden, had consulted Catesby about which plants would be suitable to send his Swedish friend; Catesby told Linnaeus in his letter that he had 'selected these as being hardy and naturallised to our Climate & consequently somwhat better adapted to endure your colder Air ... if but a few of them be acceptable, I shall be much pleased'. The plants included: 'Cypressus Americana', Taxodium ditichum; 'Arbor Tulipifera', Liriodendron tulipfera; 'Cornus Americ:', Cornus florida; 'Populus Nigra Carol:', Populus balsamifera or P. heterophylla; 'Periclymenum', Gelsemium sempervirens; 'Barba jovis Arborescens', Amorpha fruticosa; 'Arbor Virg: Citriæ folio',

Lindera benzoin; 'Eunonimus Americ:', Euonymus americanus; 'Aster Americ: frutescens', Aster linariifolius; 'Stirax Aceris folio', Liquidambar styraciflua; 'Bignonia – Catalpa', Catalpa bignonioides; 'Angelica Spinosa', Aralia spinosa; 'Pseudo Acacia', Robinia pseudoacacia or R. hispida; 'Anopodophyllon Canadense', Podophyllum peltatum; 'Phaseoloides frutescens', Wisteria frutescens; and 'Rubus Americanus', Rubus occidentalis.

With the letter Catesby enclosed a copy of his broadside 'Catalogue of American Trees and Shrubs that will endure the climate of England', published around four years earlier (c. 1742), noting that 'if any plant in it might be acceptable, you may freely command any that I am possessed of'. The catalogue consists of a central etched image of *Magnolia grandiflora*, which, signed with his usual monogram, Catesby had adapted from a full-scale composition by Georg Ehret (Fig. 2) ³. The image is surrounded on three sides with text listing plants available from Christopher Gray's nursery in Fulham, together with references to several botanical books including Catesby's *Natural History of Carolina*, *Florida and the Bahama Islands* (1731–43). The reader was thus directed to Catesby's large-scale coloured images of many of the plants for sale at Gray's nursery.

While Catesby's letter to Linnaeus survives with the latter's correspondence in the Linnean Society, there is no copy of the broadside with it. However, a few years ago a copy of the central image from it was found 'forgotten in a drawer' in Linnaeus's country house at Hammarby outside Uppsala.⁴ The badly insect-damaged print, very likely trimmed from the copy of the catalogue that Catesby sent Linnaeus, is pasted to a backing sheet alongside an unattributed 18th-century watercolour of the Aztec lily, *Sprekelia* (Fig. 3). It appears that the trimmed catalogue image, hand tinted and attached to the watercolour, may have been used as wallpaper in a room of Linnaeus's home at Uppsala, just as the botanist was later to paper the walls of his bedroom and study at Hammarby with botanical prints from Ehret's *Plantae selectae* and Plumier's *Catalogus plantarum americanarum.*⁵

Amongst the plants chosen by Catesby for Linnaeus 'as being hardy and naturallised to our Climate' were eight that Catesby had described and illustrated in his Natural History. By 1745, Catesby had had many years' experience of raising American plants in his gardens in Hoxton and Fulham, and when he wrote the text for his later horticultural manual, Hortus Britanno-Americanus or, A curious collection of trees and shrubs, the produce of the British colonies of North America; adapted to the soil and climate of England ... (not published until 1763, 14 years after his death) he added practical information on the methods for cultivating some of these plants.

discovered in the wild during his explorations in the New World. In Virginia he had found a rose-coloured variant of the dogwood, Cornus florida f. rubra, growing in the woods which he transplanted to several gardens.⁶ He described its blossoms and berries in the Natural History and added in the Hortus: 'These trees bear the severest weather in England, without suffering any injury therefrom.' 7

Two of the shrubs that Catesby selected for Linnaeus were ones he had



In South Carolina, he found the catalpa, Catalpa bignonioides, growing in the 'remoter parts of the Country'. He introduced it into the gardens of his friends there, noting, tis become an Ornament to many of their Gardens, and probably will be the same to ours in England, it being as hardy as most of our American plants'. 8

Another spectacular tree Catesby chose for Linnaeus was the tulip tree, Liriodendron tulipfera, of which he wrote: 'Its Boughs are very unequal and irregular ... making several Bends or Elbows, which peculiarly makes this Tree distinguishable, at a great Distance, from all other Trees.' 9 (Fig. 4.)

Linnaeus never acknowledged Catesby's consignment of plants; over three years later, on 20 September 1748, the botanist John Mitchell wrote to Linnaeus saying: 'Mr Catesby desires his compliments and wishes to know whether the plants he sent you by your friend Lawson are alive and flourishing.' 10 From information recently discovered, however, we know that the consignment arrived: Lawson and Catesby are included as donors of plants in a 1745 description of Linnaeus's garden; and in Linnaeus's published list of plants grown there until 1748, an entry for Liriodendron bears a note in Latin, 'Housed in the Frigidarium, sent by the learned English doctor Isaac Lawson and the most curious traveller Catesby'. 11

Fig 2. An undamaged copy of the broadside 'Catalogue of American Trees and Shrubs that will endure the climate of England' that Catesby sent to Linnaeus. (No copy exists in the Society's collections.) © Oakspring Garden Foundation, Upperville, VA

Fig 3. The central figure of the broadside was found pasted together with an image of *Sprekelia*, in a drawer in Hammarby several years ago; it's possible it could be from the copy Catesby sent to Linnaeus.

© Uppsala University Library

OPPOSITE PAGE TOP:

Fig 4. Liriodendron tulipfera, or the tulip tree, was one of the species Catesby sent in his consignment to Linnaeus. (Catesby, Natural History of Carolina, I, pl. 48) © The Linnean Society of London

Notes

¹ Letter L0612, Linnean Society of London; McBurney, H., Illuminating Natural History. The Art and Science of Mark Catesby, London 2021, letter 44, pp. 275-6. Lloyd's List of shipping movements is lacking records for 1745, but on 9 November 1744, the Assurance under Captain Fisher arrived at Gravesend from Stockholm: https://www.maritimearchives.co.uk/ llovds-list.html.

- ² Jarvis, C., Order out of Chaos: Linnaean Plant Names and their Types, London 2007, p. 73.
- ³ McBurney, H., 2021, pp. 94-8.
- ⁴ I am grateful to Dr Karin Martinsson for this information, published in Martinsson, K. & Backman, A., 'I ett hörn av Hammarby. Om några linneanska växtillustrationer ('In a Corner of Hammarby. On Some Linnaean Plant Illustrations'), Svenska Linnésällskapets Årsskrift, 2013, pp. 7–38. Charles Nelson published the find in 'Georg Dionysius Ehret, Mark Catesby and Sir Charles Wager's Magnolia grandiflora: an early eighteenth-century picture puzzle resolved', Rhododendrons, Camellias & Magnolias, 2014, pp. 36-51.
- ⁵ Jarvis, C., 2007, pp. 78-80; Quammen, D., 'Linnaeus. A Passion for Order, in Andrew Polaszek, ed., Systema Naturae 250. The Linnaean Ark, 2010, pp. 8-9.
- ⁶ McBurney, H., 2021, pp. 149-51.
- ⁷ Natural History, I, p. 27; Hortus, p. 13.
- 8 Natural History, I, p. 49.
- 9 Natural History, I, p. 48.
- ¹⁰ Smith, J. E., A Selection of the Correspondence of Linnaeus and other Naturalists from the Original Manuscripts, II, London 1821, p. 448.
- 11 'Hospitatur in Frigidario, missa a doctissimo Medico Anglo Isac. Lawsone & curiosissimo Peregrinatore Catesbaeo', Linnaeus, Hortus Upsaliensis, I, Stockholm 1748, p. 155 (information kindly supplied by Jesper Kårehed, FLS, Scientific Curator, Linnaean Gardens of Uppsala).

FORTHCOMING EVENTS 2022

19 Jan

Afternoon Lecture 12.30-13.00 Nigeria's Role in Global Pangolin Trafficking Speaker: Charles Emogor, *University of Cambridge*

20 Jan Evening Lecture 18.00-19.00

The Case for Conservation Optimism Speaker: Martin Harper, *Birdlife International*

17 Feb Evening Lecture 18.00-19.00 Caught in the Middle: Oceanic Sharks, Climate Warming and Fishing Speaker: Professor David Sims,

Marine Biological Association (MBA) Laboratory

23 Feb Afternoon Lecture 12.30-13.00

Energy and the Changing Climate
Speaker: Professor Chris Rhodes, Advisor on
low-carbon energy to the European Commission

25 Feb

Evening Lecture

18.00-19.00

The Natural History of Viruses

Speakers: Pranay Lal,

Biochemist and Natural History Writer

REGISTRATION IS ESSENTIAL FOR ALL EVENTS:

https://www.linnean.org/events

Please check our website for other events not listed here

Wishing all of our members a fantastic holiday season, and all the best for 2022; thank you so much for the support you've shown the Society over the last year.

Our building will be closed to visitors from 13 Dec 2021–10 Jan 2022, with the library closed until 18 Jan for annual housekeeping. (The Society itself is closed from 24 Dec 2021–4 Jan 2022.)



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The Linnean Society of London Burlington House, Piccadilly, London W1J 0BF UK

T: +44 (0)20 7434 4479 E: leonie@linnean.org W: www.linnean.org

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Nigeria's Role in Global Pangolin Trafficking

Weds 19 January 2022 12.30–13.00 GMT

Speaker: Charles Emoger

Pangolins are evolutionarily distinct but highly threatened animals. They are one of the most trafficked animals in the world, with Nigeria playing a major hub role that is facilitating the Africa-Asia pangolin trade. In this talk, Charles Emogor will briefly explore the biological uniqueness of these scaly mammals and present recent findings of Nigeria's preeminent role in global pangolin trafficking – which involves a minimum of ~ 0.8 million pangolins from 2010 to September 2021. To book: www.linnean.org/events

The Case for Conservation Optimism

Thurs 20 January 2022 18.00–19.00 GMT

Speaker: Martin Harper



The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services Conservation has warned that without rapid action to transform our economies, a million species will become extinct, many within decades.

Against this backdrop, the conservation challenge can feel overwhelming. This talk will attempt to inject some optimism and argue that that we can take the action needed to prevent catastrophe. As leaders prepare to agree a new global biodiversity framework at April 2022's UN summit in China, Martin will explain what conditions need to be in place to justify conservation optimism in the future.

Caught in the Middle: Oceanic sharks, climate warming and fishing

Thurs 17 February 2022 18.00–19.00 GMT

Speaker: Prof David Sims



Oceanic pelagic sharks have declined globally over the past half century due to overfishing. Conservation and management actions are hampered by basic knowledge gaps about movement patterns, migratory routes, drivers of aggregations, climate change impacts, and precisely where they overlap with fishers across population ranges. Without knowing where sharks go and when, and what they do in different habitats, it will remain challenging to understand the impacts of future environmental changes on populations in the face of continued anthropogenic threats.

In this lecture David will describe his team's research to understand how pelagic shark movement patterns alter in response to variations in environment, and what this means for understanding habitat selection and their interactions with fishing vessel distributions.



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