

Minutes of the 197th RBG Kew Board of Trustees Meeting held on 22 June 2023 at Wakehurst, Haywards Heath RH17 6TN

Dame Amelia Fawcett	Trustee (Chair)
Professor Chris Gilligan	King's Trustee
Steve Almond	Trustee
Sarah Flannigan	Trustee
Professor Ian Graham	Trustee
Krishnan Guru-Murthy	Trustee (NHP item only)
Sir Paul Nurse	Trustee (NHP item only)
Kate Priestman	Trustee
David Richardson	Trustee
John Scanlon	Trustee
Jantiene Klein Roseboom van der Veer	Trustee
Independent Member	
Sir Jeremy Darroch	Chair of Foundation Council
Executive Board	
Richard Deverell	Director
Professor Alex Antonelli	Director of Science
Richard Barley	Director of Gardens
Sandra Botterell	Director of Marketing and Commercial Enterprise
Ed Ikin	Director of Wakehurst
Judith Kerr	Interim Director of Development
Fern Stoner	Director of Resources
Secretariat	
Balwinder Allen	Board Secretary (Minutes)
Rachel Pan	Head of Governance and Director's Office
Agenda Items	
Item No. 6.	
<i>[Information redacted under s.40(2)¹ of the Freedom of Information Act]</i>	
Item No. 7	
Eliza Gardner	Deputy Director of Science (Operations)
Monique Simmonds	Deputy Director of Science (Partnerships)
Item No. 10	
Eliza Gardner	Deputy Director of Science (Operations)
<i>[Information redacted under s.40(2)¹ of the Freedom of Information Act]</i>	

1.	Non-Executive Session: Trustees and Director The closed session included a discussion on Executive Board succession planning.
	Standing Items
2.	<p>Chair's Welcome The Chair welcomed all attendees to the meeting, extending a special welcome to Sir Jeremy Darroch, Chair of Foundation Council to his first meeting of the Kew Board. She congratulated Sir Jeremy and Richard Barley for being recognised in the 2023 King's Birthday Honours list. These compliments were endorsed by all.</p> <p>It was noted that it was Sarah Flannigan's last meeting, as her term of office would end on 31 August 2023. On behalf of all Trustees and Executive Board, the Chair thanked Sarah for her outstanding and exceptional work to RBG Kew, she would be greatly missed.</p> <p>Congratulations were also conveyed to the Director of Wakehurst and his team for Wakehurst being eligible for the Visit England Gold Award. The report made positive and constructive reading and illustrated the importance of investing in visitor experience.</p> <p>The Chair updated Trustees on the new Trustees recruitment campaign and noted that Trustees would be kept updated on progress.</p>

	<p>Trustees were reminded of the dates of the State of the World's Plant and Fungi symposium (11 October to 13 October 2023); all Trustees were invited to join where possible. Timings and programmes would be shared when available.</p> <p>The Chair thanked all Trustees for their input into the new Herbarium project (NHP) discussions. She paid tribute to Ian Graham and the other Science Trustees for giving the matter so much personal time.</p>
3.	<p>Apologies Apologies for absence were received from Judith Batchelar, Sir Paul Nurse (SPN) and Krishnan Guru-Murthy (KGM). SPN and KGM joined for the NHP item.</p> <p>Declarations of Interest There were no declarations of interest.</p>
4.	<p>Minutes of the meeting held on 23 March 2023 The minutes of the meeting held on 23 March 2023 were agreed as a true and correct record.</p> <p>Actions Log The Actions and Decisions Log was noted by Trustees. All actions had been discharged.</p> <p>Matters Arising Board Effectiveness A formal review on Board Effectiveness would take place in one year's time at the March 2024 Board meeting. It was agreed that a RAG-rated Board Effectiveness actions list would be reviewed quarterly (AP1: RD/RP/BA).</p> <p>A discussion on any lessons learnt would take place during the closed session at the October 2023 Board meeting.</p>
5.	<p>Director's Report The Director's report was welcomed by Trustees. It was noted that papers had been shortened by combining the report with the Finance and Government Affairs updates. Future reports would also include a page on Fundraising.</p> <p>It was reported that the Global Centre for Biodiversity and Climate (GCBC) research project was progressing well: input from the Defra's Chief Scientist had been positive, <i>[Information redacted under s.36² of the Freedom of Information Act]</i>. Government investment in projects such as GCBC, Madagascar and the Landscape Ecology Programme illustrated the changing mix of Kew's income, which reflected more effective and closer working with government.</p>
6.	<p>Strategic Risks – Annual Review The annual strategic risk register (SRR) was reviewed by Trustees. The top-rated risks included protection of the collections, cyber-attack risks, and delivery of the EVE project. Trustees were invited to give feedback on the following questions: -</p> <ol style="list-style-type: none"> 1. Did the strategic risk register adequately capture our key risks? 2. Were there any risks the Board felt were missing? <p>A query on risks surrounding artificial intelligence (AI) was raised. It was noted that AI's impact was being considered by teams across Kew and feedback also sought from Defra.</p> <p>The ARC had reviewed the SRR at their last meeting and their comments were shared with Trustees. The ARC considered cyber risks were likely to remain 'red' for the foreseeable future due to the external environment. They also expressed concerns that the EVE project had returned to 'red' and emphasised the importance of greater engagement by staff in business change.</p> <p>The impact of Risk 1 (protection of the collections) relative to the other red risks was queried. It was suggested that prioritisation of the risk be further reviewed.</p>
7.	<p>Reflections on Strategy Day and Self-Generated Income Plans following Bain Report At the Strategy Day in May 2023, the Board had considered Bain's report on the recommendations for growing commercial income from £42m currently to £100m by 2030.</p>

	<p>The paper had set out the approach and indicative examples of work against the priorities identified by Bain. These would be developed into a detailed delivery plan and budget.</p> <p>It was noted that a minimum investment of £2m would be put towards income-generating ideas in the current financial year. The focus would be on finding the right balance between short- and long-term goals. Year 1 would be dedicated to building capacity and implementing cost-effective initiatives, such as trails, wine walks, dining experiences, etc., Trustees' feedback was sought on the proposed plans and suggestions for discussions at future strategy days.</p> <p>In discussion, it was noted that: -</p> <ul style="list-style-type: none"> - The £2m to start-up the initiatives would be cash flowed from reserves (and reserves topped back up as the initiatives generated a net contribution), with the potential for additional funds if Kew outperformed its operating income targets. £4m of unallocated funds were also held by the Foundation Charity which could be requested for future investments. - Funding was needed to invest not only in business opportunities but in the organisation itself, e.g., people and IT infrastructure. - It was important to consider the impact of the focus on generating commercial income on staff, including scientists, and especially how this fitted within the perceptions of job descriptions and pay and reward. In response, it was commented that this was a 'live' issue with many discussions taking place currently. Consideration continued to be given to what Kew was aiming to achieve and the options for delivery. - It was important to consider the strategic impact of Kew's Science and how it related to commercial development. The importance of considering this early and aligning with the expectations of the scientists was encouraged. - Kew's scientific achievements were praised, and the increased research budget from Defra welcomed. However, it was commented that many of the current science facilities were below par, and it was important to upgrade these whilst also moving towards the ambitious longer-term plans for the Science Quarter and new Herbarium. - Regarding facilities, it was commented that planning permission had been granted for the Conservation Research Nursery at Wakehurst. The need to optimise the facilities and fill with plants and researchers was stressed. - Securing funds through philanthropy and pursuing Comprehensive Spending Review bids for future initiatives, was also noted. - It was suggested that Kew should be willing to take more risk and not just "do more of the same". <p>The ambitions for Kew at the Strategy Day were welcomed by Trustees. However, it was commented that management should caution against pursuing revenue at any cost and ensure full consideration of the profitability of the initiatives and Kew's resources. For the Steering Group, the importance of accelerating decision-making and focusing on high potential projects was recommended. Changing the perception of 'commercial' to 'generating income for the curiosity of science' was also suggested.</p> <p>A further detailed plan on self-generated income would be shared with Trustees in December 2023. A simple philosophy was encouraged of doing more of what worked well and stopping quickly what did not and moving on, without overthinking matters.</p>
8.	<p>Delivering science-based knowledge and solutions</p> <p>a. Interim progress against Science Strategy 2021-2025</p> <p>The Director of Science gave Trustees a presentation on the status of the Science Strategy 2021-25. Much progress had been made towards the objectives and significant new funds raised would enable further progress to be made, taking the number of research staff employed by Kew to a historic high (480 staff (of which 75 work on the digitisation project and ~65 would be considered the research faculty), 80 honorary researchers, 100 PhD students, and 50 MSc students means the "Kew Science Family" consists of more than 700 people). Details on research income breakdown, directorate numbers, success measures and publications were highlighted. Other successes outlined included: - the</p>

launch of the digitisation project (with over 1m specimens imaged), the Plant and Fungal Tree of Life, and the new role as the scientific lead in the UK government's new Global Centre for Biodiversity and Climate. Obstacles to progress, e.g., pay and academic progression, some culture issues and infrastructure, were also noted. The example of winning a £10 million grant proposal for the Madagascar project by releasing someone to work on the proposal for one month was noted. In concluding the Director of Science noted that Kew is striving for excellence.

In discussion, Trustees noted that: -

- The Madagascar project was an example of success in securing additional government grant funding.
- Line managers decided on the details of appraisals where many metrics were considered.
- The total number of scientists conducting research at Kew had increased over time.
- There are outstanding individuals within Science whose achievements and skills range from publishing, securing grants and media engagement. The emphasis on quality over quantity was noted.
- There was an impressive number of publications from the Kew Science team in 2022-23.
- Positioning Kew as a centre of excellence for mycology to encourage and attract talent to Kew was recommended, given Kew's expertise in this area.

In further discussion, Trustees emphasised that it was important to: -

- define Kew's objectives and strategies for influencing international discourse, especially in relation to important global events and conferences like COP (it was important to be clear on what Kew wanted to achieve at these events, and how it could add value and have impact),
- realise the potential of AI in conservation,
- AI is a very exciting area but will require partnerships and more people with very different expertise and experience and who could be attracted to Kew and its mission,
- *[Information redacted under s.36² of the Freedom of Information Act]*
- strive for excellence and push for ambitious goals (a suggestion of 'islands of excellence' within Kew was recommended),
- benchmark against peer organisations in terms of goals and achievements,
- think about how Kew science has an impact and what sort of input it wants to have in critical international proceedings (such as COP), bearing in mind "why" and "what we want to achieve",
- address the need for capital investment and appropriate infrastructure to support scientific excellence.

Trustees expressed enthusiasm for Kew's ambitious goals and achievements in science funding and research, encouraging further progress and partnerships with external organisations. They were pleased to note the significant progress on the Science Strategy to date.

It was **agreed** to hold a short session on digital technology/AI and opportunities for science at a future meeting (to include digital/AI strategy, partnering with other organisations (such as Microsoft, Google) etc). It was noted that Kew could be very attractive to third parties in this space. (AP2: RD/AA) The Director would also follow up with Bain on the matter.

b. Nature Unlocked (Landscape Ecology Programme)

The Director of Wakehurst gave Trustees a presentation on the latest research programme which focuses on landscape ecology and nature conservation. He explained the evolution of the programme's name from 'Landscape Ecology Programme' to 'Nature Unlocked'. The research involved the benefits of nature on physical and psychological health, carbon sequestration and biodiversity (using science to understand Nature better). Reference was made to the study on 'nature connectedness' with over 1,100 children, which demonstrated the positive effects on well-being of spending time in nature. The research also explored the role of fungi in ecosystems and the need for better standards in

	<p>measuring carbon. The carbon research is part of an HMT-funded, cross-government project of four workstreams, with pilots across England. The programme would collaborate with government agencies and leverage its research for policy development. The efforts to engage with stakeholders and align Kew's work with themes that matter to government was highlighted, as was the "power of place" to make tangible points. Kew is a science partner in the NCEA programme (Natural Capital and Ecosystem Assessment) and has been invited to be a science partner in developing the new Defra/ British Standards Institution Nature Investment Standards.</p> <p>The Chair thanked the Director of Wakehurst for his presentation and Trustees followed up with questions during lunch.</p>
	<p><i>Trustees stopped for a tour of the potential new herbarium site at Wakehurst, followed by lunch at Pearcelands Woods</i></p>
9.	<p>New Herbarium – discussion on location</p> <p>The Director gave a short presentation to Trustees on the planned investments on three major capital projects in progress or proposed for Science. Referencing the 'Vision' document and Trustees' ambition to be bold and ambitious, he noted that three major interconnected projects were being considered: -</p> <ol style="list-style-type: none"> 1. Digitising the collections: this work was already underway, and would provide universal access to the collections and digital assets, 2. Establish a new herbarium: this would serve two important purposes-- <ol style="list-style-type: none"> a. safeguarding the collections for the next 100 years, and b. providing capacity at Kew to expand our science and teaching facilities for the future. <p>It was noted that the Trustees' primary concern and responsibility was to safeguard the collections for future use,</p> 3. SQ: moving the herbarium off-site would unlock the potential to transform facilities at Kew and address key issues e.g., quality of science facilities and working environment (new labs), capacity expansion for research and collaboration, increasing student numbers, enabling greater partnerships, etc to enable delivery of Kew's strategy. <p>It had taken over four years of on-going work and discussions to arrive at this stage, with significant involvement from Trustees. In the first two years discussions focused on keeping the collections at Kew; however, advice received from government was that an off-site option was more likely to receive government support and funding; in addition planning advice was that securing planning permission to expand on the Kew site would be a significant challenge. Consequently, four options were considered by Trustees in 2021, including the options of keeping the collections on site and moving the herbarium off site. A decision was made to move the herbarium collections off site in 2021. Subsequently, a number of potential sites were identified for a new herbarium and were considered by Trustees in March 2023. Trustees agreed to pursue two of these options: Wakehurst and Thames Valley Science Park (TVSP).</p> <p><i>[Information redacted under s.36² of the Freedom of Information Act]</i></p> <p>It was acknowledged that the collections would be used in a different way in the future with the shift to genomics and the advancement in the usage of AI and digital images. It was emphasised that it was important to demonstrate the significance of committing to a centre of excellence in taxonomy, with investment in skills development.</p> <p>Sir Paul Nurse was invited to update Trustees on his conversations <i>[Information redacted under s.36² of the Freedom of Information Act]</i>. He noted that:-</p> <ul style="list-style-type: none"> - <i>[Information redacted under s.36² of the Freedom of Information Act]</i> - The success of the project was dependent upon engaging staff on the future plans and addressing any remaining concerns, - The new herbarium would be a significant advancement for taxonomy and collections research in the UK,

- It was important to link the New Herbarium with the Science Quarter, when seeking funding from government and to simultaneously progress plans for the Science Quarter and ensure it remained a priority,
- Vacating the herbarium at Kew created opportunities to engage with the space and heritage buildings.

Trustees acknowledged the concerns and issues raised by staff and noted the following points: -

- World Heritage Site status: expert advice had been sought which had indicated that this would not be impacted if the herbarium collections were moved off-site. However, further advice would be sought on the matter and continuing engagement with the relevant bodies,
- Flood and fire risks in the current herbarium: detailed reports and assessments had been conducted and considered by Trustees. However, some staff remained unconvinced by their findings. It was reported that there was minimal flood risk at the TVSP site. Further work is ongoing.

It was important to ensure there was clear and transparent documentation, especially in response to alternative visions 1 and 2 for how the herbarium could be accommodated on the Kew site presented by staff at their meeting with Trustees in June, to address staff concerns.

In further discussion, Trustees noted that: -

- their main responsibilities as Trustees were to safeguard the collections and to execute Kew's strategic plan, including an ambitious Science strategy. The decision to move the collections off-site had been made in this context.
- *[Information redacted under s.36² of the Freedom of Information Act]*

Trustees [agreed](#) that a note/letter be drafted and agreed by Trustees to staff addressing their three main issues, including alternative visions and the World Heritage site, while assuring the staff that expert reports had been diligently considered. [AP3: AA/EG/Chair and Trustees](#)

The Chair reiterated sincere thanks to the Chair and Trustees of the Science Advisory Committee and all other Trustees for their valuable input into the matter. Grateful thanks were also conveyed to management for their help in supplying the information required.

Decision

The Trustees considered the two potential sites for the new herbarium: TVSP and Wakehurst. It was noted that whilst TVSP was the preferred option, Wakehurst was still a credible alternative. Costings for both sites were outlined.

In the detailed discussion that followed, the following points were noted: -

- *[Information redacted under s.36² of the Freedom of Information Act]*
- The preferred geographical location at the TVSP was an important factor. The importance of being close to NHM and British Museum (BM) would foster collaborations and interactions among researchers, creating a 'community hub'.
- *[Information redacted under s.36² of the Freedom of Information Act]*
- Further detailed feasibility studies and commercial negotiations with Reading University on TVSP were important.
- The significance of a well-thought out communications strategy was noted.
- The importance of regular/frequent consultation with staff was also acknowledged - it was important to address their concerns and objections, and to garner support for the project,

It was emphasised that it was important both to protect the collections and deliver the Science Quarter: both would be transformational for RBG Kew. So, a bold, exciting and ambitious vision should be built around both aspects.

Following further discussion, Trustees [agreed](#) to: -

	<ul style="list-style-type: none"> - The intent to relocate the herbarium collections to a new, purpose-built facility on the TVSP site, subject to further feasibility, risk assessments and due diligence, including commercial negotiations, - The process was expected to take approximately six months, at which point Trustees would make a definitive decision, informed by the insights gathered during this phase, - The off-site relocation of the herbarium collections was required to fulfil Kew's obligations to protect and preserve its collections for future generations and to deliver its strategic plan, including its Science strategy and the Science Quarter. <p>It was noted that in six months Trustees should receive -</p> <ol style="list-style-type: none"> a. <i>[Information redacted under s.36² of the Freedom of Information Act]</i> b. clarification of discussions with Reading University on the commercial aspects, including the costs and conditions related to the preferred site at TVSP. <p>On funding, it was clarified that Defra had allocated £15m to date for science infrastructure, with £10m for digitisation and £5m for progressing the new herbarium.</p> <p>In response to a query on which collections would be moved, and whether it included the Fungarium, it was remarked that the expectation was that this would remain at Kew; however, this was still under consideration. The critical importance of proper resourcing was highlighted, including the importance of following a well-established and appropriate process.</p> <p>The Chair thanked Trustees for their thoughtful input into the discussion. The aim of maintaining high ambition, noting the significance in addressing the biodiversity crisis, was reiterated.</p> <p>It was agreed that the Director would circulate details of the work that would be carried out during the six-month period to Trustees, and if the decision is made to proceed, a Trustee-led steering/project group will be established . AP4: Director</p>
10.	<p>Draft Annual Report and Accounts (ARA) 2022/23 (including consideration of RBG Kew as going concern)</p> <p>It was noted that performance in 2022/23 had shown continued growth, with self-generated income streams performing better than forecast, which had led to an increase in Kew's unrestricted reserves to fund projects in 2023/23 and 2024/25.</p> <p>The "going concern" basis was deemed appropriate for the preparation of the 2022/23 accounts. The ARA had been reviewed and was recommended by approval by the Audit and Risk Committee (ARC).</p> <p>Trustees approved:</p> <ul style="list-style-type: none"> • the draft ARA in principle, subject to any finalisation amendments. The final ARA would be circulated to the Board for approval by correspondence (w/c 3 July) following finalisation of the audit process and ARC review on 29 June 2023, • An increase in the general unrestricted reserve by £0.2m to £6.7m, • Confirmation that the "going concern" basis was appropriate for preparation of the 2022/23 accounts, • The ARA to be signed by Chair and Director, and • The Letter of Representation to be signed by the Director
11.	<p>Annual Review of Terms of Reference for Boards and Committees and Kew Enterprises Limited</p> <p>It was noted that the annual Terms of Reference had been updated so that they aligned with both the "Governance at Kew" and "Defra/Kew Framework" documents. Changes included delegating authority for certain matters to Committees in line with feedback from the Board Effectiveness Review.</p> <p>Trustees approved the revised Terms of reference for the Board of Trustees, Committees of the Board and Kew Enterprises.</p>

12.	Audit and Risk Committee Annual Report Trustees noted the ARC annual report, which summarised the ARC activities in 2022/23. The Chair of ARC expressed gratitude to the Head of Governance and Director's Office for her work on the report. Additionally, appreciation was extended to the Chair and members of ARC for their important efforts in overseeing the Committee's work.
13.	Modern Slavery Statement 2022/23 It was noted that the annual statement (a statutory requirement) had been reviewed by ARC. Trustees approved the Modern Slavery Statement 2022/23.
14.	Updates from Committees The synopsis of the various Committees/Board meetings since the last meeting were noted by Trustees.
15.	Any Other Business a. Approval of contract for architectural services – New Herbarium Trustees discussed the request to approve the contract for architectural services for the new herbarium. They noted the following points in discussion: - <ul style="list-style-type: none"> - The selection process had involved an extensive procurement process in line with Kew's Procurement Strategy and processes. - The preferred architects stood out during the selection process by delivering an excellent presentation and impressing the panel. - In response to a query of the involvement of the Board in such a high value project, Trustees were assured that their role at this stage was only to approve the contract for the appointed architects, with specific costs to be agreed over a defined period for later stages. - A Trustees-led steering group will be established to provide further oversight and guidance on the project's development. - It was important that the architects focus be on comprehending the project's functional requirements and needs. <p>Following further brief discussion, Trustees approved entering into a contract with Fielden Clegg Bradley Studios for architectural services as detailed in the paper with delegated authority to the Director to sign the contract.</p> b. Draft agenda for 12 October 2023 Board meeting was noted by Trustees.
16.	Dates and Times for next meetings The dates and times for the next meetings were confirmed as: <ul style="list-style-type: none"> - 12 October 2023 – 10.00am - 7 December 2023 – 10.00am - 21 March 2024 – 10.00am - 25 April 2024 – Strategy Day – 10.00am - 20 June 2024 – 10.00am - 10 October 2024 – 10.00am - 5 December 2024 – 10.00am

¹ Section 40(2) of the Freedom of Information Act provides that:

Information is exempt where either:

1. disclosure would contravene data protection principles, or
2. disclosure would contravene the right to object under the Data Protection Act, or
3. the information is exempt from the right of subject access under the Data Protection Act.

² Section 36 of the Freedom of Information Act 2000 provides that: Information is exempt if its disclosure under this Act would be likely to have any of the following effects:

1. prejudice collective Cabinet responsibility;
2. inhibit the free and frank provision of advice and exchange of views for the purposes of deliberation; or
3. prejudice the effective conduct of public affairs.