

THE SOCIETY FOR EXPERIMENTAL BIOLOGY

Report and Financial Statements 2022

Company number: 01314879 Charity number: 273795

Approved by SEB Council in June 2023

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OBJECTIVES AND ACTIVITIES

DEFINITION OF EXPERIMENTAL BIOLOGY AND ITS IMPACT ON SOCIETY

The stated objective in the Articles of Association for the Society for Experimental Biology (SEB) is to promote the art and science of experimental biology in all its branches.

Strategic Review 2020 – 2025

The Strategic Review 2020 – 2025¹ set out the Society's principal objectives for that period.

- To encourage and support the practice of, and scientific careers in experimental biology in research and development programmes in universities, institutes, government bodies and the private sector throughout the world.
- To help the public understand the value that experimental biology brings to their lives and how to use information derived from experimental biology to make informed decisions.
- To develop and maintain thriving partnerships with other learned societies that have common
 objectives and to encourage support for experimental biology from decision makers and
 funding organisations.
- To set the highest ethical standards in all the Society's activities in order that it is seen as an open and transparent organisation that holds the improvement of the lives of people and the environment as core values.
- To maintain robust financial performance and governance structures that support the above aims.

The Directors/Board of Trustees (Council) review the objectives periodically. In 2022 the charitable objectives were, as set out below.

The Society aims to promote, and increase the influence of Experimental Biology within the scientific community and Society by:

- developing the field of, and scientific careers in, experimental biology;
- developing education and public awareness in experimental biology;
- developing collaborative partnerships;
- maintaining transparency, ethical and environmental sensitivity in every sphere of activity;
- ensuring the financial viability of the Society.

In pursuit of its aims SEB's activities include:

- the organisation and sponsorship of experimental biology conferences, both independently and in collaboration with other life science societies;
- the publication and dissemination of a range of scientific literature;

¹https://www.sebiology.org/who-we-are/structure-and-governance/strategy.html

- education, outreach and careers engagement (often in collaboration with other life science societies);
- the administration of travel grants for young researchers;
- offering membership to experimental biology researchers in academia working at postgraduate level and above.

The activities that provide direct public benefit include:

- Publishing publicly available journals and scientific texts;
- Organising scientific conferences and courses that are open to all;
- Providing educational materials for outreach;
- Participating in sessions at public science festivals;
- Developing the subject of experimental biology;
- Developing opportunities for young scientists and careers in the field.

SPECIFIC OBJECTIVES FOR 2022

The Society's specific objectives for 2022 were to build on the lessons learnt from the positive opportunities presented during our operation during the pandemic (virtual working, virtual conferences etc.) and look to regain and improve upon our engagement and communication with the membership in the coming year.

The Society sought to continue to deliver, across all the pillars of the strategy, specific objectives for 2022.

- Deliver a range of successful SEB sponsored and supported events, including:
 - o the Annual Conference in Montpellier in July 2022;
 - o two satellite meetings (cell biology and animal biology in Montpellier July 2022);
 - o a Careers Week in November;
 - o an early career researcher Symposia in Helsinki in October;
 - o regular Journal of Experimental Botany (JXB) virtual Seminars;
 - o virtual Seminars for the other SEB Journals;
 - o a plethora of outreach and education activities for members and the public.
- Plan for the centenary celebrations: developing plans for a year of activities in 2023 to celebrate the sciences of experimental biology and their impact on the wider society.
- Continue to deliver high quality peer reviewed journals.
- Enhance the relationship between the journals and the Society, demonstrating the impact of the science published in our journals to members and the public.
- Improve Member engagement through the appointment of a Membership manager, who will review and improve upon a membership engagement plan.
- Enhanced Communications with non-members and potential new partners.

- Maintain the provision of Grants, actively promoting the new grants introduced in recent years, to support the membership and wider community.
- Further expansion of the Outreach, Education and Diversity (OED) portfolio.
- Embed the new SEB website and improve the Customer Relationship Management (CRM) system.

Criteria for success

The criteria for measuring success in these objectives were:

- Numerical data in relation to publications (e.g., impact factors, download numbers etc.)
- Numbers of early career scientists participating at events
- Attendance numbers at events organised by the Society and analysis of the feedback from those attending Society events.
- Numbers and type of grants awarded.
- Engagement levels of membership surveys
- Feedback from members and non-members attending OED and/or career support events.
- Communication statistics; aiming for higher levels of engagement from members and the public.

The achievements that helped the Society meet its annual objectives are set out in the "Achievements" section below.

The trustees confirm that they have complied with the duty in Section 17 of the Charities Act 2011 to have due regard to the Charity Commission's general guidance on public benefit, "Charities and Public Benefit". The Society has referred to this guidance when reviewing its aims and objectives and planning future activities.

ACHIEVEMENTS

EDUCATION, OUTREACH AND DIVERSITY (INCLUDING CAREER DEVELPOMENT)

EVENTS

GRANTS

MEMBERSHIP

ENHANCED COMMUNICATIONS

PUBLICATIONS

INFRASTRUCTURE

GOVERNANCE

KEY ACHIEVEMENTS IN 2022

The Strategic plan gave a significant emphasis to further developing outreach, education and public engagement that will enhance the public benefit brought about by the work of the Society. This work was further developed in 2022.

The following report on Outreach and Education and Diversity presents the many achievements this year.

OUTREACH, EDUCATION AND DIVERSITY



Throughout 2022, we have seen increased member recognition and engagement with the Societies outreach, education, and diversity (OED) activities. As well as continued high attendance at career development events, we founded a new OED member working group which is steadily growing in numbers. With the efforts of our OED Trustee, Sheila, this has created a community of members who are actively engaging in the OED work of the Society. We have therefore noticed more direct requests for specific diversity initiatives, ideas for developing our online offering, and more OED annual conference session and symposia proposals.

OED activities are also helping the Society meet other key aims from our 5-year strategy. We have seen an increased level of attendance by non-members at career building events and their applications for grants. We are extending the reach and engagement of the Society and attracting and developing the next generation.

MEMBER ENGAGEMENT

OED member working group.

At the end of 2021, we put a call out to SEB members to join a new working group, concerned with the areas of Outreach, Education and Diversity, with the purpose of generating ideas for new initiatives, creating resources, representing a broader range of viewpoints on OED areas that affect our members and the wider experimental biology community.

Across 2022, we held online meetings every two months. Initially we had gained interest from approx. 20 members, and numbers continued to grow by 30% thanks to the work of the OED Trustee in promoting the group.

The members of this group are very engaged and have begun taking lead roles for initiatives and activities from running OED sessions at the annual conference, creation of an online depository for teaching and practical resources, and the formation of an awards nomination taskforce.

Mentoring scheme

Although the SEB centenary year begins in 2023, we launched our first celebration initiative at the end of 2022. This is a new peer mentoring scheme for members of the SEB to share experiences and help one another grow their careers. We hope to pilot the scheme across 2023, and if successful we will roll it out further in future years.

In total 41 people signed up and 33 partnerships were matched (some mentors had multiple mentees). Initial training sessions run at the end of 2022 were all well received.

The scheme will continue across 2023, with periodic feedback surveys to guide partnerships and aid analysis of impact.

OED offering at SEB events

Increased engagement with our membership has led to renewed uptake of members submitting proposals for OED sessions and events through the Society's funding channels. In December 2022, three of our members secured funding and support to hold a symposium on decolonizing and diversifying the bioscience curriculum. Our OED working group also created a 1-day interactive session at the annual conference focusing on education and diversity in the biosciences. Due to the success of this session, a further 6 OED sessions are planned for the 2023 Centenary Conference.

CAREER DEVELOPMENT

We also engaged our members by continuing to offer a range of career development opportunities for science professionals and researchers with a program of events and resources including seven interactive workshops and a range of on-demand career building resources.

Career Building Workshops

These workshops covered the topics of *The Publishing Process, maintaining your wellbeing during your PhD, finding your impact narrative, Leading and Supporting Others for Early Career Researchers* and *New Principal Investigators*. These were very positively received; a summary of the sessions and feedback reports can be found below.

"The Publishing Process" – held on the 25th January 2022. This 30-minute webinar, followed by 30-minutes for questions, was run by Surayya Johar, Publishing Editor of the Journal Biology Letters (Royal Society). This discussed all parts of the publishing process; from how to select the right journal for your work, the different policies journals may have, and how to promote your published paper afterward.

- Average score of 4.4/5 for trainer and 4.2/5 for the content of the session
- Number of available places: unlimited
- Number of members who signed up: 146
- In general attendees enjoyed getting an overview of the publishing process and found the online format accessible.

Finding your impact - Two identical sessions were both held on the 15th March 2022. The session was lead by Dr Sophie Morris. The sessions explored the meaning of impact to the researcher, the research and wider society. Attendees used case studies to define their own impact narrative specifically focused on basic or fundamental research projects. They were able to translate their impact narrative into an exciting research story for the public, considering how to reach different target audiences.

- Participants increased in confidence from 2.7/5 to 4/5
- Number of available places: 30 (15 in each session)
- Number of members who signed up: 23
- Feedback from participants identified the session as "very useful" and said they "loved the session".

"Maintaining your wellbeing during your PhD" – Two identical sessions were held on the 8th and 15th February 2022. The session was led by Dr Natalie James (Research Coach). During this online 3-hour interactive workshop, participants considered what contributes to good wellbeing, common triggers for workrelated stress and anxiety, and identified practical strategies to proactively support your wellbeing.

- Average score of 4.8/5 for trainer and 4.5/5 for how useful and enjoyable the session was
- Number of available places: 40
- Number of members who signed up: 35
- Final attendance: 22

Poster Design & Presentation Skills for Scientists and Researchers - This was a practical 2-part workshop (total 8 hours), where participants learnt how to design and present a poster in a way that is engaging and interesting for your audience. They began with understanding their audience, moving on to the basics of graphic design, how to get attention in a digital world, and the tools used to design a poster. Finally, they focused on delivery: how to attract readers, how to keep them interested, and how to give them something to think about when they walk away.

- 100% of participants said they "strongly agree" that it was helpful to offer this workshop ahead of the annual conference.
- All participants felt they had a much better understanding of how to plan a poster, and increased knowledge of design and presentation.
- Number of available places: 100
- Number of members who signed up: 98

Leading and Supporting Others for Early Career Researchers and New Principal Investigators" – Two identical sessions were held on the 14 and 21 September 2022. The session was led by Dr Natalie James (Research Coach). During this online 3-hour interactive workshop, explored the role that emotional intelligence plays in the context of leadership, management and supervision.

- Average score of 4.6/5 for trainer and 4.3/5 for how useful and enjoyable the content
- Number of available places: 60
- Number of members who signed up: 39 (1st session: 14/ 2nd session:
 - 25)

- Final attendance: 25 (1st session: 9/ 2nd session: 16)
- International attendance from the following countries: Portugal, Nigeria, Estonia, UK, Sweden, Germany, Belgium, Canada, India, Mexico, Iran, Australia, USA, Ireland, Norway, and Spain

We used the career building events as an opportunity to engage with members more actively. Attendees were asked to submit suggestions for future events which has shaped a full program of career development opportunities across 2024 and we are continuing to learn lessons from our interactions including:

- 1. Running similar workshops in concurrent years leads to lower attendance.
- 2. Non-members are increasingly engaged and willing to pay for the sessions. We now need to learn how to capture their interaction to secure new memberships.
- 3. Over subscription of 30% maximises attendance.
- 4. Sessions run in duplicate (one AM and one PM session in UK time) supports attendance of members from multiple time zones.

ON-DEMAND RESOURCES

Since the formation of the new website, we have created several on demand resources for members to use. This includes: public engagement activities to download; recordings and on demand videos of career development workshops; as well as written guides to aid career progression. The public engagement resources have proved very popular and are some of the most highly visited assets on the SEB website. However, the on-demand career workshop videos may require additional promotion to boost site visits and maximise their usefulness to members.

A summary of the available assets and number of people accessing them is below:

Public engagement resources	Date Published	Visit count
Plant Cell Spot the Difference Game	19/08/21	522
How does a whale stay warm?	19/08/21	147
The carbon cycle crossword puzzle	04/10/22	242
Make your own microscope	04/10/22	81
Influential Black Biologists: An educational resource Children's worksheet	26/10/22	95
Influential Black Biologists: Teachers' lesson plan	26/10/22	68

On-demand career development resources	Date Published	Visit count
Public Engagement 101	19/08/2021	2
A Quick Start Guide to Connecting with Industry	19/08/2021	4
Careers in Academic Publishing	12/10/2021	3
Successful Grant Writing	02/03/2022	75
Time Management for Researcher and Academics	02/03/2022	69
The Publishing Process (Royal Society)	11/03/2022	92
Getting started with Evaluation	13/10/2021	3

OUTREACH

Throughout 2022, we amplified our focus on widening the reach of the Society and encouraging the next generation of experimental biologists by engaging with undergraduate level bioscience students. On the 28th of September 2022, the OED manager delivered a talk to a group of 200 UG students at the University of Bristol on careers in biology and the benefits of joining a Learned Society. This was well received and resulted in 12 enquiries for membership from the students. We also used this event to launch a new resource page designed for undergraduate on the SEB website: https://www.sebiology.org/careers/resources-for-undergraduates.html

RSB Policy Lates Events

The SEB also continued our previous co-sponsorship of a series of four Policy Lates Events hosted by the Royal Society of Biology (RSB). These sessions brought together a panel of experts for an informal debate on contemporary science policy topics and allowed for audience participation in a questionand-answer session. The following topics were covered last year:

19th July 2022 – <u>Can One Health prevent pandemics?</u>

This online panel discussion explored how a One Health approach can be integrated into research and policy, for prevention of and response to future pandemics. The expert panel of speakers discussed the challenges and possible solutions facing One Health researchers in carrying out research and advice to policymakers, alongside those facing policymakers in integrating One Health evidence and expertise into policymaking processes. The event was chaired by Professor Louise Cosby FRSB, head of virology, Agri-Food and Bioscience Institute Northern Ireland, and honorary professor of microbiology at Queen's University Belfast.

20th September 2022 - <u>Tackling inequity in clinical research.</u>

The importance of good clinical trials has been particularly visible to the public with the emergence of COVID-19 and the work undertaken to research and develop vaccines and therapeutics. Devastatingly, the pandemic has also laid bare the inequalities in health outcomes among different communities in our society. To better understand and tackle inequalities of the research system, we must address participant diversity in clinical research, and how barriers to this can be overcome. This event focused on clinical trials and population studies, and explored how addressing inequity in clinical research design can benefit public health and wellbeing. An expert panel covered innovative initiatives, research funding incentives and policies that support equitable research design.

23rd November 2022 - What bioscience skills are needed?

Biological research and innovation are evolving. New ways of doing biological science, enabled by advanced digital technologies, systems thinking, and engineering biology, for example, are emerging. This is alongside new expectations for the sector to address challenges for health, sustainable development and economic benefit. The next generation of bioscientists need the skills to tackle the sector's future challenges. According to a 2018 Nuffield report, only 32% of UK bioscience undergraduates go on to work in the sector. Promoting transferable skills and increasing emphasis on inter-, multi- and trans-disciplinary work can push discoveries to new frontiers. In this Policy Lates, we heard perspectives on what bioscience skills are needed for the future, and how scientists can be inclusive of, and responsive to, the values of the global society, from a panel of experts.

THEMED WEBINARS

In late 2020, we introduced a new virtual lecture series themed around significant dates or holidays in the calendar which proved very popular and have continued since. In 2022, we held 4 Christmas themed webinars of a short 30-minute talk aimed at a lay audience, followed by an audience Q&A session. The talks were designed to have a broad interest to be engaging for all members and interested parties no matter their background or career level.

The lectures were very well received with over 100 participants of ages ranging from 14-60+. On average they were scored 4.5/5 for enjoyability, 4.5/5 for the speakers, and 4.4/5 for the level of science discussed. The recordings of all the videos can be accessed via links in the associated artwork below.



Tuesday, 13 December 2022 - Spying on whales and walrus from space to safeguard their future.



Wednesday, 14 December 2022 - The Christmas Bird Count: From Historical Conservation to 21st Century Community Science



Thursday, 15 December 2022 - Development of a Christmas tradition: structure, ecology and evolution of mistletoes



DIVERSITY AND INCLUSION

Award judging criteria

In the past year, the Society has taken significant steps to improve our awards judging criteria and processes to ensure transparency, openness, and fairness. We have shifted our focus away from judging scientific excellence solely on impact factors and have expanded the definition to include other activities such as teaching, mentoring, and outreach work. By doing so, we hope to diversify our nominations pool and give recognition to historically marginalized groups, particularly women, who are more likely to dedicate time to these aspects that are often ignored in awards judging and promotions.

To make our new judging criteria and processes accessible and understandable to all, we have made them publicly available on the SEB website, and our nomination forms now include a clear set of questions that directly relate to the judging criteria. Nominees will have a better understanding of how to put forward a successful application and what they can improve for future years, thus contributing to our five-year aim of embedding inclusion and diversity into all areas of the Society.

In the upcoming year, we will trial these new criteria and processes and discuss any necessary amendments and improvements at our Council meeting in March 2024. We are committed to making our awards program more inclusive and equitable and look forward to seeing the positive impact of these changes.

Code of Conduct

The Code of Conduct was also updated to include virtual events and social media engagement to ensure that all members feel safe to open scientific debate and conversations. This is supported by an internal anti-harassment policy to deal with negative social media posts and online abuse.

In addition, a number of grants in support of a range of communities were introduced in 2022; information is provided in the section on grants, see pages 33-35.

EVENTS

The Society was pleased to be able to return to hosting in person events in 2022; legacy COVID issues however brought a significant amount of uncertainty to event planning.

Following on from the success of the first virtual conference in 2021, the Annual Conference held in Montpellier was the first fully hybrid conference organised by the society. The conference offered the opportunity for those registered to attend all sessions and talks in person or virtually. A new virtual registration rate was introduced which allowed us to reach an audience who may not have been able to attend due to economic considerations.

Information on the individual events is set out below:

Annual Conference

The Annual conference took place on 5 - 8 July 2022, at the Le Corum Conference Centre in Montpellier, France.

Council had taken the decision to hold the annual conference as a hybrid event to address the risks and uncertainties from planning a conference as the world emerged from COVID restrictions. At the planning stage for the conference, there were several uncertainties including the feasibility of conference attendance in person and possible restrictions and additional requirements for international travel. In addition, there were delays in securing and finalising operational plans with the venue. Internal event planning (session scheduling etc) was also delayed and caused a detrimental knock on effect to all involved in the planning, execution and attendance at the conference.

534 people attended the annual conference (502 in person and 32 virtual registrations.) The attendees were made up of delegates, speakers, session organisers and poster presenters. This was a significant reduction from the 2021 conference that had 930 attendees. Whilst delegates were lower, they seemed to appreciate meeting in person after attending online only events for such a long time.

Delegate preference for in person or virtual participation is a movable feast; we will know more after a few years of operation in the post COVID hybrid conference reality. Whilst we did offer a virtual registration, this was deliberately not promoted until closer to the event to increase the in-person registration. In addition, the registration numbers may well have been reduced as a direct result of unforeseen issues with the abstract management system.

Membership type	Registration numbers	Virtual registration	Total number of bookings	Percentage
Early Career Scientist	77	4	79	15%
Retired member	1	0	1	0.4%
SEB Full Member	132	12	147	29%
SEB Student Member	152	7	157	28%
Non-Member	127	9	148	28%

REGISTRATION BY MEMBERSHIP TYPE

All in person registration where also able to view the conference virtually. The highest group of members who attended the conference were SEB Student Members and SEB Full Members.

MEMBERS VS NON-MEMBERS



When completing the feedback form for the conference 75% of people identified themselves as members. This is line with the virtual conference which took place in 2021 last year where there were 76% of delegates who attended and participated in the conference where members.

Attendance by delegate location

The 2022 Annual conference had a large percentage of delegates from the United States, United Kingdom, France, Germany Australia, and Canada.

The 2021 virtual conference had delegates attend from a larger group of countries, outside of Europe, Australia, the United States and Canada.

The Events, OED and Membership team are working on working on a plan to target and extend the reach for future delegates from low- and middle-income countries to build on the work to extend the reach of SEB which was started in 2021.



There were 596 unique visitors who logged into the Underline website to view the programme and the sessions. The discrepancies between the 533 who registered to attend the conference also accounts for the SEB and Underline staff who logged in to access and monitor the platform during the conference.



Out of the 596 unique visitors on the Underline website², there were 65,749 total page views for the event. This represents each page which was clicked on the website including repeated views on a single page.



The majority of the people (over 70%) who logged on to the Underline Site used their mobile to access the website.

128 people viewed the posters on the Underline site and there were 78 views of the exhibitor pages.

² There were 596 unique visitors who logged into the Underline website to view the programme and the sessions. The discrepancies between the 533 who registered to attend the conference also accounts for the SEB and Underline staff who logged in to access and monitor the platform during the conference.

CONFERENCE FEEDBACK

A delegate survey was conducted after the Annual Conference and was completed by 20% of the attendees (109 people).

33% of delegates who completed the feedback survey heard about the conference through word of mouth. 22% through email and 19% of delegates heard about the conference through other methods.



Nearly half of the people surveyed said the conference was not good value for money; the pricing of the conference is comparable to other conferences within the industry.



The responses from the feedback survey indicated that talks, sessions, and networking opportunities were the participants favorite parts of the conference.



The least favorite part of the conference for the 109 people who completed the feedback survey were the issues surrounding the abstract submissions, registration, and the online programme. This was due to significant problems with the new CRM system, in particular the inadequacy of the abstract handling system: at a late stage we had to abandon use of the CRM abstract handling system and revert to previously used discrete software and handle the transition from abstract submission to generating a programme manually. This was time consuming and caused severe delays and problems for all involved.

Plans to improve the annual conference experience:

- We will use the old discrete software to manage abstracts for the centenary conference.
- For future conferences we will collect feedback using the app or Underline platform to ensure a larger take up from delegates to complete the feedback form.
- We plan to update our University Contacts list to ensure information regarding the conference can be distributed to a larger group of potential delegates and members.
- We will be focusing on more networking opportunities in the centenary conference.
- Resources will be created to assist speakers with preparing their talk and posters.

Symposiums

Two symposiums were held in 2022, one for the Animal Section and the other for the Outreach Education and Diversity sections of the Society.

ECR symposia, Helsinki

An Early Career Researcher (ECR) Symposium in Animal Biology took place at Tvärminne Zoological Station, Finland from 3rd October to 7th October 2022. The Symposium brought together early career researchers from across the Animal Biology Section to showcase their work, meet and connect with other ECRs within a unique setting in picturesque southern Finland.





ECRs and students where the targeted attendees for the event; an analysis can be seen below.



Over 65% of delegates had not attended SEB events previously and this was their first experience of an SEB event



The event managed to extend the reach of our events targeting delegates from previously underrepresented regions such as the USA.



24% of delegates funded their travel through their university. 20% of delegates funded their attendance from other grants.



Improving key skills such as presenting their research was one of the key reasons for attending.







There were many attendees who were members who had not attended an SEB event before or were non-members (presenting an opportunity to gain new members.)

This format may serve as a useful way for ECRs to be introduced to the Society, attendance at an ECR focused smaller event may be a less stressful environment for them to become aware of what the Society can offer them (as a precursor to attendance at the annual conference.) The Society is considering introducing similar types of events in future.

Decolonising and Diversifying Biosciences Education Symposium , Cambridge

The SEB Decolonising and Diversifying Biosciences Education Symposium took place at Robinsons College, Cambridge, UK on the 19th/20th December 2022. The symposium brought together a variety of scientists across the OED sector. This was a hybrid event.

The event had 75 attendees which consisted of in person attendees and online attendees. (50 in person and 25 online registered)



The event attracted delegates across the range of their career stages.

A large portion of people who attended were not members of SEB.



As with the previous symposium, this was the first SEB event many non-member delegates had attended.



The event was based in the UK so had a large proportion of UK attendees.



A large proportion of attendees were self-funded.



Keeping up to date with research was one of key reasons for attending.



A large proportion of people who attended were speakers.





Journal webinars

Journal webinars were introduced in 2021 to strengthen the relationship between the journals and the Society and to help bring highly reviewed journal papers to a wider audience. The science is disseminated through 1-hour webinars available to the SEB membership and general public to meet the SEB charitable objectives to expand the reach and provide avenues for public awareness in experimental biology.

The following webinars were organised in 2022:

Name of the webinar	Authors	Link to paper	Date
JXB Webinar: How and why do bees buzz? Implications for buzz pollination	Mario Vallejo-Marín	https://acade mic.oup.com/ jxb/article/73 /4/1080/6372 437	19 th October 2022
JXB Webinar: Field-grown ictB tobacco transformants show no difference in photosynthetic efficiency for biomass relative to the wild type	Ursula M Ruiz-Vera, Liana G Acevedo-Siaca, Kenny L Brown, Chidi Afamefule, Hussein Gherli, Andrew J Simkin, Stephen P Long, Tracy Lawson, Christine A Raines	https://acade mic.oup.com/ jxb/advance- article/doi/10 .1093/jxb/era c193/658563 <u>4</u>	26 th October 2022

Name of the webinar	Authors	Link to paper	Date
TPJ Webinar: Real-time	Gaurav Singh, David	https://online	9 th February
tracking of root hair	Pereira, Stéphanie	library.wiley.c	2022
nucleus morphodynamics	Baudrey, Elise	<u>om/doi/10.11</u>	
using a microfluidic	Hoffmann, Michael	<u>11/tpj.15511?</u>	
approach	Ryckelynck, Atef	<u>af=R</u>	
	Asnacios, Marie-Edith		
	Chabouté		
TPJ Webinar: Symbiotic	Francesco Venice,	https://doi.or	13 th July
responses of Lotus	Matteo Chialva, Guido	<u>g/10.1111/tpj</u>	2022
japonicus to two isogenic	Domingo, Mara Novero,	<u>.15578</u>	
lines of a mycorrhizal	Andrea Carpentieri,		
fungus differing in the	Alessandra Salvioli di		
presence/absence of an	Fossalunga, Stefano		
endobacterium	Ghignone, Angela		
	Amoresano, Candida		
	Vannini, Luisa Lanfranco,		
	Paola Bonfante		
PBJ Webinar: Plant made	Rahul Singh, Zhi Ren, Yao	https://online	25 th May
chewing gum to decrease	Shi, Shina Lin, Kwang-	<u>library.wiley.c</u>	2022
SARS-CoV-2 infection,	Chul Kwon, Shanmugaraj	<u>om/doi/10.11</u>	
transmission and	Balamurugan, Vineeta	<u>11/pbi.13643</u>	
disruption of dental	Rai, Francis Mante, Hyun		
plaque	Koo, Henry Daniell		
CP Webinar:	Andrea J. Morash, Sara	https://acade	28 th
Understanding the unique	R. C. Mackellar, Louise	<u>mic.oup.com/</u>	September
physiology of	Tunnah, David A.	<u>conphys/articl</u>	2022
elasmosbranchs for their	Barnett, Kilian M.	<u>e/4/1/cow03</u>	
conservation	Stehfest, Jayson M.	<u>6/2951709?lo</u>	
	Semmens, Suzanne	<u>gin=false</u>	
	Currie		
		https://acade	
	Andrea J Morash,	mic.oup.com/	
	Jeremy M Lyle, Suzanne	conphys/articl	
	Currie, Justin D Bell,	<u>e/8/1/coz105</u>	
	Kilian M Stehfest, Jayson	/568/092?log	
	M Semmens	<u>in=talse</u>	
	Donnio D. H. Hatastak	http://	
	Dennis D. U. Heinrich,	<u>nttps://acade</u>	
	Joure L. Kummer, Andrea	<u>mic.oup.com/</u>	
	J. Wordshi, Sue-Ann	<u>compriss/articl</u>	
	VValson, Companya Alishalla	(2205222)	
	R Houng Dhilin I	n-false	
	Munday	11-10150	
	wiuliuay		
	I		l

Name of the webinar	Authors	Link to paper	Date
CP Webinar: The	Heather M. Bryan, Chris	https://acade	5 th October
conservation physiology of	T. Darimont, Paul C.	<u>mic.oup.com/</u>	2022
predators, prey, and	Paquet, Katherine E.	<u>conphys/articl</u>	
people in changing	Wynne-Edwards, Judit E.	<u>e/2/1/cou010</u>	
ecosystems	G. Smits	<u>/326925?logi</u>	
		<u>n=false</u>	
CP Webinar: Differential	Annelise M Del Rio,	https://acade	13 th
sensitivity to warming and	Gabriella N Mukai,	<u>mic.oup.com/</u>	December
hypoxia during	Benjamin T Martin,	<u>conphys/articl</u>	2022
development and long-	Rachel C Johnson, Nann	<u>e/9/1/coab05</u>	
term effects of	A Fangue, Joshua A	<u>4/6317986?lo</u>	
developmental exposure	Israel, Anne E Todgham	<u>gin=false</u>	
in early life stage Chinook salmon			

In November, Trustees and staff held an additional governance meeting to review the events planning processes. This served as a reminder of existing processes and discussions on improvements to be made in the future. The events and communications team will be implementing proposed improvements in 2023.

GRANTS

The Society facilitates the award of two types of travel grants; the Company of Biologists travel grant and the SEB Travel grant; available to those participating at the annual conference. In recent years we have also introduced a number of additional grants, such as the outreach grant. Details are set out below.

Company of Biologists Travel Grant

In 2022, the Company of Biologists awarded the Society a total of £8,184 to distribute in grants to young scientists in support of their attendance at meetings, training courses and lab visits. Together with unspent funds rolled over from 2021, this gave us a total of £37,500 to distribute.

In 2022, we saw an increase in number of applications as in-person events and availability to travel returned to normal following the pandemic. This was also reflected in the SEB Annual Conference 2022 in Montpellier, a symposium for early career researchers in the field of animal biology took place in Helsinki in September, and an OED symposium on the topic of decolonising the bioscience curriculum in December at Cambridge University. The funding enabled us to support 47 students and early career researchers, spending £22,120 of the total money awarded to us by the Company of Biologists, with an average of £470 awarded per applicant. Reports from travel recipients are published on the SEB's news page on our website as well as bi-annually in the SEB member magazine.

The SEB Annual Conference Travel Grant

In addition to the Company of Biologists grant, the Society also provides £20,000 of funds to support students attending and presenting at our Annual Conference. In 2022, we supported 28 students with attendance at SEB's 2022 Annual Meeting in Montpelier. All applicants received the full amount requested in their applications and a total of £10,530 was distributed in grants. The average amount awarded was £376 per applicant.

For the 2023 centenary conference in Edinburgh, we plan to increase the amount of funding available, and have a marketing scheme to include a focused promotion to members in low-income countries to ensure we support a greater number of students with attendance at the meeting.

OUTREACH AND OTHER GRANTS

We have continued our commitment to ensure equality, inclusion, and diversity in all our activities and encourage members to make similar commitment. In 2021 we launched a new Outreach Grant to provide funding for events and initiatives that promote the art and science of experimental biology and its researchers. Members can apply for funding of up to £1,000, and non-members up to £200 to cover costs associated with their event or initiative, with preference given to activities that create resources that can be shared via the SEB website. Over the last year, we have supported seven outreach events in this way with more details below.

We have continued our commitment to ensure equality, inclusion, and diversity in all our activities and encourage our members to make a similar commitment. At the end of 2020 we launched a new Diversity Grant which will provide funding to help tackle barriers to inclusion and support initiates that promote diversity in academia and science. Members can apply for funding of up to £1,000 to cover costs associated with improving diversity and increasing

inclusivity in academia and research, specifically within the field of experimental biology. In 2021, we supported two diversity initiatives in this way, but we received no applications in 2022. To help boost applications for this grant and to promote the work being done in the area, we invited a 2021 awardee, Dr Emily Armstrong to speak at our annual conference about her SEB funded initiative which aims to improve existing accessible lab practice and expand on inclusive disability support policy at the University of Glasgow and the College of Medical Veterinary and Life Sciences as an exemplar molecular biology research institute.

The SEB also promotes inclusion by focusing on removing barriers to accessing Society. We therefore also offer a Hardship Fund to support members during challenging times in their career or a period of financial hardship, providing a reduced or full fee waiver for one year of membership. This will allow them to continue to access the career development resources and research network provided by the SEB. In 2022 we supported 3 SEB members in this way.

OUTREACH GRANT WINNERS

Caitlin McAndry – An independent project (employed as PhD at University of Plymouth) This project aimed to inspire curiosity and increase public understanding of how organisms may respond to climate change. This was achieved by creating a series of short to medium-form 2D animated videos to target children and adults of all ages with no scientific background. The videos also address knowledge gaps in the target audience by describing methods that organisms use to respond to change, and highlighting the role that experimental biology plays in studying these processes and predicting future climate change effects.

Lenia D. Rato - MARE (Marine and Environmental Sciences Centre)

The project intends to reach children, families, and senior citizens: inspiring the new generations of biologists, updating and raising awareness in adults, and focusing on a target audience often forgotten in science outreach, senior citizens. There will be three main activities: one in partnership with the local Ocean Museum named "Museum at Night – Experimentation to tackle societal issues" with families and adults as target audience. The second one would be similar but aimed for senior citizens named "Senior Ocean - What are experimental scientists up to?" and the other one would be in a public school aimed for kids named "MAD Scientists - The World of Experimentation". The overarching goal is to raise awareness on the importance of experimental biology to society, as people often question what biologists do.

Dr Prasanta Dhak - Techno India University, West Bengal, India

Parthenium, or Indian congress grass, is one of the most devastating and hazardous weeds spread to more than 40 tropical and subtropical countries. Due to the invasion of this poisonous plant, several crops production has been decreased to almost 40 percent and a 90 percent drop in forage production in the country. There are several health-related issues to humans and animals caused by this plant as it is extremely toxic to livestock. In last two decades, parthenium has invaded millions of farmlands and agricultural land in India as well as in other countries. The aim of this event would be to connect a lay audience of around 100+ individuals (14+) which includes high school students, their guardians, local administrative persons, health persons, academicians, local NGOs, and research scholars, and present before them about adverse effect of parthenium on human and animal health, agriculture, as well as on other biological systems in the said area. This will help to educate people on potential suggestions to deal with this plant in line with a campaign developed by the department of agriculture in India.

Miss Eleanor Watson - An independent project (employed with University of Essex) This event is a 3 day festival at 6 different venues in May 2023. Each venue has a theme – Beautiful Mind (neuroscience, psychology), Planet Earth (plant sciences and zoology), Our Society (law, history, politics) and Our Body (medicine, human biology, health), Tech Me Out (biotechnology), and Atoms to Galaxies (physics, chemistry, astronomy). The target audience of these is adults who are members of the general public.

Miss Sumana Shrestha - Knowing Neurons

The production of the neuroscience comic book with a story defining autism spectrum disorder characteristics, neural mechanisms, and the brain cells involved. The target audience is children aged 6-11 years, of neurotypical and neurodiverse backgrounds. The final product will be available mainly as an online format with limited physical printed copies available through collaboration with Centre of the Cell and partner schools, and the aim is to enhance children's understanding of autism and neuro cell biology.

Miss Rebekah White - University of Exeter

This funding supported Darwin's Black Book, a commended podcast series exploring the wonderfully weird world of evolution. Two science researchers, PhD student Bekah and BBC Studios researcher Tom, answer evolution questions, debunk science myths, and maybe have a few laughs along the way.

Miss Becky Robertson – Civil Service Science and Engineering Fast Stream

The funding supported the STEM Challenge, a competition-based schools' outreach program aimed at Year 9 and 10 students. Schools were specifically selected on the basis of low STEM GCSE attainment to improve the uptake of science in low socio-economic regions and give students in these areas the opportunity to develop their scientific skills ahead of their GCSEs. The challenge ran throughout March and April 2022 and students worked in small groups to come up with three solutions relating to bioscience problems such as "sustainable food production". The challenge gave students the freedom to explore scientific topics of interest outside of the scope of the curriculum, with the objective of learning about a topic in more detail and applying this to real-world problems that we are facing today.
MEMBERSHIP

Membership Statistics

At the end of 2022, SEB had a total of 1,116 members spread across 59 countries. Full membership remains the most popular membership option, totalling 43% (484) of the total membership, followed by Student membership at 35% (392), Early Career at 19% (214) and Retired at 1% (11).

In addition to the main membership categories, there are currently 13 members listed under the Low-Income Country membership and 2 members under the Associate category. These are historic schemes which are set to be adjusted in 2023.

Over 57% of members opt for a 1-year subscription, 21% for 5-years and 20% for 3 years. A full breakdown of each membership category and the corresponding subscription type is displayed below:

Rank	Membership Category	Subscription	Total per category	% of total membership
		type		
1	Full Membership	1 year	280	25.09%
2	Student Membership	1 year	231	20.70%
3	Full Membership	5 years	204	18.28%
4	Student Membership	3 years	149	13.35%
5	Early Career Scientist Membership	1 year	114	10.22%
6	Early Career Scientist Membership	3 years	74	6.63%
7	Early Career Scientist Membership	5 years	26	2.33%
8	Student Membership	5 years	11	0.99%
9	Low-income country Membership	1 year	8	0.72%
10	Retired Membership	5 years	6	0.54%
11	Low-income country Membership	5 years	5	0.45%
12	Retired Membership	1 year	5	0.45%
13	Associate Membership	1 year	2	0.18%
14	Student Membership	2 years*	1	0.09%
	Grand Total		1116	

Table 1: SEB membership totals per category and subscription type. Data taken on 31st Dec 22.

*The student 2-year subscription is a trialed option which is being phased out and not available on the website.

There had been large reductions in the membership total since 2020 at a rate of 20% each year (Table 2). However, the Society has seen this decline shrink to a 10% reduction in the membership base at the end of 2022. The membership team identified various factors which influenced a fall in the total membership number (Table 2) since 2020 which included:

- the cancellation of the SEB 2020 Annual Conference due to COVID -19;
- the lack of need for travel and event funding due to COVID related restrictions;
- uncertainty regarding the format of our 2021 Annual Conference;
- financial reasoning; either the result of COVID or more recently the increasing cost of living.



 Table 2: Total SEB membership figures 2014-2022. Data taken on 31st Dec 22.

 Table 3: SEB Membership Top 10 Countries. Data from 1019 members holding address information.

No.	Region	Country	Personal	Work	Overall Total	% of total
			Address	Address		members
1	Europe	United Kingdom	255	77	332	32.6%
2	North America	Canada	81	28	109	10.7%
3	North America	United States	67	30	97	9.5%
4	Europe	Germany	52	20	72	7.1%
5	Oceania	Australia	30	25	55	5.4%
6	Europe	France	31	5	36	3.5%
7	Europe	Belgium	10	19	29	2.8%
8	Europe	Portugal	17	4	21	2.1%
9	Europe	Norway	15	1	16	1.6%
10	Europe	Czech Republic	9	6	15	1.5%
	Rest of the countries		150	87	237	23.26%



Table 4: SEB Membership World Regions Spread

Membership Strategy Implementation

The membership manager position was filled at the end of Q2 2022 following a gap of 8 months. This has led to a new membership strategy being drafted and formally approved in September 2022. To address the decline in membership subscriptions, a strategy has been formulated to focus on our key areas for concern: retention, engagement, and acquisition. The yearly objectives include:

- 2022 To ensure complete functionality and set up of our CRM system
- 2023 To improve retention and support for the existing membership base
- 2024-2025 To increase engagement and new member acquisition for each career stage

Key CRM Updates

- Data migration issues: At the end of 2021, the final data export from Aptify (the previous member data management system) was migrated to SEB's new CRM system: ReadyMembership. SEB's data underwent a thorough review and clean by an external data contractor to ensure duplicates were removed. However, issues with the data migration and set up were identified following a thorough review of the system. Additional work was completed during Q4 22 to ensure all missing data from the original import was successfully migrated to ensure the SEB's records are up to date.
- Old suppliers investigated: A numbers of contracts which related to the previous CRM system were identified as still active incurring a monthly fee on top of our new systems. The following contracts for Aptify (CRM), Bottomline (Payment software) and Cloud Direct (IT resource) were terminated in 2022 saving us a monthly charge of approximately £2,900.
- Data export functionality: There were significant problems with data transfer. A large proportion of membership data wasn't available to export and therefore severely reduced our reporting and trend analysis capabilities. Work was completed in Q4 22 to ensure all relevant membership data is now available to download for analysis.

- **Financial functionality review:** A new refund process for event/membership payments was established, Sage Pay was fully integrated within the CRM to allow monthly reconciliations to resume, and work was completed to ensure the SEB was 3DS V2 secure EXPLAIN for all payments completed via the website.
- **System emails updated:** A large proportion of our communications sent via the CRM remained un-populated following the CRM transition. Work has been completed to ensure all system emails have been personalized to include relevant SEB information. This includes key renewal emails, membership welcome communications and account set-up details.

Additional Membership initiatives in year

In addition to managing and resolving the significant data issues, set out above, the Membership manager also started a further set of improvements and new initiatives.

- Bristol Early Career Fair: The membership manager attended the University of Bristol Biology Careers Fair and engaged in discussion with over 40+ undergraduate students. Of which, 30 left their contact details and 12 signed up for membership. At the end of 2022, the SEB had a total of 392 student members showing a 15% increase on last year's figures (340 members).
- **Membership Benefit of the month:** A new section in the monthly newsletter features a dedicated piece on one specific membership benefit. The aim is to draw attention to the wide variety of benefits including those with upcoming deadlines for application.
- Low-Middle Income Countries: The process is underway to move the current low-income discount to a new model which applies a set discount across all membership categories and is applicable to all low-middle income countries as per the world bank classification.

ENHANCED COMMUNICATIONS

During 2022 the Society assessed how to effectively communicate all activities and new initiatives both internally - to SEB committee members, and externally - to members and the public, raising awareness of all offerings and opportunities for involvement.

Several improvements were introduced including expanding the audience, new content and improving frequency of communications. Detail is provided below.

EVENTS PROMOTION

A key element of the communications plan is the promotion of our events. Conference specific communication plans are implemented throughout the preceding and current year for the conference.

• Montpellier Conference, 2022

Despite problems with the CRM we were able to utilise a range of communication opportunities to ensure members and other possible attendees were kept abreast of developments.

We introduced a spread the word page (containing all the marketing materials) on the website. (see link here)

In response to the various problems, the deadline for abstract submissions was extended until the end of March in 2022. We made a 360 public announcement: news article, share of information on social media outlets and sent emails to all members (sent to 2484 members / 1147 unique open, which is an open rate of 53,42%).

• Centenary Conference (Edinburg 2023)

To help spread the word about the forthcoming Centenary Conference we created a "<u>Spread</u> <u>the word</u>" webpage containing the following promotional materials for members, nonmembers, session organisers and speakers to use widely to promote the event:

- Online banners
- Suggested posts for social media
- Slides promotion for sessions

Several emails have been sent to promote the abstract deadline, the president letter, the opportunities for ECS, etc.

<u>Videos</u>

In 2022, our goal was to significantly increase the number of videos (39) to support promotion of our events. These videos incudes our careers webinars, journals webinars and our symposium. They have received great visibility on YouTube.

Journals Webinars

In 2021, the majority of journal webinars were JXB Webinars; in 2023 we were pleased to introduce webinars from our other journals.

To promote them, a communications plans was created for these webinars.

Playlists were created on Youtube:

- JXB Webinar series videos
- Plant Journal Webinar series videos
- PBJ Webinar series videos
- <u>Conservation Physiology Webinar series videos</u>

and are available on the "resources" section of our website:

- JXB Webinar series videos
- Plant Journal Webinar series videos
- <u>PBJ Webinar series videos</u>
- <u>Conservation Physiology Webinar series videos</u>

SOCIAL MEDIA ACTIVITY

The Society has a presence on 5 social media platforms: Twitter, LinkedIn, Facebook, Instagram and You-Tube. Following analysis we know that our members are predominately present on twitter, as such this is our platform of choice for interacting with the scientific community.

Over the past 12 months we have increased our social media activity on Twitter by promoting all Society's activities, benefits and opportunities. We have seen the following results:

- Significant increase in profile visits (4,351–16 March 2023)
- Increase in number of Followers Increase in Number of Followers (7,303 in March 2022 to 7,597 – 16 March 2023) (+4,03%)
- Increase in number of mentions (6,761 in March 2022 to 7,597 in March 2023) (+12,37%)

The following shows the increase in activity on other platforms.

- YouTube: March 2022: 499 March 2023: 720 (+44,29%)
- Facebook March 2022: 3,518 March 2023: 3,565 (+1,37%)
- LinkedIn March 2022: 5,182 March 2023; 5,323 (+2,72%)
- Instagram March 2022: 273 March 2023=): 341 (+24,91%)

MAGAZINE

In the SEB Strategy 2020-2025, we committed to an ambition to go green. As such the member magazine is now fully digital and not printed.

We decided to reinforce the digital aspect of the magazine and deliver full interactive issues. To do so, we subscribe to the ISSUU service which allows us to add interactives links such as shortcuts in the magazine itself, lab websites, journal articles, webpages, etc.

PUBLICATIONS

The Society owns five research journals. These journals rank highly among other journals publishing similar scientific papers and are well-regarded by the communities they support.

Journal-level metrics

Journal	Journal Impact Factor	Normalised Eigenfactor	Journal Citation Indicator	CiteScore
Journal of Experimental Botany	7.378	7.951	1.64	10.9
The Plant Journal	7.091	6.456	1.92	10.4
Plant Biotechnology Journal	13.263	3.947	2.45	16.6
Conservation Physiology	3.252	0.749	0.75	4.4
Plant Direct	3.369	0.452	0.86	4.7

Journal Impact Factor = the yearly mean number of citations to items published in the previous two years.

Normalised Eigenfactor = the total importance of a scientific journal (incoming citations from highly ranked journals score more highly).

Journal Citation Indicator = normalises mean citations for topic, article age and article type.

CiteScore = similar to impact factor but referenced to the Scopus database, and includes items published over the previous four years instead of two years.

Publication governance

An evaluation of the journal section of the SEB's Risk Register concluded that it would be useful to have a risk register for the Society's publishing activities. A draft **Journal Risk Register** was created and approved by the Publications Management Committee in November 2022.

The major risks were identified as: switching the Society's hybrid journals to an open access model, the level of service provided by the journals' publishers, and the reliance by some of the Society's journals on a specific market for submissions.

In December 2021, the Society signed a letter of intent to agree a new contract for **The Plant Journal**, which is co-owned by the SEB and Wiley. After negotiations between the two parties during the first half of 2022, a new contract was signed in August 2022. The new contract features a change in business model and is based on a royalty payment, with the SEB receiving 30% of all revenues.

Plant Direct is co-owned by the SEB, Wiley Blackwell and the American Society of Plant Biologists. After Ivan Baxter announced his intention to stand down, a new editor-in-chief was sought during 2021, and Larry York (Oak Ridge National Laboratory, USA) was appointed in January 2022 following an open call.

Plant Biotechnology Journal is co-owned by Wiley, the SEB and the Association of Applied Biologists. The editor-in-chief Henry Daniell reached the end of a 10-year term in December 2022. After an open call, Johnathan Napier (Rothamsted Research, UK) was appointed as the new editor-in-chief: his term officially starting in January 2023 after a short transition period.

Conservation Physiology is co-owned by the SEB and Oxford University Press. The publishing contract between the parties expired at the end of 2022, by which time negotiations on a new contract had not been completed. As such, a temporary extension of the existing contract was signed, which remains in place until the end of 2023.

Lindsay Haddon, who supported the journal as a member of SEB staff, retired in March 2022. After an open call, the Society appointed Bridget O'Boyle to work on Conservation Physiology as an Assistant Editor. Bridget is based in the Lancaster editorial office and also has a role supporting the Journal of Experimental Botany and performing some central SEB work related to the journals and ensuring that journals are a key part of the Centenary celebrations. Responsibility for the Conservation Physiology editorial office transitioned from Oxford University Press to the Lancaster editorial office in January 2023.

New Ventures: Announcement will be made in 2023

The Society is committed to regularly considering new ventures in publications. During early 2021, the chair of the SEB Publications Management Committee meeting asked for ideas for a new SEB journal. Two proposals were received, and the more viable of these suggestions, a proposed journal to be called **Integrative Cell**, was taken forward. An internal SEB meeting was held in May 2021, after which time the SEB contacted a range of potential publishers. After more detailed discussions with a couple of publishing houses throughout 2022, the SEB opted to continue the development of the new journal with Oxford University Press, who have now provided a draft contract to the Society.

In 2023, the Society will recruit an editor-in-chief and build the editorial board. The new journal will provide an outlet for members of the SEB's Cell Section and will expand the Society's journal portfolio, thereby reducing risk across its publishing activities.

Publication Income

The SEB relies on its two hybrid journals (Journal of Experimental Botany and The Plant Journal) for a large proportion of the Society's income. The SEB is committed to switching these journals to an open access model and, when this happens, it is anticipated that the income they generate will reduce significantly. Indeed, income from these journals has been declining since 2020 as the transition to open access has gathered pace and as submissions fell during the Covid-19 pandemic. Both publishers announced additional Read & Publish deals with specific consortia, allowing researchers in represented institutions to continue to publish in the Society's hybrid journals. Uptake has been good, but the publishing fee paid by researchers through these deals is lower than the fee for direct payments. Subscription income has also declined because of cuts to library budgets and the move towards supporting open access.

During 2022, the Society continued to work with the publishers (Wiley and Oxford University Press) to monitor the situation. In March 2023, the Society will receive data from Oxford University Press relating to the viability of switching Journal of Experimental Botany to an open access model. The Society also wants to consider similar data for The Plant Journal from Wiley.

INFRASTRUCTURE

London accommodation

Staff have been homebased from March 2020. The Society retains a contract with the TOG group, who manage Tintagel House, which serves as a postal address. In person staff meetings will be taking place from time to time across the year alongside a mixture of virtual and in person governance meetings.

Lancaster accommodation

SEB (JXB) staff continue to predominately work from home although have the option of using the offices within the University of Lancaster where the Registered Office is for SEB:

County Main, AO12/AO13, Lancaster University, Bailrigg, LA1 4YW

NEW WEBSITE AND CRM

Infrastructure improvements continued in 2022 and the Society completed its migration from the old CRM and Website to the new systems, provided by Pixl8. The website speed and site navigation are improved, however staff continue to work through remaining issues. In 2022, CRM problems affected a range of Society functions from registration, abstract submissions through to awards and grants. See page 38 that provides detail of action taken in year to address problems that occurred.

The Society continued to employ KCS as point of contact to manage the relationship between the Society and Pixl8 and provide consultancy support in the form of a three-year IT strategy roadmap. They will take over Cloud Direct as the IT systems provider in 2023.

GOVERNANCE

Board of trustees

In April 2022, Ji Young Park joined the Society as an independent Trustee, Ji has financial expertise, particularly in regards to investment markets.



In November 2022, the Society appointed Felix Mark as Chair of the Animal Section



Felix Mark, marine ecophysiologist at Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research (AWI), investigates the effects of climate change on two closely-related fish species in the Arctic. Due to rising water temperatures, the Atlantic cod is moving northwards and might take over the habitat of the native polar cod.

Staff

Following the staff structure review (carried out in 2021) the following appointments were made:

- Editorial Assistant, Bridget O'Boyle, in the Lancaster team to manage editorial work for Conservation Physiology, provide backup support for the JXB team, to demonstrate the impact of science published in the five journals, strengthen links between the journals and the Society and ensure the journals feature strongly in the centenary celebrations.
- Secretariat Officer, Jo Barclay, to improve the administration across all facets of the Society.
- Outreach and Engagement Officer, Ana Colombo, supporting centenary planning and furthering the OED portfolio.
- Events Assistant, Jen Symonds, providing additional administrative support to deliver quality event planning and execution.
- Membership Manager, Jordy Turl, to drive forward membership and expand the reach of the Society and lead on CRM matters.

Sophie Price, left at the end of her contract in March, at which time the new website and CRM had been installed and preliminary testing had been undertaken.

Review of Articles of Association

The formal review of the Articles of Association was postponed to 2023/24.

REFERENCE

The trustees who are also directors of the charity, for the purposes of the Companies Act 2006, present their report with the financial statements of the charity for the year ended 31 December 2022. This report has been prepared in accordance with Part 8 of the Charities Act 2011 and constitutes a directors' report for the purposes of company legislation.

The financial statements have been prepared in accordance with the accounting policies set out on pages 76-80 and comply with the charitable company's memorandum and articles of association, applicable laws and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the United Kingdom and Republic of Ireland (FRS 102).

ADMINISTRATIVE DETAILS

Registered company number: 1314879

Registered charity number: 273795

Registered office: County Main, AO12/AO13, Lancaster University, Bailrigg, LA1 4YW

TRUSTEES

Professor Jim Murray	University Professor, President from July 2021
Professor Tracy Lawson	University Professor, Vice president from July 2021.
Professor John Love	University Professor, appointed Treasurer from July 2019.
Professor Shaun Killen	University Professor, (resigned October 2022)
Dr Felix Mark	Research Scientist (appointed October 2022)
Professor David Evans	University Professor
Professor Stefan Kepinski	University Professor
Dr Tommy Norrin	Early Career Scientist
Professor Martin Parry	University Professor
Professor Sheila Amici- Dargan	Associate Professor
Ms Ji Young Park	Independent trustee

COMPANY SECRETARY

The Chief Executive Officer, Pamela Mortimer, also serves as the Company Secretary.

AUDITORS

Buzzacott LLP, 130 Wood Street, London, EC2V 6DL

FINANCE MANAGEMENT

JS2 Ltd provide financial services including the preparation of the annual financial statements.

BANKING

NatWest is the principal bank for the Society, in addition accounts are held with Skipton Building Society and NS&I.

STRUCTURE, GOVERNANCE AND MANAGEMENT

GOVERNING DOCUMENT

The Society for Experimental Biology is a company limited by guarantee governed by its Memorandum and Articles of Association dated 24th May 1977 and amended to ensure correct references to the Companies Act, 2006 and new governance arrangements on 1 July 2011. The Society is registered as a charity in England and Wales (Registered charity number: 273795).

Society is funded by subscriptions from its members, gifts from donors and the income generated from its activities (largely from its scientific journals) and investment income. Every member agrees to contribute £1 in the event of the charity being wound up.

APPOINTMENT OF TRUSTEES

The trustees are: the President, Vice President, Treasurer, Publications Officer, Animal Section Chair, Cell Section Chair, Plant Section Chair, an Outreach, Education and Diversity Trustee and an Early Career Scientist or Researcher Trustee plus one or two independent representatives who sit on the Council as well as the Audit and Risk Committee and the Human Resources and Remuneration Committee.

The section chairs are nominated and elected by the members of the Society. The Vice-President is nominated by each section (on a rotational basis every two years) and then appointed by Council. The appointment is for two years after which the Vice President is appointed President for a further two years.

The independent members are appointed by the Council after a process of selection with the Council being mindful of any shortfall in knowledge or experience within its ranks.

INDUCTION AND TRAINING OF NEW TRUSTEES

New members of the Society's Council receive written information on the Society and the obligations of their position.

The full Council received trustee training in October 2020 (provided by Buzzacott, the external auditors.)

The Society intends to provide a more substantial induction and Trustee training in 2023.

ORGANISATION

The Board of Trustees serves as the Council of the Society and guides the strategy and administration of the Society. The Council meets at least three times a year and there are committees covering each the following: scientific themes of the Society (Animal, Cell and Plant Biology), Outreach, Education and Diversity, Audit and Risk and a Publications Management. All the above committees are chaired by one of the Society's trustees. In addition a Committee was established in late 2021 to plan for the Society's centenary in 2023 and is chaired by the Outreach, Education and Diversity Manager.

In addition, there are ad hoc working groups to focus on targeted areas of business.

A Chief Executive Officer (CEO) is appointed by the trustees to manage the day-to-day operations of the charity within a delegation framework approved by the Council.

Key management personnel

The key management personnel in charge of directing and controlling the charity on a day-to-day basis comprises the trustees and the Chief Executive Officer. Trustees are not remunerated for their role as trustees to the Society. Details of remuneration paid to key management personnel is set out in note 7.

Fundraising policy

The Society does not actively engage in traditional forms of fundraising activity such as collections or appeals, and as such, the trustees do not consider it necessary for Society to adopt any particular code of practice in this area, or to enlist the support of third parties. No complaints have been received by the Society in relation to fundraising.

RISK MANAGEMENT

The Council of the Society is responsible for the management of risk.

The Audit and Risk Committee regularly reviews the Society's risk register, and the Council annually reviews the major risks to which the Society is exposed and the systems that have been established to manage those risks.

Delegated authority has been given to three trustees, the President, Vice President and Treasurer to take decisions on behalf of Council on matters arising that need resolution in between regular Council meetings. These trustees work with the CEO to resolve and/or mitigate any emerging issues.

Internal control risks are minimised by implementing procedures for authorisation and monitoring of expenditure. A key element in the management of financial risk is the setting of a reserves policy and its regular review by the Audit and Risk Committee, which advises the Council.

The principal risks and uncertainties identified by the trustees and how these risks are being managed is set out below:

Publishing Income

The main financial risk to Society continues to relate to its dependency on income from publishing activities.

Changes in financial models within the journal publishing sector create some uncertainty in the sustainability of the revenue streams and their respective surplus margins. In particular, these include the move away from the subscription to Open Access model, and the impact of 'cOAlition S^{3'} and associated initiatives from research funding bodies. The Society has two journals that are not Open Access and with the publishers (Wiley Blackwell and Oxford University Press) and it continues to proactively engage with developments in this area.

Whilst publishers are taking action with regard to read and publish deals, this may adversely impact other income streams within existing contracts. We are keeping this situation under review. Trustees have noted the potential risk from emerging technologies such as artificial intelligence (e.g., Chat CBT). We need further information to evaluate that level of risk.

Investment Income

The trustees consider the global fluctuations in investment fund values and variability of investment returns to be a risk for the Society and are cognisant that markets have fluctuated significantly due to the pandemic and other world events. The Trustees' have agreed that the portfolio will be reviewed every three years, with 2023 being the first year. Consideration was given to the ESG elements of the portfolio linking to the new standards for the investment industry. Trustees are looking to take a decision in quarter two of 2023 following further advice from the investment managers. The fund is

³ <u>www.coalition-s.org/</u> Is an initiative to make full and immediate Open Access to research publications a reality; it was formed by a group of national research funding organisations, with the support of the European Commission and the European Research Council (ERC).

actively and expertly managed and administered by Brooks Macdonald. Funds are invested in a diverse portfolio comprising commodities, equities, bonds and gilts. This managed strategy mitigates fluctuations in fund values and seeks opportunities for fund growth and income. The trustees consider this approach helps to mitigate the subsequent exposure to any investment risk.

Membership strategy implementation

In 2022 the significant yearly decline in membership numbers has started to stabilise. There had been large reductions in the membership total since 2020 at a rate of 20% each year. However, the Society has seen this decline shrink to a 10% reduction in the membership base at the end of 2022. The number of new memberships is still an area for concern as further challenges for the sector, including the increasing cost of living crisis, have increased the challenge of recruitment for membership organisations (Memberwise, 2022).

The membership manager position was filled at the end of Q2 2022 following a gap of 8 months. This has led to a new membership strategy being drafted and formally approved in September 2022. The strategy is set to span until 2025 and focuses on the key areas of membership concern: retention, engagement and acquisition.

Further work has been completed to ensure the complete functionality of the CRM system to ensure the strategy can be successfully implemented. Data migration issues were identified and corrected, data export issues fixed, event/membership refund processes established, and membership workflows were mapped and improved. One of the key issues identified revealed that since the CRM transition in 2021, members were not receiving adequate renewal notifications which is likely to have contributed to the high lapse rates between 2021-early 2022. This has been corrected on the system and a campaign to re-instate lapsed members is due to start in 2023.

As previously noted, the impact of COVID on the annual conference further highlighted the societies co-dependence between the event and bolstering membership numbers. Over the last few years, the membership offer has been improved through the introduction of many outreach and careers activities. Non-member participation in these events has increased and on occasion has dominated; this provides an opportunity to recruit new members and extends the reach of the Charity. As part of the new membership strategy, a full review of the society's membership benefits is underway to ensure the offering is further diversified to reduce the reliance on the annual conference.

Business module of Annual Conference

As mentioned above there is a reliance on the Annual Conference to recruit and retain members; this is not a finance risk as there is a conscious decision to significantly subsidise the conference costs. However, a potential developing risk is the change in consumer attitudes to choose to attend the conference in person. The Society is providing hybrid options to attend the conference, at additional cost, and will continue to keep this under review.

Poor performance of new website and CRM system

There was significant underperformance of the new CRM system during 2022; this affected the performance of many workstreams across the Society and in particular had a detrimental effect on the planning and execution of the annual conference. In Q4, we reached a steady state with adequate performance, although there are many anticipated improvements yet to be realised. In order to secure the success of the Centenary conference we have reverted to older systems whilst further improvements are considered.

Other risks

Investment policy and performance of investments

All funds of the Society not immediately required to be used or applied for the ordinary purposes of, or in carrying out the objects of, the Society and any property held by the Society, subject to the terms of any trust, may be invested by the Board of Trustees on behalf of the Society in any permitted investment.

The Board of Trustees may appoint and terminate the appointment of investment managers upon such terms and conditions as the Board may from time to time determine, except that no person should be appointed as investment manager unless authorised for this purpose in accordance with the Financial Services Act 2010 or any statutory modification thereof or replacement thereof.

Under delegated authority from the Board of Trustees, administration of the funds of the Society and all financial matters relating to the Society, subject to the overall authority of the Board, are conducted by the Audit and Risk Committee. The principal custodian of investment securities is Brooks Macdonald.

Surplus cash is held in deposit accounts with the Society's bankers, NatWest.

The market value of investments at 31 December 2022 was £4,657,609.57 compared with £3,623,533 at 31 December 2021.

Income from listed investments during the year amounted to £51,751 (2021: £39,630) representing an income yield of approximately 1.13% (2021: 0.58%). The total return on the portfolio for the 12 months to 31 December 2022 was -11.40% compared with the benchmark return of -10.19%. The 3 months performance covering the last quarter of 2022 was 3.29% compared to the benchmark return of 3.46%. Market conditions in 2022 were unprecedented with multigenerational high levels of inflation, exacerbated by the war in Ukraine and rising interest rates which impacted all asset classes even those not usually considered volatile. Understanding this, the trustees are satisfied with the investment performance. In May 2022 an additional £1.5m cash was injected into the portfolio but not invested until October as the Trustees considered the investment strategy.

Funds and reserves policy

The Audit and Risk Committee has considered the Society's reserves requirements and advised on the same to the charity's Board. When reviewing the reserves policy, the Audit and Risk Committee and the Board have given consideration to the following:

Part of the charity's net assets is represented by the net book value of Society's interest in its tangible and intangible fixed assets. The availability of these assets is essential to the day-to-day work of the charity and as such, the value of these assets cannot be regarded as funds that would be realisable with ease, in order to meet future contingencies. As such, an amount equal to the net book value of the tangible fixed assets has been separated from the charity's general funds and held as a separate designated fund. At the year end, the balance on this fund was £120,045 (2021: £135,832).

 \cdot At 31 December 2022, funds totalling £35,214 (2021: £47,750) comprised restricted funds which must be applied in accordance with the wishes of the donor.

 \cdot A designated investment fund is held to match the value of the investment portfolio. The value of the fund is held to create long term investment return and to help fund the day-to-day operations of the charity. At 31 December 2022, this amounted to £4.7M (2021: £3.6M).

 \cdot A designated fund, "Pending Investment Fund" has been created to hold funds, including those obtained by the charity from the sale of its previous office base, whilst future investment opportunities are being considered. During the year £1.5M was transferred to the investment portfolio. The full £2.2M was not invested due to concerns over the market performance and has been transferred back into general funds.

• A designated fund for the increased activity during the Centenary year was established for £500k.

 \cdot A prudent fiscal policy should be adopted in order to ensure funds are not unduly depleted during a period where additional investment is required.

• A significant proportion of the Society's net assets are represented by listed investments. Such assets are subject to fluctuations in market value due to the inherent volatility in equity markets and investment markets due to wider economic conditions, the attitude of investors to investment risk, and changes in sentiment concerning equities and within particular sectors or sub sectors. As such, the reserve requirement needs to take account of an element of unpredictability.

At 31 December 2022, the charity held free reserves totalling £3.2M (2021: £2.7M). The free reserves held represent 2 years and 8 months operating expenditure. The trustees are satisfied with the level of free reserves held as at the 31 December 2022, as this meets the requirement of 2 years' operating costs that, in the event of the Society's demise and becoming insolvent, would be required to responsibly wind down the Society.

Assessment of going concern

The trustees have assessed whether the use of the going concern assumption is appropriate in preparing these financial statements. The trustees have made this assessment in respect to a period of one year from the date of approval of these financial statements.

The trustees of the charity have concluded that there are no material uncertainties related to events or conditions that may cast significant doubt on the ability of the charity to continue as a going concern. They are of the opinion that the charity will have sufficient resources to meet its liabilities as they fall due. The most significant areas of judgement that affect items in the financial statements are detailed above. With regard to the next accounting period, the year ending 31 December 2023, the most significant areas that affect the carrying value of the assets held by the charity are the level of investment return and the performance of the investment markets.

Income recognition

Income is recognised in the period in which the Society has entitlement to the income, the amount of income can be measured reliably, and it is probable that the income will be received.

Income comprises donations, legacies, grants, income from charitable activities including subscriptions, grants, meetings, journals and publications and investment income.

In accordance with the Charities SORP FRS 102 volunteer time is not recognised within the financial statements

Donations and legacies

Donations are recognised when the Society has confirmation of both the amount and settlement date. In the event of donations pledged but not received, the amount is accrued for where the receipt is considered probable. In the event that a donation is subject to conditions that require a level of performance before the Society is entitled to the funds, the income is deferred and not recognised until either those conditions are fully met, or the fulfilment of those conditions is wholly within the control of the Society and it is probable that those conditions will be fulfilled in the reporting period.

Legacies are included in the statement of financial activities when the Society is entitled to the legacy, the executors have established that there are sufficient surplus assets in the estate to pay the legacy, and any conditions attached to the legacy are within the control of the Society.

Subscriptions

All annual subscriptions due and received during the year are treated as income of that year. Life subscriptions and five yearly subscriptions are carried forward and written off over a period of fifteen years and five years respectively.

Royalties, journals and other publications

The Society accounts for all income and related expenditure on journal sales and other publications on an accrual's basis.

Royalties are recognised in the financial statements as they are received or become receivable.

Other income (excluding meetings)

All other income, excluding meetings activities, is accounted for on a receivable's basis.

Meetings

The events committee has responsibility for the administration of all Society meetings with certain administrative tasks delegated to designated employees. All income is accounted for when receivable and all expenditure is accounted for on an accrual's basis. On the conclusion of each meeting any surplus arising there from is identified, and deficit being met by the Society in the period to which it relates.

Grants

Grant income is recognised when received or reasonably certain that the grant will be received, whichever is the sooner.

Expenditure recognition

Liabilities are recognised as expenditure as soon as there is a legal or constructive obligation committing the Society to that expenditure, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all cost related to the category. Where costs cannot be directly attributed to particular headings, they have been allocated to activities on a basis consistent with the use of resources.

Grants offered subject to conditions which have not been met at the year-end date are noted as a commitment but not accrued as expenditure.

Allocation and apportionment of costs

Costs of generating funds comprise the costs associated with seeking voluntary income and investment management fees.

Charitable expenditure comprises those costs incurred by the Society in the delivery of its activities and services for beneficiaries. It includes both costs that can be allocated directly to such activities and those costs of an indirect nature necessary to support them.

Support costs include governance costs which are costs associated with meeting the constitutional and statutory requirements of the Society and include the audit fees and costs linked to the strategic management of the Society.

All costs are allocated between the expenditure categories of the statement of financial activities on a basis designed to reflect the use of the resource. Costs relating to a particular activity are allocated directly; others are apportioned on an appropriate basis. For example, time spent.

Tangible fixed assets

Depreciation is provided at the following annual rates in order to write off each asset over its estimated useful life.

- ◆ Freehold property 2% on cost
- ♦ Fixtures and fittings 25% on cost
- Computer equipment 25% on cost

Where indication exists that there has been an impairment to the value of a fixed asset an impairment review is carried out.

Items purchased costing less than £500 are not capitalised and are expensed through the statement of financial activities.

Intangible fixed assets

The Society's policy is to capitalise intangible assets where future economic benefits from the asset are expected and the cost of the asset can be reliably measured. Amortisation has been calculated to write off the cost of intangible fixed assets over their expected lives.

♦ Intangible fixed assets - 20% on cost

Investments and investment properties

Investments are included in the balance sheet at their market value; realised and unrealised gains (losses) arising on the investments are credited (debited) in the statement of financial activities. Income arising from these investments is recorded on a receivable basis within investment income in the Statement of Financial Activities.

Taxation

The Society is a UK registered charity and, therefore, is not liable to income tax or corporation tax on income derived from its charitable activities, as it falls within the various exemptions available to registered charities.

Fund accounting

General funds are unrestricted funds, which are available for use at the discretion of the trustees in furtherance of the general objectives of the Society, and which have not been designated for other purposes.

Restricted funds are funds, which are to be used in accordance with specific restrictions imposed by donors, or which have been raised by the Society for specific purposes.

Designated funds are unrestricted funds earmarked by the trustees for a particular purpose.

Foreign currencies

Assets and liabilities in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are translated into sterling at the rate of exchange ruling at the date of transaction. Exchange differences are taken into account in arriving at the operating result. All differences are taken to income and expenditure through the statement of financial activities.

Financial instruments

The Society only holds basic financial instruments as defined in FRS 102. The financial assets and financial liabilities of the Society and their measurement basis are as follows:

Financial assets – other debtors are basic financial instruments and are debt instruments measured at amortised cost. Prepayments are not financial instruments.

Cash at bank and short-term deposits – classified as a basic financial instrument and is measured at face value.

Financial liabilities – accruals and other creditors are financial instruments and are measured at amortised cost.

EVENTS SINCE THE YEAR END AND PLANS FOR THE FUTURE

Centenary Celebrations

The Society for Experimental Biology is eagerly anticipating its centenary in 2023 and have an exciting range of celebrations and events to mark this significant milestone. Throughout the year, various events and festivities are planned, and further information can be found on the Society's website at https://www.sebiology.org/centenary.html

The Society has already begun its centenary celebrations with several initiatives during the first quarter of 2023. The "Careers and Coffee" webinar series has been a successful platform for invited speakers to discuss their career journeys, roles, career prospects, and avenues into their field. The series has received positive feedback from attendees, and all speakers have been rated highly. The Society plans to host one webinar per month throughout the centenary year, and topics covered so far include careers in academic publishing, technology transfer, the civil service, and the role of mentoring in advancing academic careers.

In addition, the Society initiated the "Leaders of the Future" webinar series, where past SEB award winners share their career experiences and how winning the award helped them. More talks are scheduled, and further information can be found at <u>https://www.sebiology.org/centenary/leaders-of-the-future.html</u>. The first talk was given by Prof. Luke Mackinder, a 2018 SEB Presidents Medallist for Cell Biology and a UKRI Future Leader Fellow at the Centre for Novel Agricultural Products (CNAP), University of York.

To encourage members to organize their own centenary celebration events, the Society established the SEB Member "Birthday Celebration" Fund. Ten successful applicants have planned events for April and May 2023. The fund provided up to £500 per event to assist with the organization of scientific meetings, networking events, lectures, or small events such as postgraduate research days. Events sponsored are international, spanning 8 countries and include initiatives such as networking events, webinars, guest lectures, and sponsored sessions at large conferences. Further information can be found at https://www.sebiology.org/centenary/sebundefinedbirthdayundefinedbirthdayundefinedgrant.html

The Society has also begun exploring its history in more detail. We visited the archives for the first time in several years with the aim of filling in gaps in our knowledge of the SEB's past. We will be sharing this with our members and supporters by publishing articles on interesting finds and points from the history of SEB throughout 2023.

Across 2023, the Society will continue with many more initiatives, including a series of public lectures on the impact of experimental biology, which will be live broadcast for a global audience. The lectures will explore how experimental biology research from the past 100 years has contributed to solving problems of today and how research from today will impact the next 100 years. Alongside the lectures, the Society will produce short animation videos and infographics to explain some of the key concepts to a lay audience.

The Society is also planning an editathon to update and create multiple biographies of experimental biologists who are from historically marginalized groups, pages on experimental biology topics that

are missing from Wikipedia and adding photos and images for common use. The Society aims to demystify Wikipedia and encourage more scientists to become new Wikipedians, add and improve pages of biologists from historically marginalized communities to enhance visibility and inclusivity, increase content and images on experimental biology topics lacking on Wikipedia and Wikimedia Commons, and utilize its international community to translate existing pages into different languages to make the content more accessible.

Centenary conference planning

Planning for the SEB Centenary Conference continues throughout the start of 2023. This hybrid event will be held in Edinburgh in July 2023 at the Edinburgh International Conference Centre and will use the UN Sustainable Development goals as a framework to define the sessions. The programme of special centenary evening and extracurricular activities has been developed to create a celebratory atmosphere.

The conference will include a range of evening events and activities, such as a special awards presentation dinner, a keynote talk from Sir Paul Nurse, and a joint drinks reception and impact talks evening with the Royal Society of Edinburgh. Several other special activities have been organized for the conference, including a public engagement event, hopefully at the Royal Botanical Gardens, a lunchtime walking tour of places of scientific interest in Edinburgh, and a diversity networking lunch.

Overall, the SEB Centenary Conference promises to be an exciting event with a focus on sustainability and the wider impact of experimental biology research.



CRM system and event planning

As set out in the membership section (pages 36-39), work is ongoing to optimise what we can get the Pixl8 CRM system to deliver and improve existing processes.

The abstract submissions system requires further testing and additional adjustments to ensure its

functionality. Therefore, all submissions for the centenary conference will be on the previously used standalone system Powered by Humans, to provide the best service for our membership and conference session organisers. Abstract submissions were opened on January 5th, 2023.

Registration for the centenary conference was opened on January 9th, 2023; registration will be processed on the CRM system.

The supplier for the hybrid element will be Underline, who provided an excellent service for the 2022 annual conference. Event planning meetings have been set up between the relevant teams and Underline, which will increase in frequency as the conference approaches.

Staff changes

A number of staff were recruited throughout 2022 to fill empty positions and provide new support for different sections of the society:

- Jennifer Symons Event Officer started June 2022
- Ana Colombo OED Officer started May 2022
- Jordy Turl Membership Manager started June 2022

In addition, Jo Barclay, who had been employed as the Secretariat Officer left at the end of March and recruitment for a Governance Officer is underway.

Eniola Aladale resigned at the start of April 2023. The Society is in the process of taking urgent contingency action to ensure a manager is in place to cover the centenary conference.

PLANS FOR THE FUTURE

The Society will continue to deliver across all the pillars of the main Strategy.

Key deliverables for 2023 include:

Governance

The Society will seek the following new Trustees in 2023:

- A Vice President from the Animal Biology community
- An Early career Scientist, Researcher or teacher; the successful candidate should have a background in education.
- A Cell Section Chair
- An Animal Section Chair and a Treasurer; on both these posts the Society hopes to retain the current incumbents (for a full first term for the former and second full term for the latter.)

Once the new Trustees are appointed the incoming President and CEO will lead on a project to review the articles of association and the softer elements and culture in the governance of the Society. The Society is keen to ensure we embed best practice in organisational approaches and human interaction; we will look to involve all staff, Trustees and other partners in these deliberations and be cognisant of equality, diversity and inclusion best practice.

- A review of the structure and performance of the board will be undertaken.
- All staff and Trustees will undertake unconscious bias or habit breaking training.
- Trustee induction training will be enhanced with the support of external auditors.
- A new code of conduct for respectful working relationships will be developed.

Deliver a range of successful SEB sponsored and supported events; the following events are planned:

The SEB is committed to providing a range of events in 2023 to engage new audiences, provide careerbuilding opportunities, and celebrate its centenary. Additionally, the Society is supporting events from partner organisations that align with its values and goals. One aim is to attract and retain undergraduate members, the SEB is developing an offer that will appeal to them throughout their careers. The Society is also considering annual early career scientist events as an introduction to the SEB and its work, to encourage attendance at the annual conference.

The current calendar of events planned across 2023 are detailed below:

- The SEB is celebrating its centenary in 2023, and a range of centenary events will be provided as detailed above, including the Centenary Conference to be held in Edinburgh on 04-07 July 2023.
- Regular virtual webinars will be held for the SEB journals, highlighting key, high impact papers. Journal editors will identify key papers of interest, and authors will present a 30-minute talk followed by a 15-minute audience Q&A session. These webinars aim to create better links between the journals and the SEB and are free to attend.

- The Outreach, Education & Diversity team is arranging activities for SEB members and the public. For example, the Christmas Webinar Series will offer broad-interest talks that engage all members and interested parties, regardless of their background or career level. To help members develop their careers, the SEB is offering a workshop on how to design scientific posters for the annual conference and develop presentation skills to engage people on the day.
- SEB is sponsoring the Plant Environmental Physiology Group (PEPG) special interest group to run symposium that provides an opportunity for MSc, PhD students, and early career researchers to gain hands-on experience and training in plant ecophysiology techniques from leading scientists and manufacturers.
- The JXB Editorial board meeting will be held just before the annual conference to allow maximum joint attendance.
- A joint science communication workshop and celebratory event will be held with the Journal of Experimental Biology.
- The SEB is also sponsoring and supporting events from partner organizations, such as the Policy Lates Series run by the Royal Society of Biology. These talks bring together a panel of experts for an informal debate on a contemporary science policy topic. Workshops are also being run by Sense about Science on topics of standing up for science and talking to the media, as well as getting involved with peer review of journal papers.

Centenary celebrations

- **Centenary Branding:** SEB brand updated with gold colour and new logo for centenary celebrations.
- **Birthday Grants Review:** SEB Birthday Fund provided grants up to £500 to help members organize scientific meetings, networking events, and lectures to celebrate the centenary year.
- **Mentoring Scheme:** SEB launched a peer mentoring scheme for members to share experiences and help grow their careers.
- **Impact Lectures:** A series of live public lectures planned throughout 2023 to address how Experimental Biology research from the past 100 years has contributed to solving current problems and how research from today will impact the next 100 years.
- Editathon: A community effort to improve Wikipedia pages related to experimental biologists from historically marginalized communities, experimental biology topics lacking on Wikipedia, and translating existing pages into different languages to increase accessibility.
- **Careers and Coffee Webinars:** Free webinars featuring an invited speaker covering their personal career journey, role, career prospects, and avenues to get into the field, with the opportunity for attendees to ask questions.
- Leaders of the Future Webinars: Webinars highlighting mid-career scientists and past SEB award winners, providing insights into their career paths, and discussing future research directions.

Continue to deliver high quality peer reviewed journals

Enhancing the relationship between the journals and the Society and demonstrating the impact of the science published in our journals to members and the public remains a priority in 2023.

We will agree a new contract for Conservation Physiology.

The SEB Journals will also be contributing to the Centenary in several ways:

- Editors of each Journal will write letters for the SEB magazine reflecting on the past 100 years of experiential biology and where they envision the next 100 years will lead us.
- A collection of articles across all journals in being collated. This is entitled "Science with Impact Article Collections" and will feature papers across the history of the journals that have had high impact in their subject areas.
- A series of interviews with early career scientists who show exceptional promise in their field will be published across the year.
- The Journal of Experimental Botany will be publishing special Centenary Reviews.
- Conservation Physiology Journal's Ten-year Anniversary Celebrations coincide with the SEB 100 anniversary, and they have plans to incorporate this.
- SEB Journals will run a workshop at the centenary conference on creating figures for papers.

Improve Member engagement

The Membership manager will continue to implement the improvement strategy and membership engagement plan; the focus in 2023 will be retention and improving the current membership offering.

- Application form adjustments: To guarantee key information is collected upon initial application to ensure we can deliver targeted content which reflect a member's interests.
- Renewal campaigns: Improving our existing renewal communications and processes. This includes the re-introduction of a member lapsing survey so we can capture information on how to improve the society as a whole.
- Annual membership survey: The membership base will be fully surveyed to touch base with the community to ensure our membership provision continues to meet their current needs and identify areas for improvement through feedback. The membership base last received a chance to feedback on their subscription in 2020.
- Website adjustments for membership: Changes to the membership section of the website will be undertaken to adjust how the benefit offering is displayed so it's clear what is accessible for a member at each career stage. Work is also being undertaken to introduce a resource tab within the members area to draw all useful benefits and video content into a centralised location.

• Engagement at the annual conference: A transportable membership stand is in production which will be set up at the centenary conference. The membership team will have the functionality to recruit members on the stand, update records and check a member's renewal status. The team will use this stand at other events throughout the year following the success of the Bristol University Careers fair in September 2022.

From 2023 onwards we will focus our attention on providing a deeper and more value- member experience, to tailor each aspect of our membership offering to the different career stages.

Maintain the provision of Grants

The Centenary year provides an opportunity to increase focus on the SEB's grant provision. This includes improving the promotion of our current grant offering and the ability to award more grants in 2023.

The SEB Travel Grant fund has been increased by £20,000 in 2023 as part of the centenary initiatives. In total there is now £40,000 available to assist SEB Student and Early Career members who are presenting a poster or talk at the annual conference.

An additional £10,000 has been provided to further assist successful travel grant applicants in the form of the Top-up Fund. The SEB travel grant is designed to help students and early career researchers attend the Centenary Conference with a financial contribution towards travel and accommodation. Although this contribution was never intended to cover the full costs of travel, we are aware that travel costs (particularly flights) post-covid and in the middle of this cost-of-living crisis have dramatically increased from previous years. As such, the SEB "top-up fund" is for successful applicants of the SEB travel fund, whose costs significantly exceed the monetary value of the SEB Travel Grant they were awarded.

Further to the new incentives listed above, the current grant schemes are still available to access:

- The Company of Biologists Travel Grant
- Funding for Small Conferences
- University Public Lecture Grant
- Sponsorship for PhD Events
- Outreach Grant
- Diversity Grant
- Hardship Fund

Further expansion of the Outreach, Education and Diversity portfolio

In 2022, the Society made significant progress in expanding our outreach, education, and diversity initiatives, which align with our goals of fulfilling our charitable obligations of promoting the art and science of experimental biology, while also enhancing the benefits for our members. As we look ahead, the centenary year provides a significant opportunity to continue building on our progress in these areas and increase our efforts to promote the wider impact of experimental biology.

FINANCIAL REVIEW

A summary of the year's results is provided on pages 73-75 of the attached financial statements.

Total income for the year amounted to £2,573,148 (2021: £2,465,241). The principal funding sources were: publications £2,307,012 (2021: £2,321,184), meetings and symposia £150,438 (2021: £32,059), membership subscriptions £46,134 (2021: £55,165), investment income £57,880 (2021: £56,833) and grants of £11,684 (2021: £nil).

Total expenditure for the year amounted to £2,204,488 (2021: £1,672,340). £2,171,014 (2021: £1,637,000) of the expenditure incurred in the year, representing 98% (2021: 98%) of the total expenditure incurred, was spent on charitable activities, which includes directly attributable costs, project costs and overhead costs supporting core charitable objectives.

The net income for the year before investment gains and losses was therefore £368,660 (2021: £792,901).

After accounting for the net losses generated on the revaluation and disposal of listed investments totaling £490,817 (2021 – gains £316,396), the charity's overall funds decreased by £122,157 (2021: increased £1,109,297).

STATEMENT OF TRUSTEES' RESPONSIBILITIES

The trustees (who are also the directors of The Society for Experimental Biology for the purposes of company law) are responsible for preparing the trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice). Company law requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing those financial statements, the trustees are required to:

- · select suitable accounting policies and then apply them consistently;
- · observe the methods and principles in the Charity SORP;
- · make judgements and estimates that are reasonable and prudent;

• prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in business. The trustees are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the charitable company and to enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. In so far as the trustees are aware:

• there is no relevant audit information of which the charitable company's auditors are unaware;

 \cdot the trustees have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

Approved by the trustees and signed on their behalf by:

Signature:

Trustee:

Approved by the trustees on:

Independent auditor's report to the members of The Society for Experimental Biology

Opinion

We have audited the financial statements of The Society for Experimental Biology (the 'charitable company') for the year ended 31 December 2022 which comprise the statement of financial activities, the balance sheet, and statement of cash flows, the principal accounting policies and the notes to the financial statements. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland' (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- give a true and fair view of the state of the charitable company's affairs as at 31 December 2022 and of its income and expenditure for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the charitable company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the charitable company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the annual report and financial statements, other than the financial statements and our auditor's report thereon. The trustees are responsible for the other information contained within the annual report and financial statements. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the trustees' report, which is also the directors' report for the purposes of company law for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the trustees' report, which is also the directors' report for the purposes of company law has been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the charitable company and its environment obtained in the course of the audit, we have not identified material misstatements in the trustees' report. We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of trustees' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit; or
- the trustees were not entitled to prepare the financial statements in accordance with the small companies regime and take advantage of the small companies' exemptions in preparing the trustees' report and from the requirement to prepare a strategic report.

Responsibilities of trustees

As explained more fully in the trustees' responsibilities statement, the trustees (who are also the directors of the charitable company for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the charitable company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charitable company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

Our approach to identifying and assessing the risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, was as follows:

- we identified the laws and regulations applicable to the charitable company through discussions with management, and from our commercial knowledge and experience of the sector;
- we focused on specific laws and regulations which we considered may have a direct material effect on the financial statements or the operations of the charitable company, including those that relate to the reporting framework (Statement of Recommended Practice: Accounting and Reporting by Charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the United Kingdom and Republic of Ireland (FRS 102)), the Charities Act 2011 and the Companies Act 2006;
- we assessed the extent of compliance with the laws and regulations identified above through making enquiries of management and inspecting correspondence; and
- identified laws and regulations were communicated within the audit team and the team remained alert to instances of non-compliance throughout the audit.

Auditor's responsibilities for the audit of the financial statements (continued)

We assessed the susceptibility of the charitable company's financial statements to material misstatement, including obtaining an understanding of how fraud might occur, by:

- making enquiries of management as to where they considered there was susceptibility to fraud, their knowledge of actual, suspected and alleged fraud; and
- considering the internal controls in place to mitigate risks of fraud and non-compliance with laws and regulations.

To address the risk of fraud through management bias and override of controls, we:

- performed analytical procedures to identify any unusual or unexpected relationships;
- tested journal entries to identify unusual transactions;
- assessed whether judgements and assumptions made in determining the accounting estimates set out in the accounting policies were indicative of potential bias; and
- investigated the rationale behind significant or unusual transactions.

In response to the risk of irregularities and non-compliance with laws and regulations, we designed procedures which included, but were not limited to:

- agreeing financial statement disclosures to underlying supporting documentation;
- reading minutes of meetings of those charged with governance; and
- enquiring of management as to actual and potential litigation and claims.

There are inherent limitations in our audit procedures described above. The more removed that laws and regulations are from financial transactions, the less likely it is that we would become aware of non-compliance. Auditing standards also limit the audit procedures required to identify non-compliance with laws and regulations to enquiry of the trustees and other management and the inspection of regulatory and legal correspondence, if any.

Material misstatements that arise due to fraud can be harder to detect than those that arise from error as they may involve deliberate concealment or collusion.

A further description of our responsibilities is available on the Financial Reporting Council's website at <u>www.frc.org.uk/auditorsresponsibilities</u>. This description forms part of our auditor's report.
Independent auditor's report 31 December 2022

Use of our report

This report is made solely to the charitable company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the charitable company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charitable company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Signed:

Buzzacott hh?

Date:

Shachi Blakemore (Senior Statutory Auditor) For and on behalf of Buzzacott LLP, Statutory Auditor 130 Wood Street London EC2V 6DL

Statement of financial activities Year to 31 December 2022

(incorporating an income and expenditure account)

	Notes	Unrestricted funds £	Restricted funds £	2022 Total funds £	Unrestricted funds £	Restricted funds £	2021 Total funds £
Income:							
Charitable activities	2						
. Subscriptions		46,134	-	46,134	55,165	_	55,165
. Grants, awards and prizes			11,684	11,684		—	_
. Meetings and symposia		150,438	-	150,438	32,059	_	32,059
. Journals and other		2 307 012	_	2 307 012	2 222 184		2 221 184
Investment income	1	2,307,012		57 880	2,232,104	_	56 833
Total income		2,561,464	11,684	2,573,148	2,465,241		2,465,241
Expenditure: Raising funds							
. Raising donations and legacies		4,363	_	4,363	300	_	300
costs		29,111	_	29,111	35,040	_	35,040
		33,474	_	33,474	35,340		35,340
Charitable activities . Subscriptions . Grants, awards and prizes . Meetings and symposia . Journals and other publications . Education and public affairs		159,470 51,947 740,080 1,078,853 116,174	 24,220 	159,740 76,167 740,080 1,078,853 116,174	254,163 25,602 211,828 1,061,018 82,470	 1,919 	254,163 27,521 211,828 1,061,018 82,470
Total expenditure	3	2,180,268	24,220	2,204,488	1,670,421	1,919	1,672,340
Net income (expenditure) before investment gains	5	381,196	(12,536)	368,660	794,820	(1,919)	792,901
Net (losses) gains on investment portfolio		(490,817)		(490,817)	316,396		316,396
Net (expenditure) income and net movement in funds		(109,621)	(12,536)	(122,157)	1,111,216	(1,919)	1,109,297
Reconciliation of funds:							
Balance brought forward at 1 January		8,670,602	47,750	8,718,352	7,559,386	49,669	7,609,055
Balance carried forward at 31 December		8,560,981	35,214	8,596,195	8,670,602	47,750	8,718,352

All recognised gains and losses are included in the above statement of financial activities.

All of the charity's activities continued during the above two financial years.

Balance sheet 31 December 2022

	Notes	Unrestricted funds £	Restricted funds £	2022 Total funds £	Unrestricted funds £	Restricted funds £	2021 Total funds £
Fixed assets							
Tangible assets	8	6,145	_	6,145	6,361	_	6,361
Intangible assets	9	113,900	_	113,900	142,671	_	142,671
Investments							
. Investments	10	4,655,636		4,655,636	3,623,533		3,623,533
		4,775,681		4,775,681	3,772,565		3,772,565
Current assets							
Debtors	11	1.202.954	_	1.202.954	1,139,745	_	1,139,745
Cash at bank and in hand		2.942.783	35.214	2.977.997	3.978.897	47.750	4.026.647
		4,145,737	35,214	4,180,951	5,118,642	47,750	5,166,392
Creditors Amounts falling due within one year	12	(360,437)	-	(360,437)	(220,605)	_	(220,605)
Net current assets		3,785,300	35,214	3,820,514	4,898,037	47,750	4,945,787
Total assets less current liabilities Net assets		8,560,981 8,560,981	<u>35,214</u> 35,214	8,596,195 8,596,195	8,670,602 8,670,602	47,750 47,750	8,718,352 8,718,352
Funds Unrestricted funds General funds	14			3 285 300			2 711 141
Designated funds				5,275,681			5 959 461
				8.560.981			8.670.602
Restricted funds				35,214			47,750
Total funds				8,596,195			8,718,352

Approved by the Board of Trustees on

and signed on its behalf by:

Name and Role:

The Society for Experimental Biology – Company Registration Number 01314879 (England and Wales)

Statement of cash flows Year to 31 December 2022

	Notes	2022 £	2021 £
Cash flows from operating activities:			
Cash generated from operations	А	461,252	1,165,122
Interest paid		(41,285)	(40,128)
Net cash provided by operating activities		419,967	1,124,994
Cash flows from investing activities:			
Purchase of tangible fixed assets		(3,577)	(1,988)
Purchase of intangible fixed assets		_	(83,063)
Purchase of investments		(1,644,546)	(1,355,527)
Proceeds from sale of investments		240,239	421,777
Dividends received		57,880	56,833
Net cash (used in) investing activities		(1,350,004)	(961,968)
Change in cash and cash equivalents in the year		(930,037)	163,026
Cash and cash equivalents at 1 January	В	4,170,582	4,007,556
Cash and cash equivalents at 31 December	В	3,240,545	4,170,582

Notes to the statement of cash flows for the year to 31 December:

A Reconciliation of net movement in funds to net cash flow used in operating activities

	2022 £	2021 £
Net movement in funds (as per the statement of financial activities)	(122,157)	1,109,297
Adjustments for:		
Depreciation charges	32,563	4,729
(Gains) on investments	(18,987)	(79,266)
Interest paid	12,174	5,088
Unrealised (gains) on investments	509,805	(237,130)
Dividends received	(57,880)	(56,833)
Charges paid from investments	29,111	35,040
(Increase) decrease in debtors	(63,209)	402,269
Increase (decrease) in creditors	139,832	(18,072)
Net cash provided by operating activities	461,252	1,165,122

B Analysis of changes in cash and net debt

	2022 £	2021 £
Cash at bank and in hand	25,131	24,413
Notice deposits (less than 3 months)	2,952,866	4,002,234
Cash held by investment manager	262,548	143,935
Total cash and cash equivalents	3,240,545	4,170,582

The principal accounting policies adopted, judgements and key sources of estimation uncertainty in the preparation of the financial statements are laid out below.

Basis of preparation

These financial statements have been prepared for the year to 31 December 2022 with comparative information given in respect to the year to 31 December 2021.

The financial statements have been prepared under the historical cost convention with items recognised at cost or transaction value unless otherwise stated in the relevant accounting policies below or the notes to these financial statements.

The financial statements have been prepared in accordance with the principles set out in Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their financial statements in accordance with the Financial Reporting Standard applicable in the United Kingdom and Republic of Ireland (Charities SORP FRS 102) issued on 16 July 2014, the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

The principal accounting policies of the charitable company have remained unchanged from the previous year.

The financial statements are presented in sterling and are rounded to the nearest pound.

Critical accounting estimates and areas of judgement

The items in the financial statements where these judgements and estimates have been made include:

- the estimates of the useful economic lives of tangible and intangible fixed assets used to determine the annual depreciation/amortisation charges;
- the assumptions adopted by the trustees and management in determining the value of any designations required from the charity's general unrestricted funds; and
- the basis on which support costs have been allocated across expenditure headings.

Assessment of going concern

The trustees have assessed whether the use of the going concern assumption is appropriate in preparing these financial statements. The trustees have made this assessment in respect to a period of one year from the date of approval of these financial statements.

The trustees of the charity have concluded that there are no material uncertainties related to events or conditions that may cast significant doubt on the ability of the charity to continue as a going concern. They are of the opinion that the charity will have sufficient resources to meet its liabilities as they fall due. The most significant areas of judgement that affect items in the financial statements are detailed above. With regard to the next accounting period, the year ending 31 December 2023, the most significant areas that affect the carrying value of the assets held by the charity are the level of investment return and the performance of the investment markets.

Income recognition

Income is recognised in the period in which the Society has entitlement to the income, the amount of income can be measured reliably, and it is probable that the income will be received.

Income comprises donations, legacies, grants, income from charitable activities including subscriptions, grants, meetings, journals and publications and investment income.

In accordance with the Charities SORP FRS 102 volunteer time is not recognised within the financial statements.

Donations and legacies

Donations are recognised when the Society has confirmation of both the amount and settlement date. In the event of donations pledged but not received, the amount is accrued for where the receipt is considered probable. In the event that a donation is subject to conditions that require a level of performance before the Society is entitled to the funds, the income is deferred and not recognised until either those conditions are fully met, or the fulfilment of those conditions is wholly within the control of the Society and it is probable that those conditions will be fulfilled in the reporting period.

Legacies are included in the statement of financial activities when the Society is entitled to the legacy, the executors have established that there are sufficient surplus assets in the estate to pay the legacy, and any conditions attached to the legacy are within the control of the Society.

Subscriptions

All annual subscriptions due and received during the year are treated as income of that year. Life subscriptions and five yearly subscriptions are carried forward and written off over a period of fifteen years and five years respectively.

Royalties, journals and other publications

The Society accounts for all income and related expenditure on journal sales and other publications on an accruals' basis.

Royalties are recognised in the financial statements as they are received or become receivable.

Other income excluding meetings

All other income, excluding meetings activities, is accounted for on a receivables' basis.

Meetings

The meetings committee has responsibility for the administration of all Society meetings with certain administrative tasks delegated to designated employees. All income is accounted for when receivable and all expenditure is accounted for on an accruals' basis. On the conclusion of each meeting any surplus arising there from is identified, and deficit being met by the Society in the period to which it relates.

Grants

Grant income is recognised when received or reasonably certain that the grant will be received, whichever is the sooner.

Expenditure recognition

Liabilities are recognised as expenditure as soon as there is a legal or constructive obligation committing the Society to that expenditure, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all cost related to the category. Where costs cannot be directly attributed to particular headings, they have been allocated to activities on a basis consistent with the use of resources.

Grants offered subject to conditions which have not been met at the year-end date are noted as a commitment but not accrued as expenditure.

Allocation and apportionment of costs

Costs of generating funds comprise the costs associated with seeking voluntary income and investment management fees.

Charitable expenditure comprises those costs incurred by the Society in the delivery of its activities and services for beneficiaries. It includes both costs that can be allocated directly to such activities and those costs of an indirect nature necessary to support them.

Support costs include governance costs which are costs associated with meeting the constitutional and statutory requirements of the Society and include the audit fees and costs linked to the strategic management of the Society.

All costs are allocated between the expenditure categories of the statement of financial activities on a basis designed to reflect the use of the resource. Costs relating to a particular activity are allocated directly; others are apportioned on an appropriate basis. For example, time spent.

Tangible fixed assets

Depreciation is provided at the following annual rates in order to write off each asset over its estimated useful life.

- Freehold property 2% on cost
- ♦ Fixtures and fittings 25% on cost
- Computer equipment 25% on cost

Where indication exists that there has been an impairment to the value of a fixed asset an impairment review is carried out.

Items purchased costing less than £500 are not capitalised and are expensed through the statement of financial activities.

Intangible fixed assets

The Society's policy is to capitalise intangible assets where future economic benefits from the asset are expected and the cost of the asset can be reliably measured. Amortisation has been calculated to write off the cost of intangible fixed assets over their expected lives.

Intangible fixed assets - 20% on cost

Investments and investment properties

Investments are included in the balance sheet at their market value; realised and unrealised gains (losses) arising on the investments are credited (debited) in the statement of financial activities. Income arising from these investments is recorded on a receivable basis within investment income in the Statement of Financial Activities.

Taxation

The Society is a UK registered charity and, therefore, is not liable to income tax or corporation tax on income derived from its charitable activities, as it falls within the various exemptions available to registered charities.

Fund accounting

General funds are unrestricted funds, which are available for use at the discretion of the trustees in furtherance of the general objectives of the Society, and which have not been designated for other purposes.

Restricted funds are funds, which are to be used in accordance with specific restrictions imposed by donors, or which have been raised by the Society for specific purposes.

Designated funds are unrestricted funds earmarked by the trustees for a particular purposes.

Foreign currencies

Assets and liabilities in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are translated into sterling at the rate of exchange ruling at the date of transaction. Exchange differences are taken into account in arriving at the operating result. All differences are taken to income and expenditure through the statement of financial activities.

Financial instruments

The Society only holds basic financial instruments as defined in FRS 102. The financial assets and financial liabilities of the Society and their measurement basis are as follows:

Financial assets – other debtors are basic financial instruments and are debt instruments measured at amortised cost. Prepayments are not financial instruments.

Cash at bank and short-term deposits – classified as a basic financial instrument and is measured at face value.

Financial liabilities – accruals and other creditors are financial instruments and are measured at amortised cost.

1 Investment income

	2022 £	2021 £
Dividends	51,751	39,630
Interest	6,129	1,528
Rental income	_	15,675
Total	57,880	56,833

2 Income from charitable activities

	2022 £	2021 £
Activities		
Subscriptions	46,134	55,165
Grants, awards and prizes	11,684	
Meetings and symposia	150,438	32,059
Journals and other publications	2,307,012	2,972,184
	2,515,268	3,059,408

Grants received, included in the above, are as follows:

	2022 £	2021 £
COB travel grant	11,684	
	11,684	_
COB travel grant	<u>11,684</u> 11,684	

In 2022, £11,684 income from charitable activities was restricted (2021: £nil).

3 Charitable activities costs

	Direct Staff	Direct Costs £	Support Costs £	2022 Totals £
Raising donations & legacies	_	4,363	_	4,363
Investment management costs	_	29,111	_	29,111
Subscriptions	81,514	15,871	62,355	159,740
Meetings and symposia	142,799	425,106	172,175	740,080
Journals and other publications	309,546	547,298	222,009	1,078,853
Education and public affairs	90,149	3,195	22,830	116,174
Grants, awards and prizes (note 4)	_	73,200	2,967	76,167
	624,008	1,098,144	482,336	2,204,488

3 Charitable activities costs (continued)

Prior year	Direct Staff	Direct Costs £	Support Costs £	2021 Totals £
Raising donations & legacies	_	300	_	300
Investment management costs	_	35,040		35,040
Subscriptions	104,223	16,021	133,919	254,163
Meetings and symposia	98,876	23,991	88,961	211,828
Journals and other publications	271,745	555,394	233,879	1,061,018
Education and public affairs	63,591	399	18,480	82,470
Grants, awards and prizes (note 4)	_	27,521		27,521
	538,435	658,666	475,239	1,672,340

In relation to the above costs, all cost were unrestricted with the exception of £24,220 (2021: £1,919) which were restricted.

	2022	2021
	£	£
Support costs		
Staff costs	61,097	69,717
Other staff costs	45,222	49,139
Property & rental expenses	218,705	215,770
Professional & legal fees	10,629	24,139
Non recoverable VAT & Bank charges	32,289	28,253
Insurance	8,317	4,251
Depreciation of tangible fixed assets	32,564	4,731
Governance costs		
Staff costs	41,298	42,431
Honoraria	16,640	22,308
Auditors' remuneration	15,575	14,500
	482,336	475,239

Direct staff costs have been apportioned to the charity's activities based on the percentages detailed in Note 7.

4 Grants payable

	2022	2021
	£	£
Grants, awards and prizes	76,167	27,521

2022

2021

The total grants paid to institutions during the year was as follows:

	2022 £	2021 £
Support grants	51,947	25,602

The total grants paid to individuals during the year was as follows:

	2022 £	2021 £
Travel grants	24,220	1,919
	24,220	1,919

5 Net income

This is stated after charging:

	2022 £	2021 £
Staff costs (note 7)	726,405	650,583
Auditor's remuneration		
. Statutory audit services (current year)	15,575	14,500
Depreciation (note 8)	3,793	3,548
Amortisation (note 9)	28,770	1,073

6 Trustees' remuneration and benefits

Two members of the council received emoluments worth £5,030 during the year (2021: £2,640) for services rendered as editor for The Journal of Experimental Botany. The institutions that the council members work for are entitled to receive a flat rate honorarium of £1,000. During the year the total amounts of honorarium paid was £7,000 (2021 - £10,000). No emoluments are paid to Council members for their services as trustees to the Society (2021 – none).

Trustees' expenses

Total expenses paid to trustees for attending council meetings was \pounds nil (2021 - \pounds nil) and amounts paid for other trustee expenses and Society committee meetings was \pounds 2,385 (2021 - \pounds nil). The total number of trustees in receipt of payment of expenses in the year was 8 (2021 – nil).

All of the trustees are members of the Society and as such pay an annual membership subscription. The trustees do not benefit from any discounts in the subscription rates set by the Society.

7 Staff costs

The average number of employees of the company during the year and their aggregate emoluments are shown below:

	2022 £	2021 £
Wages and salaries	570,200	511,777
Social security	59,097	50,465
Pension	97,108	88,341
	726,405	650,583

The average number of employees of the company during the year was 15 (2021: 14).

Staff costs are apportioned to the charities activities during the year using the following percentages:

	2022	2021
Journals and other publications	50%	50%
Meetings	23%	18%
Membership	13%	20%
Education and Public Affairs	14%	12%

The number of employees whose remuneration (excluding employer pension contributions) was £60,000 or more were as follows:

	2022 Number	2021 Number
Between £80,000 - £90,000	_	1
Between £90,000 - £100,000	1	_
	1	1

The key management personnel in charge of directing and controlling the charity on a dayto-day basis comprises the trustees and the Chief Executive Officer. Trustees are not remunerated for their role as trustees to the Society.

The total employee benefits including employer pension contributions and National Insurance contributions of the key management personnel were £103,976 (2021 - £99,164).

8 Tangible fixed assets

	Computer equipment £	Totals £
Cost		
At 1 January 2022	15,021	15,021
Additions	3,577	3,577
At 31 December 2022	18,598	18,598
Depreciation		
At 1 January 2022	8,660	8,660
Charge for year	3,793	3,793
At 31 December 2022	12,453	12,453
Net book value		
At 31 December 2022	6,145	6,145
At 31 December 2021	6,361	6,361

9 Intangible fixed assets

J	CRM system £	Totals £
Cost		
At 1 January 2022	143,852	143,852
At 31 December 2022	143,852	143,852
Amortisation		
At 1 January 2022	1,182	1,182
Charge for year	28,770	28,770
At 31 December 2022	29,952	29,952
Net book value		
At 31 December 2022	113,900	113,900
At 31 December 2021	142,670	142,670

The capital commitment in relation to the CRM system at 31 December 2022 was £nil (2021: £5,260).

10 Fixed asset investments

	Total 2022 £	Total 2021 £
Market value		
At 31 December	3,479,598	2,229,452
Additions	1,644,546	1,355,527
Disposals (proceeds £240,239 gains £18,987)	(221,252)	(342,511)
Unrealised gain	(509,805)	237,130
At 31 December	4,393,088	3,479,598
Cash and settlements pending	262,548	143,935
	4,655,636	3,623,533

Historical cost of the investments at 31 December 2022 was £4,272,643 (31 December 2021 - £2,848,000).

Listed investments

No investments held at 31 December represent over 5% of the portfolio value.

The total unrealised gains as at 31 December included in the above constitute movements on revaluation of the charity's listed investments. Movements during the year were as follows:

	2022 £	2021 £
Reconciliation of movements in unrealised gains:		
Total unrealised gains at 1 January	631,598	394,467
Add: losses relating to disposals in the year	(18,987)	(79,266)
Add: (losses) gains arising on revaluations in the year	(492,165)	316,397
Total unrealised gains at 31 December	120,445	631,598

11 Debtors: amounts falling due within one year

	£	2021 £
Trade debtors	15,492	19,146
Other debtors	—	104
VAT	_	5,306
Prepayments and accrued income	1,187,462	1,115,189
	1,202,954	1,139,745

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# 12 Creditors: amounts falling due within one year

|                                        | 2022<br>£ | 2021<br>£ |
|----------------------------------------|-----------|-----------|
| Trade debtors                          | 98,952    | 35,908    |
| Social security and other taxes        | 18,753    | 15,164    |
| VAT                                    | 55,126    | _         |
| Other creditors                        | 2,320     | 2,217     |
| Accruals and deferred income (note 13) | 185,286   | 167,316   |
|                                        | 360,437   | 220,605   |

# 13 Deferred income

|                                | 2022     | 2021     |
|--------------------------------|----------|----------|
| Deferred income at 31 December | 51,192   | 53,223   |
| Income deferred                | 41,481   | 51,192   |
| Amounts released as income     | (51,192) | (53,223) |
| Balance at 31 December         | 41,481   | 51,192   |

The deferred income at 31 December represents advance membership income received in advance for future years.

### 14 Movement in funds

|                           | At 1<br>January<br>2022<br>£ | Income<br>£ | Expenditure<br>£ | Gains and<br>losses<br>£ | Transfers<br>between<br>funds<br>£ | At 31<br>December<br>2022<br>£ |
|---------------------------|------------------------------|-------------|------------------|--------------------------|------------------------------------|--------------------------------|
| Unrestricted funds        |                              |             |                  |                          |                                    |                                |
| General                   |                              |             |                  |                          |                                    |                                |
| fund                      | 2,711,141                    | 2,561,464   | (2,147,705)      | —                        | 160,400                            | 3,285,300                      |
| Designated funds:         |                              |             |                  |                          |                                    |                                |
| .Fixed assets fund        | 135,832                      | _           | (32,563)         | —                        | 16,776                             | 120,045                        |
| .Investment fund          | 3,623,629                    | —           |                  | (490,817)                | 1,522,824                          | 4,655,636                      |
| .Pending investment       | 2,200,000                    | _           | _                | _                        | (2,200,000)                        | _                              |
| Centenary Fund            | _                            | _           | _                | _                        | 500,000                            | 500,000                        |
|                           | 8,670,602                    | 2,561,464   | (2,180,268)      | (490,817)                |                                    | 8,560,981                      |
| Restricted funds          |                              |             |                  |                          |                                    |                                |
| Grants from<br>Company of |                              |             |                  |                          |                                    |                                |
| Biologists Limited        | 46,349                       | 11,684      | (24,220)         | —                        | —                                  | 33,813                         |
| Irene Manton Fund         | 1,401                        | —           |                  |                          |                                    | 1,401                          |
|                           | 47,750                       | 11,684      | (24,220)         |                          |                                    | 35,214                         |
| Total funds               | 8,718,352                    | 2,573,148   | (2,204,488)      | (490,817)                |                                    | 8,596,195                      |
|                           |                              |             |                  |                          |                                    |                                |

#### 14 Movement in funds (continued)

#### Comparative figures for the year ended 31 December 2021

|                           | At 1<br>January<br>2021 | Income    | Expenditure | Gains and<br>losses | Transfers<br>between<br>funds | At 31<br>December<br>2021 |
|---------------------------|-------------------------|-----------|-------------|---------------------|-------------------------------|---------------------------|
|                           | £                       | £         | £           | £                   | £                             | £                         |
| Unrestricted funds        |                         |           |             |                     |                               |                           |
| General                   |                         |           |             |                     |                               |                           |
| fund                      | 1,988,032               | 2,465,241 | (1,665,691) | —                   | (76,441)                      | 2,711,141                 |
| Designated funds:         |                         |           |             |                     |                               |                           |
| .Fixed assets fund        | 68,710                  | _         | (4,730)     | _                   | 71,852                        | 135,832                   |
| .Investment fund          | 3,302,644               | _         |             | 316,396             | 4,589                         | 3,623,629                 |
| .Pending investment       | 2,200,000               | _         |             |                     |                               | 2,200,000                 |
|                           | 7,559,386               | 2,465,241 | (1,670,421) | 316,396             |                               | 8,670,602                 |
| Restricted funds          |                         |           |             |                     |                               |                           |
| Grants from<br>Company of |                         |           |             |                     |                               |                           |
| Biologists Limited        | 48,268                  |           | (1,919)     | _                   |                               | 46,349                    |
| Irene Manton Fund         | 1,401                   | _         |             |                     |                               | 1,401                     |
|                           | 49,669                  | —         | (1,919)     | _                   | —                             | 47,750                    |
| Total funds               | 7,609,055               | 2,465,241 | (1,672,340) | (316,396)           | _                             | 8,718,352                 |

# Fixed assets fund

The balance on the fixed asset fund represents the carrying value of the charity's tangible fixed assets and intangible fixed assets. The availability of these assets is essential to the day-to-day work of the charity and as such, the value of these assets cannot be regarded as funds that would be realisable with ease, in order to meet future contingencies. As such, an amount equal to the net book value of the fixed assets has been separated from the charity's general funds and held as a separate designated fund.

#### Investment fund

The investment fund has been created to cover the cost of the investment portfolio. The value of the fund is held to create long term investment return and to help fund the day-to-day operations of the charity.

#### Pending investment fund

The pending investment fund has been established to represent the amount that the trustees are considering future investment opportunities for.

### Grants from Company of Biologists Limited

The fund represents the Grant money received from the Company of Biologists Limited towards providing travel grants to help members attend the SEB meetings.

# Irene Manton fund

The fund represents funds received to be used to provide awards as part of the annual meetings.

## Centenary fund

This fund has created to accommodate the additional expenses in 2023 to support a wide range of events and initiatives planned in honour of the SEB's 100th Anniversary. This fund will facilitate grants, collaborative projects with other organisations, and a plethora of member-focused events and initiatives.

#### 15 Analysis of net assets between funds

|                                                       | Fixed<br>assets fund<br>£ | Other<br>designated<br>funds<br>£ | General<br>funds<br>£ | Restricted<br>funds<br>£ | Total<br>2022<br>£ |
|-------------------------------------------------------|---------------------------|-----------------------------------|-----------------------|--------------------------|--------------------|
| Fund balances at 31 December 2022 are represented by: |                           |                                   |                       |                          |                    |
| Fixed assets                                          | 120,045                   | _                                 | —                     | _                        | 120,045            |
| Investments                                           | _                         | 4,655,636                         | _                     | _                        | 4,655,636          |
| Net current assets                                    |                           | 500,000                           | 3,285,300             | 35,214                   | 3,820,814          |
|                                                       | 120,045                   | 5,155,636                         | 3,285,300             | 35,214                   | 8,596,195          |
|                                                       |                           | Other                             | 0                     |                          | <b>T</b> . (1)     |
|                                                       | Fixed assets              | designated<br>funds               | General<br>funds      | Restricted<br>funds      | 1 Otal<br>2021     |
|                                                       | £                         | £                                 | £                     | £                        | £ 2021             |
| Fund balances at 31 December 2021 are represented by: |                           |                                   |                       |                          |                    |
| Fixed assets                                          | 149,032                   | _                                 | _                     | _                        | 149,032            |
| Investments                                           | _                         | 3,623,533                         | _                     | _                        | 3,623,533          |
| Net current assets                                    |                           | 2,200,000                         | 2,698,037             | 47,750                   | 4,945,787          |
|                                                       | 149,032                   | 5,823,533                         | 2,698,037             | 47,750                   | 8,718,352          |

## 16 Taxation

The company is registered as a Charity and the exemption contained in the Income and Corporation Taxes Act 1988 and subsequent legislation which generally relate to Charities are applicable to this company.

### 17 Contingent liabilities

The Society's employees participate in the Universities Superannuation Scheme (USS) which is a defined benefit multi-employer scheme. It is not possible or appropriate to identify assets and liabilities of the schemes which are attributable to the Society. Consequently, the Society's contributions are recognised in the statement of financial activities in the year of payment.

According to the latest actuarial valuation of the USS, as at 31 March 2020 the USS's assets were sufficient to cover 78% of its liabilities. The USS has completed its most recent review as at 31 March 2022. The indicative future service contribution rate based on financial conditions as at 31 March 2022 for benefits accruing from 1 April 2022 is 24.5% of Salary (reducing to 23.7% of salaries from 1 April 2024).

The pensions charge for the year represents contributions payable of £91,788 (2021: £88,341).

#### 17 Related party transactions

Other than those disclosed in note 6 and note 7, there were no related party transactions during the year.

#### 18 Share capital

The company is limited by guarantee. Under the provisions of the Memorandum and Articles of Association, in the event of a winding-up, the individual members liability is limited to a maximum of £1.