

THE MAGAZINE OF THE INSTITUTE OF CONSERVATION • OCTOBER 2021 • ISSUE 96



### Having an impact

Also in this issue

Environmental sustainability in the heritage sector

# THE INSTITUTE OF CONSERVATION AN BE SIMPLE

Becoming and remaining a successful conservator requires knowledge and skills which develop over time. By identifying your strengths and weaknesses and creating your own personal and professional goals it is possible to plan a long and rewarding career in conservation. Continuing Professional Development (CPD) is an essential part of becoming and remaining Accredited.

### But CPD doesn't have to be complicated or difficult.

We've compiled some quick ideas for your CPD - whether you have 5 minutes, 1 hour or 1 day.



min

min

HOURS

### **5 MINUTES**

 Take a virtual coffee break and talk to another conservator about vour work

- Join an Icon Group, Network or Icon's online Discord community
- Visit the Icon website to look up potential future CPD activities
- Register for an on-line event or course •
- Search for any CPD grants available
- Share an idea or resource with a peer
- Identify a skill or competency you would like to develop Ask a colleague for feedback

### **1 HOUR**

- Fill out your Upgraded Listing on the Conservation Register
- Read relevant articles, newsletters, books, websites
- Attend a webinar or virtual seminar
- Respond to a debate on social media
- Record and reflect on your CPD activities in your CPD learning log
- Carry out online research or study a relevant topic
- Consider writing an academic article
- Write an article for Icon's publications
- Research conferences to submit an abstract to
- Peer review an article or find a book to review
- Write a case study for the Icon website
- Chair an on-line team/committee meeting
- If you are an ACR, consider becoming an Icon mentor
- Listen to a TED Talk
- Practice your IT skills by taking software tutorials
- Teach a colleague something online

**1 DAY** 

- Participate in an online event or workshop such as the many Icon courses planned for the year
- Virtually shadow someone by sitting in on online meetings
  Take a stress management e-learning course
- Present or network at a conference, e.g. Icon's Twitter Conference
- Plan or run an online course or event
- Plan and pitch a research project
- Volunteer in a related field
- Learn a new craft for pleasure

# inside Con

### OCTOBER 2021 Issue 96



### From the Editor

Welcome to this special issue of Icon News which takes as its theme the topic of environmental sustainability in the heritage sector.

If you are like me, sometimes wondering if it is all worthwhile as you drop a lone tin can in the recycling box to a backdrop of news reports on

fires, floods, melting ice caps, species loss and the opening of another coal-fired power station, then this issue should give you heart. The authors come from a range of backgrounds academia, big institutions and private practice - but one thing they all share is their commitment to making a difference: our contributors are clear that each little action does count and can cumulatively effect change and have an impact.

Having an impact for the benefit of the conservation profession and the cultural heritage we safeguard is a key part of Icon's mission and for the first time we are presenting a summary report in easily digestible form of Icon's impact and activities for our latest financial year. You will find it on pages 4-5. The full impact report for 2020-21 (with case studies and more detail) is available on the website. And do attend the AGM online on 27 October to hear more.

### Lynette Gill



Institute of Conservation 106 -109 Saffron Hill London EC1N 8QS

T +44(0)20 3142 6799

admin@icon.org.uk membership@icon.org.uk www.icon.org.uk

Chief Executive Sara Crofts sara.crofts@icon.org.uk

Conservation Register membership@icon.org.uk www.conservationregister.com

ISSN 1749-8988

Icon News Editor Lynette Gill news@icon.org.uk

Production designer Lee Holland leerh1974@gmail.com

Printers Calderstone Design & Print Limited www.calderstone.com

Advertising Display and Recruitment **020 3142 6789** Advertising@icon.org.uk







Design by Lee Holland to reflect

See pp 4-5 for a summary report of

Whilst every effort is made to ensure

accuracy, the editors and Icon Board

expressed in Icon News; it is solely

Deadlines for adverts and editorial

of Trustees can accept no

responsibility for the content

that of individual contributors

For the February 2022 issue

Tuesday 30 November

For the April 2022 issue

Tuesday İ February

Icon's year to 31 March 2021.

activities and impact

Cover image

© Lee Holland

Disclaimer:

#### Z NEWS

From the Chief Executive; from the ESN Chair; Icon's impact; policy update; bats; Group news

### 13 PEOPLE

**15** CALICO INTO PAPER A recycling experiment is underway

16 INSPIRED INTO ACTION

A sustainability journey begins

#### 18 COD2( AT I

**COP26 AT NGS** National Galleries Scotland responds to the UN Conference

### 22

ARE WE DOING ENOUGH?

Sharing some dissertation findings

### 24

SUSTAINABLE LABS How to increase laboratory sustainability

### 27

**REVIEWS** Plastic materials course; virtual couriering discussion

### 30

**IN PRACTICE** Tips and tricks: how to run a sustainable studio

### 34 THE EMERGING CONSERVATOR

The British Library's green network a year on

Icon is registered as a Charity in England and Wales (Number 1108380) and in Scotland (Number SC039336) and is a Company Limited by Guarantee, (Number 05201058)

ICON NEWS • OCTOBER 2021 • 1

# professional update

### From the Chief Executive



### Sara Crofts on environmental sustainability, Icon's *Strategy* and impact

Last year, just as the first lockdown was beginning, I shared a virtual stage with Professor Katharine Hayhoe, Chief Scientist at *The Nature Conservancy*. We had both been invited to take part in *Let's Talk Climate Action* – a panel debate deftly orchestrated by our colleagues at Historic Environment Scotland and expertly hosted by journalist

Sally Magnusson. We discussed our experiences of finding effective ways of communicating the climate crisis and how we each use our areas of expertise to reach new audiences, hopefully changing hearts and minds along the way.

So, amidst the extensive media coverage surrounding the launch of the latest Intergovernmental Panel on Climate Change (IPCC) report ahead of this year's COP26 global climate summit in Glasgow I turned to Twitter to get Professor Hayhoe's take on the situation. Her brief commentary on the report concluded with this statement: 'That's why this new IPCC report is so blunt. Climate change isn't just one more priority on our already over-crowded list. It is a threat multiplier that affects every single other priority already on it, from the air we breathe to the food we eat'.

This is a stark message, but Katharine is an optimist rather than a doomsayer, so it's also worth sharing this positive quote from her too: 'Climate action isn't a giant boulder sitting at the bottom of a steep hill with just a few hands on it. It's already at the top of the hill, it's already got millions of hands on it, and it's already slowly rolling in the right direction. It just needs to go faster'.<sup>2</sup>

So what can loon and its members do? We already know that many conservation businesses and cultural heritage organisations are changing their practices to reduce their carbon footprints and to introduce mitigation and adaptation measures to counter the impact that climate change is having on the objects, collections, and buildings that they care for. Icon is also taking practical action, for example promoting a digital-only option for *Icon News* and the *Journal of the Institute of Conservation* (while switching to paper envelopes for those who still want to receive hard copies), moving to a more energy efficient office building, and reducing our staff travel.

We have also teamed up with *Fit for the Future* to help share our members' knowledge and ideas with others in the wider heritage and charitable sector. We are part of the COP26 Task and Finish Group set up by the Historic Environment Forum too, and we recently participated in a roundtable convened by the Department for Digital, Culture, Media and Sport to gather ideas about sustainability policies that can be fed into the forthcoming Government *Heritage Statement*. On the global stage we continue to play a role in the international Climate Heritage Network, which includes taking part in the recent G20 Italia 2021 webinar series: *Preserving Cultural Heritage, Supporting the Green Transition*<sup>3</sup> developed by the Italian Cultural Ministry.

However, the most exciting recent development has been the launch last year of Icon's Environmental Sustainability Network (Icon ESN), chaired by trustee Lorraine Finch ACR. This new network already has two hundred and seventy members and delivered a busy programme of events in its first year. The network is actively contributing to the implementation of Icon's *Environmental Action Plan* and is therefore playing a full role in helping to deliver our strategic priorities. If you haven't already signed up as a member of Icon ESN, then I urge you to do so!

So, in a year that has brought many challenges, Icon ESN has been an encouraging and uplifting success story but, in addition to the professional impact that the network is delivering through its events, I think that it also offers an insight into a new way of working as we consider our next *Strategy* and its implementation.

Over the last six months I have co-ordinated a series of strategic workshops with a range of stakeholders, including members, Group and Network representatives, funders, and senior staff in a variety of heritage organisations. I have also talked individually to others. I am sincerely grateful to everyone who has given their time to share thoughtful insights and creative ideas, and my notebooks are now filled with many potential actions and projects. As a professional body it seems that we are very clear about **what** we need and want to do over the next few years. However, I am less sure that we have a clear sense of **who** is going to do the doing. Why do I say this? Because throughout the strategy-focussed conversations a particular phrase came up time and again: *Icon should do this / more of this.* 

This clarion call to do more is great, and I wholeheartedly support the ambition, but my question is: who do we mean when we say *Icon should*? Yes, there is a small staff team (eight people, mostly part-time) and we certainly do undertake projects, as well as ongoing policy and advocacy work, in addition to running the organisation. We also have our Board of Trustees, and our Board committees, which steer our finance, professional standards and development, and conferences, but if we are to implement the exciting emerging ideas that will shape the next *Strategy* then we will need to find a way to harness additional resources.

Over the last couple of years I have been astounded by the energy that is found in our Group and Network committees and by the quality (and quantity!) of the outputs that they deliver. Groups and Networks play a crucial role in supporting Icon members, offering CPD and learning opportunities, and sharing knowledge. The Icon Scotland Group also takes on policy and advocacy activity, engaging with the wider conservation sector in Scotland; we are starting to see the potential of Icon ESN too. However, my general observation is that a lot of our activity is inwardly-focussed, and so I wonder whether Icon's vibrant Groups and Networks could play a greater role in making Icon bigger, stronger, better, and more impactful. Can we utilise some of the existing energy and creativity in our Groups and Networks and direct it outwards into activities such as building collaborative projects with other organisations, seeking funding to support internships, and raising our game in terms of advocacy for the conservation profession? Are Groups and Networks, and individual members, willing to be active advocates for Icon and to inspire others to join our ranks so that our collective voice is louder and more powerful?

If we can harness the skills and talents within our Groups and Networks, and the membership more broadly, then I believe that we can create the momentum and impact that we need to become more visible, to raise our profile, and to achieve

### **REFLECTIONS FROM THE ESN CHAIR**

In the one year that the Icon Environmental Sustainability Network has been active, I've had the pleasure of seeing many of you at our events. It has been really great to have spoken to so many of you and to listen to your thoughts on environmental sustainability in cultural heritage. A theme that has come up again and again, is the feeling of powerlessness. Many of you feel that you are unable to affect change in your workplace, whether you are employed or self-employed.

You have the power to create change. Every small change that you make, makes a difference. You might feel that your decision to turn off the lights in your studio and work by natural light won't help but if ten, a hundred or one thousand other people who are reading this follow suit - that makes a difference.

What one thing can you do today to make a difference? For a few suggestions visit the Count Us In website: At www.count-us-in.org/en-gb/16-steps/ you will find 'Making Change that Matters. These sixteen steps are the most effective way to reduce your carbon pollution and persuade others to do the same'. Even though these steps are not written for the cultural heritage sector, with a bit of creativity you can adapt them:

the recognition that conservation deserves. Every one of us can seek out and use opportunities to encourage more conservators and heritage scientists into the Icon family. And members' assistance with tasks such as fundraising and seeking support for internships is always welcome. So, if you have something to offer or would like to get involved, please don't be shy about getting in touch. Many hands make light work as they say!

### Share your reflections, comments, and ideas with me via feedback@icon.org.uk

### 1. Twitter:

https://twitter.com/KHayhoe/status/1407692695804383234?s=20 2. In the Face of Climate Change, We Must Act so that We Can Feel Hopeful—Not the Other Way Around. Katharine Hayhoe. 12 August 2021: https://time.com/6089999/climate-change-hope/ 3. The text of the presentation is available on the Icon website: www.icon.org.uk/resource/supporting-the-green-transition.html

- Fly less? Can you get a train to the meeting or attend online?
- Drive electric? Use a taxi firm that has an all-electric fleet.

And we can all do the speaking up.

Speaking up is so incredibly important. You might feel that you are only one person in your work place and have a limited ability to affect change at a higher level but coming together with colleagues or other freelancers will create change on a bigger scale. The changes you make will be noticed. They will cause others to think about environmental sustainability and to make changes themselves. If you don't do anything and never speak up, how will change for the better ever happen? Research into the effectiveness of non-violent protest shows that once 3.5% of the population participate success is inevitable\*.

So speak up, walk to work, stop using single use plastics in your studio, green your money and switch off the lights!

You have the power. You are the power.

### Lorraine Finch ACR

sustainability.icon@gmail.com \*https://www.bbc.com/future/article/20190513-it-only-takes-35-ofpeople-to-change-the-world



We can all speak up in one way or another

# OUR YEAR at a glance

Despite the disruption caused by the Coronavirus and lockdown we were able to deliver most of our planned activities and projects. So, here's a snapshot of our key achievements for the year ended 31 March 2021.You can learn more about our impact on the lcon website: www.icon.org.uk/about-us/icon-impact.html

# SUPPORTING OUR MEMBERS 2222 NEW Members Ethical guidance published 15 Policy Responses

submitted, demonstrating our ongoing commitment to policy and advocacy work

# ACCREDITATION &TRAINING

**15** ACCREDITATION ASSESSMENTS RUN REMOTELY

We were able to offer Icon Accreditation to those outside of the UK – including candidates in Australia and the USA

## ICON IS NOW THE **END POINT ASSESSMENT ORGANISATION**

for the two newly approved conservation apprenticeship programmes in England

# ADVOCACY **Campaigns**

## **Values of conservation**

In 2020, we launched a new research and engagement project in response to lcon's strategic priority to articulate the value of conservation to stakeholders and the public. lcon's Values of Conservation project articulates the values of cultural heritage conservation to society and to consider how we can better communicate them to audiences.

# 20th Anniversary of accreditation

Over the last 20 years lcon's accreditation framework has been **reviewed 5 times** and **1100 members** have been accredited. To mark the 20th Anniversary, lcon launched the new **Accredited Member logo**, **redeveloped the Conservation Register**, and produced **Virtual Open Studios** - a series of videos of Accredited conservators opening their virtual doors to the public.

## **Online engagement**

This year, we launched the **Icon Newsletter**, engaged with high profile **Social Media campaigns** like Maintenance Week and #AskAConservator, and ran a **fundraising campaign** on social media on **Giving Tuesday.** 

# COVID-19 Advocacy + Action

## Conservation Together at Home

The **Conservation Together at Home** webinar series was launched during the first lockdown in the spring of 2020. The series now includes over **30 videos** that have reached a **global audience**, connecting conservators who were working at home and may not otherwise have been able to interact with fellow professionals. This created a valued sense of community as well as providing worthwhile CPD.

## **Policy Successes**

Our calls for targeted support for conservation were reflected in the Government's **Cultural Recovery Fund for Heritage**. The Fund specifically highlighted conservators and conservation work as being **eligible** for the grants. We also published **Collections Care: An Act of Custodianship and Optimism** - a policy booklet that makes the case that investing in preventive conservation is responsible and cost- effective as well as our **position statement on the value of care of collections professions.** 

## Collections Care Stimulus Fund

The Collections Care Stimulus Fund was created to support the **care of collections** at a time when budgets for the conservation of collections and objects were restricted. **16 grants** of up to £1,250 have been given out to **small heritage organisations** to support interventive, preventive and digitisation activities.

# CONSERVATION REGISTER



We launched a new version of the Conservation Register to ensure that members of the public and potential clients can find conservators they can trust, or can confirm the professional status of a conservator they already know.

# COING GREEN

## WE LAUNCHED ICON'S Environmental Sustainability network

## AND ICON'S environmental statement and action plan

We encouraged members to go digital with lcon News and the Journal of Conservation. We also moved to a more energy efficient office.





Managing Energy Use in Modern Buildings Case Studies in Conservation Practice Edited by Bernard Flaman

and Chandler McCoy This timely volume contains ten case studies that examine the unique challenges for buildings built between 1931 and 1969 and offers valuable lessons for other structures facing similar issues.

© 2021 J. Paul Getty Trust

Getty Publications getty.edu/publications

### POLICY UPATE

### **Horizon Scanning**

As mentioned in my introductory column, I have been running a series of workshops to gather insights and ideas to inform Icon's *Strategy 2030*. As part of these sessions we have carried out 'horizon scanning' exercises where we tried to capture the key external opportunities and threats that are likely to arise over the coming decade. To help focus our thinking we used the PESTLE structure to group the opportunities and threats under the following headings:

- Political e.g. devolution, Government priorities, political issues
- Economic e.g. funding priorities, competition, markets, impact of Coronavirus
- Socio-cultural e.g. social trends, public attitudes, workforce diversity
- Technological e.g. skills, IT, digital divide
- Legal e.g. legislation, regulations, policies
- Environmental e.g. climate crisis

Having identified the opportunities and threats we then went on to consider what impact they might have on the conservation profession. Working collaboratively in small groups we were able to collate the suggestions in a series of Google sheets. These have now been combined into one single summary document which we have published on the Icon website.

The findings from this research are unlikely to be a surprise to members. Some of the most frequently cited threats were the obvious (and longstanding) issues such as lack of Government support for culture, cuts to funding, climate change, and barriers to entry into the conservation profession. However, the topic that came up most frequently in conversation was **recognition**, or rather the lack of recognition of the value of conservation and they ways in which conservators' work benefits society.

Over the last few years Icon has worked hard to raise the profile of conservation, but this is not a task that will ever be completed. We must continue to do all we can to champion not just the intrinsic value of what we do but also its relevance to people, communities, and societies. We've become skilled at articulating why conservation matters in the abstract, but now we need to focus on demonstrating more clearly why conservation should matter to the public, stakeholders, clients, employers, decision-makers etc. and how conservation can contribute to solving wider societal problems. This vital work will be a key strand of the next Strategy.

### Labour Market Intelligence research

In August we launched our call for members and others to participate in Icon's Labour Market Intelligence (LMI) research. We had initially planned to complete this research in 2020, however, given the Coronavirus-related upheaval of the last year, the research was temporarily put on hold. Happily, with lockdown restrictions largely lifted, we are now pressing ahead with this important work and hope to be able to share the final report at the end of the year.

The LMI research will enable us to gain a comprehensive understanding of the conservation sector's composition. We will investigate topics such as demographics, skills, qualifications, salaries, and benefits. The dataset and the report will then provide the evidence that we need to be able to advocate more strongly on the skills and workforce issues that are important to our members.

A key example is remuneration – both in terms of salaries for those in employment and fees for those in private practice. The lack of adequate financial reward has been a longstanding concern in our sector, but there are no quick-fix solutions. That said, there is some evidence to show that the introduction of the minimum salary guidance for entry-level conservators has had a positive impact, with job advertisers sometimes revising the offered salary once they understand that their advert will carry our non-compliance banner.

An important outcome of the LMI research will be the opportunity to revise the existing Icon salary guidance and to potentially introduce a table of salary figures that reflect a broader range of career stages. This will certainly be a positive development, even if it will not in itself address the endemic problem of low pay and fees that exists throughout the heritage sector. If we are to achieve the desired culture shift, other actions will be needed, as the diagram attempts to show.

With the desired culture shift in mind we will be inviting members to join two roundtable events in the autumn; one to consider conservators' salaries and one to look at freelance fees. The aim of these sessions will be to gather workable suggestions about who we might have the power to influence and how we can build a case for support that goes beyond 'we're well-educated professionals who deserve better'.



Moving from problem to solution - how to make change happen

Talking, or indeed shouting, about the issue isn't going to deliver results – we need to come up with considered and workable proposals that decision-makers will be motivated to accept and implement.

Sara Crofts, Chief Executive

### THE FIT FOR THE FUTURE NETWORK

The Fit for the Future network is an environmental sustainability network created by the National Trust in collaboration with the sustainability charity Ashden in 2013. The network has over one hundred charities, heritage organisations, local authorities and cultural venues in its membership.

Fit for the Future facilitates collaboration and knowledgesharing of best practice across organisations and sectors so that they can achieve the rapid and far-reaching changes needed to decarbonise, adapt to climate change, build business resilience and drive positive environmental impacts.

Network activity covers diverse environmental sustainability issues including energy management, transport, waste, biodiversity, land use, heritage and conservation. The development and delivery of net zero and climate-change / adaptation strategies are now a key focus of the network, linking all areas of activity.

Fit for the Future collaboration and knowledge-sharing is enabled through:

- Seminars/ webinars (including virtual)
- Site visits (tours)
- One-to-one member linkups and peer reviews
- Online resources

The Fit for the Future team continues to develop partnerships with a wide range of organisations to grow the network and develop its knowledge/experience and services/resources. Many of these collaborations have a heritage and conservation focus, including a partnership with the National Lottery Heritage Fund where applicants can include Fit for the Future membership as part of their grant award (to make projects more sustainable and resilient to climate change through adaptation planning and activity). The Covid-19 crisis of 2020/21 has enabled a stronger focus on environmental sustainability for organisations, with many accelerating their ambitions in this area, for example to become net zero by 2030 rather than 2050. Drivers for this focus include a desire to create more efficient, effective, resilient, ethical and responsible organisations for now and the future; collaboration being central to progress and meeting ambitions. Fit for the Future has proved that action can be



### Solutions for Environmental Monitoring, Control and Calibration

D-Tech specialise in providing advice, consultancy, monitoring equipment, humidifiers, dehumidifiers and calibration services to help you to understand, control, improve and monitor your environment.

Environmental monitoring solutions. We advise and supply loggers for all applications. From stand alone dataloggers to wifi "cloud" loggers and Eltek Radio Telemetric Systems.



Experts in on-site instrument calibration Supply of Humidifiers & De-humidifiers Short Term Humidifier Hire Servicing of your existing humidifiers

Please contact us for advice, a site survey or quote on any of the above services or equipment info@d-tech.co.uk www.d-tech.co.uk +44 (0) 1403 610091



accelerated through peer-to-peer learning based on the sharing of experience and knowledge, enabling hundreds of practitioners involved to support practical, transformational change for their organisations.

'Fit for the Future has put us into contact with many other like-minded organisations, and we have benefitted greatly from peer reviews and advice. When I go to an event I feel a lot more empowered to go back to my organisation and give advice on how to change things. One of the great strengths of the Network is that we are able to see how other organisations have overcome the same struggles as us and find practical ideas to take away and apply'. Anita Phillips, Health, Safety and Environment Officer, Historic Royal Palaces

The Institute of Conservation is a member of the Fit for the Future network and is working together to share resources/learning and collaborating on event delivery.

### **EVERY LITTLE HELPS!**

Did you know that as part of our ongoing drive to reduce our environmental footprint, you can now opt-out of print editions of *Icon News*? Each issue is dispatched in print form to members, but members also have access to the latest and all previous editions via the 'Resources' area of the Icon website. To opt-out of print editions, simply log-in to the Icon website (www.icon.org.uk/login.html) and amend your preferences via the 'Contact Preferences' tab under the 'Edit Profile' section of your 'My Account' area.

### **GUIDANCE ON BATS**

Historic England has published new guidance on 'Building Works and Bats', which has been developed in collaboration with the Bat Conservation Trust, National Trust, Natural England and English Heritage.

All UK bats are protected by law. This new guidance is intended to help property owners and all involved in managing, maintaining or making changes to buildings, or using the buildings, avoid infringing the law.

The two key things to remember are:

- Always start with the assumption that bats are present in a building or the surrounding site, unless a bat survey within the last two years shows that no bats or signs of bats are present.
- Plan all works well in advance so that a bat survey can be carried out and the works progressed when least disturbance will be caused to the bats.

The guidance covers:

- Why Bats Use Buildings
- British Bats and Their Life Cycles
- What To Do if You Find a Bat
- Buildings, Bats and the Law
- Bat Mitigation Licences



The Brown long-eared bat typically roosts in trees, attics and old buildings

- Bat Surveys
- Planning Changes to Buildings with Bats
- Timber Treatments and Pest Control
- Works to Roofs, Walls and Building Services
- Managing Properties for Bats and People

To read the new guidance go to: https://historicengland.org.uk/advice/technical-advice/buildings/ building-works-and-bats/

### THE JUNE BAKER TRUST AWARDS

The June Baker Trust is pleased to announce the awards that it has been able to give out this year with it's 'Awards for Conservators in Scotland' grants:

**Camille LaFrance**, a student on the MPhil Textile Conservation course at the University of Glasgow, was awarded £500 towards the cost of a summer placement at Perth Museum and Art Gallery.

**Jade Hill**, a student on the Paintings conservation MA course at the University of Northumbria, was awarded £300 towards the cost of materials required for her dissertation research.

**Kirstin Ingram**, a student on the MPhil Textile Conservation course at the University of Glasgow, was awarded £300 towards the cost of undertaking a summer placement at the Bowes Museum.

**Sarah Bernardo Souza Almeida**, a student on the MPhil Textile Conservation course at the University of Glasgow, was awarded £300 towards the costs of undertaking a placement at the National Museums of Scotland.

The June Baker Trust was set up in 1990 to help individuals working in the conservation of historic and artistic artefacts in Scotland, or training with the intention to do so. The 'Awards for Conservators in Scotland' are available to assist with funding travel, attendance at conferences and on short courses, purchase of equipment, or other suitable projects for conservators with a strong Scottish connection. These awards are made once a year, with the deadline for applications being 31 May.

The Trust can be contacted by email at: junebakertrust@gmail.com

### **NEWS FROM THE GROUPS**

### Archaeology Group

The Archaeology Group 2021 AGM was held on 6 August via Zoom. As well as the AGM we were delighted to welcome five guest speakers who each presented on the theme 'A Project I am Proud of'. We were very pleased with the attendance and would like to say a huge thank you to everyone who joined in and the wonderful guest speakers! The event was recorded and the video will be available shortly. A full review of the event will be published in the next issue of *Icon News*.

Work on the revised edition of *First Aid for Finds* is progressing well and we would like to thank Sarah Watkins-Kenney ACR who presented on FAFF during our AGM. We are aiming for publication of the revised edition in 2022, fifty years since the first publication in 1972.

We are looking forward to hosting more events in the future and are currently planning a series of online lunchtime lectures and exhibition tours. We are always looking for ideas for future events and workshops and would love to hear your suggestions. Please contact us using our new Group email address: archgroup.icon@gmail.com if you have any suggestions or ideas.

Please watch Iconnect, Twitter (@ICONArchaeology) and the website for further announcements. We always love to hear about your archaeological conservation projects big or small; please tag us and #FindsFriday in your posts and follow us on Twitter to see what everyone else us up to and how exciting our jobs can be!

### Charlotte Wilkinson

Icon AG Communications Rep

### Ceramics and Glass Group Last chance to buy tickets!

The Ceramics & Glass Group, together with the Stained Glass Group, have been working hard to organise our upcoming joint conference on 16-17 October: 'Fragmented Stories: Case Studies in Ceramics, Glass and Stained Glass Conservation'. This two-day conference will be an international forum of professionals and students to share, discuss and disseminate the latest research and projects on the conservation of ceramics, glass and stained glass. We will host an exciting range of talks, interactive Q&A sessions, posters, tours and networking opportunities.

Booking is still open and details on purchasing a ticket, along with the full conference agenda, can be found online on the Ceramics, Glass and Stained Glass Conference event page.

### Other news

CGG are excited to announce an online lecture on Stain Reduction delivered by Lauren Fair. The lecture will be held on 11 November 2021. Please see the CGG event page on the website for further details.

Lauren Fair is the Head of Objects Conservation at Winterthur Museum, Garden & Library and serves as Affiliated Assistant Professor for the Winterthur/University of Delaware Program in Art Conservation. In addition to her work at Winterthur and WUDPAC, Lauren is the Coordinator of the ICOM-CC Glass and Ceramics Working Group. Her research interests have included 18th-19th century Staffordshire enamel technology, stain reduction techniques for the conservation treatment of ceramics, and 'ajami decoration techniques of Damascene interiors.

### **Talk Summary**

The decision to reduce stains on ceramic objects can often be fraught with challenges: what is the nature of the stain? If I try to remove it and fail, could it become more visible? Do I risk leaving chemicals within the body that could cause harm later on? Does the stain hold intrinsic value to the object, and should I remove it at all?

This lecture addresses these questions and more by sharing the latest research on stain reduction of ceramics at Winterthur Museum and the University of Delaware (USA). The theory behind current protocols is explained in detail, and case studies are presented to offer a range of stain reduction scenarios experienced by the presenter for over a decade of teaching and public dissemination of this work.

### Ethnography Group

Thank you very much to those who attended the Group's AGM on Wednesday 14 July. We sent a big thank-you to



### MASTER YOUR CAREER

### MA Collections Care and Conservation Management, p/t MA Conservation Studies

"The opportunity to learn from tutors who are professional conservators and accredited in their field. The rich and stimulating learning environment has allowed me to advance my skills and grow in confidence."

Andri Maimaridou, MA Conservation Studies alumnae

westdean.ac.uk 💟 🗗 🞯 😰



Verena Kotonski ACR and Nikki Harrison who stepped down from the working committee. Their energy, enthusiasm and superb organisational skills have been so vital to a number of successful talks, symposiums and behind-the-scenes tours in recent years. With their departures the Ethnography Group's working committee members are Misa Tamura ACR (Chair), Adele Wight (Treasurer), Kay Saunders (Secretary), Rachel Howie (Social Media), Lydia Messerschmidt (Event Coordinator) and Keira Miller (Event Coordinator).

We looked back at the Group's activities during a challenging 2020, in which we were fortunate enough to host fantastic talks by Ceri Ashley & Nik Petek-Sargent (the British Museum), Helen A. Alderson (Museum of Archaeology and Anthropology), Rebecca Plumbe (Pitt Rivers Museum), Thandiwe Wilson (Pitt Rivers Museum), and Barbara Wills ACR and Sophie Rowe-Kancleris ACR (the British Museum), on subjects ranging from treatment case studies, community engagement and co-curation, capturing indigenous material knowledge to the precision-laser-cutting of Plastazote foam. Carmen Vida's talk on her Re-Entanglements Research project, that accompanied this AGM, was a fitting reflection of her conservation work in the context of the wider scope of the restitution of knowledge and decolonisation.

## **ICM**<sup>®</sup> Ecological insect control & biocide decontamination in collections

#### PHOT

Anobium punctatum eggs just before hatching of larvae. Copyright of MPA Materialprüfungsanstalt Eberswalde.

ICM will present first results of a re-evaluation of temperature tolerances of some museum pests at the Pest Odyssey Conference, September 2021.

www.icm.works

Brussels | London | Berlin | Mobile

Thank you very much to the respondents who filled in the post-AGM survey to help us plan future activities. Most respondents answered that they were comfortable attending in-person events from either this Autumn or next Spring. Every respondent would like to attend online talks and events, even after the pandemic. We are touched by your enthusiasm and appetite for learning and professional development opportunities. The respondents expressed interest in a wide range of topics from conservation technical studies and practical workshops, as well as learning more about materials knowledge and their social contexts, decolonisation and sustainability, relating to ethnographic and world cultural collections. Getting together online and receiving positive feedback and support for our online talks has been such a morale boost for all of us in the working committee. Thank you very much for showing your virtual faces and keeping us going.

We look forward to the year ahead, seeing your names on our Zoom screen, and hopefully in-person in the not too distant future...

### Misa Tamura

Chair of the Ethnography Group

### Heritage Science Group AGM and invited lecture

On 2 July 2021 the Group's AGM took place where we

discussed HSG activities during the past year. These included well-attended online events (Excel, Statistical Analysis of Heritage Science Data, and support and networking for HS students and Early Career Researchers), numerous communication outputs through Iconnects and pieces in *Icon News*, including two accessible research summaries or 'Science Bites' and the impact case study of the Group's Ethical Sampling Guidance document. You can find the agenda and reports by committee members on our website, in the documents section.

The AGM was followed by our 2021 Annual Guest Lecture by Dr. Lindsay Oakley, Director of Heritage Science and Research Testing from National Archives and Records Administration (NARA) of the US, entitled: 'Heritage Science Research to Address Preservation Changes in 21st Century Archives'.

### Committee changes

Eleanor Schofield ACR, chair, and Anita Quye, treasurer, stepped down from their committee roles during the AGM. We want to warmly thank them both for their fantastic work in the committee over the past years and wish them well in their future projects. We now welcome Josep Grau-Bove as the new HSG's committee chair. We have been recruiting new committee members, who will be announced in due course.

### Icon News 'Science bites'

HSG welcomes contributions from Icon members to publish summaries of your articles with scientific content, with the aim of disseminating Heritage Science, give visibility to your research projects and connect with other conservation professionals. The summaries should be up to one thousand words, and you may also include two to three images or diagrams that will help get the message across clearly. They should be written in a simple and engaging language, in the spirit of the Heritage Bites. Please send your summaries to iconhsg@gmail.com and include your name, affiliation, email and details of the full publication.

### Keeping in touch

Finally, keep an eye out for our notices in Iconnect, on our webpage, and on Twitter (@ICONSci) and get in touch via our Group email address (iconhsg@gmail.com) if you would like to become more involved in the Group's activities.

### Lucia Pereira-Pardo

HSG Committee Communications Officer

### Icon Scotland Group

### Training and events

By the time this goes to press, we will have had our first in-person events in a long time, a series of Black History walking tours around Edinburgh. In these tours, Lisa Williams, from the Edinburgh Caribbean Association, will share a series of stories and histories of people from Africa, the Caribbean and Asia, which have strongly influenced this city. At the end of October, we will host an Online Photogrammetry Demo, led by Marta Pilarska, which will introduce attendees to this photography-based 3D imaging technique, and explain how it can be used to produce digital 3D models of objects.

We are also currently liaising with potential speakers for our annual Plenderleith lecture in November, and by the time *Icon News* goes to press we will have made an announcement about this. And for the future, we are considering holding a 'Take Five' webinar focussing on environmental sustainability projects and tips. We would be interested in hearing from any potential speakers willing to fill a five-minute slot.

### Other happenings

At our committee meeting on 24 June we discussed our commitments for environmental sustainability; and equalities, diversity and inclusion; and we agreed the following: *Environmental sustainability* 

- If we are holding physical events we will attempt to reduce paper training materials, for example by circulating electronic feedback forms or using Slido within a session to gather feedback.
- We will follow the Veg UK policy for physical events i.e. ensure all catering is meat-free.



- We will ensure that our committee meetings always offer an online joining option for those who would otherwise have to travel to the meeting.
- We will consider holding events with environmental sustainability themes.

Equalities, diversity and inclusion

- We will consider holding events with equalities, diversity and inclusion themes.
- We will work to make our events more inclusive and accessible.

### Contact and keep in touch

We are always delighted to have new members in the Group, but remember that all you need to do in order to receive the emailed Scotland Group Iconnects is tick the Group on your Icon membership form.

You can also see our latest updates on social media: our blog is at https://iconscotland.wordpress.com, our Facebook page is https://en-gb.facebook.com/iconscotlandgroup and our Twitter feed is @icon\_scotland. Our general email address is admin@iconscotland.org and comments and suggestions for events can be emailed to events@iconscotland.org.

### Icon Textile Group Latest News

The committee are very pleased to welcome new Chair, Ksynia Marko ACR to the Textile Group, she takes over from Ann French ACR, who did an amazing job over the past three years. Many thanks go to Ann for all her hard work, enthusiasm and keeping the Group in check. We also said a fond farewell to three other committee members, Viola Nicastro, Kim Thüsing and Emily Austin, and welcomed newcomers Melinda Hey, Marina Herriges, Ania Golebiowska and Beth Gillions. For a full update on who's who, please see the committee section of the

A view of the new Icon office



Icon website. With new committee members come new and exciting ideas...stay tuned for forthcoming events, tours and talks (in person and online).

### A few words from the new Chair

It gives me great pleasure to take over the position as Chair of the Textile Group and I want to give my personal thanks to those of the committee who are leaving, and to those who are staying on, for all their hard work on behalf of us all.

The committee has provided a number of very successful online talks and discussions, keeping us all informed and in touch with Icon activities. These have been well attended and this year's Forum, I hope you will agree, was a highpoint. Well done everyone.

Following the Forum the new committee had an informal discussion via zoom and we had a face-to-face meeting at Burghley House, Stamford, Lincolnshire in September. This enabled us to get to know each other better and to discuss future plans. We would like to continue with online events in the form of a Spring and Autumn lecture series, hopefully leading to training sessions and face-to-face meetings, perhaps in smaller groups, during 2022. More news on this will follow in due course, so do check the Icon website. If any members want to ask a question or make a suggestion for an event please email us on: icontextilegroup@gmail.com

Committee members are now as follows: Ksynia Marko ACR – Chair Beth Gillions – Secretary Marina Herriges – Treasurer Hannah Sutherland – Website and Social Media Officer Terri Dewhurst – Icon News coordinator Melinda Hay – Emerging Professionals Network Rep Elizabeth-Anne Haldane ACR - Events Ania Golebiowska – Events Maria Pardos-Mansilla – Events – Technical Support Kelly Grimshaw – Co-opted Events Officer for one-year term.

### In This Issue

With this issue of *Icon News* focused on the environment, we are pleased to have been able to include submissions from textile conservators and, coincidentally, both committee members. Hannah Sutherland, Textile Conservator at the V&A highlights their environmentally conscious way of recycling calico fabric scraps. And Marina Herriges, Textile Conservator at Textile Conservation Ltd shares the outcomes of her research on environmental issues within the textile conservation industry.

### Keeping in touch with the Group

Due to publication deadlines, it is not always possible to mention all events so please check the Icon website, Facebook page, Twitter feed and Iconnect for details. If you have anything that you would like mentioned in our communications please contact the Textile Group's News Editor Terri.Dewhurst@nationaltrust.org.uk

### Writing for Icon News

If you would like to submit an article or review an event, details of how to write for *Icon News* can be found here: https://icon.org.uk/what-is-conservation/writing-icon or by contacting Terri Dewhurst.

# people

### Icon staff news



Welcome to **Jess Lock**, who joined Icon in September as our new Membership Officer.

Following graduation from Cambridge with a degree in English, Jess became a social impact researcher at an international executive recruitment company where she worked with cultural organisations such Art Fund and the Houses of Parliament Restoration and Renewal Programme.

Jess is currently completing an MA in Early Modern Studies at University College London where her dissertation subject is early modern deafness. But her interests are very varied and she has written on a range of topics from early beekeeping and text as food to mnemonic gloves! bodies and has led the resurgence of heritage science research activity in the UK over the last two decades. She was recognised for this with the award of the Plowden Gold Medal in 2012.

She told *Icon News*: 'I'm hugely pleased to be joining the lovely Icon team as their new Membership Officer. I'm really excited to be looking after the people who look after the objects I've spent so much of my time studying! I look forward to meeting as many of you as possible - virtually or otherwise as I settle into my new position.'

Jess will be in the Icon office Mondays to Thursdays, and can be reached at membership@icon.org.uk

### Awards

Congratulations to May Cassar on her award of an honorary CBE for services to heritage. May is Professor of Sustainable Heritage and Director of the Institute for Sustainable Heritage at University College London. She established the Institute in 2001 and has been its Director for twenty years. The Institute brings together arts, humanities, social and heritage sciences to research and teach sustainable solutions to real-world cultural heritage problems and to engage cultural heritage and sustainable development, social and environmental sustainability.

Professor Cassar's long-standing area of research interest is preventive conservation with a particular focus on the impact of climate change on cultural heritage. She has worked on these topics with a huge range of national and international bodies and has led the resurgence of heritage science research activity in the UK over the last two decades. She was recognised for this with the award of the Plowden Gold Medal in 2012.

## Welcome to these new members

We would like to extend a very warm welcome to all those who joined us in June and July 2021. We hope to see you at an Icon event soon!

Samara Ayvazian-Hancock Student

Andrei Azzopardi Student

Morgan Browning Pathway

Annabelle Camp Student

Scarlett Crow Student

Laura Di Milla Student

Claire Embree-Lalonde Student

Madeleine Ewing Associate

Almudena Fernandez Associate

Lorna Flynn Student

Alice Freilinger Supporter

Nadia Ghannam Associate

Catalin Grigoras Associate

Sabeth Hagenkotter Associate

Samantha Hare Associate

Sophie Harris Pathway

Maia Henderson-Roe Student

Marcela Ivanovicova Student

Phedra Komodromou Student

Laura Karoniemi Pathway

Kamila Korbela Pathway

Jen Leadbetter Student

Carla Learoyd Student Chris Letizia Associate

Nicky Lobaton Pathway

<mark>Yetunde Odediran</mark> Student

Olivia O'Dwyer Student

Sally Peet Pathway

William Reid Pathway

Reuben Ruxton Student

Leila Sauvage Associate

Remmert Schouten Associate

Chiara Sgaravatti Student

Julia Sharp Associate

Emily Shepherd Student

Nathan Sherriff Associate

Louise Shewry Student

Richard Sinclair Supporter

Bethany Skuce Associate

Briege Thomas Student

Liana Tucker Student

Change Tym Associate

Mark Vine Supporter

Chung Wan Wong Pathway

Katerina Williams Student

Chloe Wilson Student

Kyle Young Student

Duen Yung Leung Student

Bethanie Zucker Student



### In memory



### DR ROY THOMSON ACR

It is with great sadness that I have to let you know of the recent death of Roy Thomson. Roy was well known to many of us within the world of conservation.

Roy started his career by completing a degree in the Chemistry of Leather manufacture at Leeds University. Following this he worked in research and technical services and in 1968 he was appointed Works Director at the largest lambskin leather tannery in the UK.

It was in 1994 that Roy was appointed Chief Executive of The Leather Conservation Centre in Northampton and it was in this role that many of us knew Roy.

As a leather chemist he was a major contributor to bringing a deeper understanding of the science of leather and related materials to the conservation profession, greatly advancing the work of John Waterer whose work dated back to post-World War II and the 1950s. Roy had published many articles and booklets and was joint editor (together with Marion Kite) of the Butterworth-Heinemann book 'The Conservation of Leather and Related Materials'.

He also had a great interest in, and great knowledge of, the history of leather manufacture and the leather industry; and also in the education of conservators. Roy was awarded a PhD by The University of Northampton in 2013; his thesis was entitled Role of Leather Science and Technology in Heritage Conservation and was a compilation of about twelve papers that he had written during his career, with a commentary on their relevance to heritage conservation. He reviewed the papers retrospectively, demonstrating how knowledge of the subject had developed since their publication.

Roy will be remembered with great affection, a man of considerable learning who had the ability to explain the sometimes complex chemistry of leather tanning in a way that made it not only intelligible but even fun. He would answer questions with enormous patience and had a fund of stories, many of which demonstrated his great sense of humour.

Roy had also been the most stalwart supporter of The Archaeological Leather Group, acting as Chair and, later, Treasurer, organising conferences and seeing that the papers presented made it to publication and available to a wider audience. Roy was awarded the title of Honorary President at the 2021 AGM following his retirement as Treasurer (a post he had held since 1997).

Roy was a Fellow of the Royal Society of Chemistry, The Society of Leather Technologists and Chemists, and of the International Institute for Conservation, and was an Accredited Conservation Manager.

Our thoughts are with his wife Pat, and two children Alex and Susanna.

Yvette Fletcher ACR

## Notice of 17<sup>th</sup> Annual General Meeting

Notice is hereby given that the 17th Annual General Meeting of the Institute of Conservation will be held online at 5.00pm (UTC+01:00) on 27th October 2021 to consider the following business:

**Ordinary Resolution 1:** To receive the Trustees' Annual Report and Accounts for the year ending 31st March 2021.

**Ordinary Resolution 2:** To authorise the Trustees to appoint the auditors to serve until the end of the next Annual General Meeting and to authorise the Trustees to decide the remuneration to be paid to the auditors.

A member of the Institute of Conservation who is entitled to attend and vote at the meeting (being a paid-up Accredited, Associate, Pathway, Student or Emeritus Member) is entitled to appoint a proxy, who need not be a member of the Institute of Conservation, to attend and vote instead of them. Proxies may be appointed via the web portal or to the registered office so long as they are received before 5.00pm (UTC+01:00) on Monday 25th October 2021. Those received later will not be counted.

If you are eligible to vote you will be sent an email by our election support provider mi-voice inviting you to access the Proxy Notice enabling you to register your instructions online. If you do not have an email address, please phone the mi-voice office at 0845 241 4148.

### Simon Green, Company Secretary

7th June 2021

# TURNING CALICO INTO PAPER

# Textile Conservator Hannah Sutherland on a recycling experiment taking place at the V&A

The Victoria and Albert Museum's Textile Conservation team are endeavouring to create a circular economy with their fabric off-cuts. Guided by our team's sustainability officer Lilia Tisdall, we are collecting calico scraps to see if they can be turned into paper for use in paper conservation.

The work of turning these small bits of fabric into paper will be done by *Paper Foundation*, a charity dedicated to ensuring the survival of heritage paper-making skills. Using their Cumbria-based mill (The James Cropper Mill, owned by Mark Cropper) they will rett and beat the fabric to return it to a consistency which allows paper to be made the traditional way.

Each 4.5kg bag of scrap can produce up to one hundred and

fifty sheets of paper. Experiments will be done to understand the quality of paper which can be produced and whether the production is still successful if the calico gets contaminated with other fibres... polyester wadding gets everywhere!

We are grateful to Melissa Lewis ACR for connecting us to Tom Frith-Powell of *Paper Foundation*.

We are still collecting our first bag of bits and hope to see the fruit of this experimentation later in the year.

If anyone has any questions please contact h.sutherland@vam.ac.uk and I can pass you to the necessary parties.



# A LIFE-CHANGING PROJECT

## Helen Wilson ACR of The National Archives tells a story of personal transformation catalysed by... a climate change risk report!



I've always enjoyed and found value in my work in The National Archives' Collection Care Department (CCD) but one recent project has had a particularly profound effect on me.

Eighteen months ago I was knee-deep in reports and papers, researching how climate changeinduced flooding might impact The National Archives' collection over the coming decades. This

was a new area of study for me, as I have a background in conservation science and preventive conservation. The report was meant to be a one-off project, to help inform the Collection Care Department's emergency planning, after which I would move on to other subjects. Instead, it became so much more.

The report started a whirlwind of activity both within CCD and the wider organisation: the creation of a departmental sustainability working group and action plan, participation in new networks, an international partnership, and the development of a virtual conference on sustainability in archives, due to be held during COP26 in November!

Along the way I've been transformed from a 'head-in-the-sand', eco-anxious person into a passionate advocate for climate action at work and at home.

Here's a little more about the work I've been doing and what I've learnt along the way.

### THE RISK REPORT

I wrote my report on the risks posed by climate change following a literature review, discussions with colleagues, and attendance at relevant conferences and webinars. The report was challenging to produce for several reasons.

Firstly, there was limited information specific to archives, but there was a lot of information more generally about climate change, the risks to the UK, to our local area, and to heritage more generally. I was relieved to find that thanks to the Thames Barrier and the Environmental Agency's ongoing work to maintain it, there is a low flood risk to our building and repositories, even with climate change and the fact that the building sits near the banks of the Thames. My research turned up other risks to consider too - including staff wellbeing, ability for staff to reach the building for work, and the effect of extreme heat or floods on the building and local transport. I found it tricky to identify when I should stop reading and start writing!

Secondly, while I could say relatively easily that climate change posed risks to our collection, quantification of these risks was difficult. Flood risk was the easiest to quantify due to the Environmental Agency's freely available flood risk data.

Thirdly, maintaining the scope was tricky. This report was for CCD-use only, not for the wider organisation as our Estates and Facilities (E&F) team lead on the corporate sustainability agenda. I needed to identify who was best placed to take forward the opportunities I was identifying, or whose responsibility it would likely be. Consequently, my risk report made recommendations for CCD, but I have kept in contact with E&F and other departments either directly or via the staff Green Champions network, led by E&F. In doing so I've been able to share initiatives, events, and research on environmental sustainability that I think could be valuable to the organisation.

### OUR DEPARTMENTAL ACTION PLAN

A key recommendation from the report was to develop an environmental sustainability action plan to direct our activities. To drive progress, a Collection Care Sustainability and Climate Change Working Group was established. The working group created an action plan for the department for 2021-2023 taking into account current work plans, ambitions and departmental needs.

The plan focuses on integrating up-to-date research into practice and policies, undertaking new research to help us increase our environmental sustainability and resilience, promoting sustainability within The National Archives and the archive and conservation sectors, and networking and participating in sustainability initiatives across the wider archival and heritage sectors. Crucially, the actions included in this plan have been incorporated into CCD's preventive conservation work plan for the next few years and the intention is that a new plan will be drawn up next year for the 2023-2025 period.

Over these eighteen months, I've seen the importance of staff being given time to devote to sustainability-related activities and for these activities to be prioritised in order to drive change. A successful sustainability strategy requires that we remain flexible with our priorities and support new recommendations with the appropriate resources.

### INTERNATIONAL RELATIONSHIPS

Since starting my sustainability journey several exciting networks and initiatives have arisen and I've been keen to be involved in all – unfortunately this isn't realistic. Sometimes corporate rather than departmental membership is



appropriate and as such we've taken two recommendations to our Executive Team for joining sustainability networks or partnerships. Both were approved, resulting in change at an organisational level!

The National Archives is now both a partner in ICCROM's Our Collections Matter initiative (OCM) and a member of the Climate Heritage Network (CHN). Excitingly, CCD is leading both relationships. We recently released a Sustainability and Climate Action Statement, and joining these networks certainly demonstrates our commitment to tackling this global challenge.

### **COP26 EVENT**

Last March, I could not have imagined that I would now be knee-deep organising an event on archive sustainability to be run in the weeks of COP26. I cannot tell you how excited I am about being part of this and how delighted I am that it arose from one of the recommendations in my climate change risk report - that we join CHN!

COP26 is the global UN summit on climate change due to be hosted this year by the UK Government in Glasgow (1 – 12 November). This is the most important climate event since the signing of the Paris Agreement in 2015 as it Is a key opportunity to review progress and accelerate action on the targets of this agreement. It wasn't until I learnt about CHN, its aims and its action plan, the outputs from which would be presented at COP26, that I began to realise that we too could participate in this important event.

The question for me was how to make this happen, as this was outside of my usual sphere of activity. The combination of CHN's ambitions, our leadership role for the archive sector and my newly acquired knowledge had greatly inspired and energised me. I had become an enthusiastic bundle of ideas for what the organisation could do to help lead the archive sector towards greater sustainability. Unfortunately for me I had little knowledge or experience to make them a reality!

Looking back I find that success has arrived through sharing my grand ambitions and enthusiasm, having a team of like-minded colleagues to help pin down and define these ideas, securing senior management team approval. Our Head of International and External Affairs was able to connect me with the 'right' people, of the 'right' seniority, and in the 'right' departments to make this a reality. As a result, what was once an idea for a departmental-led event for the conservation sector, has become a corporate event for the wider archive sector, being run by a cross-departmental organising committee.

### AND FINALLY...

On a personal scale, I've taken up a voluntary role on Icon's Environmental Sustainability Network after I found their webinars to be particularly valuable. I've been making changes in my personal life to lower my carbon footprint and instigated an informal discussion group within CCD to share knowledge and inspire others to do the same.

In conclusion, before the climate risk report I didn't know how or what to change in order to adapt to and to mitigate climate change. Yet, through the power of knowledge and an intention to focus on the things that I can change or influence, rather than those I cannot, I have been transformed from an eco-anxious person into a driver of climate action both at home and at work. I'm by no means an expert and there is a lot still for me to do but that's fine, as I'm moving in the right direction at the right pace for me.

# COP26 AT THE NATIONAL GALLERIES OF SCOTLAND

Isobel Griffin ACR, Head of Conservation at NGS, describes the activities taking place there, inspired by the UN Climate Change Conference

### INTRODUCTION

As for many other cultural heritage organisations, improving our environmental sustainability and addressing the climate emergency have increasingly become priorities for the National Galleries of Scotland (NGS) over the past few years. We have embraced COP26 as an important catalyst for our activities, not least because the event will be hosted in Scotland.

Firstly, COP provides a platform for the conversation to be widened across the organisation, thereby identifying further actions for the future. And secondly, COP has encouraged us to use our collections to promote public engagement with environmental issues, by illustrating the effects of climate change and providing a vehicle to explore emotional responses and practical solutions.

Activity around COP is not limited to the conservation department at NGS – our working group includes representation from the conservation, learning and engagement, curatorial and digital content teams – but as specialists who undertake what the National Trust defines as the 'careful management of change' (Our conservation principles: www.nationaltrust.org.uk/features/ our-conservation-principles), conservators arguably have a strong responsibility to investigate the effects of climate change on cultural heritage and identify appropriate mitigation strategies.

Visual showing the integrated elements of the NGS Climate Emergency Response Plan



### CLIMATE STATEMENT AND EMERGENCY RESPONSE PLAN

In terms of getting our house in order, NGS set the targets of externally promoting our new environmental statement and internally introducing colleagues to the Climate Emergency Response Plan by November. We have made good progress: our statement was recently published on our website and it reads:

We recognise an urgent need to play our part in combating the climate and ecological emergency. Art has the universal power to inspire us and all our stakeholders in responding to the collective challenge we face. To guide our work in this area, we have made three commitments:

### 1) Engaging and Inspiring

Working with our partners in Scotland's cultural sector and beyond to inspire people and communities to do whatever they can to help make positive change. Through our exhibitions, learning programmes and digital content, we will find inclusive and sustainable ways to engage our audiences in understanding how we can all contribute to a low carbon society.

### 2) Playing our part to achieve Net -Zero

As Scotland's aims to reach its net-zero target before 2045, we will reduce our environmental impact by adopting low carbon alternatives wherever possible across our own estate.

### 3) Protect our world class collection

Preparing for the effects and impacts of climate change in order to protect Scotland's world-class art collections for future generations.

Additionally, the scoping work for the Climate Emergency Response Plan is well underway and has required each department to contribute a list of its current activities and further suggestions for the short- medium- and long-term. These actions will be collated into a plan drawing out crossorganisational themes, such as reducing the resources we are using; and department-specific actions, such as the conservation department's work to source ethical gold for gilding.

### PHYSICAL PRESENCE AT COP

NGS decided early on that we would like a physical presence at COP if possible, as this would give us more opportunity to engage with new audiences on climate change. We therefore joined the Scottish Government briefings about the application process for the green civic zone at COP, as opposed to the blue zone which is the more formal space for the official delegate discussions.

The Scottish Government explained that the process would be highly competitive, with thousands of organisations competing for a few hundred places, and that collaboration was highly recommended. We were delighted to partner with our sister organisation, the National Library of Scotland ('the Library'), as this offered the potential for an interesting juxtaposition of our complementary collections.

We based our joint application around the theme of 'Preserving Pasts, Imagining Futures', and proposed that we would create a physical display demonstrating how our



William Scott, Benbecula (one of the islands of the Outer Hebrides)

collections can illustrate and explain climate change, and how current activity, such as our learning and engagement programmes, can explore visions for the future. Our display would also provide an opportunity for the Library to collect the ephemera produced for COP, such as leaflets, posters and banners. Unfortunately our application was unsuccessful, as we had known was likely, but the Scottish Government is planning to create an additional civic zone in Glasgow and we are considering requesting space in this.

### DIGITAL ENGAGEMENT ACTIVITY

Regardless of whether we have a physical presence at COP, from the outset we have planned a strong digital offering. This includes creating a page on our website for climate change and environmental sustainability, where we showcase our environmental statement and Climate Emergency Response Plan and include case studies of our work in specific areas and links to relevant resources. We are also hoping that for the two weeks when COP is taking place we will reference it on the home page of our website, possibly by using a green colour scheme.

In addition to our web resources, we are running a digital engagement project in the weeks preceding COP, in collaboration with the Library. The project uses the 'Preserving Pasts, Imagining Futures' theme to focus on five geographical locations in Scotland and highlight material in the NGS and Library collections which shows or tells us how these areas looked in the past and how they may change going forward.

The locations have been chosen to provide a good geographical spread across Scotland and to address aspects of climate change, such as coastal impact, land use, energy production and consumption, and transport. So for the Outer Hebrides, for example, the theme of coastal impact is particularly relevant as it puts road connections and many coastal settlements at risk. The collection items chosen include a painting and a photograph respectively showing Benbecula by William Scott and Loch Skiport, South Uist by George Washington Wilson; and Islands of the West, a film directed by Bill Forsyth in 1972, which is in the Library's Moving Image Archive

(https://movingimage.nls.uk/film/2692).



George Washington Wilson, Loch Skiport, South Uist

The public are encouraged to respond to the collection material by submitting creative content illustrating how the locations currently appear or visualising how they might look in the future. Their submissions can include creative writing; photography; drawings and paintings; and digital material such as films, audio files and computer-generated graphics. They may take a

Conservator Lisa Cumming ACR working on daguerrotypes from the Mackinnon photographic collection, which features in a blog linked to our COP26 activity



positive stance, illustrating the potential for rewilding and increasing biodiversity, or they may show worst-case scenarios for climate change, for example with rising sea levels destroying large swathes of Scotland's coastline.

The material is presented in blogs on the NGS and Library websites, and where there are additional resources produced by other projects and activities we have linked to them. So for example, when we show items from the Mackinnon photographic collection, which is jointly owned by NGS and the Library, we link to a blog about the conservation undertaken to preserve the collection since its acquisition in 2018.

And when we show material relating to the Edinburgh area, we link to information about our 'Art in the Open' learning and engagement project: with National Lottery Heritage Fund support, NGS has run workshops across Edinburgh encouraging the public to sketch their surroundings. We are using social media to promote the digital engagement project and we have created a joint display of highlights from the project within Google Arts and Culture, in order to reach as wide an audience as possible.

### **COLLABORATION IN SCOTLAND**

As is evident from all these activities, COP provides many opportunities for collaboration between organisations, and the Scottish Government briefings to organisations in Scotland have encouraged this.



The Art in the Open project taking place below Edinburgh Castle

Initiatives to date include the informal group put together by Creative Carbon Scotland and Historic Environment Scotland, consisting of non-departmental government bodies such as NGS, NLS and National Museums Scotland, along with Museums Galleries Scotland (MGS) and creative organisations such as Creative Scotland and Screen Scotland. This group is sharing knowledge about COP activity and identifying ways to collaborate on publicity, for example with a shared website and a collaborative film.

There have also been various funding opportunities in Scotland to encourage collaboration. Creative Carbon Scotland is running a scheme called Climate Beacons giving funding for collaborative projects; the application process was highly competitive and the Edinburgh beacon which NGS participated in did not receive funding. However, Museums Galleries Scotland launched two further funds in June, the Climate Beacons Fund to fund projects which had failed to receive funding from Creative Carbon Scotland; and the COP26 Climate Conversations Fund, which was to support cultural heritage organisations in '[engaging] with the conversations around important climate issues emerging in communities across Scotland'. NGS is waiting to hear about its applications to these funds.

At the time of writing other collaborations are still under discussion, but are likely to include the use of shared hashtags, such as the World Wildlife Fund's #ArtForYourWorld initiative. Art for Your World has also proposed that cultural organisations should light their buildings green on 5 November, but whether or not this will happen is unclear, and it illustrates one of the challenges relating to COP activity: providing an exciting and thought-provoking response while avoiding appearing wasteful or tokenistic.

### CONCLUSIONS

In conclusion, COP26 is providing a major incentive for NGS to move environmental sustainability and climate change up its internal agenda and form valuable collaborations with other organisations. It has also prompted us to consider how our collections can contribute to the climate change dialogue, which represents an exciting new interpretation approach.

As noted earlier, this work involves teams from across the organisation, but the conservation department is taking a strong lead, and there are opportunities to showcase the department's work, for example with the blog about the conservation of the Mackinnon Collection which will be referenced as part of the COP digital engagement project. The close working with other teams is also highly beneficial for the department and will facilitate further internal collaboration in the future.

Going forward, we will continue to address the environmental impact of our organisation and to ensure that environmental sustainability and climate change considerations are fundamental to decisions about developing, caring for and displaying our collection, similarly to how equalities, diversity and inclusivity have become core considerations. And we will preserve the legacy of COP26 in the content we have created and the creative work generated by the public, which will provide a valuable record of the event and its place within Scotland's history.

# ARE WE DOING ENOUGH? CAN WE DO MORE?

Marina Herriges chose sustainability for her conservation degree dissertation and shares some findings



Marina Herriges cleaning the mirrorwork on a child's hat from Pakistan, for the 'Do you believe in Magic?' exhibition in the Bristol Museum

### Introduction

In early 2020, I faced the challenge of choosing a subject for my final research piece, a requirement for the MPhil Textile Conservation degree at the University of Glasgow. It was the chance to research a subject that was important to me, not only professionally but also personally. I have always been keen on looking at new ways of lessening my impact on the world. This interest led me to become involved in various initiatives that work towards incorporating environmental sustainability in conservation. As a result, I thought: 'why not combine my passion and the MPhil requirements in a piece of research?!' That was the beginning of my dissertation which is called 'Challenges in textile conservation: Sustainability as key for the profession to move forward.'

### Is conservation environmentally sustainable enough?

When the world began to face the challenges of the Coronavirus outbreak, it forced everyone to slow down and

rethink multiple aspects of life. The pandemic has also drawn increasing attention to environmental sustainability, resulting in more conservators and institutions getting involved in this debate. Icon's regular five-yearly review of its professional standards was already underway and led to the addition of environmental sustainability under the section 'Professional Judgments and Ethics'. As the situation made us reappraise our relationship to the environment, my research was fortunately timed to coincide with the current zeitgeist, leading to further professional opportunities.

In this article, I would like to briefly present results from my research that demonstrate how conservation has been responding to the environmental sustainability debate and why conservation education can be a great place to start. I would also like to inspire readers, get the conservation profession involved in this discussion and spread the word further.

### Is conservation environmentally friendly?

Environmental sustainability has, of course, been addressed previously by many researchers, acknowledging the need of the profession to engage with the subject. May Cassar in 2005 highlighted the issue, acknowledging that conservation practice should have minimal effect on the environment as resources may not be accessible in the future. In 2007, Elizabeth Pye and Dean Sully highlighted climate change as a challenge to be faced by conservators during the twenty-first century. Megan de Silva and Jane Henderson (2011) presented useful measures and guidelines to be adopted by conservators to reduce their environmental impact.

More recently, professionals are bringing the subject into the light and striving to make the profession more sustainable. Examples include Caitlin Southwick, founder of the NGO *Sustainability in Conservation* as well as Natalya Swanson and Marie Desrochers, the voices behind the podcast *Conservators Combating Climate Change*.

As far as my research is concerned, the surveys and interviews I conducted showed ambiguous findings regarding the profession's understanding of environmental sustainability in the field. On the one hand, the survey showed that most conservators think that the profession is not sustainable (73.3%). On the other hand, the interviews presented a dichotomy – with some believing that the profession is sustainable and some not.

The interviews also revealed gaps in knowledge about environmentally sustainable practices. Surprisingly, the answers presented an understanding that sustainable practice is a complicated subject to be implemented or explained, which creates a barrier to implementing it. Nevertheless, consistent with the overwhelming survey results that the profession should be more sustainable (98%), all interviewees believed that the profession can be improved towards more sustainable practice. Likewise, this improvement was seen as an ethical requirement by interviewees and survey respondents.

I realised that the environmental sustainability debate can actually cause discomfort among professionals. Sarah Sutton, the consultant leading *Sustainable Museums* (https://sustainablemuseums.net/), considers this resistance the result of a possible lack of understanding about the subject or fear of not doing enough. In the webinar 'Sustainable Preservation: Quick Tips and Approaches for Museums, Libraries and Archives,' hosted by the Image Permanence Institute, Sarah presented her inspiring view on the subject. She emphasised that we are learning together and the more we speak about it, the more other people will get involved with the subject.

Similarly, I have also learnt that talking about the subject brings new ideas and makes us reflect and re-evaluate our practice to choose more sustainable options. Although, we will always create an impact in some way, we can make conscious decisions that will reduce the effect on the world and come up with realistic recommendations. Keep in mind that doing something is always better than doing nothing, then this is a good way to start.

### Why is the educational context so important?

I was also interested in understanding how the educational sector was approaching the subject. In fact, training was frequently mentioned in the survey and the interviews as an obvious place to approach sustainable practices. Students were also interviewed and highlighted environmental sustainability as an important topic to be addressed in conservation education; however, they acknowledged that more teaching and consideration of the subject could be included in their training.

In my view, the beginning of a conservation career is where students can engage with the subject and become active voices in the field. It is a time in which we build our knowledge and expertise, therefore integrating environmental sustainability into our decision-making process as students is the best way to get off on the right foot.

With this in mind, and with the great support of my supervisor, Karen Thompson ACR, we developed a pilot programme to embed environmental sustainability in the Textile Conservation course at the University of Glasgow. The first-year students could learn and develop skills to make their daily practice greener. The discussions were aligned with learning topics, such as wet cleaning. The students were part of the process, identifying areas for improvement as well as reasons why every so often it is hard to implement changes. The pilot project ended with very positive feedback from the students.

In the next academic year, further research will be carried out to enable us to evaluate factors in developing sustainable practices. The project, in which I am a research assistant, is called 'Embedding environmental sustainability for active *learning and student engagement in textile conservation'.* It has been funded by the Learning and Teaching Development Fund, University of Glasgow. Karen and I intend to build more sustainable practices through a collaborative partnership between students and staff. We plan to publish the findings to share our observations.

### So now for some practical tips!

Starting a dialogue with your colleagues can be an excellent way to start planting seeds as well as finding new possibilities. Sharing information is very important for getting information to as many people as possible.

Keeping an eye on new developments and research is also a good idea. Products that are known to be particularly ecologically damaging should be reduced and research into more suitable products should be encouraged.

I believe a lot of people will have heard about waste management and its popular 'Rs'. Taking into account three of these 'Rs', *reduce* should always be the priority, followed by *reuse* and *recycle*, respectively. Being creative is a good way to reuse materials. I am sure you can find great solutions for odds and ends – without mentioning the financial benefit. De Silva and Henderson suggest conducting a waste audit and it is an excellent piece of advice that helps conservators understand which kind of materials can be reduced or reused and finally recycled when needed.

Diving a little bit deeper, Life-Cycle Analysis (LCA) is one of the sustainability measurements that should be considered. The LCA evaluates the environmental impact associated with a product or energy source. Luckily, there is an online tool called STiCH (Sustainability Tools in Cultural Heritage https://stich.culturalheritage.org/about/) that helps us to understand the impact of many materials used in conservation. It is definitely worth a look.

### Conclusion

There are many ways to address environmental sustainability in conservation and I hope I could inspire readers to take part in the dialogue and be curious about finding other resources and sharing new ideas. It is an opportunity to discover new paths and enrich our practice, for which every individual is responsible.

Let's make our profession more environmentally sustainable!

### About the author

Marina Herriges works as a textile conservator in Bristol, UK. She completed her MPhil in textile conservation from the University of Glasgow in 2020. She also holds a MA in Conservation of Cultural Heritage at the Universitat Politécnica de Valéncia, Spain, and a BA in Art, Conservation and Restoration at the Portuguese Catholic University, Portugal. Marina has worked in a range of different heritage and conservation organizations in Brazil, Portugal, Spain and the United Kingdom. She writes a regular column about environmental sustainability in News in Conservation (IIC).

marina.herriges@gmail.com

# SUSTAINABLE LABORATORIES

### Dr Miriam Wright and Dr Scott Allan Orr of the UCL Institute for Sustainable Heritage describe ways to improve sustainability in the laboratory

Society is grappling with the question of sustainability on all fronts, and laboratory science is no exception. The Heritage Science Labs within the UCL Institute for Sustainable Heritage have been tackling sustainability and strived to ensure its lab-based teaching and research is as sustainable as possible.

Recently, the labs were awarded (for the second year running) a Gold Sustainable Labs Award through the Laboratory Efficiency Assessment Framework (LEAF). The award recognises sustainable laboratory practices that allow research to be conducted in a resource efficient and sustainable way. LEAF contains criteria which lab users in any organisation can implement around areas such as waste and recycling, equipment management, procurement, and more. Although the scheme started at University College London, it is now being taken up more widely within the UK Higher Education sector and beyond.

### Introducing our Heritage Science Labs

The Institute for Sustainable Heritage labs are home to a range of state-of-the art equipment. The range of instrument types available reflects the cross-disciplinary nature of Heritage Science, with both sites benefitting from environmental, imaging and microscopy, spectrometry, analytical chemistry, and other types of equipment. The ISH Heritage Science Lab facilities extend across two sites, located in Gordon House (Bloomsbury, in Central London) and Here East (Hackney Wick, in East London). There is a wet chemistry laboratory, as well as a sample preparation/teaching space in Gordon House. Here East has an imaging laboratory – which contains a bespoke hyperspectral art scanner and 3D hyperspectral robotic arm, as well as a reference collection and sample storage laboratory.

This year, ISH secured funding from the AHRC 'Capability for Collections' fund to increase its hyperspectral imaging capabilities, as well as X-ray fluorescence analysers, both for collections-focused imaging and analysis which will be shared with the UCL Institute of Archaeology.

ISH also submitted three successful RCIF (Research Capital Investment Fund) bids to acquire the following equipment:

- Tabletop FTIR microscope with functionality to carry out automated chemical mapping in ATR (attenuated total reflectance), transmission and reflectance modes, with a thermoelectrically cooled MCT (mercury-cadmium-telluride) mid-band detector.

- Portable near Infrared (NIR) Spectroradiometer for measuring reflectance and radiance in the 350-2500 nm

region of the electromagnetic spectrum (visible and shortwave infrared).

- GC Olfactory port, which is an attachment to a Gas Chromatography/Mass Spectrometry system. Coupling the olfactory port to a GC/MS allows human analysts to record

The imaging set-up within the ISH Heritage Science laboratories: several different cameras can be mounted in the framework which allows for images to be captured across a large surface area, as well as several distances, allowing for multi-resolution investigation and 'fixed-resolution' for objects that vary in surface and shape



odour sensation data and relate to the chemical data obtained by the GC/MS. This instrument will be used for olfactory heritage science research, particularly for projects focusing on heritage smells.

More information on these recent acquisitions can be found at: https://www.ucl.ac.uk/bartlett/heritage/news/2021/apr/ucl-wins-ps900000-heritage-science-infrastructure-investments

The ISH Preventive Conservation Laboratory has scientific instruments and software for researching interactions between heritage materials and their environments. For example, it includes tools to predict the dust deposition on an object based on particle size and air motion, and software that can predict the concentration of pollutants. We have fluid dynamics models that can predict ventilation and air circulation in partially enclosed areas and display cases, and instruments for environmental monitoring that can measure air flow, pollutants, and particles.

The lab is available for use by overseas partners through the IPERION HS collaboration where it is available as a FIXLAB infrastructure:

http://iperionhs.netseven.it/category/48/

The facility was one of the ISH Heritage Science laboratories that received the Sustainability Award and we are keen to collaborate with partners to maximise its use.

### How to be a sustainable lab

The average laboratory consumes up to three to ten times more energy per square metre compared to office spaces. Laboratories are known to consume high amounts of water and plastics, particularly single-use plastics, such as pipette tips and petri dishes.

Given their significant footprint in the wider context of sustainability and efforts to address the growing climate emergency, universities and laboratories in particular, must be actively involved in the conversation.

The Sustainable UCL team developed LEAF (the Laboratory Efficiency Assessment Framework) as a tool to improve laboratory sustainability and efficiency. LEAF addresses the fact that lab-based research has a significant environmental impact and the fact that there is a lack of standards related to making labs more environmentally sustainable.

LEAF consists of an online framework, online calculators, toolkit and resources, as well as user engagement and training. Any laboratory can implement the framework, by using LEAF's online platform to carry out a self-assessment. Laboratories become LEAF certified following a successful audit, and an impact report is generated. The impact report outlines total savings (carbon and financial), as well as the award level achieved (Bronze, Silver or Gold) depending on the actions implemented.

As the following table shows, the framework takes a broad perspective on what makes a lab sustainable:

Facet	Example
Waste	Reduction of total waste produced, or increase in recycling rates
People	Actions to reduce or minimise travel
Purchasing Equipment	LEDs used for illumination (general and scientific) where feasible. Processes for sharing of excess equipment and materials Repair of equipment, locally Recirculated water when used as a coolant
IT	Computing code has been optimised, and the number of clusters/processing power has been optimised for tasks or the scheduling of tasks
Sample and chemical management	Excess samples, materials, and chemical databases made available to external laboratories, or making use of existing samples or chemicals from external sources
Research quality	Adoption of a laboratory management software Sterilisation and cleanliness methods reviewed for efficiency and effectiveness, including but not limited to autoclave methods, UV sterilisation and cleaning rotas
Ventilation	Engaged with estates to implement actions to lower fume cupboard flow rates, air exchange rates, and or removing unnecessary extracts from safety cabinets before recirculating
Water	Guidance on appropriate use of drains and effluent waste is communicated to all lab users on a regular basis

The framework can be used by any institution with a laboratory within the UK or elsewhere. Any interested parties can seek more information or get involved by writing to LEAF@ucl.ac.uk.

### **Highlights of our Heritage Science Labs**

The ISH laboratories were awarded a Gold Sustainability Award this year, following the completion and audit of this year's LEAF submission.

One of the initiatives implemented by ISH in a bid to carry out more efficient and sustainable approaches to equipment maintenance/repair, was to combine annual maintenance/repair visits with departments which use the same contractors. This reduces the number of service visits to UCL and the carbon footprint associated with travel.

This year's LEAF submission also highlighted ISH's commitment to more sustainable practices through teaching. ISH now offers a new module called 'Material-Environment Interactions' for student on the Data Science for Cultural Heritage MSc, which includes implementing the use of sustainable materials and designing experiments that have zero environmental impact.

### Sustainable lab accreditation

As highlighted above, the LEAF and associated tools can be used by any institution. We encourage anyone interested in implementing the framework or in incorporating its principles into conservation practice to contact the team on LEAF@ucl.ac.uk.

The framework takes into account that every lab is different, and with that in mind, the resources and materials available can be tailored to suit different areas of research and practice.

The carbon and financial savings calculators provided by LEAF can serve as a useful guide for research institutions to estimate the immediate impact of any changes implemented in the lab. The specific actions provided by the framework are also an excellent first step for labs to take meaningful action.

### Taking a long-term perspective

One of the main challenges faced by higher education institutions is making sustainability a key part of project planning and execution.

Using a framework, such as LEAF, is an excellent starting point for achieving long-term sustainability goals, but there is always scope for improvement. Meaningful change can only be achieved by consistently committing to good practices in terms of sustainability, whether through equipment or data set sharing, elimination of single-use items (e.g. plastics), or, most importantly, through a concerted effort to make sustainability a core value within the academic community and beyond.

Our SPME-GC/MS and TG/GC-MS systems (pictured on the right and left, respectively) are among the state-of-the-art equipment available at our Gordon House lab. SPME-GC/MS stands for solid-phase microextraction followed by gas chromatography-mass spectrometry. This method allows for the analysis and identification of volatile compounds emitted by different materials, which are sampled using a SPME fiber. Given that this technique analyses compounds passively emitted by samples/objects of interest, it is non-destructive and therefore of great use to heritage scientists. TG-GC/MS stands for thermogravimetric analysis coupled with gas chromatography and mass spectrometry. Among other applications, TG-GC/MS can be used to characterize polymer compositions by using decomposition products from samples which are separated by the GC and subsequently identified by the MS.



# reviews

### COURSES

### AN INTRODUCTION TO PLASTIC MATERIALS Online course 19 May 2021

In May, I attended a full day online course with twelve other students, primarily other museum professionals. The event was organised by West Dean College of Arts and Conservation and delivered by tutor **Brenda Keneghan** (former Plastics Conservator and Conservation Scientist at the V&A), with contributions from **Hugh Morrison**, Collections Manager at West Dean College.

The day was divided up by topic: what is a polymer; the history of the development of plastics; plastics processing; plastics in museums and galleries; degradation; and a more practical session where examples from the West Dean collection were shared and a group discussion was facilitated.

Brenda brought a wealth of knowledge to the day, explaining unfamiliar production and manufacturing processes using clear language and diagrams. She gave practical tips for identifying manufacturing processes, which can provide clues for ascertaining which polymer type you may be working with. A defined framework for polymer classifications by origin (natural, semi-synthetic and fully synthetic) or by property (when heated or stretched) meant that the new vocabulary was easy to follow and, more important, to take notes from that will be usable in the future. The same applied to the simplified but still technical walk-through of moulding and extrusion processes.

Visual tools included images, diagrams and Hugh's interactive camera tour of West Dean collections objects. These were very helpful for illustrating Brenda's explanations. However, as texture, surface appearance and smell are all degradation factors, the on-screen examples could not fully demonstrate all damage types that were referenced. This meant that there was a greater reliance on Brenda and Hugh's verbal descriptions, but they delivered these in enough detail to give me confidence when working with deteriorated plastics in the course of my work.



Degraded Rubber Kewpie doll – oxidized and completely hardened

A Mickey Mouse toy from the 1980s made from PVC (Polyvinyl chloride) – stained and slightly sticky



It was also helpful to gain a broad overview of which collections may contain plastics and which types are likely to be found, depending on the object or context. For example, learning about common imitators within ethnographical collections, such as phenol formaldehyde to simulate amber, opened my eyes to this practice, having not previously thought much about polymers being present in these collections in any great quantity.

All the topics expanded my knowledge of plastics in a way that is applicable to my day-to-day work. The section on degradation, where we explored the most common forms of physical and chemical degradation in a variety of plastic types, was especially valuable. This would be a good area for expansion in any future follow-up session.

Overall, this was a day that provided us with pragmatic, usable information on a material type that is still not well-understood within museum collections. The online format worked well, the only disadvantage being that we were unable to physically handle and smell different plastic types. However, this was outweighed by the ability to attend such a comprehensive course without the significant travel and accommodation costs usually associated with West Dean's excellent residential courses. I hope to see further development of their online offer to make their learning programme more accessible to less well-off organisations and individuals, and especially a follow-up study day exploring identification, deterioration and preservation techniques of plastics in more detail.

### Gwen Thomas

Chair Icon Scotland Group Collections Care Officer Museums & Galleries Edinburgh

### VIRTUAL COURIERING

### Icon Care of Collections Group & Modern Materials Network Online 29 April & 22 July 2021

This review covers two events organised in collaboration between Icon's Care of Collections Group (CCG) and the Modern Materials Network (MMN). First was a panel discussion held in April, followed by a symposium in July. The virtual panel discussion was hosted by Aimee Sims ACR and moderated by Vanessa Applebaum. The panellists included Carla Flack ACR from Tate, Rebecca Hellen ACR from National Trust, Adelina Vlas from Art Gallery of Ontario, Curtis Beeby from Art Tech, Emily Link from the Museum of Fine Arts Houston, and Rebecca Wallace from Historic Royal Palaces.

The moderator asked a series of questions to facilitate discussion and share experiences of virtual courier and remote condition assessments.

The panellists began by sharing their experiences of virtual courier and remote condition assessments. Some organisations had already begun working remotely to reduce travels costs and the environmental impact of loans and touring exhibitions. Panellists agreed that this is easier with trusted institutions or organisations that have built a mutual working relationship prior to the pandemic. Adelina shared her experience working with a contemporary artist during lockdown and how digital technology made communication easier and more immediate, particularly when working in different countries and time zones.

The panellists discussed different technologies trialled and used for virtual courier work. Many of them found WhatsApp useful for immediate and urgent queries and as a quick way to share videos and marked up photos of artworks. Emily discussed the different technologies trialled at MFAH including GoPro and Gimble, but found the most useful was a laptop on a movable trolley. Most panellists also found that having an additional person helping to film/record information for virtual courier work was often the most useful technology.

Preparation and contingency planning were crucial for virtual courier work. The nature of virtual working has meant that organisations are relying heavily on their documentation as there are no staff present in person to interpret the information. Carla discussed including installation video guides to provide an additional visual support. The panellists also agreed that preparatory meetings and specific sessions to ask questions were all crucial to virtual courier work, including confirming phone numbers and emails as a way to get in touch if technology fails on the day.

The session ended with a discussion on the future of virtual courier and remote condition assessments. The panellists all felt that virtual courier work was here to stay but could not completely replace the role of a traditional courier. Some artworks will always need a courier to assist with transport and installation. Also, you cannot underestimate the importance of building relationships with colleagues at other organisations. Institutions will need to have strong policies in place to support the changing work structure of virtual couriering.

The Q&A session that followed was very lively and engaging. There was such a strong interest in the topic that CCG and MMN scheduled a full day symposium to allow more time to discuss the themes in more detail with a range of speakers.

The aim of the virtual couriering symposium was to bring forward some real-world examples of how organisations are dealing with this new virtual age. Brought together by both the CCG and MMN teams, the day consisted of eight talks. Sixty-one individuals attended to listen to these organisations share their personal experience with virtual couriering, discussing the solutions and problems that have arisen.

#### Taking notes from Jacqueline Cabrera and John Robinette





Using WhatsApp to help with communication: Sharon Tager, Sivan Eran Levian and Henk van Doornik of The Israel Museum

**Clair Battisson** and **Louise Egan** from the V&A opened the day with their detailed Support Documentation Portal. This system, first developed in 2016, has made their couriering almost entirely digital and accessible to all departments with Microsoft Office.

**Rachel Rimmer** and **Nadine Loach** from the Science Museum Group emphasised the importance of keeping records up to date and using a carbon footprint calculator to help in decision making.

Alexa McNaught-Reynolds and Lesley Hanson-Thomas ACR from the British Library felt that physical couriers could not be entirely replaced and creating a network/ connection with trusted conservators overseas to assist as 'Foster Couriers' will play a vital part. This point was strengthened by Dr Henk van Doornik and Sharon Tager from Israel Museum.

Marika Kesler and Farideh Fekrsanati from MARKK felt that we need to have more adaptability with the borrowing institution as too much control can cause increased risk to the object. Also, ask for feedback to help improve processes: this highlighted the need to provide a list of the contacts the borrower will be working with and their roles. Cabrera + Art + Management and John Thomas Robinette iterated the need to assess the whole journey and different facilities during couriering, getting pre-screening and transit tracking where required.

Stephanie Wiener and Melody Chen from

Princeton University Library really broke down the couriering options and found a 'Book End' approach most suitable for their international loans. 'Book End' is where the borrower oversees (with observation from the lender) the transport up to the airport and then the lender meets the items at the receiving airport.

The Courier Training Framework presented by **Kathy Richmond** is a global tool for courier training. Although this tool already offers a wealth of information Kathy has called for others to share their stories.

Six key points have been brought out by both events:

1. Virtual Couriering Can Save the Planet Well, almost. By keeping things digital and limiting the number of people travelling we can reduce our carbon footprint. This is predominately more the case for international loans.

### 2. Foster Couriers

By developing a network of trusted conservators across the globe we can call on our fellows to assist with couriering when we physically cannot be there. This also helps with the carbon footprint – keeping it local – but means you have physical eyes, ears, nose and touch available to you. As Lesley Hanson-Thomas from the British Library said: 'you can smell when the case hasn't had time to off-gas'.

### 3. Be Flexible

There are many different methods and approaches to virtual couriering. Whether you use a 'Book-End' approach or another option, it's good to always have a contingency plan.

### 4. Risk Management

How you decide to approach the couriering of an object has to be based on risk assessments and on a case by case basis. Avoid using the term 'who we trust' and instead think about what is the lowest risk solution. 5. Documentation

Keep documentation thorough and consistent. By using other forms of documentation such as videos and annotated photographs you can make instructions clear regardless of language barriers. Preparation in advance is key.

### 6. Training

More training is needed for virtual couriering and couriering in general. We are facing an age where emerging conservators may never physically courier an object and established conservators are being asked to virtually courier when they never have before. Let's keep talking and sharing our experiences so that we can all feel confident in providing the safest option for our objects.

Arielle Juler & Kayleigh Spring CCG committee members

# in practice

### SUSTAINABILITY IN THE STUDIO

Lorraine Finch ACR has a host of low cost or no cost environmental sustainability tips for your workplace

### SETTNG THE SCENE

The Intergovernmental Panel on Climate Change (IPCC) report published in August 2021 states that it is *'code red for humanity'*.<sup>1</sup> Statements about the dire situation that we are in

Reused unwanted items from the archive - orange box, index card files and blind embossing stamps



regarding climate change and biodiversity loss may fill you with feelings of despair. There is a danger that we feel so hopeless that we 'party on the Titanic'. In other words, there is nothing I can do so I might as well enjoy myself on the way out.

This is not the case. 'Climate change is such a vexed, complex issue that if it is not approached from a perspective that includes everyone, we're not going to get there'.<sup>2</sup> Each individual action makes a difference. There is so much you can do. 'Every one of us makes a difference every single day ... We have a choice as to what kind of difference we want to make.'<sup>3</sup>

### WHAT TO DO

It can seem very difficult to know where to start. What should you tackle first? Is it the areas where you have the biggest carbon footprint or the small actions that you can take immediately to reduce your impact? Should you concentrate on one area such as materials, or should you try to do a little bit of everything? There really is no correct answer to this because everyone's situation is different. The important thing is to start.

One place to start is with the four Rs:

- Refuse
- Reduce
- Reuse
- Recycle
- Refuse
- Think about what you buy and use in your workplace. Refuse to purchase more than you need.
- Refuse to purchase wasteful products and those which are difficult to recycle.

**TIP:** Look at what you already have. Do you need to buy more?

**EXAMPLE:** I recently cleared my entire studio for re-decoration. I used this as an opportunity to go through everything that had accumulated over the years. One task was to sort through all of my notes, conference handouts and pre-prints. I passed on duplicates or those I no longer needed to others via my socials; and I now have enough sheets of paper printed only on one side that I may never need to buy paper again!

**TIP:** Ensure that what you have is well stored and easy to access. In this way you'll know what you have and will avoid buying duplicates.

**EXAMPLE:** A freelance conservator used the quiet period during the first lockdown to sort out his studio. He found three jars of beeswax. He had used a bit from one, put it down, forgotten about it and bought another when he needed beeswax again.

**TIP:** Label your materials. It is good to include details of what it is and when you bought it. Some materials have a shelf life and need to be used before they reach this.

### Reduce

- Reduce your use of harmful and wasteful products which are not easy to recycle.
- Use the minimum amount required of any materials to avoid unnecessary waste.

**TIP:** Print and/or write on both sides of paper. This will reduce your paper usage by 50%.

• Question whether you need to purchase the material and/or equipment. If you do need to purchase it, can you buy it second hand or reconditioned?

**TIP:** Check out the high street second hand retailers such as Cash Converters for power tools.<sup>4</sup>

**TIP:** Check out local school refurbishments for studio furniture and laboratory equipment. One lucky conservator sourced an extraction unit this way.

**EXAMPLE:** My binocular microscope, thermometers and all of my studio glassware come from laboratory refurbishments.

**TIP:** Keep an eye on shop refits. They often have a lot of furniture that is suitable for use in the studio.

**EXAMPLE:** My studio workbench comes from a shop refit. It is the ideal height, it is wipe-clean and it is fitted with lockable wheels.



An old piano key repurposed into a bone folder

### Reused coffee jars, contact lens pots and other glassware for handy storage



**TIP:** Enjoy a trip to the charity shop. They are great places to pick up weights and glassware.

**TIP:** Join up with other conservators and local museums, archives and libraries to reduce the amount that you buy. You might only need three sheets of mountboard but have to buy a minimum quantity of five sheets, for example. Find another conservator or organisation to share the order with.

**TIP:** Share equipment and tools. Have a pool of equipment which you can share with other colleagues, conservators and organisations.

**EXAMPLE:** I'm happy to loan out my Curateur polyester edge welder.

TIP: Repair equipment rather than replacing it.

**EXAMPLE:** I extended the lifespan of my laptop by five years by replacing the memory cards.

### Reuse

- Use reusable materials in your workplace.
- Avoid using single use items.

**TIP:** Reuse single use plastics in your studio.

**EXAMPLE:** Cleaned takeaway trays make ideal storage containers for materials and equipment such as scalpel blades.

### Takeaway trays used to store scalpel blades



These trays can be used to mix up adhesives, pigments and other materials during treatments. They also make great places to put all the loose bits when you are taking item apart, meaning that the vital piece doesn't fall off your bench never to be seen again. I have also used them as mini humidification chambers and washing trays.

**TIP:** Reuse your nitrile and latex gloves.

**EXAMPLE:** There are many ways that you can reuse gloves in your studio. If they can't be reused in your studio but are still useable, wash them and use them for those mucky jobs around your house.

- Care for your tools and equipment to extend their useable life, such as cleaning brushes and allowing them to dry before storing them well.
- Be inventive. Look around you, what's about to thrown out? How can you repurpose it?

**TIP:** Make a bone folder from an old piano key. That's fifty-two small, flexible bone folders on one piano!

**TIP:** Have leather scraps on your studio? Sew them together and fill with loose, weighty material to make flexible weights.

**TIP:** Jam jars, coffee jars, glass dessert pots and contact lens cases can all be cleaned and will fulfil a multitude of uses in your workplace.

**EXAMPLE:** Use a glass bottle filled with water as a weight to keep the lid in place when leafcasting.

**TIP:** Remember that the materials used for display can be reused.

**EXAMPLE:** Humidification chambers can be made from scratched perspex (also known as acrylic and plexiglass – polymethyl methacrylate, PMMA).

**TIP:** Don't forget that a lot of the storage boxes, enclosures and non-collection material that are set aside to be disposed of can be reused.

### EXAMPLES:

- 1. A collection was donated an archive in an orange box. The orange box makes a brilliant shelving unit to store journals and newsletters.
- 2. Index card boxes are great for storing business cards.
- 3. Blind embossing stamps make fantastic book ends.
- 4. Deed boxes make excellent storage for papers, office stationery and envelopes
- Share. If you are clearing out your studio and/or office and you have materials you no longer need offer them to other conservators and organisations for free.

### Recycling

Recycling used to be the go-to for environmental sustainability but now it is last on the list. Before you put any material into the recycling think about how it can be reused.

One reason that recycling is last on the list is that it takes energy to make a material into something else, plus (in most cases) not all of the material can be recovered and some virgin material will need to be added. Recycling has a carbon footprint. **TIP:** Check out Sustainability Tools in Cultural Heritage (StiCH]).<sup>5</sup> It has been developed to help you make educated, sustainable choices to lower the environmental impact of your work. It has a life cycle assessment carbon calculator, case studies and information sheets.

### THAT'S IT FOLKS....

Except, actually, it's not. I have so many more low cost/no cost hints and tips that I want to share with you, and many are specifically related to the areas that we need to address including:

- Materials
- Equipment
- Energy
- Water
- Digital
- Money

In fact, I have so many that I am writing them up into a book which I intend to publish online and free of charge by the end of 2021. If you have any tips that you would like included, please do contact me at heritagechampions@gmail.com or DM me on Twitter @conserve\_lfcp and Insta: @thecaringconservator.

I would love to hear from you. Together we have the knowledge and skills to make an impact on climate change and biodiversity loss. We all have a part to play and we can all play a part. I look forward to partying with you on a clean, green and equitable planet.

- 1. Read report at https://www.ipcc.ch/report/ar6/wg1/
- 2. Conversation. RSA Journal Issue 1. 2020. p. 19. Christina Figueres
- 3. Dr Jane Goodall. TED Global 2007
- 4. https://www.cashconverters.co.uk
- 5. https://tinyurl.com/8w7m3p7h

Charity shops are a a good source of useful items such as weights and glassware



# the emerging conservator

### THE BRITISH LIBRARY GREEN NETWORK

Morgan Lirette explains the origins and concept of the network and how things stand a year on from its founding for the organisation and her personal development

### A LITTLE ABOUT ME

I received my qualification in book and paper conservation from the Université Paris 1 Panthéon-Sorbonne in 2018, and I'd say that out of my class I was the most 'generalist'. Mind you, there were only four of us and we were trained to be hireable in either book, paper or preventive conservation, but still...

All my dear classmates would be superb in any route they chose, but I was the only one who hadn't found that intense passion within a passion. I liked our paper rounds, our book rounds and I fell in love with preventive conservation in earnest during my final internship at the British Library. It seemed like every new thing I did, I loved. At the time I might have thought I was just a bit of a happy-go-lucky butterfly, but this past year has taught me to find pride in my generalist-ness and what I now know is my passion for the bigger picture within the heritage sector.

When I was hired as a book conservator back at the British Library in 2019, I was overjoyed. Then I realised my role involved managing multiple conservation workstreams, exclusively working on treatments of ten hours or less and daily liaising with colleagues in different departments. I felt like I had wings.

The image I had in my head of a mature, accomplished book conservator was someone who specialised in complex endbands or could pare leather in record time without breaking into a sweat. And to be honest, that person just wasn't ever going to be me. So when I settled into my role and was doing a good job of it for longer than what could possibly be considered a fluke, I thought fab - I've found my lane, and I can start to visualise a career route that looks like me.

### THE ORIGIN STORY OF THE NETWORK

Needless to say I was riding pretty high - then lockdown hit. When we were still figuring out what conservation looked like for bench conservators away from our benches, professional development was the brief for all who could. First I read cover-to-cover those seminal book conservation publications I had only scanned during my Masters. However, relatively soon my study was morphing exponentially into what was to me a completely new sub-field at the intersection of heritage and sustainability.

Armed with *some* knowledge, I found the confidence to bring my private environmentalism into my professional life. I first suggested that someone with more authority on the matter could set up a Library-wide environment -focused staff network



Examples of card book supports being trialled at the British Library. If successful, these supports would replace the current practice of using exclusively bespoke, single-use acrylic supports in exhibitions. Design: Monika Stokowiec.

- a 'Green Network' - in line with our four already-established staff networks: BAME, Disability Support, Gender Equality and LGBTQ+ Networks. I received a response affirming this is the right thing to do. Although, as we were not long into lockdown, a lack of resources at present prevented its fruition.

So I turned to my own department head to ask if I could put together a simple list of green ideas to incorporate once we were back in the studio. To my delight, she said yes. To my horror, she said that I could present these ideas myself in our next departmental catch-up. Gulp. Just to be clear, I have nothing but lovely and supportive colleagues. But I'd be lying if I said I didn't feel major imposter syndrome addressing them all as an emerging conservator.

I delivered my ideas shaking from my makeshift home office, and to my surprise I was met with complete enthusiasm. This was quickly followed by what can now be marked as the inaugural meeting of the British Library's Green Network on 1 July 2020. Word spread fast, and colleagues from across a growing variety of departments joined in. With them came their ideas, and the picture that was coming into focus was of a more sustainable British Library rather than just a more sustainable conservation studio. At the time of writing this article, we have just celebrated our 1st birthday.

### THE CONCEPT OF THE NETWORK

Everything took off rather organically from there. After a year of co-chairing the network I am positive that we have built a structure that, although continuously developing, is doing its job.

The Green Network's purpose, as an action-driven and staff-based network, is to make the British Library a more sustainable heritage organisation and workplace. In fulfilling this purpose, we aim to:

- 1. Empower staff members to find agency in today's ecological crises and create sustainable change in their professional lives
- 2. Use the momentum of those actions on the ground to advocate for sustainable Library policy
- 3. Communicate our sustainability journey internally and externally
- 4. Work with all Library staff networks to holistically evoke sustainability, especially the social pillar of sustainability

Alongside myself and my co-chair Graeme Bentley, we have senior management sponsors and a committee of departmental representatives. Those representatives each manage their own departmental action plan and are the first port of call for action working groups.

Speaking of the action plan, when I first made one for the whole of the network I naively piled on the actions. Since then I have learned this is exactly what *not* to do. Rather, it is more important to be focused, realistic and to trust that action begets action. A year on, I can also assure you that what happens in between the actions - the inter-departmental conversations - is just as special and constructive as ticking them off on a plan.

The simple act of colleagues from all corners of the Library banding together has led to the network being a main-stage player in the organisation's high-level activities relating to sustainability. This includes participating in the Library's inaugural September Climate Month and TEDxCountdown event ahead of COP26. As a collective, we amplify our individual voices and embody a cultural shift in our workplace which has the real power to affect change from across the board.

TerraCycle Zero Waste Box for nitrile glove recycling in the British Library Centre for Conservation (https://www.terracycle.com/en-GB/ zero\_waste\_boxes/disposable-gloves-en-gb)





Oddy testing non-biodegradable (blue) and biodegradable (green) nitrile gloves in the British Library Centre for Conservation. The conservation team was later made aware that the British Library has a zero landfill policy, so the biodegradable nature of gloves is not relevant under current British Library waste stream policies. Top tip - make friends with your Estates teams first thing!

## WHAT THE NETWORK HAS DONE FOR THE LIBRARY

The ideas-sharing nature of the network has led to plenty of wonderful actions previously unexplored or that had been pushed to the backburner. Some things in progress include ordering Terracycle boxes for hard-to-recycle materials that can't be recycled via our waste contractors, Conservation and Estates colleagues working together to make our exhibition areas more passive and Exhibitions and Curatorial colleagues workshopping plans for a sustainability-themed exhibition. Seeing these actions and others develop shows me that the network has first and foremost given staff an outlet for action and community in what is objectively an overwhelming topic saving the planet.

As well as new actions, the network has also been able to highlight important work that might not have been communicated to Library colleagues before. A great example is that our Estates teams have been working for decades to improve the energy-efficiency of Library buildings by switching to LED lighting and collaborating with Conservation to make our storage areas more passive. So for the Library, the network provides a medium for communicating its sustainability journey. Additionally and importantly for the public, the network is evidence that the Library is playing an active and positive role in today's ecological crises.

### WHAT THE NETWORK HAS DONE FOR ME.... ..... and what it can do for you

In founding, developing and learning from the Green Network, I have discovered what being an accomplished conservator means to me. Being a more eco- and socially-conscious conservator and heritage professional has become my moving target, and the career route I was starting to visualise before lockdown becomes clearer every day. Beyond these more theoretical epiphanies, the network has led me to more deeply engage with my workplace, the conservation field and the heritage sector. I've been able to build skills in project management, I feel more confident in my professional voice and I collaborate with colleagues all over the Library and beyond. In 2021 alone, I will have presented at five conferences, hosted three webinars and published this article. All at a time when being an emerging conservator could have been a challenge, to say the least.

I no longer feel like I have a home-me and a work-me. Thanks to the Green Network, I now bring my *whole self* to work. And the great thing is that in doing so I have helped provide a platform for others in my workplace to do the same. Collectively we've influenced our organisation which we hope will, in turn, encourage others in the wider heritage sector to join the cause. That widening sphere of influence - the idea that the individual voice matters - is what energises me most.

If anything in this article has tempted you, then I'd sincerely urge you to try something similar in your own workplace. Having buckets of experience in sustainability or being in a senior management position is not a precursor - trust me! Nor is it necessary to get things perfect on the first try. Give it a go, and whether it be one initiative, one action plan or a companywide staff network, you might be surprised by the impact you make.

## **10 ways to reduce plastics in laboratories**

## Can your packaging be sent back?

Several suppliers offer this so it can be reused. Engage your suppliers on what options they can offer.



### Glass vs. Plastics: Could you switch from plastic to reusable glass?



The energy used for washing is far less than that to remake and transport plastic.

### Do you require gloves?

Much research was successfully done without gloves in the past. Choose the appropriate gloves for your task – a thinner version may be just as safe.



- a. Can you reuse gloves between experiments?
- b. Thicker gloves are easier to reuse but have more plastic. Consider the balance between thickness and reuse that is best for your work.

### Could your leftover plastic containers be used for something else in the lab?



### Purchase 'flexible' kits:

Many labs use kits for standard processes – purchase kits which allow you to buy the contents separately – avoiding waste bottles/reagents.



### Can you recycle your packaging?

Most packaging doesn't require incineration. Consider if there are ways to avoid excess clinical waste, e.g. targeting a few items which aren't contaminated to no longer go through clinical waste.



### Create reagents/kits in-house:

Many common reagents and materials may be produced on site e.g. pour your own gels for DNA electrophoresis



### Could you buy bulk?

Combine and share with other labs. Only do so when certain to utilise all contents.



## Can you downsize your plastics?

Sometimes there are alternatives which perform the same task with less plastic. E.g. smaller tube sizes.



### Tip boxes: Can you reload tip boxes?

Non-contaminated tip boxes can be recycled or some suppliers offer take-back schemes.



