

SPNHC 2022 PROGRAMME (as at 19.05.22, subject to change)

Saturday 4th June 2022

14:00 – 18:00	Registration Open	Royal Botanic Garden
		Edinburgh, John Hope
		Gateway, Arboretum PI,
		EH3 5NY

Sunday 5th June 2022

PLEASE NOTE ALL FIELDTRIPS MUST BE PRE-BOOKED

10:00 – 18:00	Registration Open	Royal Botanic Garden Edinburgh, John Hope Gateway, Arboretum PI, EH3 5NY
08:45 – 17:30	Outlander Tour	
09:30 - 11:30	Edinburgh Walking Tour – Edinburgh Rocks	Meeting points and
10:00 - 12:00	Edinburgh Walking Tour – Plants & Habitats of Arthurs Seat	timings will be
13:00 - 16:00	Maid of the Forth & Inchcolm Island	communicated to
14:00 – 16:00	Edinburgh Walking Tour – Greyfriars Kirk & Pavement Palaeontology	individuals booked on each fieldtrip.
14:00 – 16:00	Distillery Tour	
19:00 – 20:15	Mercat Ghost Tour	

Monday 6th June 2022

07:30 - 18:30	Registration Open	McEwan Hall
10:30 – 17:30	Exhibition Open	McEwan Hall
08:30 - 09:30	SPNHC Standing Committee Meetings	
	Education	Deans Room, McEwan Hall
	Best Practices	Lecture 1, Appleton Tower
	Long Range Planning	Lecture 2, Appleton Tower
	Web	Lecture 3, Appleton Tower
08:30 - 10:30	BHL Annual Meeting Reports	Lecture 5, Appleton Tower
09:30 - 10:30	SPNHC Standing Committee Meetings	
	Emerging Professionals	Deans Room, McEwan Hall
	Legs & Regs	Lecture 1, Appleton Tower
	Conference	Lecture 2, Appleton Tower
	Archives	Lecture 3, Appleton Tower
10:30 – 11:00	Refreshment Break	McEwan Hall
11:00 – 12:00	SPNHC Standing Committee Meetings	
	International Relations	Deans Room, McEwan Hall
	IDEA	Lecture 1, Appleton Tower
	Grants & Recognitions	Lecture 2, Appleton Tower
	Colln Theft & Security	Lecture 3, Appleton Tower
11:00 – 13:00	BHL Annual Meeting Reports contd.	
12:00 – 13:00	SPNHC Standing Committee Meetings	



	US Federal Collections	
	Biodiversity	Lecture 1, Appleton Tower
	Conservation	Lecture 2, Appleton Tower
	Membership	Lecture 3, Appleton Tower
13:00 - 14:30	Lunch & Exhibition	McEwan Hall
13:00 - 14:30	Emerging Professionals Luncheon	Foyers 1-4
13:00 - 14:30	Committee Chairs Meeting	Lecture 1, Appleton Tower
14:30 – 16:00	Opening Ceremony Chair:	Lecture 4, Appleton Tower
14:30 – 14:45	Welcome Angus Robertson MP	
14:45 – 15:30	Climate Change & Collections Mark Maslin	
15:30 – 16:00	Discovering the Deep: Edinburgh and the birth of deep-sea science Hermione Cockburn	
16:00 – 16:30	Refreshment Break	McEwan Hall
16:30 – 17:00	Scottish Folk Flora Greg Kenicer	Lecture 4, Appleton Tower
17:00 – 17:30	#UNITEDFORBIODIVERSITY Gilles Doignan	
17:30 – 18:00	Publications Committee Meeting	Lecture 2, Appleton Tower
19:00 – 21:00	SPNHC 2022 Welcome Reception	Royal Botanic Garden Edinburgh

Tuesday 7th June 2022

08:00 -	- 18:00	Registration Open	McEwan Hall
09:00 -	- 17:00	Exhibition Open	McEwan Hall
09:30 -	- 11:00	Concurrent Sessions - 1	
		(MI) MIDS - A digitisation standard for natural history collections Co-Chairs: Elspeth Haston and Heimo Rainer	Lecture 1, Appleton Tower
09:30	09:45	The first stage digitisation standard: What are MIDS-1 and MIDS-1i and how do you use them? Elspeth Haston	
09:45	10:00	A schema to calculate MIDS scores Mathias Dillen	
10:00	10:15	How well is the world's biodiversity represented in collections? Pieter Huybrechts	
10:15	10:30	Applying the Digital Extended Specimen: building collections and integrating data Sara Hansen	
		G1: General	
10:30	10:45	Setting Natural Science Data Free: UK Collections' Digital Readiness Tara Wainwright	
10:45	11:00	Harnessing the Goldilocks Effect: What is the best way to share digitisation workflows? Lisa French	
		G3: General Chair: Isla Gladstone	Lecture 2, Appleton Tower
09:30	09:45	New digitization technologies at the service of science and society – do virtual nature museums have a future? Marcin J. Kamiński *	
09:45	10:00	Digi-Leap: Connecting Novel Tools, Machine Learning and Public Participation to Label Digitization Efforts	



	1	Deb Owner being *	
10.00	10.15	Rob Guralnick *	
10:00	10:15	DINA and ODK – Useful tools for digitisation and moving of natural	
		history collections	
10:15	10:20	Majid Vafadar What's the use? Physical and digital use of the Naturalia collection	
10:15	10:30	What's the use? Physical and digital use of the Naturalis collection	
10:20	10:45	Max Caspers	
10:30	10:45	Digitized Collections as a Means to Deepen Informal Science Learning:	
		An Argument and Early Findings Lynne Zummo and Madlyn Larson	
10:45	11:00	Setting quality thresholds for the use of natural history collection	
10.45	11.00	specimens in scientific studies	
		Annmarie Fearing	
		G4: General	Lecture 3,
		Chair: Mariana Di Giacomo	Appleton Tower
09:30	09:45	Alcide d'Orbigny and the Paris Foraminifera: story of a collection under	
00.00	00.10	Byne attack	
		Clara Hairie	
09:45	10:00	Pathologies associated with the Osteological Collection of the Natural	
00.10	10.00	History and Science Museum of the University of Porto	
		Sofia Perestrelo	
10:00	10:15	The Durfort Mammoth at the Muséum National d'Histoire Naturelle, Paris	
10.00		: a Specimen that accounts for 150 Years of Restoration Practices	
		Veronique Rouchon	
10:15	10:30	Herbarium as an object for conservation. Ethical background to decision	
		making on conservation treatments	
		Magdalena Grenda-Kurmanow *	
10:30	10:45	Documenting the alteration of Georges Deflandre's microscope slides: a	
		way to assess the most durable mounting method?	
		Alice Gimat	
10:45	11:00	The role of the conservator in construction projects: the Yale Peabody	
		Museum renovation as a case study	
		Mariana Di Giacomo	
		(LI) Liberating Natural History Collections Data in Biodiversity	Lecture 4,
		Literature	Appleton Tower
		Chair: Connie Rinaldo and Martin Kalfatovic	
00.00	00.45	Nighting in the consequence of the light of	
09:30	09:45	Nothing in (taxonomic) publishing makes sense except in the light of treatments	
09:45	10:00	Donat Agosti	
09.45	10.00	All the cool stuff a taxonomic journal can (should?) showcase through semantic enhancement	
		1	
10:00	10:15	Laurence Benichou Collection and specimen data life cycle completed: The case of Pensoft's	
10.00	10.15	journals and OpenBiodiv Knowledge Graph	
		Lyubomir Penev *	
10:15	10:30	A new romance between taxonomic literature and specimen data? News	
10.13	10.30	from Paris	
		Gildas Illien	
10:30	10:45	Using specimen citations to show the impact of natural history	
10.00	10.40	collections: metrics, machine learning, and manual annotation	
		Andrea Thomer *	
10:45	11:00	Presenting botanical type citation data from the International Plant	
		Names Index as material citations	
		Nicky Nicolson *	
		(LT1) Long time no see	Lecture 5,
		Chair: Jennifer Gallichan	Appleton Tower
09:30	09:35	Introduction to the Symposium	
		Jennifer Gallichan	



09:35	09:44	The Natural History Museum of Denmark: a new museum, new	
		exhibitions and new collaborations	
00.44	00.50	Bethany Palumbo	
09:44	09:53	Introducing the "IUGS Geocollection Subcommission" – the new	
		international body to represent geological collections Rachel Walcott	
09:53	10:02	It takes a village to fill a herbarium: how a small team can accomplish big	
09.55	10.02	things	
		Clare Booth-Downs	
10:02	10:11	Breathing New Life into Collections	
10.02	10.11	Klara Scharnagl*	
10:11	10:20	An Agate a Day Gets the Public Engaged	1
		Emily Brown	
10:20	10:29	Keeping the doors open (Virtually) – Natural Science events during	1
		lockdown. Changing the way we deliver public outreach events at	
		Amgueddfa Cymru National Museum Wales	
		Andrew Haycock	
10:29	10:38	Updates on the Natural History Collections Club Network (NHCCN) Kevin Krajcir	
10:38	10:47	Connect-Conserve Cyswllt-Cadwreath Cymru - a new way of working	
10.50	10.47	together as conservators in Wales	
		Kate Andrew	
10:47	10:56	Remote Volunteering: Publication Round-up	
		Nicole Volden	
10:56	11:00	End of Session 1 Wrap Up	
		Jennifer Gallichan	
11:00 –		Refreshment Break	McEwan Hall
11:30 –	- 13:00	Concurrent Sessions - 2	
		G2: General Chair: Erica Krimmel	Lecture 1, Appleton Tower
11:30	11:45	Measuring the economic impacts of digitised collections Helen Hardy	
11:45	12:00	Marine Biological Collections: their importance and value Elena Guerrero	
12:00	12:15	Perspectives and challenges of creating a new museum in 21st century Brazil Bruna Toscano	
12:15	12:30	The Chiapas Maya Project - an Update	1
		Lori Benson	
12:30	12:45	Preserving and Sharing Museums and Collections Through Exhibit Hall	
		and Collections Area Virtual Tours and 3D Specimen Photogrammetry	
		Ralph Kugler	
12:45	13:00	Rediscovering the rocks of Surinam: giving structure and context to a	
		collection with the aim of decolonization Frances Versluis	
		(MO1) Mobilizing specimens for factbased conservation in the face	Lecture 2,
		of a global biodiversity crisis	Appleton Tower
		Chair: Jutta Buschbom	
11:30	11:45	Use of New York Botanical Garden Digitized Herbarium Specimen Data	
		for Biodiversity Conservation	
		Barbara Thiers	
11:45	12:00	A Museum of Biology in the capital of Brazil	
10.55	10.:=	Gabriela Hirata	
12:00	12:15	Collection Discovery and Development at the Museum für Naturkunde	
I		Berlin Jana Hoffmann	



12:15	12:30	Using collections data to solve the mystery of the Black-winged Monarch or "To lose a species is tragic; to not know where it is for half of every year when nearly 200 museum specimens exist is careless." Leo Joseph *	
		(AU) Authentic natural history museum experiences to prepare students for global challenges Chair: Jack Ashby and Adania Flemming	Lecture 3, Appleton Tower
11:30	11:42	Museums, Students, Zoology and the Public: Bringing Them All Together Jack Ashby	
11:42	11:54	Lessons learned from fifteen years of "The Collections Course" at the University of Connecticut Sarah Taylor	
11:54	12:06	Tucson Bee Collaborative: engaging 2-year and 4-year college students in specimen-based research Wendy Moore	
12:06	12:18	Natural History Collections Research Design: A discussion course for research applications using collections and differentiating hypotheses from predictions Travis Marsico *	
12:18	12:30	Watching History Repeat Itself: How undergraduate involvement in collections has changed (or not) over the past 200 years at a small liberal arts college Lyndell Bade	
12:30	12:42	Assessing marginalized undergraduate students use of Natural History Collections Adania Flemming *	
12:42	13:00	Discussion Jack Ashby and Adania Flemming	
		(RE) Reflections on the Biodiversity Heritage Library: Value in Collections and Collaboration Chair: David Iggulden	Lecture 4, Appleton Tower
11:30	11:50	The Biodiversity Heritage Library as a platform for connecting natural history materials Diane Rielinger & Joseph deVeer * (Diane in person, Joseph pre-recorded)	
11:50	12:10	Better publications for better research Elisa Hermann	
12:10	12:30	Project #RetroPIDs: BHL's mission to unlock the world's biodiversity literature Nicole Kearney	
12:30	12:50	Discussion	
		(LT2) Long time no see Chair: Yvette Harvey	Lecture 5, Appleton Tower
11:30	11:35	Welcome to Session 2 Yvette Harvey	
11:35	11:44	Conservation and photogrammetry of subfossil Quaternary walrus (Odobenus rosmarus) from the Bay of Fundy, Canada Dee Stubbs-Lee *	
11:44	11:53	Digitisation of the National Herbarium of Ireland (DBN) Wuu Kuang Soh	
11:53	12:02	Crystal Model Collections in UK Museums Peter Davidson	
12:02	12:11	New focus and new audiences for the engagement programme at the Museum of Zoology during the pandemic and into the future Rosalyn Wade	



12:11	12:20		
I .		The ZooMu Initiative: Enhancing the Value of Zoo Collections to Advancing Biological Sciences by Bridging the Gap Between Zoos and	
		Museum	
12:20	12:29	Gregory Watkins-Colwell Making Nature: Preventive Conservation and Sustainability Challenges in	
12.20	14.43	Contemporary Diorama Construction	
		Claire Dean	
12:29	12:38	Curatorial handover in the time of Covid Mike Rutherford	
12:38	12:47	Exploring and Evolving: Bringing over a million specimens out of the shadows at the Cambridge University Herbarium Lauren Gardiner	
12:47	13:00	Questions and end of Session 2 wrap up Yvette Harvey	
13:00 – 1	14:00	Lunch & Exhibition	McEwan Hall
14:00 – 1	15:30	Concurrent Sessions - 3	
		(ID1) Identifiers and labels in natural history collections: new technologies, challenges and opportunities for linking objects and data Chair: Christian Bölling	Lecture 1, Appleton Tower
14:00	14:15	Why not use RFID's in natural history collections? Luc Willemse	
	14:30	Identifiers and labels for everyone: recent developments in Symbiota Laura Rocha Prado *	
14:30	14:45	Specimen Data Refinery - A novel approach to automating digitisation Julie Gray	
14:45	15:00	Partnering with scholars in the digital humanities to link an historic regional herbarium with its original collection and accession records Andrea Weeks	
15:00	15:15	Networking specimen data across collections and disciplines: the CETAF Botany Pilot Anton Güntsch *	
15:15	15:30	Assisting digitisation and specimen data enhancement through Digital Specimen Identifier DOI infrastructure and services Wouter Addink	
		(MO2) Mobilizing specimens for factbased conservation in the face of a global biodiversity crisis Chair: Jutta Buschbom	Lecture 2, Appleton Tower
14:00	14:15	Contribution of undergraduate botanical research on plant species' conservation in a biodiversity hot-spot Alina Freire-Fierro *	
14:15	14:30	How museum specimens and community science data are used to revise the conservation status of a rattlesnake in Utah, USA Drew Dittmer *	
14:30	14:45	Citizen Science Initiatives as Sources of Fungal Biodiversity Data Gregory Mueller *	
14:45	15:00	The Ulster Museum Natural Sciences collections – past, present and future, here for good Helen Barber-James	
15:00	15:15	Marine biodiversity advances using the natural collections and open data Hanieh Saeedi *	
15:15	15:30	Multiplying the value of collections data through sharing and citation Tim Hirsch	
		(CE) Civically engaged natural history museums: transforming public programmes to address societal challenges Chair: Jack Ashby	Lecture 3, Appleton Tower

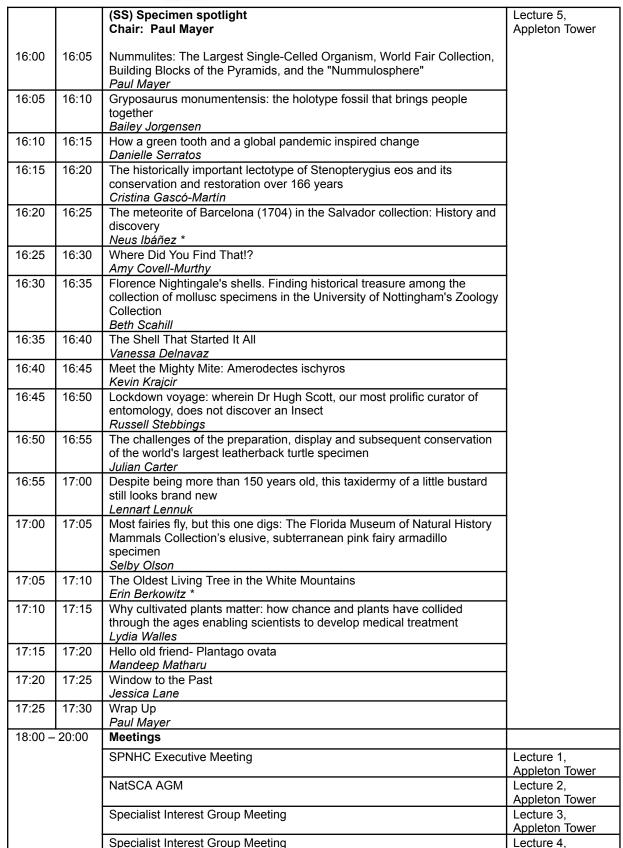


16:00	16:15	Persistent identifiers for specimens/samples are way more than yet another label	
		technologies, challenges and opportunities for linking objects and data Chair: Christian Bölling	Appleton Tower
. 3.00		(ID2) Identifiers and labels in natural history collections: new	Lecture 1,
16:00 -		Concurrent Sessions - 4	
15:30 –	16:00	History and Science Museum of the University of Porto, Portugal Luis Ceriaco Refreshment Break	McEwan Hall
15:15	15:30	Peter Giere Recovering an abandoned Zoological Museum – the case of the Natural	
15:00	15:15	Stay on top of permits, MATs and MTAs – collating sample and legal information with existing data management systems in compliance with legal requirements. The GDM at MfN – a case study	
14:45	15:00	The Trèmols herbarium (19th century), a European herbarium preserved at the Botanical Institute of Barcelona Laura Gavioli *	
14:30	14:45	Setting prioritites for managing previousely unmanaged collections Hans Kristensen	1
14:15	14:30	A proposal for the entomological collection workflow to study diversity applied to forensics and conservation: from the field to data publishing. Luz Miryam Gomez Pinerez	
14:00	14:15	A New Era of Provenance Research? How the Yale Peabody Museum is looking at provenance today Erin Gredell	
		G5: General Chair: Jessica Nakano	Lecture 5, Appleton Tower
15:15	15:30	Redesigning databases for comprehensive collection management Christine Johnson	1
15:00	15:15	Questions John Simmons	
14:45	15:00	Prepare to move – even if you don't Paul Callomon	
14:30	14:45	A new approach to mammal specimen storage at LACM Shannen Robson	
14:15	14:30	Testing An Alternative Shelving Arrangement to Optimize Space and Task Efficiency in a Fluid Fish Collection Dean Hendrickson *	
14:00	14:15	Managing Long-Term Sustainability in an Uncertain Future John Simmons	
		(ML1) Managing Long-Term Sustainability in an Uncertain Future Chair: John Simmons	Lecture 4, Appleton Tower
15:00	15:30	What next? Taking action to enable natural science collections to be socially engaged: an open discussion Liz Hide	
14:45	15:00	Natural history collections and social impact in the context of the climate and ecological crises Isla Gladstone	
14:30	14:45	Reveal, Reclaim and Recognise: Digging under the hidden narratives of natural history collections Miranda Lowe	
14:15	14:30	Liz Hide Museums, Health and Wellbeing Miranda Stearn	
		Introducing the 'civically engaged natural history museums: transforming public programmes to address	



10.15		Lesley Wyborn *	
16:15	16:30	Institution Codes, Collection Codes, and Specimen Identifiers: linking	
		voucher specimen to Tissues, DNA Samples, and Sequence Data Daniel Mulcahy	
16:30	16:45	Integrating Zoo and Museum Collections Databases: A Case Study	
		Serina Brady *	
16:45	17:00	Darwin Tree of Life Project: Sample Tracking	
		Heather Allen	Looturo O
		(MO3) Mobilizing specimens for fact-based conservation in the face of a global biodiversity crisis Chair: Jutta Buschbom	Lecture 2, Appleton Tower
16:00	16:15	The value of herbarium specimen collections for quantifying the impact of the 2019-2020 bushfire and drought disasters on Australian plant biodiversity Robert Godfree *	
16:15	16:30	Spatial uncertainty in data from Natural History Collections as mediated by GBIF. Implications for ecological research Arnald Marcer	
16:30	16:45	Misidentifications of herbarium specimens are a great problem for distribution studies: Kalanchoe as a case study Jordi López-Pujol *	
16:45	17:00	Making the most out of your collection data to assess the extinction risk of endemic plant species Wesley Tack	
17:00	17:15	Specimen-based model clade research and its implications for biodiversity conservation Patrick Sweeney	
		(EX) Exhibiting Extinction and Endangerment Chair: Dolly Jørgensen	Lecture 3, Appleton Tower
16:00	16:10	Introduction to the symposium Dolly Jørgensen	
16:10	16:30	Facing Extinction: Gorilla Death Masks in Museum Conservation Narratives Verity Burke	
16:30	16:50	From Extinction Voices to Extinction Silences: exploring how natural history displays can shape narratives and action against future extinctions, using a case study from Bristol Museums Isla Gladstone	
16:50	17:10	As Dead as a Dodo: Extinction Narratives and Justice in the Museum Anna Guasco	
17:10	17:30	Running Out of Time: Extinction, Impermanence and Museum Display Alice Would	
		(ML2) Managing Long-Term Sustainability in an Uncertain Future Chair: John Simmons	Lecture 4, Appleton Tower
16:00	16:15	Publication vs. Collection Management: What was your CMS designed for? Teresa Mayfield-Meyer	
16:15	16:30	Specimens, tissues, DNA samples and permits: how databases can support comprehensive collection management Dirk Neumann	
16:30	16:45	Creating Active Collections in Natural History Museums Laura Alejandra Rincón Rodriguez	
16:45	17:00	Being strategic: reassessing the use and interpretation of collections Julianne Snider	
17:00	17:15	Approaching sustainability through strategic reduction of concerns Robert Waller	
17:15	17:30	Questions and closing remarks	





Appleton Tower



	Specialist Interest Group Meeting	Lecture 5,
		Appleton Tower
20:15 – 23:15	Ceilidh	South Hall,
		Pollock Halls

Wednesday 8th June

08:00 -	17:30	Registration Open	McEwan Hall
09:00 - 17:00		Exhibition Open	McEwan Hall
09:30 –	11:00	Concurrent Sessions – 5	
		G6: General Chair: Shelley James	Lecture 1, Appleton Tower
09:30	09:45	Using Symbiota to establish a global, decentralized model for high-quality data aggregation:Novel concepts and designs to improve the interoperability of occurrence-based biodiversity data Edward Gilbert *	
09:45	10:00	Adapting Arctos for Paleontology Collections Nicole Volden	
10:00	10:15	Little Brown Bugs: Machine Learning on Challenging Collections Jeremy Miller *	
10:15	10:30	Flexible and scalable label generation workflows in support of collection digitization using persistent and machine-actionable identifiers Christian Bölling	
10:30	10:45	DINA – An Open-Source System with an Innovative Data Model for Collection Management Falko Glöckler	
10:45	11:00	Applying Colorimetry to Minerals: Limitations and Applications Kathryn Royce	
		G9: General Chair: Yvette Harvey	Lecture 2, Appleton Tower
09:30	09:45	Harbor Porpoise Time Machine: mounting a small cetacean to gain insights into how old specimens were prepared Becky Desjardins	
09:45	10:00	A Stable Future – The importance of stable and sustainable Oddy tested materials within taxidermy Jazmine Miles Long	
10:00	10:15	DORA for MoBBiDig: Unlocking of the German mollusc collection of the MfN Berlin through digitization Nora Lentge-Maaß	
10:15	10:30	Re-housing Taxidermy-mounted Bird and Mammal Specimens at the Michigan State University Museum Laura Abraczinskas *	
10:30	10:45	Taxidermy Vertebrate Specimens at the Natural History Science Museum of University of Porto (MHNC-UP) and the need of an Illustrated Glossary for the Conservation Assessment Mariana Costa	
10:45	11:00	Caring for Insect Collections – taking our entomology training online Ashleigh Whiffin	
		(CC1) Connecting Communities to Natural History Collections Chair: Jeanette Pirlo	Lecture 3, Appleton Tower
09:30	09:45	Integrating African Natural History specimen data; current progress and future needs Helen Barber-James	



		Chair: Nelson Rios	Appleton Tower
1.30 -	13.00	Concurrent Sessions – 6 G7: General	Lecture 1,
11:00 – 1:30 – 1		Refreshment Break Concurrent Sessions 6	McEwan Hall
10:45	11:00	Sampling strategies, techniques and curation of the Swedish Environmental Specimen Bank Anna Jerve	M.E
10:30	10:45	Using Excel Macros for Data Quality Assurance: Lessons Learned from a Coding Beginner Larissa Welton	
10:15	10:30	Deciphering natural history and mapping the world through collection labels Krisztina Lohonya	
10:00	10:15	Modular Solutions in Image digitization Frederik Berger	
09:45	10:00	Smartphone microscopy – Tips for taking high-quality microscope images with a phone camera Bob Gooday	
09:30	09:45	Chair: Emily Braker and Genevieve Tocci A Snake in the Glass: Wet tank setup and focus stack imaging method for reptile and amphibian specimens Emily Braker	Appleton Tower
10:45	11:00	Advancing Interdisciplinary Collaboration between Natural History and Cultural Heritage Collections Kerstin Lehnert * (BB1) Back to Basics: Museum Techniques Skillshare	Lecture 5,
10:30	10.45	When Butterflies Don't Migrate Voluntarily: A 4,000-mile Moving Story Cailin Meyer	
10:15	10:30	Are you prepared? Preparation, response, and recovery of collections in unanticipated disasters Mare Nazaire *	
10:00	10:15	G12: General SciCoMove: Scientific Collections on the Move: Provincial Museums, Archives, and Collecting Practices (1850–1950) Patricia Mergen	
09:45	10:00	From Unknown Unknowns to Known Unknowns: A product of digitisation is a better understanding of the causes of collection loss Rachel Walcott	
09:30	09:45	"Keep it secret, keep it safe": Lessons learned from mineral collection security Erika Anderson *	
		Taormina Lepore (CT) Collection Theft and Security Monitoring of Collections Chair: Paul Mayer	Lecture 4, Appleton Tower
10:30	10:45	Neurodiverse communities as crucial contributors to paleontology exhibits and collections perspectives, using inclusive museum design and self-advocacy	
10:15	10:30	Creating Inclusive Spaces: Centering Gender Identity in Biodiversity Science and Natural History Collections Sara Hansen	
10:00	10:15	Hillary Barron * "One Specimen Many Stories", encouraging new visions and seldom heard voices about natural history specimens Christopher Marshall	
09:45	10:00	Culturally Responsive Undergraduate Science Education: A model for equity and social justice academic biology	



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11:30	11:45	Data cleaning an iterative process: lessons learned from the second mass digitization project at Meise Botanic Garden Henry Engledow	
11:45	12:00	Harnessing the power of community science to digitize, transcribe and import preparation information into a collections management database system Carolyn Levitt-Bussian	
12:00	12:15	Mass Imaging and Transcription of Zoology Trait Data: Using Low Cost Tools and Community Science Alyson Wilkins	
12:15	12:30	(Re)using published georeferences with Biodiversity Enhanced Location Services (BELS) Julie Allen	
12:30	12:45	Scaling 3D Digitization of Natural History Collections: Use Cases from Anthropology & Entomology Nelson Rios	
12:45	13:00	Scaling up digitization in entomology collections – a new approach initiated and enabled by the Museum fuer Naturkunde Berlin, supported by Naturalis Biodiversity Center and realized by Picturae Frederik Berger	
		G10: General Chair: Bethany Palumbo	Lecture 2, Appleton Tower
11:30	11:45	Updated, collated, recurated – it's the new Herbarium Handbook! Nina Davies & Clare Drinkell	
11:45	12:00	Herbarium backlogs: Challenge or opportunity? Hannah Bendull	
12:00	12:15	Resurrecting the orphaned Lord Fairfax Community College herbarium (LFCC) Andrea Weeks	
12:15	12:30	Best Practices for the Preservation Fluid Collections: Where are we? John Simmons	
12:30	12:45	Monitoring of temperature and relative humidity in the biological collections of the Museo Argentino de Ciencias Naturales "Bernardino Rivadavia" in Buenos Aires city Soledad Tancoff *	
12:45	13:00	Tackling Pests in the Public Eye – Procedure for Removing Mold and Dermestids from Herpetology Skeletal Specimens Stevie Kennedy-Gold *	
		(CC2) Connecting Communities to Natural History Collections Chair: Jeanette Pirlo	Lecture 3, Appleton Tower
11:30	11:45	Re-connecting communities in biodiverse places to their biological heritage Quentin Groom	
11:45	12:00	Changing Natures. Developing a Shared Participatory, Digital Collection of the Anthropocene Elisabeth Heyne *	
12:00	12:15	Building the Community through Biodiversity Literacy Anna Monfils	
12:15	12:30	Boots on the Ground: Success Stories of Reaching Underrepresented Groups across Puerto Rico Janelle A. Peña-Jiménez *	
12:30	12:45	And We're Live: Utilizing Livestreaming and Digital Technology to Engage Audiences with Natural History Collections Gabriele-Philip Santos	
12:45	13:00	Bringing Florida Museum of Natural History 3D Collections into K-12 Schools to Teach About Adaptations, Evolution, and Climate Change Stephanie Killingsworth	



		(CS1) Collection space in the 21 st century and beyond Chair: Luc Willemse	Lecture 4, Appleton Tower	
11:30	11:45	Looking into the future: A systematic way of collection space planning Thomas Schossleitner	A systematic way of collection space planning	
11:45	12:00	Planning a new collection space for the Royal Horticultural Society's specialist herbarium of ornamental plants Yvette Harvey]	
12:00	12:15	A Swiss sense of compromise: Planning a new museum building in an eco-friendly city Alice Cibois		
12:15	12:30	Focusing on Users and Maximising Opportunities: the Sedgwick Museum Collections Research Centre, University of Cambridge Liz Hide		
12:30	12:45	CryoArks – The UK's first zoological biobank Andrew Kitchener		
		(BB2) Back to Basics: Museum Techniques Skillshare Chair: Emily Braker & Genevieve Tocci	Lecture 5, Appleton Tower	
11:30	11:45	Herbarium Life: Shipping Cryptogamic Specimens Genevieve E. Tocci		
11:45	12:00	Unique Approaches to Packing Vertebrate Paleontological Specimen Loans Adrienne Stroup		
12:00	12:15	Freeze it all! An IPM case study of the Angelo State Natural History Collections Serina Brady *		
12:15	12:30	Press Juicy, Sticky Plants with Tissue Paper and Pillows of Silica to Prevent Mould and Retain Colour Nadia Cavallin *		
12:30	12:45	Osteoscribing: writing on bones Jacki Whisenant		
12:45	13:00	An advanced method of non-traditional bird skin preparation, to ease applications of scientific methods and enhance the value of avian collections Bernhard Bock		
13:00 –	14:00	Lunch	McEwan Hall	
13:15 –		LGBTQ+ Informal Session	Foyer 5 McEwan Hall	
14:00 –	15:30	Concurrent Sessions – 7		
		(VA1) Virtual Access – transitioning natural history collections for digital-on-demand Chair: Sandy Knapp	Lecture 1, Appleton Tower	
14:00	14:15	The SYNTHESYS+ Virtual Access experiment Vince Smith		
14:15	14:30	Synthesys+ Virtual Access projects at the Museum für Naturkunde Berlin – data, experiences and outcomes Eileen Westwig		
14:30	14:45	Considerations for Digitization Requests and Digital Asset Rights of Smithsonian Paleobiology Collections Jessica Nakano		
14:45	15:00	What we did in the shadows: Digitising the London NHM bat collection for the Covid-19 Chiroptera Knowledge Base Phaedra Kokkini		
15:00	15:15	Ask and Ye Shall Receive: Implementation of a Digital Entomological Loans Workflow Peter Wing		



	l	(DC) DemoCamp – A live demonstration of software and	Lecture 2,
		applications relevant to the management, analysis, dissemination, and use of natural history collections	Appleton Tower
		Chair: Jason Best, Erica Krimmel, Caitlin Chapman	
14:00	14:15	New Symbiota Features to Support Digital and Extended Specimen Data Katelin Pearson	
14:15	14:30	TaxonWorks: A User's Perspective: Digitizing a specimen start to finish Michelle Kohler	
14:30	14:45	Arctos: Collection Data Management, Publication, and Community in Support of the Extended Specimen Teresa Mayfield-Meyer	
14:45	15:00	An integrated knowledge hub for the natural science collections community – the example of the DiSSCo Knowledgebase Julia Pim Reis	
15:00	15:15	Global Names Architecture tools for verification, normalization, and detection of scientific names Dmitry Mozzherin *	
15:15	15:30	Collaborative Georeferencing Natural History Collections using GEOLocate/CoGe Nelson Rios	
		(CC3) Connecting Communities to Natural History Collections Chair: Jeanette Pirlo	Lecture 3, Appleton Tower
14:00	14:15	Like Baseball Cards: Distributing Specimens through the Curriculum Maura Flannery *	
14:15	14:30	Successes in utilizing museum collections and community collaborations to study the establishment of eastern fox squirrels in Utah Katrina Derieg	
14:30	14:45	Taking Up Space: The Sedgwick Museum's co-curated Community Cabinet Rob Theodore	
14:45	15:00	Digitizing the Ordovician from Biodiversification to Pandemic: Adapting to complete an Institute of Museum and Library Services (IMLS) funded project through the pandemic Patricia Coorough Burke	
15:00	15:15	Implementing 'Science Up Close': an innovative researcher-curated exhibition at the Florida Museum of Natural History Rachel Narducci	
15:15	15;30	Using public programs and classroom team-based research to collect, digitize, and study large collections of fossil alligators from Florida Mithcell Riegler	
		(MC1) Moving collections: curse, blessing or? Chair: Steven van der Mije	Lecture 4, Appleton Tower
14:00	14:15	Bringing together 13 million specimens: A case study on relocating and uniting CSIRO's National Research Collections Margaret White *	
14:15	14:30	The Natural History Museum on the Move: from Bloomsbury via South Kensington to Harwell a 150-year journey! Clare Valentine	
14:30	14:45	From bee to bone – theory and praxis of a large scale collection move Meta Friese	
14:45	15:00	First we take the earthquake: Moving Bird and Mammal collections of the Croatian Natural History Museum Irena Grbac *	
15:00	15:15	Two birds one stone: Between object location and digitisation – the benefits of QR-codes Heike Straebelow	
		(NW1) Natural History Wet collections	Lecture 5,



		Chair: Laura Brambilla	Appleton Tower
14:00	14:15	Teaching specimens: masterpieces of preparation and their problematic histories	
		Fabian Neisskenwirth *	
14:15	14:30	Preserving colour of wet specimens – The need to understand their uses and values for the collection Elodie Granget	
14:30	14:45	Past and Present Teaching: Returning to the Cole Museum of Zoology's original function as a university-level teaching resource, by developing a new museum space and enabling undergraduate students to safely undertake remedial conservation work within our fluid-preserved collections Claire Smith	
14:45	15:00	An introduction to the marine invertebrate wet collections at National Museums Scotland Fiona Ware	
15:00	15:15	How not to – damages in fluid-preserved collections caused by renovation works Dirk Neumann	
15:15	15:30	Physicochemical analysis of sealants from Anatomic collection in fluid of the MNHN: evolution of historical recipes Baptiste Zuber	
15:30 –	16:00	Refreshment Break	McEwan Hall
16:00 –	17:30	Concurrent Sessions – 8	
		(VA2) Virtual Access – transitioning natural history collections for digital-on-demand Chair: Sandy Knapp	Lecture 1, Appleton Tower
16:00	16:15	Mass digitisation of freshwater bioindicators: The NHM's Ephemeroptera, Plecoptera and Trichoptera Collections Robyn Crowther	
16:15	16:30	Diversifying virtual access: going for 3D Pierre-Yves Gagnier	
16:30	16:45	The future of digitisation-on-demand for natural history collections Sandra Knapp G8: General	
16:45	17:00	Mollusca Types in Britain & Ireland: Founding a Union database Jonathan Ablett	
17:00	17:15	Preserving the Genomes of Type Specimens: Lessons from the Museum of Comparative Zoology Rina Morisawa	
		(NF) Non-Fungible Tokens (NFTs), Blockchain, and Natural History Museums Chair: TBC	Lecture 2, Appleton Tower
16:00	16:15	The VERO: An NFT for increasing the production, flow and distribution of information associated with specimens Samuel Bolton *	
16:15	16:30	Clean NFTs: how Tezos can build long-lived, sustainable digital assets Anil Madhavapeddy	
		(YS) Year of the Student: Attracting College Students to Campus Museums Chair: Patti Wood Finkle	Lecture 3, Appleton Tower
16:00	16:15	More than a "mineral museum": refocusing, reinterpreting, and striving to remain relevant on a college campus Julianne Snider	



16:15	16:30	Running a Museum on Empty: Creative ways to maintain a museum and create new exhibits on a shoestring budget Ariana Lushtak	
16:30	16:45	The Study Gallery: Object-based Teaching through Collaborative Exhibits Nicole Palffy-Muhoray	
16:45	17:00	Year of the Student: Attracting College Students to Campus Museum Patti Wood Finkle & Valerie Innella	
		G11: General	
17:00	17:15	Renewing Curation of the Science Museum of Minnesota's Biology Collection Catherine Early	
		(MC2) Moving collections: curse, blessing or? Chair: Sophie Boulom	Lecture 4, Appleton Tower
16:00	16:15	Moving collections: Curse, Blessing or Opportunity? Dan Pemberton	
16:15	16:30	The fragility of frozen collections and the common and unique considerations for a large-scale collection move Kirsty Lloyd	
16:30	16:45	Moving Collections in a Pandemic? No Problem! How Planning and Preparation Saved the Day Margo Yousse	
16:45	17:00	Moving around living collection in Meise Botanic Garden: the Green Ark project Marc Reynders* & Patricia Mergen	
17:00	17:30	'I didn't know we had that!' – Bringing insight and order into a herbarium backlog when moving to a new depot Marnel Scherrenberg	
		(NW2) Natural History Wet collections Chair: Laura Brambilla	Lecture 5,
		Gliali. Laura Diallibilia	Appleton Tower
16:00	16:15	How to CT scan "the gorilla in the room" without going ape Gregory Watkins-Colwell	

16:15	16:30	Death Re-enlightened: The Conservation of the Wet Anatomical Preparations of Frederik Ruysch, the Rembrandts among Fluid Preserved Specimens Andries van Dam	
16:30	16:45	Characterization of old jar sealants: use of organic membrane and metal foils Sophie Cersoy	
16:45	17:00	Fragmented DNA in formalin-preserved specimens and where to find it Erin Hahn *	
17:00	17:15	Dip a toe into wet collection of the National Museum of Ireland Natural History Amy Geraghty	
17:15	17:30	Posters Flash Presentations	
19:00 –	- 23:30	Gala Dinner	National Museum of Scotland

Thursday 9th June

PLEASE NOTE ALL WORKSHOPS AND TOURS MUST BE PRE BOOKED

08:00 - 17:30	Registration Open	Appleton Foyer
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09:00 – 17:00	Exhibition Open	Appleton Foyer
09:00 - 10:30	Workshops	
	Digital Specimens and Extending them – Steps towards Implementation	Lecture 1, Appleton Tower
	People are unique, unique people are priceless	Lecture 2, Appleton Tower
	Workshop on Nagoya Protocol and Access and Benefit Sharing (ABS)	Lecture 3, Appleton Tower
	Art in the Museum: Natural Science Illustration and Artist Residency Programs	M2, Appleton Tower
	Strictly Planning: How to Organize a Digitization Project and Fill your Dance Card	Lecture 5, Appleton Tower
09:30 – 10:30	National Museums Scotland Collections Tours Conservation Labs, Invertebrate Biology, Vertebrate Biology, Palaeontology, Earth Science	National Museums Collections Centre, 242 West Granton road EH5 1JA
10:00 – 11:00	National Museums Scotland Library Tour	National Museums Scotland, Chambers Street EH1 1JF
10:00 – 11:00	Royal Botanic Garden Living Collection Tour	Royal Botanic Garden Edinburgh, 20A Inverleith Row EH3 5LR
10:30 – 11:00	Refreshment Break	Appleton Foyer
10:30 – 11:30	National Museums Scotland Collections Tours Conservation Labs, Invertebrate Biology, Vertebrate Biology, Palaeontology, Earth Science	National Museums Collections Centre, 242 West Granton road EH5 1JA
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11:00 – 12:00	Royal Botanic Garden Living Collection Tour	Royal Botanic Garden Edinburgh, 20A Inverleith Row EH3 5LR
11:00 – 12:30	Workshops	
	DINA Collection Management – Hands On Workshop	Lecture 1, Appleton Tower
	People are unique, unique people are priceless	Lecture 2, Appleton Tower
	Workshop on Nagoya Protocol and Access and Benefit Sharing (ABS)	Lecture 3, Appleton Tower
	Art in the Museum: Natural Science Illustration and Artist Residency Programs	Lecture 4, Appleton Tower
	Strictly Planning: How to Organize a Digitization Project and Fill your Dance Card	Lecture 5, Appleton Tower
12:30 – 13:30	Lunch & Exhibition	Appleton Foyer
13:30 – 15:00	Workshops Application of BIOfid tools for extracting data from biodiversity literature	Lecture 1, Appleton Tower
	Capturing community expertise: A SPNHC wiki edit-a-thon	Lecture 2, Appleton Tower
	Community engagement workshop on the new taxonomic backbone development by Global Biodiversity Information Facility (GBIF) and Catalogue of Life (COL)	Lecture 3, Appleton Tower
	Art in the Museum: Natural Science Illustration and Artist Residency Programs	Lecture 4, Appleton Tower
	Collection space in the 21st century and beyond	Lecture 5, Appleton Tower
14:00 – 15:00	National Museums Scotland Library Tour	National Museums Scotland, Chambers Street EH1 1JF
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	Collection space in the 21st century and beyond	Lecture 5, Appleton Tower
16:00 – 17:00	National Museums Scotland Library Tour	National Museums Scotland, Chambers Street EH1 1JF
17:15 – 19:15	SPNHC AGM	Lecture 1, Appleton Tower
17:15 – 18:45	BHL Member Council Business Meeting	Lecture 2, Appleton Tower
19:30 – 23:00	Pub Quiz	Counting House

Friday 10th June

PLEASE NOTE ALL WORKSHOPS MUST BE PRE-BOOKED

08:00 - 17:30	Registration Open	RBGE
09:00 - 10:30	Workshops	
	The Strategy Surgery: Strategic Management of Natural Science Collections	Lecture Room 1
	Dirty Data Dancing: Cleaning, standardization, and publishing for the judges	Botanic Cottage
	Shipping Workshop	Lecture Theatre
	Cleaning Your Collections: Tips for Non-Conservators	Teaching Lab
10:30 - 11:00	Refreshment Break	RBGE
11:00 – 12:30	Workshops	
	The Strategy Surgery: Strategic Management of Natural Science Collections	Lecture Room 1
	Dirty Data Dancing: Cleaning, standardization, and publishing for the judges	Botanic Cottage
	Shipping Workshop	Lecture Theatre
	Cleaning Your Collections: Tips for Non-Conservators	Teaching Lab
12:30 - 13:30	Lunch & Exhibition	RBGE
13:30 – 15:00	Workshops	
	Curating community knowledge of indigenous medicinal plants in global tree planting and biodiversity net gain activities	Lecture Room 1
	Dirty Data Dancing: Cleaning, standardization, and publishing for the judges	Botanic Cottage
	Shipping Workshop	Lecture Theatre



	The art and science of imaging specimens: creativity, imagination and detail	Teaching Lab
15:00 - 15:30	Refreshment Break	RBGE
15:30 – 17:00	Workshops	
	Curating community knowledge of indigenous medicinal plants in global tree planting and biodiversity net gain activities	Lecture Room 1
	Dirty Data Dancing: Cleaning, standardization, and publishing for the judges	Botanic Cottage
	Shipping Workshop	Lecture Theatre
	The art and science of imaging specimens: creativity, imagination and detail	Teaching Lab