

2018 SPNHC + TDWG CONFERENCE

COLLECTIONS AND DATA IN AN UNCERTAIN WORLD

25 AUGUST - 1 SEPTEMBER, DUNEDIN, NEW ZEALAND



**2018
SPNHC
+ TDWG
CONFERENCE**
COLLECTIONS AND DATA
IN AN UNCERTAIN WORLD

Conference Organising Committee

Local Reps:

Robert Morris
Nyssa Mildwaters
Emma Burns

SPNHC Rep:

Barbara Thiers

TDWG Reps:

Shelley James
Gail Kampmeier
Niels Klazenga
James Macklin
David Shorthouse
Stan Blum
William Ulate

Kia ora tātou,

The local organising committee is delighted to welcome you to Dunedin and the 1st joint meeting of the Society of the Preservation of Natural History collections (SPNHC) and Biodiversity Information Standards (TDWG). We are particularly excited to host the 1st annual SPNHC meeting in the Southern Hemisphere and hope that this meeting is an opportunity for members of both organisations to share knowledge and expertise.

Though the theme of the conference 'Collections and Data in an Unstable World' is particularly relevant to New Zealand, living as we do in the shaky isles, it has a much wider scope in these times of uncertainty. We look forward to bringing people and ideas together from all around the world who share a common interest in Natural Science collections and the information generated from them. We believe that in times of instability, collaboration is key to ensuring the well-being of our collections and their role in promoting the importance of the natural world. We hope that this meeting will act a catalyst for greater collaboration within the southern hemisphere and of course more widely.

We wish to extend sincere thanks to our conference partners whose financial sponsorship has been instrumental in the organisation of this conference as well as to our colleagues on both the TDWG and SPNHC organising committees whose input and assistance has been greatly appreciated. As you will see from the conference programme, this is a particularly busy meeting with lots of concurrent sessions. We hope however that there is something for everyone and that your time with us is both engaging and rewarding

Ngā mihi mahana

The Local Organising Committee

Robert Morris – Chair, Nyssa Mildwaters and Emma Burns.

CONFERENCE PARTNERS

DIAMOND PARTNERS



PLATINUM PARTNERS



GOLD PARTNERS



SILVER PARTNERS



BRONZE PARTNERS



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POSTERS

On behalf of SPNHC Council, it gives me great pleasure to welcome all participants to our 33rd Annual Meeting in Dunedin, New Zealand, being hosted by the Otago Museum and the University of Otago. Since this is the first SPNHC meeting in this region of the world and the first joint meeting with the Biodiversity Information Standards (TDWG), it's shaping up to be significant milestone for our respective organizations and for collections worldwide.

The conference theme is "Collections and Data in an Unstable World." This timely theme reflects the current events as well as our efforts as museum professionals to find ways to combat the various waves of instability, ranging from the environment to politics, which affects not only our collections, but also our day-to-day practices. The Local Organizing Committee has done a tremendous job of providing an engaging program of events around this theme including oral and poster sessions, informative workshops and some exciting social events. We thank them for the huge amount of work they have done in making this meeting bound for success.

It is rewarding to announce that our SPNHC Annual Meeting Travel Grant and Meeting Donation Drive programs have assisted in funding the attendance of 10 members. In addition, I thank the JRS Foundation for granting funds to support the attendance of three colleagues from African countries. All grantees will be mentored by established collections professionals and we thank our mentors for their valuable contributions. Meetings such as these would not be possible without the valued financial backing of our sponsoring partners. We thank them for their continued support and encourage you to do the same by visiting their booths at the vendor show.

The core of SPNHC's accomplishments is the result of the valuable work done by the society's committees. In these unstable times, it's important for museum professionals to stand together and advocate for what we feel is important. I encourage everyone to become involved by becoming engaged with one of our committees, which all work towards our unwavering fundamental goal of caring, conserving and promoting our natural history collections.

Our annual meeting provides us the opportunity to network with professionals, learn about evolving technologies in collection/data management, highlight our accomplishments, and socialize with our colleagues. This meeting is bound to be a success in all of these areas, and I'm excited to wish all of you a productive and fun-filled meeting.



Linda S. Ford
President
Society for the Preservation of Natural
History Collections (SPNHC)

Dear colleagues,

It is with great enthusiasm that I welcome you, on behalf of the Executive Committee, to the 2019 annual TDWG meeting. Our 34th annual event is jointly organised with the Society for the Preservation of the Natural History Collections (SPNHC).

Since the first meeting (1985, Geneva) TDWG has not only been developing standards and recommendations for biodiversity information, it has nurtured a thriving community of experts and acted as a bottom-up international focal point for biodiversity data mobilisation and integration. TDWG products, incl. flagship Standards Darwin Core and ABCD, are used today for the majority of biodiversity data transactions globally, underpinning platform and software interoperability needs.

The unprecedented rate of production of scientifically fit-for-purpose information, along with the urgent need for frontier data-intensive research, highlight the importance of TDWG's mission. Developing the right strategic partnerships, providing appropriate community services, and further professionalising the organisation are instrumental priorities, which ensure TDWG continues its important mission and remains relevant. In this context, joint conferences are a key part of our strategy to enhance the interplay between TDWG and relevant communities of practice, such as the natural science collections. Our 2019 meeting (to be held in the Netherlands between 21 and 25 October 2019) will also be a joint meeting with global and regional infrastructures.

In our approach to link out and improve our operational capacity, TDWG also introduced the all new Biodiversity Information Science & Standards (BISS) open access journal. BISS enters the complex ecosystem of academic journals to provide better visibility to community outputs (incl. Standards and recommendations) and act as a scholarly communication platform for biodiversity informaticians and data practitioners. The abstracts of this joint conference are also published in BISS.

With our brand new website, direct participation to large funding proposals and shared activities with international actors such as RDA and CODATA, we strive to further improve TDWG's position in the global landscape of domain-specific standards bodies, add value to the work of our community, and improve the reach and impact of our products.

In these exciting but also turbulent times, TDWG will continue playing a central role in supporting both scientists and infrastructures to generate, structure, share and re-use data of the natural world.

I would like to close by thanking our local hosts for the great work in putting this conference together, and wish you the best for a really productive meeting in this exciting part of the world.



Dimitris Koureas
Chair, Executive Committee
Biodiversity Information Standards - TDWG



SPNHC
ADVANCING COLLECTIONS CARE

SPNHC ANNUAL MEETING TRAVEL GRANTS

The Society for the Preservation of Natural History Collections (SPNHC) has a Travel Grant program designed to assist members with the costs of attending the Society's annual meetings.

This year the SPNHC Annual Meeting Travel Grant program consisted of four different grants- The Fitzgerald Travel Grant, the Christine Allen Travel Grant, the Jean DeMouthe Travel Grant, and the New Zealand Travel Grant.

Due to the generosity of donors, including University Products, Gaylord Brothers, Hollinger Metal Edge (the Christine Allen Travel Grant), and several anonymous donations (one for the Jean DeMouthe Travel Grant), the Committee was able to award ten grants.

2018 SPNHC ANNUAL MEETING TRAVEL GRANT RECIPIENTS

Fitzgerald Travel Grant Recipients

Christina Byrd
Sternberg Museum of Natural History

Thomas McElrath
Illinois Natural History Survey

Jess Miller-Camp
Department of Earth Sciences, University of California - Riverside

Christine Allen Travel Grant Recipients

Vanessa Delnavaz
University of Kansas Biodiversity Institute and Natural History Museum

Ben Frable
Scripps Institution of Oceanography,
University of California – San Diego

Tiana Rehman
Botanical Research Institute of Texas

Jean DeMouthe Travel Grant Recipients

Anthony Adu-Gyamfi
University of Ghana
Department of Plant and Environmental
Biology

Julie McIntosh Shapiro
Harvard University Herbaria

New Zealand Travel Grant Recipient

Meghan Grizzle
University of Kansas

Fitzgerald/New Zealand Travel Grant Recipient

Lise Stork
Leiden Institute of Advanced
Computer Science

**TRAVEL GRANTS FOR DELEGATES FROM
AFRICA**

Thanks to the generosity of the JRS Biodiversity Foundation, the organising committees for this year's joint Society for the Preservation of Natural History Collections (SPNHC) & Biodiversity Information Standards (TDWG) Conference have awarded travel assistance to three delegates from African countries.

Anthony Adu-Gyamfi

University of Ghana, Ghana Herbarium,
Legon, Accra, Ghana.

Boikhutso Lerato Rapalai

Curator of Entomology, Natural History
Division, Botswana National Museum,
Gaborone.

Yvette Umurungi

Centre of Excellence in Biodiversity and
Natural Resources Management (CoEB),
University of Rwanda, Southern Province,
Rwanda.

The organising committee are delighted to
welcome the JRS Biodiversity Foundation
Travel Grant recipients to Dunedin.

2019 DIGITAL OPEN SCIENCE WEEK ON BIOLOGICAL & GEOLOGICAL DIVERSITY

biodiversity_next

better Data - better Science - better Policies - better Future

joint Conference

Biodiversity
Information
Standards
T D W G

 **GBIF**
Global Biodiversity
Information Facility



DISCO
Distributed System of Scientific Collections

21 - 25 October 2019
Leiden, the Netherlands

biodiversitynext.org

N
Naturalis
Biodiversity
Center



MAKING THE CASE FOR NATURAL HISTORY COLLECTIONS

In 2019, the 34th annual meeting of the Society for the Preservation of Natural History Collections will take place in Chicago, hosted by the Field Museum. Chicago is centrally located and an international hub for travelers across the globe. It is a culturally rich and vibrant city with numerous iconic attractions including, Buckingham Fountain, Navy Pier, the Magnificent Mile, 60 different museums, Cloud Gate (also referred to as "The Bean"), plus our own SUE the T. rex, to name a few.

Reflecting on the leadership role that SPNHC has in promoting collections, the annual meeting will focus on the theme of "Making the Case for Natural History Collections". We hope to encourage a more outward facing concept that engages the public and explains what we do and why it has importance in local and global communities. We want to invite members, both new and established, to give talks or presentations that highlight what you do and why your collection matters.

Please visit our website for more details:

<https://www.spnhcchicago2019.com/>

CONFERENCE VENUE

The main body of the conference will take place at the University of Otago with additional activities held at the Otago Museum and other external locations. Conference presentations will be held in the Castle and Burns Buildings while The Link will host the poster presentations, sponsors booths, the registration desk and all catering.

Castle Lecture Theatre Complex, North Dunedin, Dunedin 9016

The Burns Building, 95 Albany St, North Dunedin, Dunedin 9016

The Link, 640 Cumberland St, North Dunedin, Dunedin 9016

Otago Museum, 419 Great King St, North Dunedin, Dunedin 9016

CONFERENCE MIHI AND FAREWELL

As part of the opening of the conference a Māori Mihi or greeting will be held. It is important that delegates do not interrupt this or walk in front of those speaking during the Mihi. We ask that all delegates be seated promptly for 9am in Castle 2 on Monday, August 27th. Those arriving late will be asked to wait to enter the lecture hall until after the Mihi has finished. To close the conference a farewell will be held in The Link at the start of the lunch break on Friday, August 31st. This will be relatively informal and delegates will be able to collect food during this time although we do ask that noise be kept to a minimum so those addressing the delegates can be heard.

REGISTRATION DESK

The conference registration desk is open between 7.30am and 5.30pm every day from Saturday, August 25th until Friday, August 31st. Delegates are free to visit the desk any time to check in, pick up their registration materials and ask questions. Conference delegates are asked to wear their lanyards at all times while attending the conference.

ORAL PRESENTATIONS

Talks are scheduled for either 15-minute or 20-minute slots including any time for questions. The time slots will be enforced by session moderators to accommodate the many concurrent TDWG and SPNHC sessions that will be running each day.

Presentation slides should be prepared and saved as PowerPoint in widescreen 16:9 or pdf. Speakers are encouraged to ensure that they have separate copies of any embedded videos in the event of playback issues. All presentations must be labelled with the speaker's name, session title or code and the order of presentation within that session, For example:

*Smith - Collections Mgmt1
- Presentation 3
or
Brown_505_4*

In the event that a speaker wishes to demonstrate specialist software it is possible for the speaker to use their own laptop when presenting. VGA and HDMI connectors are available as are adaptors for USB-C connections.

Please be aware that all presentations during the conference will be recorded and made available to delegates after the conference. If you have concerns, please approach the registration desk.

PRESENTATION DROP-OFF ROOM

Delegates are asked to take their presentations to the presentation Drop-off Room in the Castle Building at least 12 hours prior to their scheduled session. Delegates will have the opportunity to test their presentations before they are uploaded to the University system. The presentation drop-off room is open between 9am and 5pm every day from Sunday, August 26th until Friday, August 31st.

POSTERS

Conference posters will be displayed throughout the conference in The Link and poster presenters are asked to set-up their posters between 7.30 and 9am on Monday, August 27th and to take down their posters between 4 and 5.30pm on Friday, August 31st.

A dedicated poster session is scheduled for 1-1.45pm on Thursday to allow presenters time to share and discuss their work with other delegates. Presenters are expected to be present during this time.

CODE OF CONDUCT

The conference is covered by a code of conduct that is available for all delegates to view online at <http://spnhc-tdwg2018.nz/conference/code-of-conduct/>. If you have any questions or would like to raise any issues the Code of Conduct Committee members can be reached, along with hard copies of the Code of Conduct, via the conference registration desk and at the Otago Museum reception desk. Representatives of the Committee will also be identified on their Conference lanyards.

SOCIAL MEDIA

Find us on Twitter @SpnhcTdwgNZ and on Instagram at SpnhcTdwgNZ

PHOTOGRAPHY

Please be aware that there will be a conference photographer recording key events. The imagery may be used for Otago Museum venue marketing purposes and will also be available for purchase via the photographer's website. If you have concerns, please approach the registration desk.

PARKING

Parking around Otago Museum and the University of Otago is very limited and we would suggest delegates make use of public transport, the city's cycle ways or park further away from the venue and walk the remaining distance where possible. There are a limited number of mobility parks available around the University. If you need to make use of one of these parks, further information is available from the local organising committee and at the registration desk.

SCHED

The conference programme is available via the Sched website and app at spnhctdwg18.sched.com

Dunedin is a small city that is very simple to navigate your way around, with most facilities located within an easy travelling distance of the city centre. The only exception to this is the journey from Dunedin Airport to the city centre which is approximately 29km. It takes approximately 30 minutes by car and around 50 minutes if you choose to use the shuttle bus. <https://www.airportshuttlesdunedin.co.nz/>

BUSES

Bus services operate regularly from the city to all suburbs and outlying centres with cash fares ranging from \$2.60 to \$6.00 for Zones 1 to 3. For those who intend to use buses regularly during the conference a 'GoCard' may be worth considering. With a GoCard you pay less than a cash fare and can get a free transfer within the same zone within 30 minutes of getting off. GoCards cost \$5 to set up with a minimum top up of \$10 and can be bought from the bus driver or at the University Bookshop across from Otago Museum. More information on bus services in Dunedin can be found at <https://www.orc.govt.nz/public-transport/dunedin-buses> or please ask at the conference registration desk.

TAXIS

Dunedin's small size means that taxi fares are generally affordable and a range of providers such as Dunedin Taxis (03 477 7777) are available. Please note that taxi fares from the city to Dunedin Airport will cost in the range of \$80.

DRIVING

For those delegates who are hiring a car during their stay, Dunedin is relatively easy to navigate by road. However, parking can be an issue particularly around the conference venue and delegates may find that if the metered car parks along Cumberland Street are full, they have to park some way from the venue and walk the remaining distance.

WALKING

Dunedin is a very compact and walkable city, with plenty of cafes and street art to admire as you walk. All the conference events, with the exception of the Monarch Cruise Tours, are either being held at or departing from locations within a 5 to 10 minute walk of each other. With this in mind we would suggest that walking is the most convenient way to get around Dunedin city centre.

MAPS

The following maps show the location of all the relevant conference venues and details of the Castle and Burns lecture theatres that will be used during the conference. For further information or directions, please approach the registration desk or one of the local organising committee or volunteers, all of whom will be wearing Dunedin lanyards.



PENSOFT

pensoft.net

info@pensoft.net

Pensoft is an academic publisher and technology provider, well known for its innovations in the field of semantic publishing. The company is actively developing novel tools, workflows and methods for integrated narrative and data publication and dissemination of scientific information. **Key products of Pensoft are:**



arpha

A first-of-its-kind end-to-end publishing platform featuring technologically advanced workflows for

Authoring,
Reviewing,
Publishing,
Hosting and
Archiving of open access journals, books and conference abstracts / proceedings.

arphahub.com

info@arphahub.com

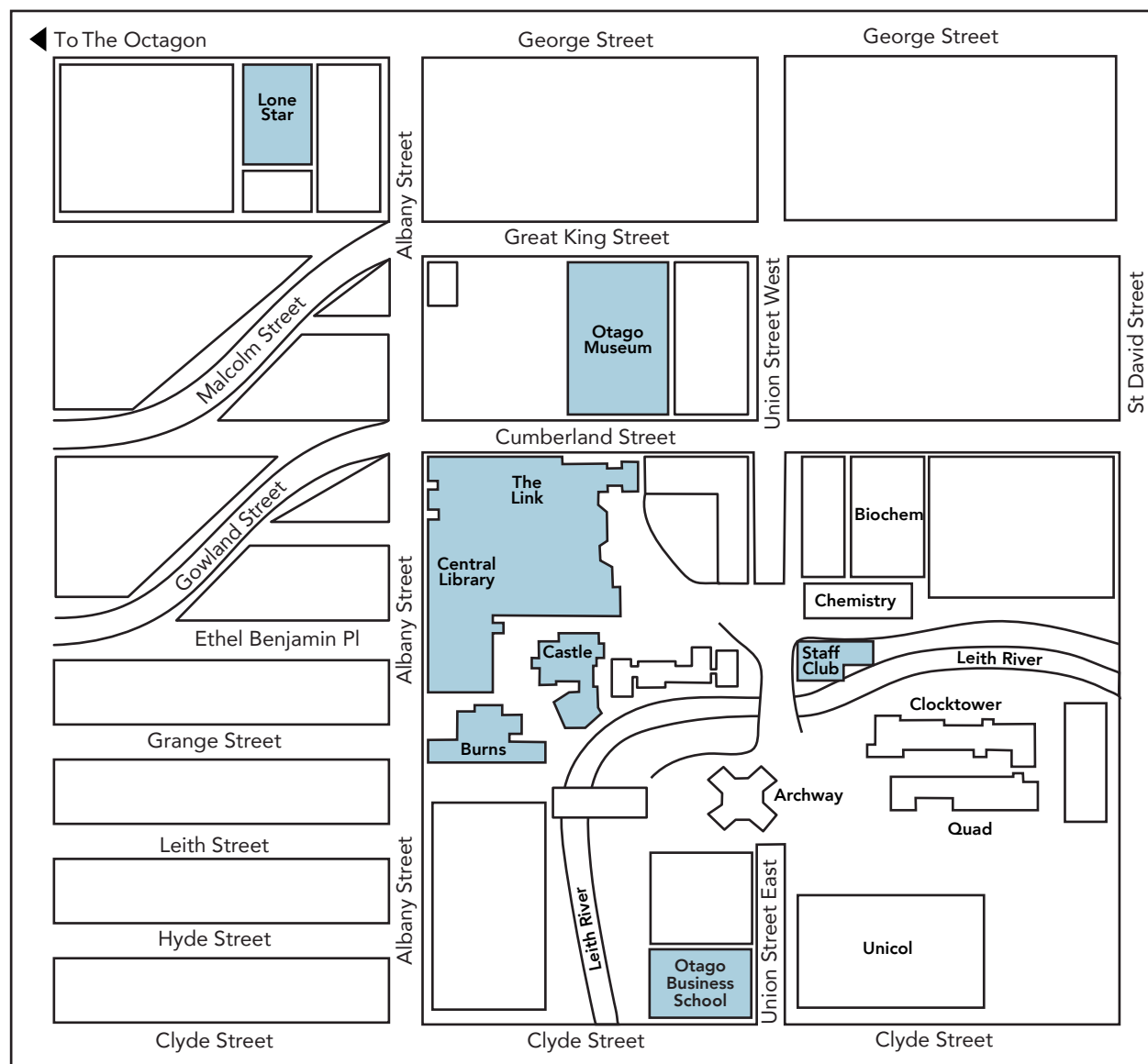


OpenBiodiv

RDF-based Biodiversity Knowledge Graph, encompassing nearly one billion of triples from text and data mining of thousands of full-text articles from dozens of journals for biodiversity-related objects, such as taxon names, taxon name usages, images, taxonomic treatments, occurrence records, the GBIF taxonomic backbone, and more.

openbiodiv.net

GENERAL AREA

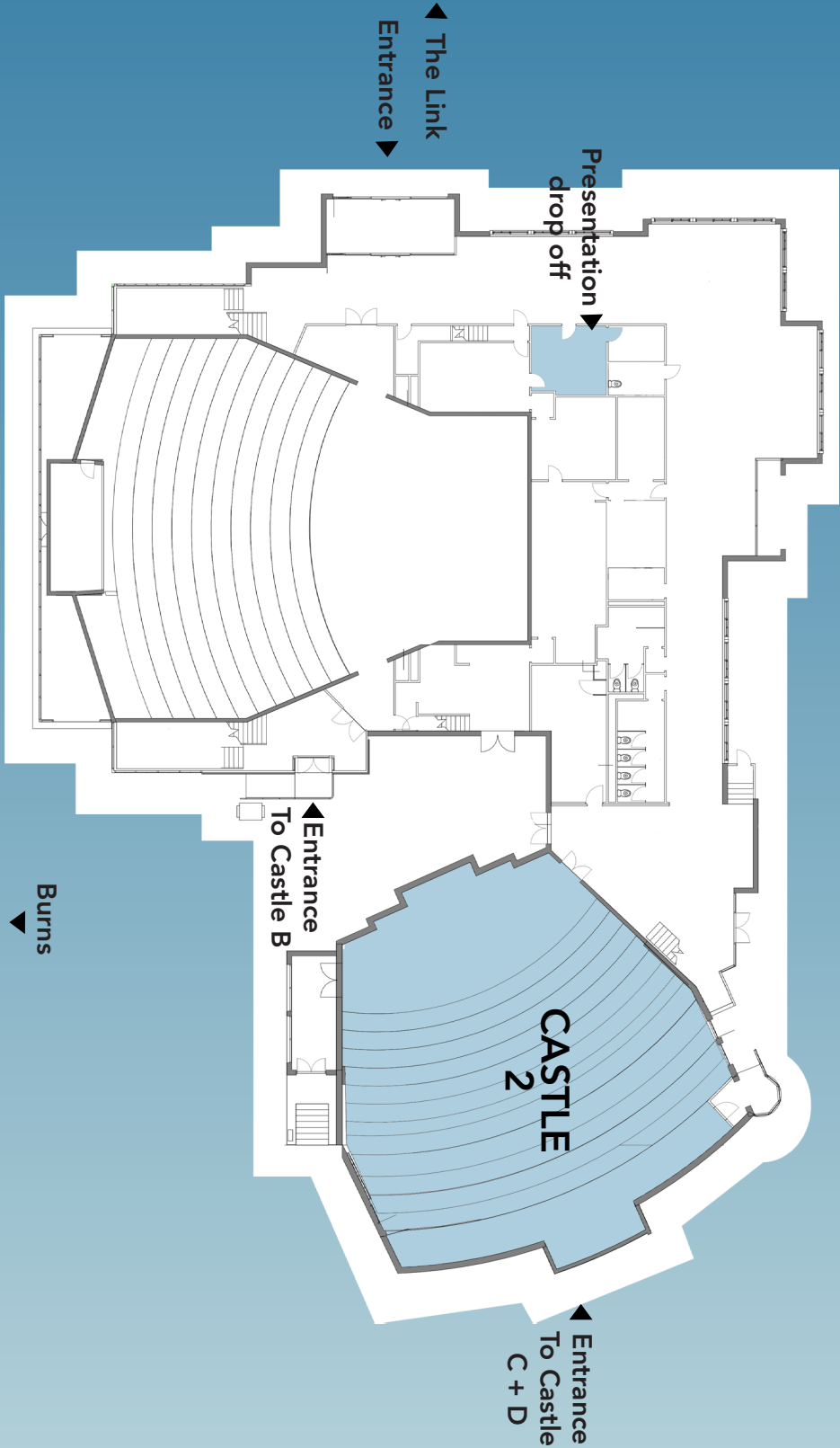


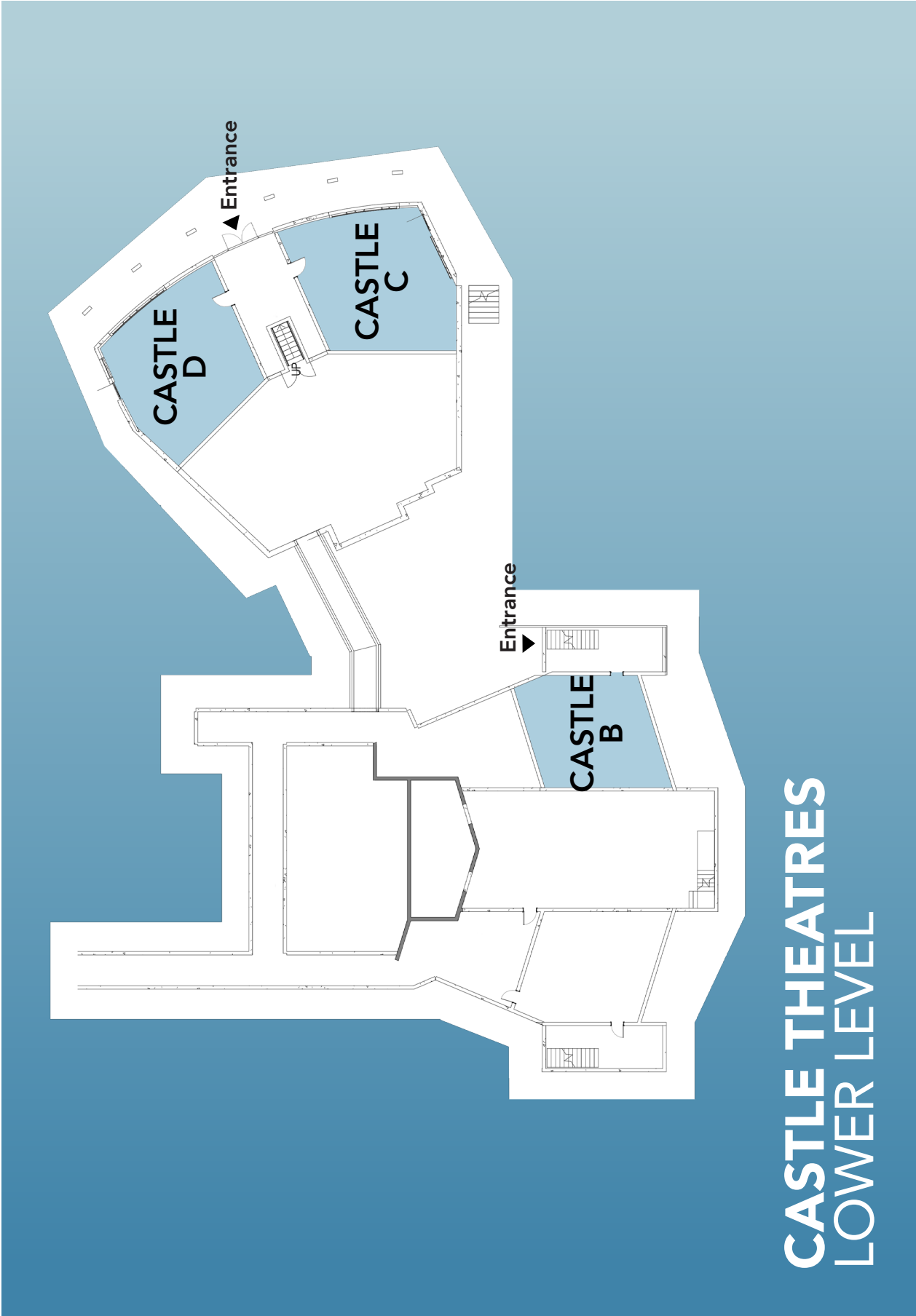
WIFI

Wireless internet access is available at both the University of Otago and Otago Museum. To access the internet while on University premises you will need to connect to the UO_Guest wireless network and create an account. An OU_Guest account will provide you with 14 days of free access, with up to 500MB of data per day across two devices at a time.

To access the internet while on Otago Museum premises you can either make use of the museum's free wifi or log into the OM Functions network using the password – MEQXC-MKKCV

CASTLE THEATRES GROUND LEVEL







PICTURAE



FLORA COLOMBIANA

Macleania rupestris (Kunth) A.C. Sm.

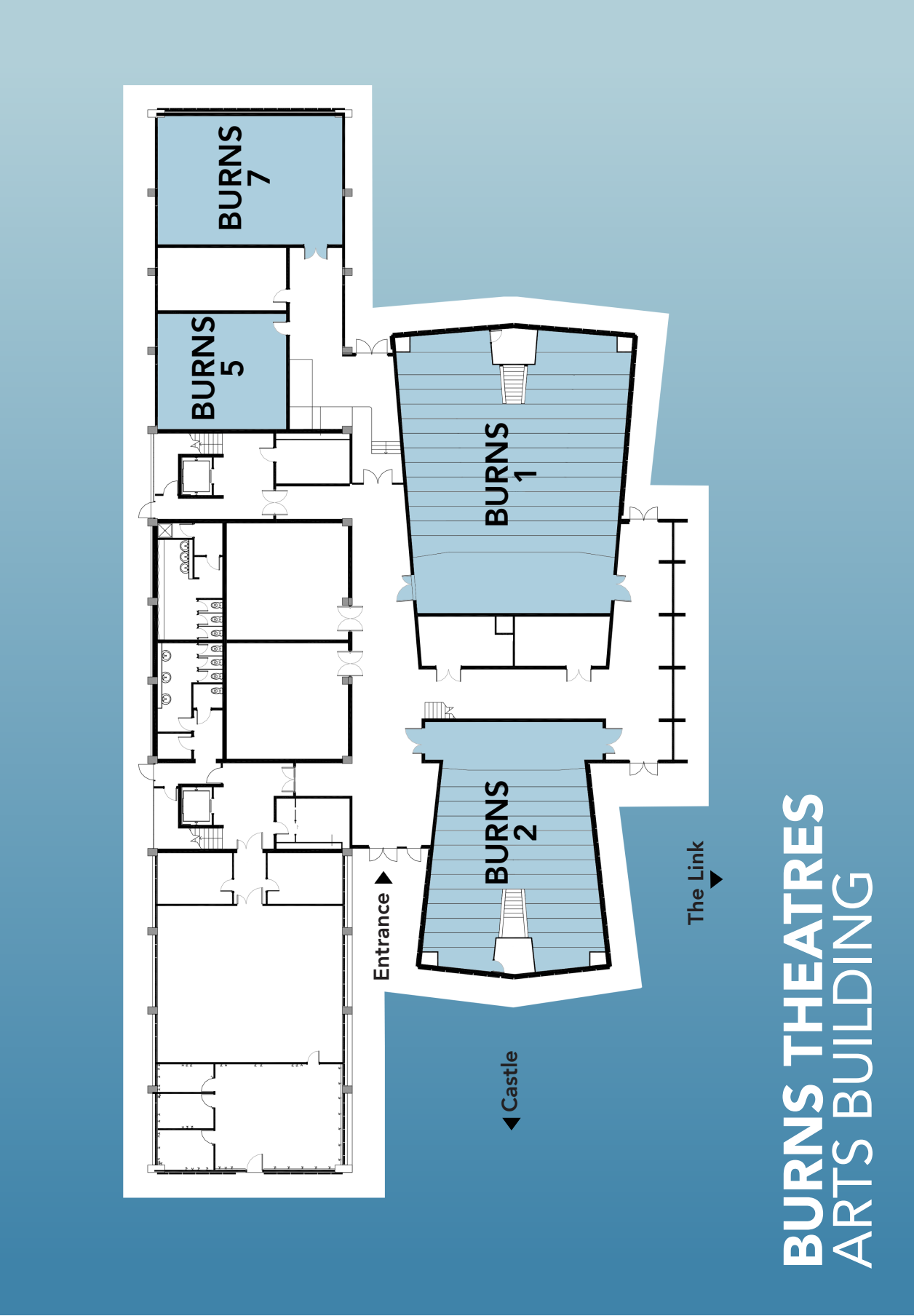
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S. 6. Degradated. Sp. Asian forest wi. sub-
pl. -like veget. ...

Leg. Schott A.J. Gräbandt Alt. 2730 m.
& Gustavo Huertas G.

dd. 27 - VII - 1974 No. ...

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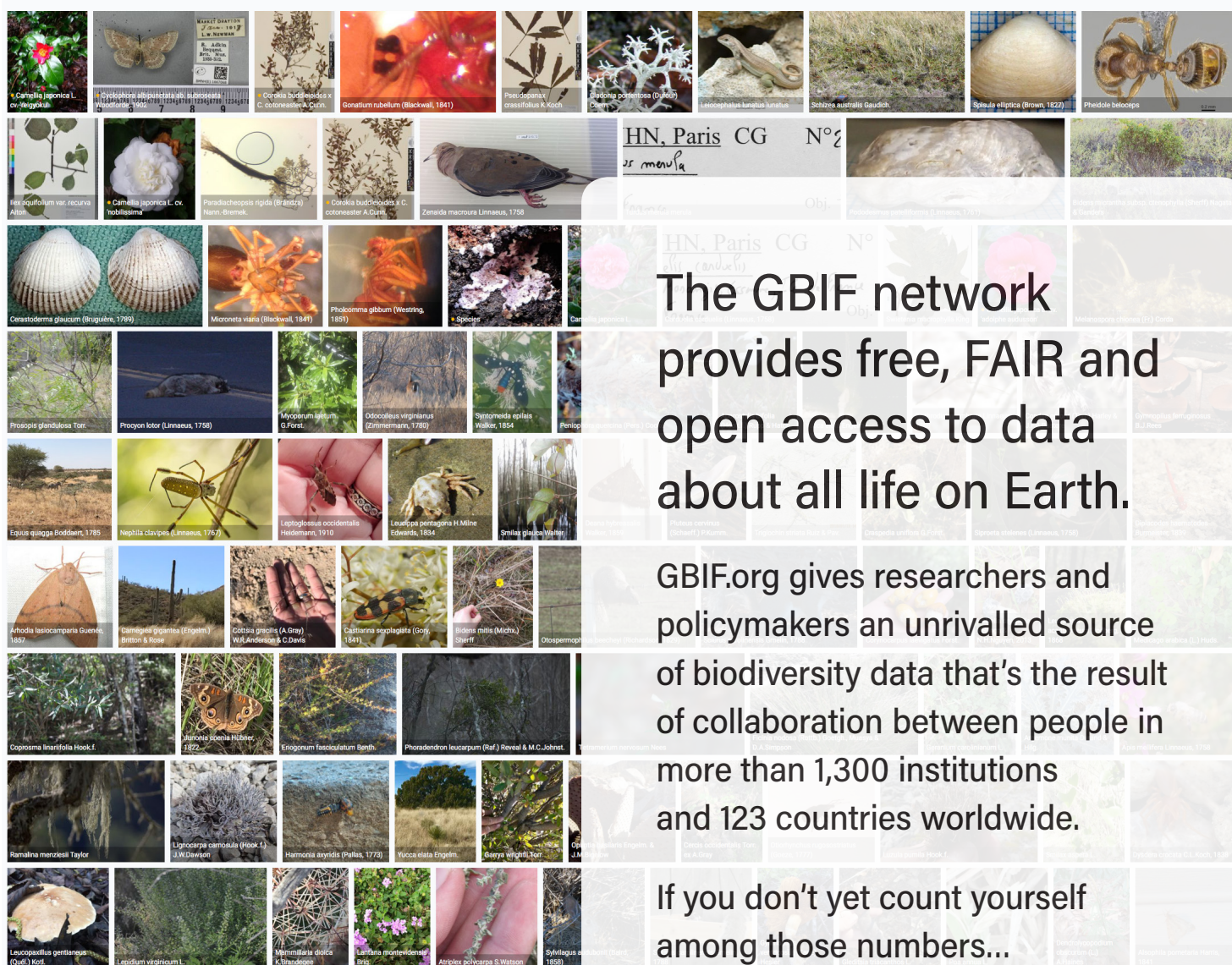
Global Biodiversity
Information Facility

Thanks and congratulations to our participants, publishers partners and data users
—especially those from **TDWG** and **SPNHC**—who have contributed to

#GBIF1billion

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gbifs



company/GBIF



GBIF.org

BIODIVERSITY HERITAGE LIBRARY (BHL)

Contact Details:

Website: biodiversitylibrary.org

Email: feedback@biodiversitylibrary.org

Social Media: @BioDivLibrary

The Biodiversity Heritage Library (BHL) is the world's largest open access digital library for biodiversity literature and archives.

Operating as an international library consortium, BHL provides free access to 54+ million pages, representing over 500 years of scientific knowledge, alongside services like data exports, APIs, and taxonomic name finding tools to facilitate discovery and reuse of data and collections. Explore the library at biodiversitylibrary.org.

AXIELL

Axiell is the leading provider of collection management software solutions for Museums, Archives and Special Libraries. With offices in Australia, New Zealand, the Middle East, UK, Europe and North America, Axiell has more than 3400 customers using our products to manage over 690 million objects.

Our collection management solutions support industry standards and enable your institution to effectively manage, conserve, exhibit, share, digitise and publish your collections.

Axiell also provides digital asset management systems (DAMS), innovative public library management solutions, education and learning software, e-book and e-media distribution as well as vital record management systems around the world.

For further information please visit <https://alm.axiell.com/>

or email sales-alm@axiell.com.

VERNON SYSTEMS

Contact Details:

Website: vernonsystems.com

Email: vsl@vernonsystems.com

Our systems are used around the world by natural science, cultural heritage, and archive organisations to catalogue, manage and publish information about collections. We develop Vernon CMS, a comprehensive collection management system, and eHive, a simple to use web-based cataloguing and public access system.

MADISON ERIN MAYFIELD

Contact: mayfieldillustration@gmail.com

Natural History Artist specializing in Scientific Illustration & Taxidermy.

Offers freelance Natural History Museum services including, but not limited to, exhibition prep, data entry, and specimen preparation.

Also offering information about Arctos, the ongoing collaborative community effort to integrate access to specimen data, collection management tools, and external resources on the internet.

OVERVIEW SCHEDULE

	Thursday 23rd	Friday 24th	Saturday 25th	Sunday 26th	Monday 27th
7.30 - 8am				Registration Desk Open	Registration Desk Open - Poster set up
8 - 8.30am					
8.30 - 9am					
9 - 9.30am	Software Carpentry and Data Carpentry Instructors Workshop (all day)	Software Carpentry and Data Carpentry Instructors Workshop (all day), MAHC Meeting (all day)	Registration Desk Open (all day) Care of Historic Mammal Taxidermy (all day) Orokonui Field Trip with Takahe Feeding (9.15-1.30pm) Otago Museum Tours (11-3.45pm) Monarch Cruise (1-5pm) Biodiversity by Night (5-8.30pm)	Registration Desk Open (all day)	Opening session, including mihi. Keynote Address - Jonah Duckles
9.30 - 10am				Introduction to 3D Imaging using Photogrammetry (all day)	
10 - 10.30am					Coffee Break
10.30 - 11am				Conservation of Zoological Collections Workshop (all day)	Keynote Addresses - Anthony Wright and Bryan Lessard
11 - 11.30am				TDWG Exec Meeting (9-5.30pm)	
11.30 - 12pm				Data Quality IG (9-4pm)	Lunch - Short tour (free) - IG/TG02 Natural Colls Descr. - IG/TG08 Biodiversity Services and Clients - IG/TG09 Species Information
12 - 12.30pm				W01 (2-5.30pm)	
12.30 - 1pm				SPNHC Committee Meetings (2-6pm)	Conservation 1 - Collections Access and Use 1 - W04 - W05 - S11
1 - 1.30pm				Orokonui Field Trip with Takahe Feeding (9.15-1.30pm)	Coffee Break
1.30 - 2pm				Monarch Cruise (1-5pm)	Conservation 2 - Collections Access and Use 2 - W13 - W04 - S10 - Contributed 1
2 - 2.30pm				Otago Museum Tours	
2.30 - 3pm					
3 - 3.30pm					
3.30 - 4pm					
4 - 4.30pm					
4.30 - 5pm					
5 - 5.30pm					
5.30 - 6pm					
6 - 6.30pm					Ice Breaker and Conference Photograph
6.30 - 7pm					
7 - 7.30pm					
7.30 - 8pm					
8 - 8.30pm					
8.30 - 9pm					
9 - 9.30pm					
9.30 - 10pm					

Tuesday 28th	Wednesday 29th	Thursday 30th	Friday 31th	Saturday 1st	Sunday 2nd
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Registration Desk Open	Registration Desk Open	Registration Desk Open	Registration Desk Open	Opportunity for Self Guided Activities/ Tours etc.	Opportunity for Self Guided Activities/ Tours etc.
Keynote Addresses - Hamish Holewa, Lee Belbin, Elycia Wallis and Priscilla Wehi	Disaster Planning/ Managing Risk 3 - Completing the Data Pipeline - S06	Collections Management 3 - Digitisation and Collections Data 3 - S15 - W16	Collections Access and Use 7 - W17 - W10 - S12 - Contributed 5		
Coffee Break	Coffee Break	Coffee Break	Coffee Break		
Conservation 3 - Collections Access and Use 3 - W18 - W12 - S03 - Contributed 2	Disaster Planning/ Managing Risk 4 - Completing the Data Pipeline - W11 - S02 - S13	Collections Management 4 - Digitisation and Collections Data 4 - W03 - Contributed 3 - S05 - Educational Share Fair	SIG - Natural History Collections Aotearoa and Australasia - SIG -Add Your Input to Challenges for Implementing Collections Data Quality Feedback		
Lunch - Short tour (free) - IG/TG06 Literature - IG/TG07 Outreach - SIG -Harnessing Biodiversity Collections Data for Addressing Global Challenges	Lunch - EMP Lunch - IG/TG05 Fundraising-Parnters - IG/TG01 ABCD	Lunch - IG/TG04 Joint RDA-TDWG - IG/TG03 Audubon Core - Poster Session	Lunch - Conference Farewell- SPNHC Annual Business Meeting		
Disaster Planning/ Managing Risk 1 - Collections Access and Use 4 - Education and Science Communications 1 - W14 - W07 - S08	Collections Management 1 - Digitisation and Collections Data 1 - Completing the Data Pipeline - W11 - W05 - S07 - S14	Collections Management 5 - Digitisation and Collections Data 5 - W08 - W06 - S09 - Contributed 4 - Challenges for Implementing Collections Data Quality Feedback	SPNHC Annual Business Meeting cont. - TDWG Business Meeting		
Coffee Break	Coffee Break	Coffee Break	Coffee Break		
Disaster Planning/ Managing Risk 2 - Collections Access and Use 5 - Education and Science Communications 2 - W14 - W07 - S08	Collections Management 2 - Digitisation and Collections Data 2 - Completing the Data Pipeline - S07 - S14	Collections Access and Use 6 - Digitisation and Collections Data 6 - W08 - W06 - Challenges for Implementing Collections Data Quality Feedback	Poster Take down		
SPNHC Council Meeting	Sponsors' Cocktail	Conference Dinner	Farewell Drinks and Nibbles		
Quiz Night					

THURSDAY 23 AUGUST

9 - 10.30AM **Software Carpentry and Data Carpentries Instructor Training.**
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

10.30 - 11AM **Coffee Break**

11 - 12.30PM **Software Carpentry and Data Carpentries Instructor Training.**
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

12.30 - 2PM **Lunch Break**

2 - 3.30PM **Software Carpentry and Data Carpentries Instructor Training.**
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

3.30 - 4PM **Coffee Break**

4 - 5.30PM **Software Carpentry and Data Carpentries Instructor Training.**
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

9 - 10.30AM Software Carpentry and Data Carpentries Instructor Training.
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

MAHC Group Meeting. Organiser - Antony Kusabs.
Kakapo Room, Otago Museum.

10.30 - 11AM Coffee Break

11 - 12.30PM Software Carpentry and Data Carpentries Instructor Training.
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

MAHC Group Meeting. Organiser - Antony Kusabs.
Kakapo Room, Otago Museum.

12.30 - 2PM Lunch Break

2 - 3.30PM Software Carpentry and Data Carpentries Instructor Training.
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

MAHC Group Meeting. Organiser - Antony Kusabs.
Kakapo Room, Otago Museum.

3.30 - 4PM Coffee Break

4 - 5.30PM Software Carpentry and Data Carpentries Instructor Training.
Organiser - Jonah Duckles.
Hutton Theatre, Otago Museum.

MAHC Group Meeting. Organiser - Antony Kusabs.
Kakapo Room, Otago Museum.

7.30AM - 5.30PM Registrations Desk Open

The Link

9 - 10.30AM Workshop in the Care of Historic Mammal Taxidermy Workshop.

Organiser - Fran Richie.
Hutton Theatre, Otago Museum.

Orokonui Field Trip with Takahe Feeding (9.15am – 1.30pm)

Meeting point: Otago Museum Foyer

10.30 - 11AM Coffee Break

11 - 12.30PM Workshop in the Care of Historic Mammal Taxidermy Workshop.

Organiser - Fran Richie.
Hutton Theatre, Otago Museum.

Otago Museum Tour (11 – 11.45am)

Meeting point: Otago Museum Foyer

12.30 - 2PM Lunch Break

Otago Museum Tour (1 – 1.45pm)

Meeting point: Otago Museum Foyer

2 - 3.30PM Workshop in the Care of Historic Mammal Taxidermy Workshop.

Organiser - Fran Richie.
Hutton Theatre, Otago Museum.

Monarch Cruise (1 – 5pm)

20 Fraytt Street, Dunedin

Otago Museum Tour (2 – 2.45pm and 3 – 3.45pm)

Meeting point: Otago Museum Foyer

3.30 - 4PM Coffee Break

4 - 5PM Workshop in the Care of Historic Mammal Taxidermy Workshop.

Organiser - Fran Richie.
Hutton Theatre, Otago Museum.

5 - 8.30PM Biodiversity by Night (5 – 8.30pm)

Meeting point: Otago Museum Foyer

7.30AM - 5.30PM Registrations Desk Open
The Link

9 - 10.30AM Data Quality IG
Burns 5 (50)

TDWG Exec Meeting
Castle D (40)

Introduction to 3D Imaging Using Photogrammetry.
Organiser - JP Brown.
1877 Space, Otago Museum

Workshop: Care & Conservation of Zoological Collections.
Organiser - Julian Carter.
Hutton Theatre, Otago Museum

Orokonui Field Trip with Takahe Feeding (9.15 – 1.30pm)
Meeting Point: Otago Museum Foyer

10.30 - 11AM Coffee Break

11 - 12.30PM Data Quality IG
Burns 5 (50)

TDWG Exec Meeting
Castle D (40)

Introduction to 3D Imaging Using Photogrammetry.
Organiser - JP Brown.
1877 Space, Otago Museum

Workshop: Care & Conservation of Zoological Collections.
Organiser - Julian Carter
Hutton Theatre, Otago Museum

1 - 1.30PM Lunch Break

Monarch Cruise (1 – 5pm)
20 Fryatt Street, Dunedin

2 - 3.30PM Data Quality IG
Burns 5 (50)

W01 - Training workshop in auditing and cleaning of biodiversity data.
Organiser - Dr Robert Mesibov.
Castle B (32)

TDWG Exec Meeting
Castle D (40)

Introduction to 3D Imaging Using Photogrammetry.
Organiser - JP Brown.
1877 Space, Otago Museum

2 - 3.30PM **Workshop: Care & Conservation of Zoological Collections.**

Organiser - Julian Carter.
Hutton Theatre, Otago Museum

SPNHC Committee Meetings,
Skinner Annex, Otago Museum.

3.30 - 4PM **Coffee Break**

4 - 5.30PM **W01 - Training workshop in auditing and cleaning of biodiversity data.**

Organiser - Dr Robert Mesibov.
Castle B (32)

TDWG Exec Meeting
Castle D(40)

Introduction to 3D Imaging Using Photogrammetry.

Organiser - JP Brown.
1877 Space, Otago Museum.

Workshop: Care & Conservation of Zoological Collections.

Organiser - Julian Carter.
Hutton Theatre, Otago Museum.

SPNHC Committee Meetings
Skinner Annex, Otago Museum.

5.30 - 6PM **SPNHC Committee Meetings Cont.**

Skinner Annex, Otago Museum.

SPNHC Committee Meetings

- | | |
|------------|---|
| 2 - 2.55PM | Legislation and Regulation Committee - Stephanie Carlson |
| | Membership Committee - Ann Pinzl |
| 3 - 3.55PM | Professional Development Committee - Jeff Stephenson and jenifer Strotman |
| | Best Practices Committee - Jessica Cundiff |
| 4 - 4.55PM | Conference Committee - Barbara Thiers |
| | Conservation Committee - Fran Richie |
| 5 - 5.55PM | International Relations Committee - Deborah Paul |
| | Long - Range Planning Committee - Barbara Thiers |

7.30 - 9AM **Registrations Desk Open and Poster Set-up**
The Link

9 - 10.30AM **Opening session including mihi (9 – 9.45am)**
Castle 2 (415)

**Keynote Address: Building, Growing and Sustaining
Global Collaborative Communities.**

- Jonah Duckles (9.45–10.30am) [BISS 28158]

10.30 - 11AM **Coffee Break**

11 - 12.30PM **Keynote Address: Collections in an Uncertain World: The Impact of
Earthquakes on Canterbury Museum.**

- Anthony Wright (11–11.45 am) [BISS 28364]
Castle 2 (415)

**Keynote Address: Promoting Public Engagement of Natural History
Collections through Science Communication.**

- Bryan Lessard (11.45–12.30 pm) [BISS 28479]
Castle 2 (415)

12.30 - 2PM **Lunch**

IG/TG08 Biodiversity Services and Clients
Burns 5 (50)

IG/TG09 Species Information
Castle B (32)

IG/TG02 Natural Colls Descr.
Castle D (40)

Short Tours of Geology or Anatomy Museums (1.15–1.45PM)
Meeting Point: Registration Desk

2 - 3.30PM **W05 - Developing a mechanism to coordinate planning and investment in
biodiversity informatics.**

Organiser - Donald Hobern.
Burns 2 (175)

S11 - Invasive Species Experts' Panel: Breaking Information Silos.

Organiser - Annie Simpson.
Burns 5 (50)

1. Documenting the occurrence through space & time of aquatic non-indigenous fish, mollusks, algae, & plants threatening North America's Great Lakes utilizing herbaria & zoological museum specimens - Mark Wetter (2 – 2.15pm) [BISS 24930]

2. Vocabulary challenges with invasive species data sharing - Annie Simpson (2.15 – 2.30pm) [BISS 25642]

- 2 - 3.30PM**
3. Introducing the Global Register of Introduced and Invasive Species: challenges with classification - Shyama Narayana Pagad (2.30 – 2.45pm) [BISS 25306]
 4. TrIAS, leveraging citizen science data to monitor invasive species in Belgium - Quentin Groom (2.45 – 3pm) [BISS 24749]
 5. Discussion (3–3.30pm)

Collections Access and Use 1.

Moderator - Tom Myers
Burns 7 (88)

1. Opening-up Crépin's Rose Herbarium by New Technologies: a Pilot Project. - Patricia Mergen (2–2.20 pm) [BISS 25792]
2. Shining a New Light on Elmer Ottis Wootton's Legacy Herbarium and Historical Archive: an Exercise to Increase Student Participation while Promoting Public Engagement. - Sara Fuentes-Soriano (2.20 – 2.40pm) [BISS 25783]
3. A Workflow for the Semantic Annotation of Field Books and Specimen Labels. - Lise Stork (2.40 – 3pm) [BISS 25839]
4. Authenticity in an Uncertain World: Ensuring Accuracy in both the Explicit and Implicit Messages of Exhibits. - Steven M. Sullivan (3 – 3.20pm) [BISS 25785]

W04 - Next generation biodiversity data: developing an international traits system.

Organiser - Simon Checksfield.
Castle B (32)

Conservation 1. Moderator - Sheldon Teare
Castle C (40)

1. Collections Management from the Public Floor, Exhibit Registrars and Preparators Fight against Light, Dust and the Public. - Lindsay Palaima (2 – 2.20pm) [BISS 26053]
2. Put a (clear, goal-oriented, flexible and focused) contract on them! Some thoughts on selecting your pest contractors. - Armando Mendez (2.20 – 2.40pm) [BISS 26721]
3. Finding the Silver Lining: Creating Positive Outcomes From Pest Problems. - Nyssa Mildwaters (2.40 – 3pm) [BISS 26226]

3.30 - 4PM Coffee Break

4 - 5.30PM S10 - Digital Collection Data: storage, archive and disaster recovery.

Moderator - Jeff Gerbracht; Timer - Rob Guralnick
Burns 2 (175)

1. Introduction - Jeff Gerbracht, Steve Kelling, Rob Guralnick (4 – 4.05pm)
2. Best Practices for using Cloud Services for Digital Data Archive and Disaster Recovery - Jeff Gerbracht (4.05 – 4.20pm) [BISS 25812]

4 - 5.30PM

3. The Death of VertNet Has Been Greatly Exaggerated But We Still Archive - Robert Guralnick (4.20 – 4.30pm) [BISS 26836]

4. COSA: Cloud Object Storage Archive for deep archival of digital data - Jeff Gerbracht (4.30 – 4.45pm) [BISS 25811]

5. Validation for preservation: how sustainable are GBIF datasets? - Joakim Philipson (4.45 – 5.00pm) [BISS 25805]

6. Biodiversity Data Curation: South Africa Goes Online - Willem Coetzer (5.00 – 5.15pm) [BISS 25840]

Contributed 1.

Moderator - Bronwyn Collins
Burns 5 (50)

1. Embedding Data Sharing in Biodiversity Research - Mary Barkworth (4 – 4.15pm) [BISS 26262]

2. Catalogue of Life Plus: innovating the CoL systems as a foundation for a clearinghouse for names and taxonomy - Wouter Addink (4.15 – 4.30pm) [BISS 26922]

3. Integrated Landscape Assessment and Monitoring (ILAM): A cost-effective approach towards informed decision-making for natural resources management - Faustin Gashakamba (4.30 – 4.45pm) [BISS 26304]

W04 - Next generation biodiversity data: developing an international traits system.

Organiser - Simon Checksfield.
Castle B (32)

Conservation 2. Moderator - Sophie White
Castle C (40)

1. The Forgotten Variable: Effects of Sample Preparation and Storage on Geochemistry of Invertebrate Skeletal Carbonate. - Abigail Smith (4 – 4.20pm) [BISS 26288]

2. Revising the Dead Art of Skeleton Preparation for Today's Museum Collections. - Judith Streat (4.20 – 4.40pm) [BISS 26278]

3. Composting – Recent Investigations for Specimen Preparation. - Sheldon Teare (4.40 – 5pm) [BISS 26340]

4. Bone Degreasing – Finding a New Solution to an Old Problem. - David Stemmer (5 – 5.20pm) [BISS 26392]

W13 - Audubon Core Workshop.

Organiser - Niels Klazenga.
Castle D (40)

1. Specifications and Standards for Insect 3D Data - Jiangning Wang (4 – 4.15pm) [BISS 26561]

4 - 5.30PM

Collections Access and Use 2

Moderator - Sophie Fern
Burns 7 (88)

1. Data enrichment facilitated by existing inter-disciplinary expertise at Auckland War Memorial Museum. Data enrichment: A cross-disciplinary approach.
- Severine Hannam, Elle Keen (4-4.20 pm) [BISS 25937]
 2. Looking Back for the Future: Utilizing Sawfish Saws from Natural History Collections to Conserve the Critically Endangered Largetooth Sawfish (*Pristis pristis*). - Annmarie Fearing (4.20-4.40 pm) [BISS 25806]
 3. The Archnology Collection at the Denver Museum of Science & Nature.
- Jeffrey T. Stephenson (4.40-5 pm) [BISS 25810]
-

5.30 - 7PM

Ice Breaker and Conference Photograph

Otago Museum

7.30 - 9AM The Link
Registrations Desk Open and Poster Set-up

9 - 10.30AM Keynote Address: The change Imperative: Accelerating the pace of Biodiversity Discovery and Documentation.
- Lee Belbin and Elycia Wallis (9.00 – 9.45am) [BISS 28131]
Castle 2 (415)

Keynote Address: If Only They Could Speak.
- Priscilla Wehi (9.45 – 10.30am)
Castle 2 (415)

10.30 - 11AM Coffee Break

11 - 12.30PM S03 - Biodiversity Heritage Library: Strategies for Improving Research Efficiency and Delivering Biodiversity Data through Digital Library Collections.
Organizer - Carolyn Sheffield; Moderator - Constance Rinaldo.
Burns 2 (175)

1. Outreach Strategies to Engage Citizen Scientists: Insights from the Biodiversity Heritage Library - Grace Costantino (11 – 11.20am) [BISS 25641]

2. How A Citizen Scientist Can Reuse & Link Biodiversity Heritage Library Data - Siobhan Leachman (11.20 – 11.40am) [BISS 25298]

3. What are we DOIng about the Missing Links? Connecting Taxonomic Names to the Linked Network of Scholarly Research - Nicole Kearney (11.40am – 12pm) [BISS 25700]

4. Improving Search Efficiency in the Biodiversity Heritage Library Corpus - Carolyn A. Sheffield (12 – 12.20pm) [BISS 25586]

Contributed 2.

Moderator - Julia Kasper
Burns 5 (50)

1. Best practices for connecting genetic records with specimen data - Michael Trizna (11 – 11.15am) [BISS 26369]

2. Best practices for setting up a repository of phenotypic data for European germplasm holdings - Stephan Weise (11.15 – 11.30am) [BISS 25223]

3. Discussion of the Method for Constructing Animal Traits - Jiangning Wang (11.30 – 11.45am) [BISS 26168]

4. Automated Trait Extraction using ClearEarth, a Natural Language Processing System for Text Mining in Natural Sciences - Anne Thessen (11.45am – 12pm) [BISS 26080]

5. Using Semantics for morphological Descriptions in Morph•D•Base - Christian Köhler (12 – 12.15pm) [BISS 25535]

11 - 12.30PM Collections Access and Use 3.

Moderator - Anusha Beer
Burns 7 (88)

1. Overcoming the Tyranny of Distance: Revealing Type Collections Down-Under. - Wilma Blom (11 – 11.20am) [BISS 26280]
2. Integration and Curation of At-Risk Collections into the Scripps Institution of Oceanography Collections. - Benjamin Frable (11.20 – 11.40am) [BISS 26259]
3. A Case Study for Connecting Collections and Ecological Research. - Richard Levy (11.40 – 12am) [BISS 26008]
4. Labels, Ledgers, Scribbles and Scraps: Uncertain Historical Data. - Rosi Crane (12 – 12.20pm) [BISS 25784]

W12 - Standards for Interoperability for Bio-logging Data.

Moderator - Peggy Newman; Timer - Holger Dettki.
Castle B (32)

1. What Went Where When? Representing Animal Movements as Simple Darwin Core Occurrences - Peggy Newman (11 – 11.10am) [BISS 25664]
2. Setting the Stage – The Life Cycle of Bio-logging Data: Origin, Mobilization and Data Exchange - Holger Dettki (11.10 – 11.25am) [BISS 25914]
3. Outcomes of the International Oceanographic Data and Information Exchange Ocean Biogeographic Information System OBIS-Event-Data Workshop on Animal Tagging and Tracking - Abigail Benson (11.25 – 11.40am) [BISS 25728]
4. Discussion (11.40am – 12.30pm)

Conservation 3.

Moderator - Fran Ritchie
Castle C (40)

1. 100 Years of Adhesives: Knowing What Sticks. - Julie McIntosh Shapiro (11 – 11.20am) [BISS 26147]
2. Measuring and Mitigating Mercury Gases in the Museums Victoria Collection. - Danielle Measday (11.20 – 11.40am) [BISS 27044]
3. Pyrite Rehousing – Recent Case Studies at Two Australian Museums. - Sheldon Teare (11.40 – 12pm) [BISS 26343]

11 - 12.30PM W18 - Names for Biodiversity.

Organiser - Greg Whitbread.
Castle D (40)

12.30 - 2PM Lunch

SIG -Harnessing Biodiversity Collections Data for Addressing Global Challenges

Burns 7 (88)

IG/TG07 Outreach

Castle B (32)

IG/TG06 Literature

Castle D (40)

Short Tours of Geology or Anatomy Museums (1.15–1.45PM)

Meeting Point: Registration Desk

2 - 3.30PM Disaster Planning/ Managing Risk 1 .

Moderator - Sue Cooper

Burns 1 (88)

1. This Old Herbarium: APHIS Compliance and Renovation Planning. - Erika M. Gardner (2 – 2.20pm) [BISS 28122]
2. Unexpected Faults: Managing Entomology Collections through the 2010/11 Canterbury Earthquakes. - John W. M. Marris (2.20 – 2.40pm) [BISS 27268]
3. Planning for when Push Comes to Shove: Mitigating Risk; Recovering from Disaster. - Dermot Henry (2.40 – 3pm) [BISS 26126]
4. Catching up with Archives – Disaster preparedness and the Protection of Cultural Heritage in Berlin Museums. - Peter Giere (3 – 3.20pm) [BISS 26337]

S08 - Biodiversity Data Quality – alpha to omega.

Moderator - Arthur Chapman; Timer - Antonio Saraiva.

Burns 2 (175)

1. Data Quality Task Group 2: Tests and Assertions - Lee Belbin (2 – 2.15pm) [BISS 25608]
 2. Vocabularies of Values: Tackling the Heterogeneity Problem - Paula Zermoglio (2.15 – 2.30pm) [BISS 25438]
 3. Avoiding Conflicting Assertions: Approaches to Developing Consistent Test Implementations - Paul J Morris (2.30 – 2.45pm) [BISS 25324]
 4. An Integrated Data Quality System for Species Observations - Steve Kelling (2.45 – 3pm) [BISS 25395]
 5. Data Quality in Data Exchanges: a Tri-Part Approach in the French Information System on Nature and Landscapes - Remy Jomier (3 – 3.15pm) [BISS 25176]
- Discussion (3.15 – 3.30pm)

2 - 3.30PM Collections Access and Use 4.

Moderator - Anna Wood
Burns 7 (88)

1. Building Next-Generation Collections: Natural History Specimens, Just One Click Away! - Kamal Khidas (2 – 2.20pm) [BISS 26145]
2. Mapping Marine Biodiversity: Using Open Source GIS Tools to Visualise and Extract Collection Data. - Sadie Mills (2.20 – 2.40pm) [BISS 25787]
3. Plants and People: How Plant Collections can Connect Artefacts and Culture. - Catherine Smith (2.40-3 pm) [BISS 28278]
4. The Preservation of Two Leopard Seals (*Hydrurga leptonyx*), Ten Years Apart. - Emma Burns (3 – 3.20pm) [BISS 26682]

W07 - Improving research linking and visibility of specimens and physical samples through standardised identifiers and metadata.

Organiser - Donald Hobern.
Castle B (32)

1. Specimen Identifiers in Related Disciplines: What can Biodiversity Learn from and Offer to Other Fields? - Kerstin Lehnert (2 – 2.20pm) [BISS 26615]
2. Identifiers as Mechanisms for Linking Archaeological Data across Repositories - Laura Brenskelle (2.20 – 2.40pm) [BISS 26471]
3. Standardised Globally Unique Specimen Identifiers - Anton Güntsch (2.40 – 3pm) [BISS 26658]
4. Options to Apply the IGSN Model to Biodiversity Data - Donald Hobern (3 – 3.20pm) [BISS 27087]

Education and Science Communications 1.

Moderator - Kate Timms-Dean
Castle C (40)

1. Beyond the Museum Walls: Developing Inexpensive Discovery Trunks for k-12. - Julia E Robinson (2 – 2.20pm) [BISS 25925]
2. Discovering New Fungal Species to Kick-Start a Passion for Science - Mahajabeen Padamsee (2.20 – 2.40pm) [BISS 26085]
3. Engaging Children with Herbarium Specimens at Royal Botanic Gardens Kew's Science Festival. - Melissa Bavington (2.40 – 3pm) [BISS 25933]
4. Turning a Recently-Donated Mineral Collection into a Multifaceted Learning Experience. - Jess Miller-Camp (3 – 3.20pm) [BISS 27073]

W14 - Deep Learning for Biodiversity.

Moderators - Erick Mata & Francisco Pando; Timer - Lara Lloret.
Castle D (40)

1. Applications of Deep Learning in Ornithology - Jessie Barry (2 – 2.15pm) [BISS 27251]

2 - 3.30PM

2. Convolutional Neural Networks for Phytoplankton identification and classification - Lara Lloret (2.15 – 2.30pm) [BISS 25762]
3. Deep learning for plant identification: how the web can compete with human experts - Hervé Goëau (2.30 – 2.45pm) [BISS 25637]
4. Deep Learning for Forest Species Identification Based on Macroscopic Images - Erick Mata-Montero (2.45 – 3pm) [BISS 25261]
5. A Pipeline for Deep Learning with Specimen Images in iDigBio - Applying and Generalizing an Examination of Mercury Use in Preparing Herbarium Specimens - Matthew Collins (3 – 3.15pm) [BISS 25699]
6. A Methodological Proposal for Collecting and Creating Macroscopic Photograph Collections of Tropical Woods with Potential for Use in Deep Learning - Erick Mata-Montero (3.15 – 4pm) [BISS 25260]

3.30 - 4PM

Coffee Break

4 - 5.30PM

Disaster Planning/ Managing Risk 2.

Moderator - JP Brown
Burns 1 (288)

1. Developing a GIS of Hazards for Canadian Cultural Institutions. - Tom Strang (4 – 4.20pm) [BISS 26305]
2. ALERT Lessons From A Biosecurity Disaster. - Gill Brown (4.20 – 4.40pm) [BISS 25941]
3. Using Data From Index Herbariorum to Assess Threats to the World's Herbaria. - Barbara Thiers (4.40 – 5pm) [BISS 26440]
4. Adhesives and the Herbarium: International Survey and Application of the Results in Analysis of the Influence of Conservation Materials on DNA of Herbarium Specimens. - Magdalena Grenda-Kurmanow (5 – 5.20pm) [BISS 25583]

S08 - Biodiversity Data Quality – alpha to omega.

Moderator - Lee Belbin; Timer - Antonio Saraiva
Burns 2 (175)

6. Sample Management Across the National Ecological Observatory Network - Christine M Laney (4 – 4.15pm) [BISS 25351]
 7. Georeferencing and data quality: SANBI's story - Fhatani Ranwashe (4.15 – 4.30pm) [BISS 25310]
 8. The Online Pollen Catalogs Network (RCPol) data quality assurance system - Allan Koch Veiga (4.30 – 4.45pm) [BISS 25657]
 9. Whip: Communicate and Test What to Expect from Data - Peter Desmet (4.45 – 5pm) [BISS 25317]
- Discussion (5 – 5.30pm)

4 - 5.30PM Collections Access and Use 5.

Moderator - Priscilla Wehi
Burns 7 (88)

1. The Importance of Museum Biomaterial Resources and Specimen Records for the Advancement of Zoological Research in Southern Africa. - Zamawelase Mwelase (4 – 4.20pm) [BISS 26350]
2. Subsistence Practices, Past Biodiversity, and Anthropogenic Impacts Revealed by New Zealand-Wide Ancient DNA Survey. - Nic Rawlence (4.20 – 4.40pm)
3. A New Method to Access Isotopic Signatures on Preserved Fish Specimens. - Steve Wing (4.40-5 pm) [BISS 26597]
4. Global Genomic Resources for Biodiversity Research. - Jonathan Coddington (5-5.20 pm) [BISS 28440]

W07 - Improving research linking and visibility of specimens and physical samples through standardised identifiers and metadata.

Organiser - Donald Hobern.
Castle B (32)

Discussion (4 – 5.30pm)

Education and Science Communications 2.

Moderator - Tahu Mackenzie
Castle C (40)

1. Project Paleo: Citizen Curation and Community Science at the Natural History Museum of Los Angeles County. - Elizabeth R Ellwood (4 – 4.20pm) [BISS 25980]
2. "Critter of the Week": Wikipedia as a Museum Outreach Tool. - Mike Dickson (4.20 – 4.40pm) [BISS 25798]
3. Digital Construction Kit: 3D Computer Graphics for Creative and Accessible use of Museum Collections. - Jiri Frank (4.40 – 5pm) [BISS 26023]

W14 - Deep Learning for Biodiversity.

Moderators - Erick Mata & Francisco Pando; Timer - Lara Lloret.
Castle D (40)

7. Deep learning for weed identification based on seed images - Francisco Pando (4 – 4.15pm) [BISS 25749]
8. Technology Developments for Biodiversity Monitoring and Conservation - Steve Kelling (4.15 – 4.30pm) [BISS 25833]

5.30 - 6.30PM SPNHC Council Meeting

Otago Museum Boardroom

6.30 - 9PM Quiz Night at Lone Star

484 George Street

7.30 - 9AM **Registrations Desk Open**
The Link

9 - 10.30AM **Disaster Planning/ Managing Risk 3.**

Moderator - Julian Carter
Burns 1 (288)

1. Earthquake Mitigation Solutions for Collections - Experience from New Zealand's National Museum. - Antony Kusabs (9 – 9.20am) [BISS 26598]
2. Edifice Complex: Managing Risk During Construction. - Jeffrey Hirsch (9.20 – 9.40am) [BISS 26119]
3. Building the Beaty: Creating, Maintaining, and Growing a Publicly Accessible Biodiversity Museum Collection in the Pacific Ring of Fire. - Christopher Stinson (9.40 – 10am) [BISS 26273]
4. After the Fall. - Meghann Toner (10 – 10.20am) [BISS 28075]

S06 - Science Powered by Informatics. - The Next Steps.

Organisers - Abigail Benson and Robert Guralnick.
Burns 2 (175)

1. Introduction (9–9.05 am)
2. New Requirements of Biodiversity Research for Metadata on Models and Sensors on the Internet of Things and Big Data Era - Wilian França Costa (9.05–9.20 am) [BISS 25653]
3. Current progress in the development of taxonomic and anatomical ontologies within the scope of BIOfid - Markus Koch (9.20–9.35 am) [BISS 25585]
4. The Open Biodiversity Knowledge Management (eco-)System: Tools and Services for Extraction, Mobilization, Handling and Re-use of Data from the Published Literature - Teodor Georgiev (9.35–9.50 am) [BISS 25748]
5. Published examples using the new Chronometric extension to Darwin Core - Laura Brenskelle (9.50–10.05 am) [BISS 25694]
6. Discussion (10.05–10.30 am)

Completing the Data Pipeline: Collections Data Use in Research, Education and Outreach.

Organisers - Gil Nelson and Molly Phillips.
Burns 7 (88)

1. The Impact of Digitization and Digital Data Mobilisation on Biodiversity Research and Outreach. - Gil Nelson. Presented by Randy Singer (9 – 9.20am) [BISS 28470]
2. Increasing the Research Value of Digitized Fossil Museum Specimens via Integrated Stable Isotope Data. - Bruce J MacFadden. Presented by Sean Moran (9.20 – 9.40am) [BISS 26567]
3. Preparing the Next Generation of Data-Driven Scientists through the Biodiversity Literacy in Undergraduate Education - Data Initiative (BLUE Data). - Anna Monfils and Elizabeth Ellwood (10.20 – 10.40am) [BISS 27162]
4. Tools and Techniques of Implementation Science to Support Wide-Spread Adoption of Biodiversity Literacy Standards. - Natalie Douglas (10.40 – 11am) [BISS 27150]

10.30 - 11AM Coffee Break

11 - 12.30PM Disaster Planning/ Managing Risk 4.

Moderator - Lisa Yeats

Burns 1 (288)

1. Panel Discussion: Institutional Earthquakes and Recovery Experiences: Continuing to be Collections Stewards in an Uncertain World. - Carol R. Butler and Christiane Quaisser (11 – 12.30am) [BISS 26570]

S02 - Species-centered projects, tools and methods.

Organisers - Francisco Pando, Chuck Miller and Erick Mata;

Moderators - Chuck Miller & Francisco Pando; Timer - William Ulate.

Burns 2 (175)

1. Aggregation and Synthesis of Taxon Information in the Encyclopedia of Life. - Katja Schulz (11 – 11.15am) [BISS 25852]

2. A Content Management System and underlying models for avian taxonomic monographs. - Jeff Gerbracht (11.15 – 11.30am) [BISS 25693]

3. Towards an Integrated Species Distribution Modelling Environment. - Tania Laity (11.30 – 11.45am) [BISS 25165]

4. Descriptive Data Challenges for the World Flora Online - Chuck Miller (11.45am – 12pm) [BISS 26731]

5. The Online Pollen Catalogs Network (RCPol). - Antonio Mauro Saraiva (12 – 12.15pm) [BISS 25658]

6. Comparison of species information TDWG standards from the point of view of the Plinian Core specification - Francisco Pando (12.15 – 12.30pm) [BISS 25869]

S13 - Metabarcoding, Metagenomics and Biomonitoring.

Organiser - Patricia Mergen.

Burns 5 (50)

1. Detecting and identifying ectomycorrhizal fungi in New Zealand silver beech (*Lophozonia menziesii*, Nothofagaceae) forest: a case study - David A Orlovich (11 – 11.15am) [BISS 25982]

2. Microbes matter: integrating microbial sequence information for biodiversity - Kelly Ramirez (11.15 – 11.30am) [BISS 26009]

3. Let me see your iD: Impacts of Environmental Stressors on Aquatic Ecosystems Assessed by (e)DNA Metabarcoding - Romana K Salis (11.30 – 11.45am) [BISS 25983]

4. DNAqua-Net or how to navigate on the stormy waters of standards and legislations - Patricia Mergen (11.45am – 12pm) [BISS 25953]

Discussion (12 – 12.30pm)

11 - 12.30PM Completing the Data Pipeline: Collections Data Use in Research, Education and Outreach.

Organisers - Gil Nelson and Molly Phillips. Moderator - Anna Monfils
Burns 7 (88)

5. Emerging Education Resources and Initiatives: Harnessing the Potential of Disciplinary Societies to advance Biodiversity literacy. - Teresa Mourad
(11 – 11.20am) [BISS 27176]

6. Engaging K-12 Audiences with Biodiversity Data through Advancing Digitization for Biodiversity Collections. - Molly Phillips (11.20 – 11.40am) [BISS 26473]

7. A model for Creating Connections and Building Collections-Based Curricula for Pre-College Educators. - Gabriela M. Hogue (11.40 – 12pm) [BISS 27037]

8. Broadening Participation in an Increasingly Digitized World. - Jeanette Pirlo
(12 – 12.20pm) [BISS 25972]

W11 - Workshop of the TDWG Data Quality Interest Group.

Organiser - Arthur Chapman.
Castle D (40)

12.30 - 2PM Lunch

IG/TG01 ABCD

Castle B (32)

IG/TG05 Fundraising and Partners

Castle D (40)

EMP Lunch

Hutton Theatre, Otago Museum

2 - 3.30PM Collections Management 1.

Moderator - Nyssa Mildwaters
Burns 1 (288)

1. Rescue of a large Orphaned Herbarium Collection: Addressing the Security, Accessibility, and Repatriation of the NLU Herbarium. - Tiana Rehman
(2 – 2.20pm) [BISS 26312]

2. Size Doesn't Matter: Fundamental Requirements in Relocating a Herbarium. - Frank Hemmings (2.20 – 2.40pm) [BISS 25991]

3. Collections Management During a Major Move. - Jeffrey T. Stephenson
(2.40 – 3pm) [BISS 26577]

4. The Uncertainty of Space: Keeping Cool With a Shared Freezer. - Cody Phillips
(3-3.20 pm) [BISS 28311]

2 - 3.30PM S07 - Citizen Science and Biodiversity Informatics for Natural History Collections and Field Observations.

Organisers - Rob Stevenson, Elizabeth Ellwood and Peter Benton; Moderator - Elizabeth Ellwood; Timer - Rob Stevenson.
Burns 2 (175)

1. A three-pronged strategy to improve trust in biodiversity data produced by citizen science programs - Robert Stevenson (2 – 2.20pm) [BISS 25838]
2. BioCollect - A modern cloud application for standards-base field data recording - Peter Brenton (2.20 – 2.40pm) [BISS 25439]
3. A fork in the alphabet soup: DoeDat a multilingual crowdsourcing platform - Quentin Groom (2.40 – 3pm) [BISS 25148]
4. Improving Data Quality in eBird- the Expert Reviewer Network - Steve Kelling (3-3.20 pm) [BISS 25394]

S14 - Linking biodiversity data through phylogenetic knowledge.

Organiser - Guanyang Zhang; Moderator - Nico Cellinese.
Burns 5 (50)

1. Parasites are Particularly Problematic - Susan Perkins (2 – 2.30pm) [BISS 25604]
2. Nurturing a sustainable Open Tree of Life - Emily Jane McTavish (2.30 – 2.45pm) [BISS 25727]
3. Phenomap - Challenges and Successes in Bringing Together Multiple Data Projects to Build New Visualizations of Phenotypic Information and Specimen Records - Matthew Collins (2.45 – 3pm) [BISS 25698]
4. Parasitism in Eukaryota - Reconstruction of Ancestral and Unavailable Extant States - Lydia Buntrock (3 – 3.15pm) [BISS 25739]
5. Phylogeny Based Biodiversity Data Queries - Scott Chamberlain (3.15 – 3.30pm) [BISS 25589]

Completing the Data Pipeline: Collections Data Use in Research, Education and Outreach.

Organisers - Gil Nelson and Molly Phillips. Moderator - Anna Monfils
Burns 7 (88)

9. Expanding Core Capability in Digitisation by Sharing of Resources: the CSIRO Collections Program for Digitisation of Collection Specimens. - Nicole Fisher (2 – 2.20pm) [BISS 27246]
10. The ePANDDA project: linking the Paleobiology Database, iDigBio, and iDigPaleo for biological and paleontological research, collections management, and outreach. - Jocelyn A. Sessa (2.20 – 2.40pm) [BISS 26644]
11. Bringing back the Buzzing of the Bees: Enhancing the Discovery of Fossil Insect Collections with the ePANDDA API. - Austin J. Hendy (2.40 – 3pm) [BISS 26496]
12. Lessons Learned in the Creative and Entertainment Industry for User Engagement Applied to Museum Collections 3D Digitization Strategy.. - Jiri Frank (3 – 3.20pm) [BISS 25712]

2 - 3.30PM

W05 - Developing a mechanism to coordinate planning and investment in biodiversity informatics.

Organisers - Donald Hobern and Thomas Orrell. Moderator - Rebecca Snyder
Castle B (32)

1. Biodiversity: Local Implementation.
- Rebecca Snyder (2-2.20 pm) [BISS 28153]
2. Collections Management and High-Throughput Digitization using Distributed Cyberinfrastructure Resources. - Gary Motz (2.20-2.40 pm) [BISS 25643]
3. Inter-institutional Training of Biodiversity Informatics Specialists.
- Robert D. Montoya (2.40-3 pm) [BISS 27339]
4. Establishing a New Framework for Paleontological Data Through an Evaluation of Current Data Sharing Practices. - Holly Little (3-3.20 pm) [BISS 25437]

Digitisation and Collections Data 1.

Moderator - Robert Morris
Castle C (40)

1. Adaptation of Darwin Core Standards and Development of New Standards for Geologic Specimens
- Christina Byrd (2-2.20pm) [BISS 25929]
2. Producing High-Quality 3-D Models for Specimen Research with the Creaform 3-D Scanner at the Sternberg Museum of Natural History
- Edward Shelburne (2.20- 2.40) [BISS 25908]
3. Kurator: Tools for Improving Fitness for Use of Biodiversity Data.
- Paul J. Morris (2.40 - 3pm) [BISS 26539]
4. Putting your Finger upon the Simplest Data
- Arturo H. Arino (3- 3.20pm) [BISS 26300]

W11 - Workshop of the TDWG Data Quality Interest Group.

Organiser - Arthur Chapman.
Castle D (40)

3.30 - 4PM

Coffee Break

4 - 5.30PM

Collections Management 2.

Moderator - Dani Measday
Burns 1 (288)

1. Jar-by-Jar: Curation Improvements to the Herpetology Collection at CUMNH. - Emily Braker (4 - 4.20pm) [BISS 25853]
2. From Thorne to APG IV: Reorganization of the Digital and Physical Collections of the Rancho Santa Ana Botanic Garden Herbarium. - Mare Nazaire (4.20 - 4.40pm) [BISS 25768]
3. Reviving a Dormant Collection: Updating the Invertebrate Zoology Collection at the University of Kansas Biodiversity Institute for Future Use and Accessibility. - Vanessa Delnavaz (4.40 - 5pm) [BISS 26716]

4 - 5.30PM

S07 - Citizen Science and Biodiversity Informatics for Natural History Collections and Field Observations.

Organisers - Rob Stevenson, Elizabeth R, Ellwood and Peter Benton; Moderator - Elizabeth Ellwood; Timer - Rob Stevenson.
Burns 2 (175)

5. Improving Data Quality in Citizen Science Apps for Conservation Biology - Alan Stenhouse (4 – 4.20pm) [BISS 26665]

6. A Multi-platform Mobile Application to Collect Citizen Science Data for Bignoniaceae Phenological Research - Antonio M Saraiva (4.20 – 4.40pm) [BISS 25582]

7. Automated Identification of Citizen Science Observations for Ecological Studies - Pierre Bonnet (4.40 – 5pm) [BISS 25450]

8. Supporting citizen scientists with automatic species identification using deep learning image recognition models - Maarten Schermer (5 – 5.20pm) [BISS 25268]

S14 - Linking biodiversity data through phylogenetic knowledge.

Organiser - Guanyang Zhang; Moderator - Emily Jane McTavish.
Burns 5 (50)

6. Integrating Phylogenetics and Morphology to Study Diversification and Species Limits in Madagascar's Tenrecs (Tenrecidae) - Kathryn M. Everson (4.00-4.15 pm) [BISS 25936]

7. All the Clades in the World: Building a Semantically-Rich and Testable Ontology of Phylogenetic Clade Definitions - Gaurav Vaidya (4.15-4.30 pm) [BISS 25776]

8. Panel Discussion (4.30-5.30 pm)

Completing the Data Pipeline: Collections Data Use in Research, Education and Outreach.

Organisers - Gil Nelson and Molly Phillips. Moderator - Anna Monfils
Burns 7 (88)

13. Herbaria as Functional Trait Databases. - Sofie Meeus (4 – 4.20pm) [BISS 25766]

14. Natural History Collection Data: Traits to Identify Plant-Pollinator Interactions in a Spatial Context. - Rafael Cabral Borges (4.20 – 4.40pm) [BISS 25857]

15. FishfindR.net: A New Tool for Fish Biodiversity Collections Communication. - Randal Singer (4.40 – 5pm) [BISS 26220]

16. Discussion (5 – 5.30pm)

Digitisation and Collections Data 2.

Moderator - Kane Fleury
Castle C (40)

1. Specimens, Databases, and Accession Books: Using TaxonWorks to Integrate Multiple Sources of Modern and Historical Data in the INHS Insect Collection. - Thomas McElrath (4 – 4.20pm) [BISS 25896]

2. A Workflow for Adding Specimen Metadata to Images Captured in the Field. - Richard Levy (4.20 – 4.40pm) [BISS 26247]

4 - 5.30PM 3.Dancing Tables: Digitizing 11,000 Film-based Slides in Ten Days. - Lisa Palmer
(4.40 – 5pm) [BISS 28093]

4. Managing a Mass Digitization Project at Meisei Botanic Garden: From Start to
Finish. - Henry Engledow (5 – 5.20pm) [BISS 25912]

6 - 7PM **Sponsors' Cocktails**
Otago Museum

7.30 - 9AM

Registrations Desk Open

The Link

9 - 10.30AM

Digitisation and Collections Data 3.

Moderator - Robert Morris

Burns 1 (288)

Global Plants: A Model of International Collaboration. - Dierdre Ryan.
(9-10.30am) [BISS 28233]

S15 - Biological Interaction Data: towards data standardization.

Organiser - Antonio Mauro Saralva, Jennifer Hammock and Quentin Groom;

Moderator - Quentin Groom.

Castle 2 (175)

1. Role of species: traits, interactions and ecosystem services - Tereza Cristina
Giannini (9 – 9.15am) [BISS 25345]

2. Brazilian Network on Plant-Pollinator Interactions: an update on the initiative of a
standard for plant-pollinator interactions data - Antonio Mauro Saraiva
(9.15 – 9.30am) [BISS 25343]

3. Building an OWL ontology with Xper3 - Régine Vignes-Lebbe
(9.30 – 9.45am) [BISS 25614]

4. Towards an Essential Biodiversity Variable for Species Interactions - Quentin
Groom (9.45 – 10am) [BISS 25409]

5. The Need of Species Distribution Models Metadata: Using Species Distribution
Model to Address Decision Making on Climate Change - Wilian França Costa
(10 – 10.15am) [BISS 25478]

Collections Management 3.

Moderator - Catherine Smith

Burns 7 (88)

1. Join the Dots: assessing 80 million items at the Natural History Museum,
London. - Douglas G. D. Russell (9 – 9.20am) [BISS 26500]

2. Containing the Spirits: Lessons learned from the Management of Australasian
Herbarium Wet Collections. - Bronwyn Collins (9.20 – 9.40am) [BISS 26200]

3. Preserving and Optimising a World-Class African Ornithological Collection. -
Mmatjie Mashao (9.40 – 10am) [BISS 25705]

4. Current State of Collections Management Strategies, Standards and Procedures
in the Entomology Department at the Durban Natural Science Museum, South
Africa. - Natasha Govender (10 – 10.20am) [BISS 26289]

W16 - Defining 21st Century Biodiversity Data Literacy Skills: A Roundtable Discussion.

Organsier - Elizabeth R. Ellwood.

Castle D (40)

10.30 - 11AM Coffee Break

11 - 12.30PM Digitisation and Collections Data 4.

Moderator - Barbara Anderson
Burns 1 (288)

1. Digitise This! Innovation in Digitisation Initiatives within Australasian Herbaria. - Dhahara Ranatunga (11 – 11.20am) [BISS 26077]
2. Using Deep Learning in Collection Management to Reduce the Taxonomist's Workload. - Maarten Schermer (11.20 – 11.40am) [BISS 25917]
3. Novel Services in DiSSCo: The Research Infrastructure for Europe's Natural Science Collections. - Wouter Addink (11.40am – 12 pm) [BISS 26139]
4. "Look what they've done to our data!" — How Aggregators Change Data Items in Collection Records. - Robert Evan Mesibov (12 – 12.20pm) [BISS 25906]

Contributed 3.

Moderator - Gail Kampmeier
Burns 2 (175)

1. Lions and Chickens: A specimen biography approach to unprovenanced natural history objects - Belinda Bauer (11 – 11.15am) [BISS 25661]
2. Modelling Biodiversity Linked Data: Pragmatism May Narrow Future Opportunities - Franck Michel, Gargominy Olivier (11.15 – 11.30am) [BISS 26235]
3. Biodiversity Information Services: A (not-so-) little knowledge that acts - Arturo Ariño (11.30 – 11.45am) [BISS 25738]
4. Leveraging Industry Visualization Tools for Biodiversity Science - Jocelyn Pender (11.45-12 pm) [BISS 25842]
5. TaxonWorks - Dmitry Dmitriev (12 – 12.15pm) [BISS 25560]

S05 - The Global Genome Biodiversity Network (GGBN) Standards for Molecular Collections.

Organisers - Katie Barker & Gabriele Droege.
Burns 5 (50)

1. Global Genome Biodiversity Network – Infrastructure for genomic research - Katharine Barker (11–11.15am) [BISS 25289]
2. GGBN Data Portal, GGBN Data Standard and GGBN Document Library - Gabriele Droege (11.15 – 11.30am) [BISS 25282]
3. Establishment of the ARCTOS-GGBN Data Pipeline - Teresa Jegelewicz Mayfield (11.30 – 11.45am) [BISS 25525]
4. Management and GGBN Publishing of Tissue and DNA Extract Data through Specify Software - Andrew Bentley (12.45 – 12pm) [BISS 26749]
5. Planning for Field Based Biological Sample Collection: Using the Genomic Observatories Metadatabase Project Interface - John Deck (12 – 12.15pm) [BISS 25651]

11 - 12.30PM Collections Management 4.

Moderator - Cody Fraser
Burns 7 (88)

1. Leveraging the Benefits of Open Data Services for Natural History Collection Management. - Maarten Schermer (11 – 11.20am) [BISS 25882]
2. Advancing Collections Management with the Netherlands Biodiversity Data Services. - Max Caspers (11.20 – 11.40am) [BISS 25746]
3. A Rapid Method for an Initial Registration of a Large Entomology Collection. - Peter Lillywhite (11.40am – 12pm) [BISS 26684]
4. Managers of Australasian Herbarium Collections (MAHC): A MARK of Curation Excellence. - Peter Jobson (12 – 12.20pm) [BISS 26283]

W03 - Analogue 2 digital: faster better cheaper.

Organiser - Quentin Groom.
Castle B (32)

1. State of Digitisation and Gap Analysis Surveys - Sarah Phillips (11 – 11.20am) [BISS 25969]
2. An Evaluation of In-house versus Out-sourced Data Capture at the Meise Botanic Garden (BR) - Henry Engledow (11.20 – 11.40am) [BISS 26514]
3. Service-based information extraction from herbarium specimens - Fabian Reimeier (11.40am – 12pm) [BISS 25415]
4. Crowdsourcing, is it a good option for your collection digitization? - Quentin Groom (12 – 12.20pm) [BISS 25410]

Educational Share Fair.

- Organisers - Molly Phillips,
Anna Monfils and Teresa Mourad.
Castle D (40)

12.30 - 2PM Lunch

IG/TG03 Audubon Core

Castle B (32)

IG/TG04 Joint RDA/TDWG

Castle D (40)

Poster Session (1-1.45pm)

The Link

2 - 3.30PM Digitisation and Collections Data 5.

Moderator - Emma Burns
Burns 1 (288)

1. The Walking Dead: Status Report, Data Workflow and Best Practices of the oVert Thematic Collections Network. - Gregory J. Watkins-Colwell (2 – 2.20pm) [BISS 26078]

2 - 3.30PM

2. Managing 3D Collections Data: Developing Systems and Metadata for 3D Digitization at Scale. - Jon Blundell (2.20 – 2.40pm) [BISS 26704]
3. Cretaceous World TCN: Digitizing the Western Interior Seaway at the Yale Peabody Museum. - Elissa Martin (2.40 – 3pm) [BISS 26115]
4. Data Detectives - The Backlog Cataloguing Project at Auckland War Memorial Museum. - Heidi Schlumpf and Nina Gaze (3-3.20 pm) [BISS 25194]

S09 - Data Integration and Attribution in the Web of Natural History Data.

Organiser - Andrew Bentley.
Burns 2 (175)

1. Integration, Attribution, and Value in the Web of Natural History Museum Data - Andrew Bentley (2 – 2.20pm) [BISS 25456]
2. Options to streamline and enrich biodiversity data aggregation - Donald Hobern (2.2 – 2.40pm) [BISS 26808]
3. Data Attribution from Download to Publication - Pamela S. Soltis (2.40 – 3pm) [BISS 26060]
4. Digital Object Cloud for linking natural science collections information; The case of DiSSCo - Dimitrios Koureas (3 – 3.20pm) [BISS 25474]

Contributed 4.

Moderator - Jason Best
Burns 5 (50)

1. French Information System on Water Withdrawals: Challenges of a Data Reuse Project. - Julie Chataigner (2 – 2.15pm) [BISS 25577]
2. MapBio: Mapping Biodiversity of China. - Congtian Lin (2.15 – 2.30pm) [BISS 26075]
3. The China Program on Species Diversity Information Systems. - Liqiang Ji (2.30 – 2.45pm) [BISS 26516]
4. DemoCamp: BRIT Digitization Appliance. - Jason H Best (2.45 – 3pm) [BISS 26122]

Collections Management 5.

Moderator - Lisa Yeats
Burns 7 (88)

1. Interns and Volunteers Crucial in Curating and Digitizing Fossil Invertebrates in the Field Museum's Fast Growing Mazon Creek Collection. - Paul S Mayer (2 – 2.20pm) [BISS 25942]
2. The Deep Freeze Redux: Cold Storage Packaging of Ektachrome Color Film. - Lisa Palmer (2.20 – 2.40pm) [BISS 25640]

2 - 3.30PM

W06 - The Living Atlases community in action: demonstration of real implementations of Atlas of Living Australia modules.

Organisers - Marie-Elise Lecoq and Dave Martin; Moderator Marie-Elise Lecoq.
Castle B (32)

1. The Living Atlases community in action: general introduction - Nick dos Remedios & Marie-Elise Lecoq (2 – 2.15pm) [BISS 25487]
2. The Living Atlases community in action: the GBIF Benin data portal - Marie-Elise Lecoq (2.15 – 2.30pm) [BISS 25488]
3. The Living Atlases Community in Action: Sharing Species Pages through the Atlas of Living Costa Rica - William Ulate (2.30 – 2.45pm) [BISS 25990]
4. The Living Atlases community in action: the NBN Atlas Spatial Portal and "Explore Your Region" module - Nick dos Remedios (2.45 – 3pm) [BISS 25486]
5. Citizen science at the borders of Romance (www.doedat.be) - Henry Engledow (3 – 3.15pm) [BISS 24991]
6. Scientific reuse of open biodiversity information from national Living Atlases infrastructures: Using ALA4R for reproducible research studies - Markus Skyttner (3.15 – 3.30pm) [BISS 25121]

Challenges For Implementing Collections Data Quality Feedback.

Organisers - Deborah Paul and Nicole Fisher
Castle C (40)

1. Challenges For Implementing Collections Data Quality Feedback: synthesizing the community experience. - Deborah Paul and Nicole Fisher (2 – 2.20pm) [BISS 26003]
2. Data Quality – Whose responsibility is it? - Arthur D Chapman (2.20 – 2.40pm) [BISS 26084]
3. Integrating Data Quality Feedback: a Data Provider's Perspective. - Mare Nazaire (2.40 – 3pm) [BISS 26007]
4. Label Transcript is Done – Now what do we do with that Data? - Robert Cubey (3 – 3.20pm) [BISS 27055]

W08 - Standardizing data to Darwin Core using R: A hands-on workshop with lessons learned from the TRIAS project.

Organiser - Lien Reyserhove.
Castle D (40)

3.30 - 4PM

Coffee Break

4 - 5.30PM

Digitisation and Collections Data 6.

Moderator - Janice Lord
Burns 1 (288)

1. The Australasian Virtual Herbarium (AVH) and the Changing Role of Herbaria. - Niels Klazenga (4 – 4.20pm) [BISS 25866]

4 - 5.30PM

2. A Collaborative Effort toward an Integrative Web Portal at the University of Wisconsin-Madison. - Elizabeth Leith (4.20 – 4.40pm) [BISS 27084]
3. Storing, Maintaining and Mobilizing Botswana National Museum's Entomology Digital Collections: The GBIF/BID Approach. - Boikhutso Lerato Rapalai (4.40 – 5pm) [BISS 26328]
4. Books and Drawers full of Moths. - Kane Fleury (5 – 5.20pm) [BISS 26710]

Collections Access and Use 6.

Moderator - Catherine Smith
Burns 7 (88)

1. The Ethics and Untoward Challenges of Exhibition Loans: An Alabama Extraterrestrial in Paris and the Return? of a Native American Relic. - Mary Beth Prondzinski (4 – 4.20pm) [BISS 25924]
2. Collaborative Kaitiakitanga - New Joint Pathways in Guardianship. - Vasiti Palavi (4.20 – 4.40pm) [BISS 26954]
3. The Field Guide to the Budj Bim Cultural Landscape app: A Partnership Between the Gunditjmara community and Museums Victoria. - Ursula Smith (4.40 – 5pm) [BISS 26891]
4. Kōhatu Mauri: An Exercise in Practice across Cultures. - Rachel Wesley (5 – 5.20pm) [BISS 26015]

W06 - The Living Atlases community in action: demonstration of real implementations of Atlas of Living Australia modules.

Organisers - Marie-Elise Lecoq and Dave Martin; Moderator Marie-Elise Lecoq.
Castle B (32)

Discussion (4 – 5.30pm)

Challenges For Implementing Collections Data Quality Feedback.

Organisers - Deborah Paul and Nicole Fisher
Castle C (40)

5. Practical use of aggregator data quality metrics in a collection scenario. - Andrew Bentley (4 – 4.20pm) [BISS 25970]
6. Who Has Time for Biological Collections Data Quality Feedback? Maybe a Community Can Help. - Teresa Jegelewicz Mayfield (4.20 – 4.40pm) [BISS 26083]
7. Repatriation of Augmented Information to an Institutional Database. - Sharon Grant (4.40 – 5pm) [BISS 26479]

W08 - Standardizing data to Darwin Core using R: A hands-on workshop with lessons learned from the TriAS project.

Organiser - Lien Reyserhove.
Castle D (40)

6.30 - 10PM Conference Dinner at Otago Business School

7.30 - 9AM **Registrations Desk Open**
The Link

9 - 10.30AM **S12 - DINA: Towards a Community-Driven Collection Management and Open Source System.**

Organiser & Moderator - Falko Glöckler
Burns 2 (175)

1. General introduction to DINA - James A Macklin (9-9.15 am) [BISS 25646]
2. Involving Collection Staff in the DINA Software Development – An Agile Approach - Markus Englund (9.15 – 9.30am) [BISS 25580]
3. Management of Molecular Data in DINA with SeqDB - James A Macklin (9.30 – 9.45am) [BISS 25647]
4. DINA Bits - Small Services Growing in the DINA System - Falko Glöckler & Markus Englund (9.45 – 10am) [BISS 25579]
5. Plenary Discussion - Future of Collection Management Systems - Falko Glöckler & Markus Englund (10 – 10.30am) [BISS 25635]

Contributed 5.

Moderator - Pina Milne
Burns 5 (50)

1. Sustaining Community Data Infrastructures: Challenges and Opportunities with the Scratchpad Virtual Research Environment - Vincent Stuart Smith (9- 9.15 am) [BISS 26323]
2. Entry Life-Cycle with automatic Change-History & Provenance Tracking in collaborative Semantic Web Content Management Systems as implemented in SOCCOMAS - Roman Baum, Christian Köhler (9.15- 9.30 am) [BISS 26177]
3. Integration of Biodiversity Linked Data and Web APIs using SPARQL Micro-Services - Franck Michel (9.30- 9.45am) [BISS 25481]

Collections Access and Use 7.

Moderator - Emma Burns
Burns 7 (88)

1. Collections Support Services (CSS) - 25 Years of Improving Access and Care to our Nation's Collections. - Leslie Schuhmann (9 – 9.20am) [BISS 25889]
2. All Our Eggs In One Basket: Challenges of High Resolution X-Ray Micro-Computed Tomography of Great Auk Pinguinus impennis Eggshell. - Douglas G. D. Russell (9.20 – 9.40am) [BISS 25794]

9 - 10.30AM 3. Making an Unstable World more Accessible: Using Universal Design to make Collections and Exhibits Memorable for People of all Abilities. - Steven M. Sullivan (9.40 – 10am) [BISS 25666]

4. Inter-institutional Collections Storehouse. - Max Caspers (10 – 10.20am) [BISS 25677]

W10 - Mapping the Citizen Science Agenda at TDWG with a focus on the PPSR core and Data Quality.

Organisers - Rob Stevenson, Elizabeth R Ellwood and Peter Brenton.
Castle B (32)

W17 - Biological Interaction Data Interest Group.

Organisers - Antonio Mauro Saralva, Jennifer Hammock and Quentin Groom.
Castle D (40)

10.30 - 11AM Coffee Break

11 - 12.30PM SIG - Add your input to Challenges for Implementing Collections Data Quality Feedback.

Organisers - Deborah Paul and Nicole Fisher.
Burns 7 (88)

SIG: Natural History Collections Aotearoa and Australasia.

Organisers - Aaron Wilton, Sarah Tassell, Nyssa Mildwaters and Robert Morris.
Castle 2 (415)

12.30 - 2PM Lunch Break including conference Farewell

SPNHG Annual Business meeting (1.15 onwards)
Castle 2 (415)

2 - 3.30PM TDWG Business Meeting
Burns 2 (175)

SPNHG Annual Business Meeting Continued
Castle 2 (415)

3.30 - 4PM Coffee Break

4 - 5.30PM Poster Take down
The Link

6 - 8PM Farewell Drinks and Nibbles at University Staff Club

Collections access and use

- 1** A Royal Pain, But Worth It: new storage for old collections. - Deborah Harding [BISS 27553]
- 2** Digitizing EPICC Data: Trials and Tribulations in Translating 100 Year Old Data. - Holly Little [BISS 26222]
- 3** Museum, Library and Archives Partnership: Leveraging Digitized Data from Historical Sources. - Constance Rinaldo and Linda S. Ford [BISS 25920]
- 4** Osteo Preparation Lab: Preserving the Smithsonian Tradition of Collections Access and Collections-based Research. - Daniella C. Haigler [BISS 26528]
- 5** The Treasure of George Vernon Hudson. - Julia Kasper [BISS 27006]
- 6** Think of Me When I Am Gone: Assessing Faculty Archives at the Yale Peabody Museum. - Maureen White [BISS 26571]
- 7** New Systematics & Taxonomic Collections coordinating group for New Zealand. - Susan Waugh

Collections Management

- 8** An Integrative Approach to Rehousing the Herpetology Collection. - Katie Date [BISS 26499]
- 9** Betwixt and Between: Bridging the Gap Between Field and Repository. - Meghan Grizzle [BISS 27042]
- 10** Care of Thermal Printed Labels. - Jennifer Winifred Trimble [BISS 25645]
- 11** Establishing Legal Title for Non-Accessioned Collections: All Collections Matter. - Katherine Roberts [BISS 28231]
- 12** Implementing 'Museum Victoria Wireless Input System for EMu (MVWISE)' Barcoding for Location Management of a Wet Type Collection. - Joanne Taylor and Chris Rowley [BISS 26178]
- 13** Making Education Collections Safe to touch: Safety assessments and data maintenance. - Kelsey Falquero [BISS 28197]
- 14** Replacement of Formalin-Acetic Acid-Alcohol Solution (FAA) in Herbarium Spirit Collections. - Bronwyn Collins [BISS 26493]
- 15** Revitalization of the University of Iowa's Bird Egg Collection after 100 Years of Dormancy. - Cindy E Opitz [BISS 26529]
- 16** Taming Extinct Beasts: Strategies, Projects, and Metrics for Managing the World's Largest Fossil Collection, the United States National Fossil Collection at the Smithsonian National Museum of Natural History. - Kathy Hollis [BISS 26151]
- 17** The National Collection of Arachnida, South Africa: Making the Collection more Accessible. - Petro Marais [BISS 26111]
- 18** Why are our Jar Lids Crumbling? - Jennifer Winifred Trimble [BISS 25928]

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- Conservation**
- 19** A Plant Based Artefact as a Document of War. Conservation and Preservation of a Wreath made of Yellow Everlasting and Purging Flax, Found on a Warsaw Insurgent's Grave. - Dorota Rakowska [BISS 26202]
 - 20** Can Lightning Strike Twice? The Reassembly of the Karnak Fulgurite at Museums Victoria. - Danielle Measday [BISS 27043]
 - 21** Exploring Skeletal Preparation Techniques: Recuration of Botswana Mammals from a 1969 Expedition Using TergazymeTM. - Hannah Selvey, Andrew Doll and Jeff Stephenson [BISS 26185]
 - 22** Fibres in Meise Botanic Garden: A Future for Heritage Collections? - Piet Stoffelen [BISS 26663]
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