

Digitization processes in natural history collections: from drawers to data publication

SwissCollNet Workshop - Programme January 19, 2024

Moderator: Alice Cibois, President of Board of Experts SwissCollNet and Curator at Muséum d'histoire naturelle, Genève

Schedule		Theme	
08h30		Registration	
09h00		Welcome Christoph Scheidegger, President of SwissCollNet	5'
09h05		Update on SwissCollNet Activities Pia Stieger, Head of SwissCollNet	15'
09h20	Plenary	Collection registry: "One Swiss Collection" publication Michelle Price, Board of Expert SwissCollNet and Chief Curator, Conservatoire et Jardin botaniques de Genève & Pascal Tschudin and Sofia Wyler, Scientific officers, GBIF.ch	30'
09h50		National aggregator (SVNHC) Nils Arrigo, Head of IT and data enhancement department, info fauna	30'
10h20		Break	30'
		Specimens and objects digitization /imaging	
		Sharing experiences on rapid digitization of herbarium specimens by conveyor belt Katja Rembold, Curator, Botanischer Garten Bern & Christian Sprecher, Curator, Naturama Aargau	20'
10h50	Plenary	Bulk 3D scanning of insect specimens Christian Felsner, Research associate, ETHZ	20'
		The Santiago Roth Collections in Switzerland through the looking-glass Gabriel Aguirre Fernandez, Research associate Palaeontology Department UZH	20'
11h50		Lunch	90'

13h20	Parallel breakout sessions	<p>Specimens and objects curation, data cleaning and normalization 60'</p> <p>Digitization of the historical palaeontological collection at the Naturmuseum Winterthur Sandra Scherrer, Curator Geosciences & Keesha Ming, Scientific collaborator, Naturmuseum Winterthur & Lionel Cavin, Curator Department Geology and Paleontology, Muséum d'histoire naturelle, Genève</p> <hr/> <p>Standardizing Data Standards Lucas Blattner, Head of Collection Digitization, Natural History Museum Basel & Lucia Pollini Paltrinieri, <i>Senior curator invertebrates department, Museo cantonale di storia naturale, Lugano</i></p> <hr/> <p>Challenges in data cleaning and normalization of natural history collections Fred Stauffer, Curator in charge Herbarium of phanerogamy, Conservatoire et Jardin botaniques de Genève & Hélène Gabioud-Duinat, Head of Inventories, Musée de la nature, Sion</p> <hr/> <p>From physical to digital Alexis Beck, Database Manager & Kamil Dobosz, Information and communication technology engineer, Muséum d'histoire naturelle, Genève</p>
14h20	Parallel breakout sessions	<p>Specimens and objects curation, data cleaning and normalization 60'</p> <p>Digitization of the historical palaeontological collection at the Naturmuseum Winterthur Sandra Scherrer, Curator Geosciences & Keesha Ming, Scientific collaborator, Naturmuseum Winterthur & Lionel Cavin, Curator Department Geology and Paleontology, Muséum d'histoire naturelle, Genève</p> <hr/> <p>Standardizing Data Standards Lucas Blattner, Head of Collection Digitization, Natural History Museum Basel & Lucia Pollini Paltrinieri, <i>Senior curator invertebrates department, Museo cantonale di storia naturale, Lugano</i></p> <hr/> <p>Challenges in data cleaning and normalization of natural history collections Fred Stauffer, Curator in charge Herbarium of phanerogamy, Conservatoire et Jardin botaniques de Genève & Hélène Gabioud-Duinat, Head of Inventories, Musée de la nature, Sion</p> <hr/> <p>From physical to digital Alexis Beck, Database Manager & Kamil Dobosz, Information and communication technology engineer, Muséum d'histoire naturelle, Genève</p>
15h20	Break	30'

15h50	Plenary	E-Specimina Unveiled: Leveraging ORD and FAIR Principles for Management and Use of Natural History Collections Barbara Templ, Project Manager & Reto Nyffeler, Curator Phanerogams, Institute for Systematic and Evolutionary Botany, UZH & Juriaan de Vos, Leading curator, Herbaria Basel, Department of Environmental Science, University of Basel	15'
16h05		Charting the collaborative future of the SVNHC, InfoSpecies and GBIF.ch Glenn Litsios, Director info fauna	20'
16h25		Wrap up of the day Christoph Scheidegger, <i>President of SwissCollNet</i>	20'
16h45		End	

Information parallel breakout sessions:

Participants can choose per session one theme among the 4 themes proposed. Here is a teaser of the 4 themes to make your choice for the 2 sessions.

Digitization of the historical palaeontological collection at the Naturmuseum Winterthur

Sandra Scherrer, Curator Geosciences & Keesha Ming, Scientific collaborator, Naturmuseum Winterthur & Lionel Cavin, Curator Department Geology and Paleontology, Muséum d'histoire naturelle, Genève

The support by SwissCollNet gives us the chance to raise awareness of our little-known collection. However, it is a process with lots of ups and downs: we celebrate rediscoveries and sometimes despair at unsolvable problems. My presentation is intended to encourage people to share their own experience.

Standardizing Data Standards

Lucas Blattner, Head of Collection Digitization, Natural History Museum Basel & Lucia Pollini Paltrinieri, Senior curator invertebrate department, Museo cantonale di storia naturale, Lugano

The DarwinCore standard is a valuable tool to harmonize data within and among natural history collections in Switzerland and internationally. However, in practice people encounter issues concerning the interpretation of DarwinCore properties, and there is a strong need of standardizing the standard. In our workshop we want to address this issue, show examples from ongoing SwissCollNet projects in our institutions and open the discussion to get an overview on the challenges across museums and disciplines.

Challenges in data cleaning and normalization of natural history collections

Fred Stauffer, Curator in charge Herbarium of phanerogamy, Conservatoire et Jardin botaniques de Genève & Hélène Gabioud-Duinat, Head of Inventories, Musée de la nature, Sion

Independently of the size and age of the collections stored, natural history collections often face problems in data cleaning and normalization. These processes aim to detect and to remove errors and inconsistencies from data in order to improve the overall quality. Data quality problems associated to natural history holdings are present in single data collections, such as files and databases (e.g., due to misspellings during data entry, missing information, etc). When multiple data sources need to be integrated, as for example in federated database systems or internet-based information systems, the need for data cleaning increases significantly. In this workshop we will address some major challenges associated to data cleaning and normalization of natural history collections, including exchange of experiences among Swiss Institutions.

From physical to digital

Alexis Beck, Database Manager & Kamil Dobosz, Information and communication technology engineer, Muséum d'histoire naturelle, Genève

What are the key elements to consider when organizing your geo or biological database? Observe a step-by-step digitalisation process from raw data to normalized data.