Consortium of European Taxonomic Facilities

VIENNA STATEMENT

ON THE IMPORTANCE OF RESEARCH IN **NATURAL HISTORY COLLECTIONS**

29 NOVEMBER 2023



Signatories

AUSTRIA

Biology Centre of Upper Austria State Museums Natural History Museum Vienna

BELGIUM

Meise Botanic Garden Royal Belgian Institute of Natural Sciences Royal Museum for Central Africa

BULGARIA

Bulgarian Consortium: Bulgarian Academy of Sciences, Institute of Biodiversity and Ecosystem Research Bulgarian Consortium: National Museum of Natural History

CZECH REPUBLIC

Czech Consortium: Faculty of Science, Charles University in Prague Czech Consortium: Institute of Botany, The Czech Academy of Sciences Czech Consortium: National Museum, Prague

DENMARK

Natural History Museum of Denmark

ESTONIA

Estonian Consortium: Estonian Museum of Natural History Estonian Consortium: Estonian University of Life Sciences Estonian Consortium: Tallinn University of Technology Estonian Consortium: University of Tartu Natural History Museum and Botanical Garden

FINLAND

Finnish Museum of Natural History-LUOMUS

FRANCE

National Museum of Natural History

GERMANY

Bavarian Natural History Collections Natural History Museum Berlin

Botanic Garden and Botanical Museum Berlin, Freie Universität Berlin

Senckenberg Society for Nature Research Stuttgart State Museum of Natural History

NORe Consortium: Haus der Natur-Cismar

NORe Consortium: LIB Leibniz Institute for Analysis of Biodiversity Change

NORe Consortium: German Oceanographic Museum Stralsund

NORe Consortium: Müritzeum

 ${\hbox{NORe Consortium:}}\ {\hbox{Museum of Nature and Environment L\"ubeck}$

NORe Consortium: Natural History Museum Namu Bielefeld

NORe Consortium: State Museum of Natural History Braunschweig

NORe Consortium: State Museum Nature and Man Oldenburg

NORe Consortium: Übersee – Museum of Bremen

 $NO Re\ Consortium; Zoological\ Collection\ of\ the\ University\ of\ Rostock$

 ${\hbox{NORe Consortium:}}\ {\hbox{Zoological Institute and Museum Greifswald}}$

NORe Consortium: Zoological Museum Kiel

GREECE

Natural History Museum - University of Crete, Greece

HUNGARY

Hungarian Natural History Museum

ICELAND

Natural Science Museum of Iceland

ISRAEL

The Hebrew University of Jerusalem, National Natural History Collections
The Steinhardt Museum of Natural History, Israel

ITALY

Italian Consortium: Natural History Museum, University of Florence Italian Consortium: Natural History Museum of Genova Museum and Botanical Garden of the University of Pisa

LUXEMBOURG

Natural History Museum of Luxembourg

NETHERLANDS

Naturalis Biodiversity Center

NORWAY

Natural History Museum - University of Oslo

POLAND

Museum and Institute of Zoology-Polish Academy of Sciences

SLOVAKIA

Slovakian Consortium: Comenius University-Faculty of Natural

Sciences - Botany & Zoology

Slovakian Consortium: Pavol Jozef Šafárik, University in Košice - Faculty of Science

Slovakian Consortium: Plant Science and Biodiversity Centre,

Slovak Academy of Sciences, Institute of Botany

Slovakian Consortium: Slovak Academy of Sciences - Institute of Zoology

Slovakian Consortium: Slovak National Museum-Museum of

National History

SPAIN

CSIC. National Museum of Natural Sciences CSIC. Royal Botanic Garden of Madrid

SWEDEN

Swedish Museum of Natural History
Gothenburg Consortium: Department of Biology and Environmental
Sciences, Gothenburg University
Gothenburg Consortium: Gothenburg Botanic Garden
Gothenburg Consortium: Gothenburg Natural History Museum

SWITZERLAND

Geneva Consortium: Conservatory and Botanical Gardens of Geneva Geneva Consortium: Natural History Museum of Geneva Natural History Museum of Bern

UNITED KINGDOM

Bristol Museum & Art Gallery London Natural History Museum

Manchester Museum-The University of Manchester

Natural History | National Museum Wales

British Geological Survey | National Geological Repository

National Museums Liverpool

National Museums NI

National Museums Scotland

NHM Oxford University

Royal Botanic Garden Edinburgh

Royal Botanic Gardens, Kew

The Hunterian – University of Glasgow

DRAFTED BY the CETAF Executive Committee: Michelle Price, Ana Casino, Eva Häffner, Gila Kahila Bar-Gal, Gergely Babocsay and Erik Smets The **CETAF community**, with 44 members from 25 European countries and Associated states that represent 77 natural history institutions, manages over 1.5 billion natural history specimens. This long-standing association embodies a distributed network of scientific facilities that encompass the geological and biological collections held in natural history museums, science centres and botanical gardens as well as their associated research scientists and research infrastructures. CETAF forms a cohesive and well-structured research community and provides an essential platform for exchange, collaboration and the development of joint initiatives in the natural sciences.

Natural history collections - a scientific asset that has been developed over the last 350 years - are an unparalleled source of diverse types of data on species, the evolution of life on Earth and the geological processes at work over deep time. The analysis, interpretation and synthesis of the scientific data contained in the diverse objects in natural history collections, and the transmission of scientific knowledge derived from research conducted on them, are core activities of natural history institutions and other research institutes that focus on understanding biodiversity and geodiversity. Unlocking data on biological and geological entities, the interpretation of the data derived from them, the creation of biodiversity and geodiversity knowledge and ensuring its equitable accessibility are essential components for our understanding of biological species, communities and habitats, in an evolutionary context, and on the geological entities and processes that have contributed to shaping our planet. Scientific discovery and innovation in the domains of biodiversity and geodiversity science are inseparable from natural history specimens, research infrastructures and the competencies of the institutions that house them.

Our community is well-positioned to develop the CETAF Research Agenda for Biodiversity and Geodiversity Sciences in Europe (CETAF RA) as an outcome of the CETAF Strategy and Strategic Development Plan 2015-2025. It will represent the vision of experts in the biodiversity and geodiversity sciences on the questions we need to target in order to understand the Earth and the past, present and future biological life on it as well as those that are pertinent at the European level. The questions raised by the community will be addressed with scientific excellence with the aim of strengthening the European Research Area (ERA). Our endeavours are built on top of a long history of effective and efficient cooperation and collaboration that has been created within CETAF that reaches across borders and disciplines. CETAF RA activities are to be based on FAIR data and metadata principles, anchored in the mobility criteria that ensure skill and knowledge transfer, sharing and enhancement, and based on the adoption and implementation of common standards, best practices and guidelines that have been produced by CETAF as a community resource. These actions and resources ensure that understandable, reliable biodiversity and geodiversity knowledge is made available to a wide range of potential users, from professionals to policymakers and scientists to citizens, in a format that is both understandable and reproducible.

The CETAF RA provides **opportunities for the community to promote, coordinate and undertake research on natural history specimens** with the aim of contributing to the European Union's drive to promote scientific excellence, supporting its position as a world leader in science. The CETAF RA includes three key pillars, based on CETAF and its membership, of expertise, research facilities and data. These pillars contribute to the accomplishment of the ERA objectives of collaboration, innovation, and knowledge exchange across Europe. **Ten drivers for action** have been identified to be supported and implemented by 2030 through an array of activities undertaken by the CETAF community, based on FAIR data and metadata principles and scientific excellence. Jointly, outcomes will raise acknowledgement of the relevance of the natural history collections within Europe for research as well as their contribution to scientific advancement in the natural history sciences. More globally, research conducted in natural history institutions will have an **impact on societal challenges** and sustainability goals by unlocking the critical information needed to make informed decisions.

- **1.** Integrate taxonomic knowledge into the **policy-science dialogue** in Europe to enable informed decision-making in the realms of biodiversity and geodiversity.
- **2.** Enhance training and **capacity building in the natural sciences** through the maintenance and development of Europe's premier training platform, the CETAF Distributed European School for Taxonomy (DEST)
- **3.** Accelerate **species discovery** and enable adequate monitoring and modelling of biodiversity across Europe through the support of taxonomy initiatives and funding mechanisms.
- **4.** Increase **research capacity** in Europe to provide sustainable expertise in support of biodiversity and geodiversity research.
- **5.** Promote **interdisciplinarity and integrative approaches** to improving the use of taxonomic information and knowledge, in an evolutionary or geological context, in related scientific fields.
- **6.** Combat biodiversity and geodiversity **awareness disparity** through coordinated outreach activities, education programmes, exhibitions and social media campaigns.
- **7.** Promote and channel the **integration** of specimen data and associated metadata into a harmonised system and distributed infrastructure.
- **8.** Accelerate the study of the **evolution of European biodiversity** in order to predict the future impacts of human activities and climate change on species and ecosystems.
- **9.** Explore opportunities with the **private sector** to identify potential innovation niches, focusing on sustainable technologies to reduce the negative impacts of human activities on biodiversity and geodiversity.
- **10.** Implement **responsible research** principles and promote equality in research and research opportunities.

CETAF's active engagement at the science-policy interface and its provision of reliable and trusted information in the natural history domain to the user community provides a solid foundation for decision-making that in turn supports the transformative change needed to fulfil the Kunming-Montreal Global Biodiversity Framework (GBF) that was adopted at the 15th Conference of Parties to the United Nations Convention on Biological Diversity (CBD) in December 2022.

CETAF54, Vienna, AT, 29 November 2023

hitt	hitting the GBF Targets for 2030			The CETAF Research Agenda Actions are									
mu		GBF Targets for 2030	A1 Decision- making	A2 Training	A3 Species Discovery	A4 Taxonomic Expertise	A5 Interdisci plinarity	A6 Literacy	A7 Integratio n	A8 Evolution	A9 Industry	A10 Responsi ble Industry	
Reduction of Biodiversity threats	1	Biodiversity Loss											
	2	Restoration											
	3	Management											
	4	Extinction											
	5	Wild species											
	6	IAS											
	7	Pollution											
	8	Climate Change											
Sustainable use and benefit-sharing	9	Environmental Impact											
	10	Sustainable&Friendly											
	11	Nature Contributions											
	12	Urbanization											
	13	ABS BPs											
Tools and solutions for implementation and streaming	14	Values and policies											
	15	Business											
	16	Consumpion											
	17	Biotechnology											
Tools and solutions lementation and str	18	Financial Measures											
and s	19	Resources											
ools a	20	Capacity building											
To for imple	21	Data provisions & access											
	22	Responsible & participatory											
	23	Gender & Diversity											
		Contribution to Targets	1	6	4	6	4	3	1	2	1	3	
GOAL A Integrity, connectivity and resilience of ecosystems GOAL B Sustainable use and management of biodiversity													
GOAL C Fair and equitable benefit share from GR and DSI GOAL D Secure and equitable coessible means of implementation													

... and moving orward towards th GBF 2050 goals

The CETAF Research Agenda for Biodiversity and Geodiversity Sciences in Europe will contribute to the achievement of 18 out of the 23 Global Biodiversity Framework targets by 2030, and more broadly to the recognition and accomplishment of the overarching four GBF goals for 2050





















































































































































c/o Royal Belgian Institute of Natural Sciences Rue Vautier 29 - 1000 Brussels, Belgium в info@cetaf.org т+32 (0)2 627 42 51





