

Stockholm Biodiversity Informatics Symposium 2008

Swedish Museum of Natural History, Stockholm, Sweden
1-4 December 2008

The Book of Moments

(aka The Symposium Program)

Organisers:
GBIF-Sweden, FishBase Sweden, The Swedish Museum of Natural History



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Stockholm Biodiversity Informatics Symposium 2008. The Book of Moments.

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250 years ago, one of the most revolutionary works in Biology left Lars Salvius's printing shop in Holmia (Latin for Stockholm) and began its victorious journey through science and time. The tenth edition of *Systema Naturae*, by Carl Linnaeus, marks the starting point for Zoological nomenclature and classification, complementing the *Species Plantarum* by the same author, published in 1753 and recognized as the starting point of Botanical nomenclature. The binominal naming system advanced by Linnaeus in these two works enabled efficient communication about species and their relationships, and Linnaeus's method of naming and classifying animals and plants still underlies all indexing of biodiversity.

Systema Naturae, published by Linnaeus in 12 editions and expanded on by others, was also the first organized catalogue of living organisms, in fact covering every organism known at the time. Today, more than 1.7 million species are known, and several more millions are estimated to exist. There exists no longer any complete catalogue of all living beings. Traditional taxonomic cataloguing cannot keep up pace with the descriptions of new species - about 16,000 in a year. And even if we were able to index and list the new names, traditional taxonomic revision is too slow to provide critical evaluation of the validity of the names, and to produce contextual information such as geographical distribution and morphology.

Biodiversity informatics, a collection of methods to manage biodiversity information digitally, using computers, networking protocols, and software configured for managing biodiversity information - principally the what, where and when of organisms, but not limited to such parameters - embodies a new biological discipline that will give us back control over the biodiversity. Biodiversity informatics is expanding in a multitude of directions, each with an exciting frontline. It may be difficult to orientate oneself among the myriad of acronyms and the many big and small projects now going on worldwide.

This Symposium, 250 years after the *Editio Decima* of the *Systema Naturae*, will answer two questions: (1) What is biodiversity informatics? (2) Can we reconstitute the lost book of all species? (And of course - if we can, what do we do with it?)

Keynote presentations, demonstrations, and workshops by many of the world's leading biodiversity informaticians make up the body of the Symposium. It is arranged in discrete sessions covering both technical and informational aspects of digital publishing, species information systems, data management systems, cybertaxonomy, and core biodiversity informatics projects.

Organisers

The symposium is organised by the two major biodiversity informatics projects at the Swedish Museum of Natural History: GBIF-Sweden and FishBase Sweden. GBIF-Sweden is the national node for the Global Biodiversity Information Facility; and FishBase Sweden is the Swedish office of the FishBase network and Consortium. GBIF-Sweden is supported by The Swedish Research Council and the The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning.

Venue

The Symposium takes place at the Swedish Museum of Natural History, which is the major research museum and also the major natural history museum in Sweden. The Museum is located in Stockholm, the Capital of Sweden, a peaceful city residing on numerous islands at the seaward end of Lake Mälaren. To reach Stockholm by air, there are convenient flights to Arlanda Airport 40 km north of Stockholm. There are fast trains connecting to Copenhagen in 5 hours, and ferry connections with neighboring countries in the Baltic region.

Practical information

The weather in December is expected to be somewhat chilly, usually around 0°C, but the temperature may drop to several degrees below 0°C. It may even snow. Daylight is limited to between about 0830 and 1500h. There are convenient public transport connections, and not much need to go outdoors for longer periods of time. All Swedish houses, including public buildings have central heating systems providing convenient temperatures between 20°C and 25°C.

The museum is most easily reached by Metro (*Tunnelbana* in Swedish, identified by the symbol T), line 14 destination "Mörby Centrum". Get off at station "Universitetet", turn left at the exit and walk across the bus stop to reach the museum main entrance after about 3-6 minutes walk.

Speakers

Lectures are by invitation only. There will be space for posters, and rooms for demonstrations.

Lunch

Buffet lunch, including soft drink/water/light beer and coffee/tea is served around 1200h each day. Please consult the program for exact times. The buffet is served upstairs from the auditorium, in the space to the left of the main entrance door. Your badge is your lunch ticket.

Wardrobe

There is space for clothes in the auditorium. Lockers are available in the school picnic room opposite the restaurant to the left of the toilets.

Presentations

Presentations may be illustrated in either MS-Powerpoint or OpenOffice Impress. If you create presentations on a Mac computer, it may be advisable to test if the graphics is PC-compliant, and use a pdf version.

Presentation files must be provided to the projector manager before session start, and preferably the day before the presentation.

Posters

The poster space is located just outside the auditorium. Please present your poster to the registration desk upon registration and indicate any special requests to the registration desk staff.

Emergency

The emergency call number in Sweden is 112.

Internet access

The auditorium has open wireless Internet access.

Contacts

Use this e-mail for all communication: gbif@nrm.se

Organising Committee

Sven O Kullander, Helena Eklund Snäll, Fang Kullander, Bodil Kajrup, Jessica Sandqvist, Mickaël Graf, Charlotte Johnzon

Programme overview

1 December 2008 (Monday)

Morning session: Introduktion till Biodiversitetsinformatik/Introduction to Biodiversity Informatics (Presentations in Swedish)

Afternoon session: Introductory and overviews of major biodiversity informatics initiatives

2 December 2008 (Tuesday)

Morning Session: Digital publishing, archiving and digitizing literature, open access

Afternoon session: Cybertaxonomy

3 December 2008 (Wednesday)

Morning session: Spatial information tools, observation databases

Afternoon session: Web resources and demonstrations of TAPIR

During the practical hands-on training session for setting up a TAPIR provider service, installation and implementation of TapirLink and PyWrapper3 software will be demonstrated. We will also provide assistance to test this software on your own laptop. Please consider having a web server and a database with your biodiversity dataset pre-installed.

4 December 2008 (Thursday)

All day thematic workshops in smaller rooms. By invitation only.

1 December 2008 (Monday)

0830-0900 Coffee, sandwich, registration

Introduktion till biodiversitetsinformatik

Introduction to Biodiversity Informatics

(Presentations in Swedish)

Chair: Helena Eklund Snäll

0900-0915 Magnus Friberg, Vetenskapsrådet: *Data om vår omvärld - ett åtagande över generationer*

0915-0930 Sven O Kullander, GBIF-Sweden: *Vad handlar biodiversitetsinformatik om?*

0930-0950 Lars M. Nilsson, Vetenskapsrådet: *GBIF*

0950-1010 Fang Fang Kullander, FishBase Sverige: *FishBase - samlad information för världens fiskdiversitet och analysverktyg som förbättrar informationsspridning*

1010-1030 Johan Nilsson, ArtDatabanken: *ArtPortalen*

1030-1050 Break/Paus

1050-1110 Jessica Umegård, Naturhistoriska riksmuseet: *LifeWatch - en europeisk infrastruktur för biodiversitetsforskning*

1110-1130 Erik Liljas, SMHI: *GEO, GEOSS och biologisk mångfald*

1130-1200 GBIF-Sweden Provider of the Year Award presentation

1200-1300 Lunch

Opening International Session: Introductory and overviews

Chair: Irene Bisang, Swedish Museum of Natural History

1300-1310 Opening by Else Marie Friis, Head of Research Department, NRM

1310-1340 Keynote: **Samy Gaiji**, **Vishwas Chavan** & **David Remsen**, The Global Biodiversity Information Facility Secretariat: *The GBIF Global Biodiversity Resources Discovery System (GBRDS)*

1340-1410 Keynote: Rainer Froese, FishBase Kiel: *From FishBase to SpeciesBase*

1410-1440 Keynote: Renato De Giovanni, Reference Center on Environmental Information (CRIA): *TDWG - Biodiversity Information Standards*

1440-1500 Coffee break

1500-1530 Keynote: **Marie Gebhardt** & **Walter G. Berendsohn**, Botanical Museum and Botanical Garden, Berlin: *LifeWatch - A large-scale e-Science and Technology Infrastructure for Biodiversity Research*

1530-1600 Keynote: Sébastien Miazza, Group on Earth Observations (GEO): *GEOSS and GEO BON, a Biodiversity Observation Network*

1600-1620 Andrew Jones, Species 2000: *Species 2000*

1620-1640 Nina M. Laurenne, Markus Penttilä & **Hannu Saarenmaa**, Finnish Museum of Natural History: *An LSID infrastructure for taxonomic concepts and scientific names for efficient data integration in the Nordic region*

2 December 2008 (Tuesday)

0830-0900 Coffee, sandwich, registration

Session: Digital publishing

Chair: Elizabeth Watson, Swedish Research Council

0900-0920 Eva Müller, Consultant in digital preservation: *Long-term preservation of digital information, the challenges and solutions*

0920-0940 Stefan Andersson, Uppsala University Library: *DiVA - Academic Archive On-line*

0940-1000 Francisco Welter-Schultes, University of Göttingen: *AnimalBase: digitizing early zoological literature from before 1830*

1000-1020 Coffee break

1020-1040 Jan Hagerlid, National Library of Sweden/OpenAccess.se development programme: *Open Access - from a fringe movement to a serious alternative*

1040-1100 Gregor Hagedorn, Key to Nature: *Structured Descriptive Data, software and communities*

1100-1120 Donat Agosti & Willi Egloff, Plazi: *XML: The gateway to state of the art taxonomic communication*

1120-1140 Willi Egloff & Donat Agosti, Plazi: *Legal aspects for sharing published taxonomic literature: the Plazi approach*

1140-1300 Lunch

Session: Cybertaxonomy

Chair: Fang Kullander, FishBase Sweden

1300-1330 Keynote: Christine Hine, University of Surrey: *Cybertaxonomy: antecedents, influences and constraints*

1330-1400 Keynote: Walter G. Berendsohn, Botanic Garden and Botanical Museum Berlin-Dahlem: *The EDIT Internet Platform for Cybertaxonomy*

1400-1420 Yde de Jong, Zoological Museum Amsterdam: *A Pan-European Species-directories Infrastructure (PESI)*

1420-1440 Coffee break

1440-1500 David McL. Roberts, Kehan Harman, Simon Rycroft & Vincent S. Smith, The Natural History Museum, London: *Scratchpads in the Biodiversity Informatics landscape*

1500-1520 Malcolm Scoble, The Natural History Museum, London: *Revisionary taxonomy online: Creating a Taxonomic E-science (CATE)*

1520-1540 Katja Seltsmann, Fredrik Ronquist, Greg Riccardi, Austin Mast, Debbie Paul & Chantelle Dorsey, University of Florida & Swedish Museum of Natural History: *Morphbank (www.morphbank.net): A biological image database for research scientists*

1540-1600 David Reamsen, The Global Biodiversity Information Facility: *The Global Names*

Architecture

- 1600-1620 **Richard L. Pyle**, Bishop Museum & International Commission on Zoological Nomenclature: *Initial Development and Implementation of ZooBank, the Proposed Registry of Zoological Nomenclature*
- 1620-1640 **Henrik Nilsson**, University of Gothenburg: *Fungal taxonomy and digital knowledge discovery*
- 1640-1700 **Mauri Åhlberg**, Eija Lehmuskallio & Jouko Lehmuskallio, The University of Helsinki/NatureGate® R&D Group: *NatureGate®: Free, rapid, interactive software for identification of species. Promoting biodiversity learning, studying, teaching and understanding*

3 December 2008 (Wednesday)

0830-0900 Coffee, sandwich, registration

Session: Spatial information tools and observation databases

Chair: Jessica Umegård, Swedish Museum of Natural History

0900-0930 Keynote: Kristin Kaschner, Jonathan Ready, Eli Agbayani, Josephine Rius Barile, Kathy Kesner-Reyes, Paul D. Eastwood, Andrew B. South, Sven O. Kullander, Tony Rees, Chris H. Close, Reg Watson, Daniel Pauly & Rainer Froese, AquaMaps/Albert-Ludwigs-University, Freiburg: *AquaMaps - standardized range maps of marine (and other) species: where we are and where we're going?*

0930-0950 Kathleen Kesner-Reyes & Josephine Rius, The WorldFish Center-Philippines/FishBase Philippines: *Database structure and processes for creating AquaMaps for all organisms in the ocean*

0950-1010 Edward vanden Berghe, OBIS: *OBIS*

1010-1030 Michael D. Guiry & Gwendoline M. Guiry, Martin Ryan Institute/AlgaeBase: *AlgaeBase: listing the world's algae*

1030-1050 Coffee Break

1050-1110 Jan Warnstam, SCISS/Uniview Geoscope: *Real time visualization of science data*

1110-1130 Tapani Lahti & Hanna Koivula, Finnish Museum of Natural History: *Hatikka observation database*

1130-1150 Johan Nilsson, Species Information Centre: *The Species Gateway*

1150-1210 Tord Snäll, Oskar Kindvall & Johan Nilsson, Species Information Centre: *Using presence data collected voluntarily by the public to monitor interannual variation in population level*

1210-1300 Lunch

Session: Web resources

Chair: Mickaël Graf, GBIF-Sweden

1300-1330 Keynote: Roderic D. M. Page, University of Glasgow: *Why aren't we there yet? The failures of biodiversity informatics*

1330-1350 Renato De Giovanni, Reference Center on Environmental Information (CRIA): *openModeller - a generic framework for potential distribution modelling*

1350-1410 Vishwas Chavan, Global Biodiversity Information Facility Secretariat: *Mobilizing Primary Biodiversity Data: GBIF/DIGIT activities for 2009-2010*

1410-1430 Dag Terje Endresen, NordGen: *Biodiversity data exchange software, hands-on exercises with TAPIR software*

1430-1450 Renato De Giovanni, Reference Center on Environmental Information (CRIA): *Sharing biodiversity data using TapirLink*

1450-1510 Break

1510-1730 Renato De Giovanni & Dag Terje Endresen Hands-on workshop with TAPIR

4 December 2008 (Thursday)

Workshops in smaller rooms

0900-1700 **Progress with Mapping in Support of Global Species Information Systems**, Kathleen Reyes, convener. AquaMaps group only.

0900-1700 **NordBIN**, Helena Eklund Snäll, convener. NordBIN participants only.

1000-1200 **MorphBank**, Katja Seltmann, convener. This demo workshop is open for anyone interested.