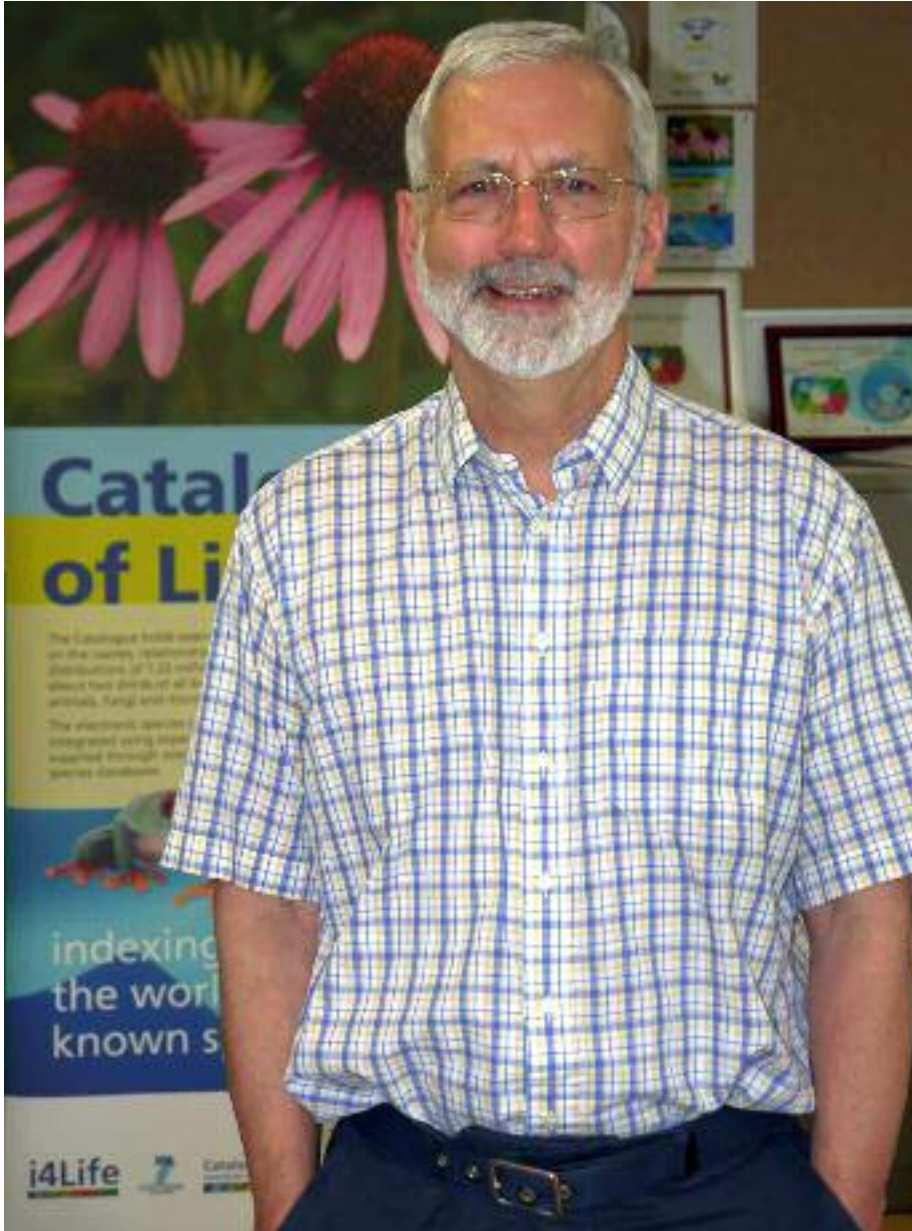


Catalogue of Life

indexing the world's known species *Issue 5 • November 2011*

4D4Life
e-bulletin

<http://4D4Life.eu>



Frank Ainley Bisby 1945 – 2011

On the evening of 25 October the field of taxonomy and biodiversity informatics lost one of its most prominent champions. Frank Bisby suddenly died at the age of 66. Although officially (reluctantly) retired and planning his succession, Frank was still very much in the middle of the development of biodiversity informatics. He was leading a challenging EC funded e-infrastructure project to enhance the Species 2000 Catalogue of Life, and was closely involved in several other major world-wide projects.



e-infrastructure



Important announcement

26-30 March 2012

4D4Life final project meeting
Taxonomy and the Catalogue of Life – Ecosystem of services

This important event will include a public symposium in memory of Frank Bisby and a meeting of the i4Life project. Further information will be available shortly. For more details please contact BGCI at 4D4life@bgci.org

Diary date

08 December 2011

Managing Megadiverse Biodiversity: using the Catalogue of Life infrastructure and services

A one day symposium in Los Banos, Philippines, organised by Species 2000 and ASEAN Centre for Biodiversity



Grab your leaflet!

The new leaflet is still available for download online at www.4d4life.eu in the documents section for all your dissemination events.



Frank's name will forever be tied to Species 2000 and the Catalogue of Life. This validated index of the world's species was his dream, his ultimate goal in life for which he worked incredibly hard, and travelled the world at an unbelievable pace. He relentlessly pointed out its concepts to the scientific community and how its establishment would have a major influence on research and development in the field. He was successful in making his dream our dream. Together we forged a global federation of independent organizations, each with a unique and valuable contribution to a single jointly-owned product (the Catalogue of Life), that is now consulted by millions of users yearly and forms the backbone of many regional, national, and international biodiversity information systems. Almost completed, the Catalogue of Life counts 1.4 million validated species names in a single list, created from the input of over 100 providing databases. 16 years of hard work, crowned with success. Frank put taxonomy firmly on the digital map, and demonstrated that there is a clear need, a major role, and a market for it.

The Catalogue of Life is a product of many people working together. Taxonomists all over the world labour on constructing and updating their unique databases, a job often underestimated and undervalued. They provide the core of the Catalogue of Life. People in other disciplines also made major and important contributions to this work, as they contributed their skills in informatics, computer science, organizational and management skills, legal advice, product development, and outreach. In the past 15 years Frank created an international multidisciplinary family of contributors and collaborators who strongly believed in their shared cause. He was very proud and very fond of this family he had created.

Despite the incredible number of hours he put in to the development of Species 2000 and the Catalogue of Life, Frank still managed to be an active and inspiring teacher in his role as a University Professor. He always remained close to biology. He loved doing botanical field courses with students and they responded to his warm and friendly approach which was underpinned by his encyclopaedic knowledge on legumes. He also adored his cottage in the countryside which had an orchard with many apple varieties.

We had the privilege to work closely with Frank for over 16 years and have never met a man so driven, so committed. His work was his life. These were turbulent years, sometimes difficult but always challenging, interesting and rewarding. We did not always agree, but we respected and admired him. The world has lost a great mind; we have lost a good and dear friend. He will be missed and remembered.

Peter Schalk and Alex Gray

on behalf of the Board of Directors of Species 2000

4D4Life Third Project Meeting



The 3rd 4D4Life project meeting was held at the National Museum in Prague from 28-30 March 2011. All the project partners and key cooperating specialists, including selected representatives of GSDs, were invited. In total 57 participants from 13 countries participated, including partners from China, New Zealand, Brazil and USA. Updates were provided on all Work Packages of the 4D4Life project as well as presentations on the working prototype for the Multi-Hub Engine being developed by CAS China as a pilot project and the EU-Brazil OpenBio Project.

The Prague meeting also included the first joint meeting of the 4D4Life and the i4Life Management Committees with each other and with the Species 2000 Global Team. With some 25 people present, it represented an exciting mix of nationalities and skills – with the object of cross-reporting between the three programmes, and maintaining coherence across the entire global Catalogue of Life programme.





The Catalogue of Life – quarterly edition

The second quarterly edition of the Catalogue was released online at: www.catalogueoflife.org/col at the end of October 2011. It contains a new database – the Global Strepsiptera Database, provided by Jeyaraneey Kathirithamby, as well as updates for another 11 databases. Detailed information can be found at <http://www.catalogueoflife.org/col/info/special>

The latest edition of the CoL includes 101 taxonomic databases, contributing data on 1,370,276 species. Assembly of this edition used the new Annual Checklist Exchange Format and benefited from the new

Catalogue of Life Workbench facilities for data harvesting.

We are very grateful to all authors and contributors, and acknowledge the excellent data assembly work carried out by Luvie Paglinawan and Luisa Abucay in the Species 2000 Philippines Office, as well as the systems management by Viktoras Didžiulis at the University of Reading.

The next edition of the Catalogue of Life will be

released on 5th December 2011 with 26 global checklists contributed by WoRMS, of which seven are new for the Catalogue.



Infrastructure improvements

The Webmin-based Workbench being developed in the framework of the 4D4Life project now includes the Data Exchange Platform where GSDs and other partners, including Regional Hubs and i4Life partners, can upload and download relevant data sets.

These connections allow for variations in the exact linkage (upload, download, SPICE wrapper etc), and now permit automation of the process where wished. A number of the GSDs were successfully uploaded through this Data Exchange Platform for the latest version of the CoL.

The Workbench also now includes the Quality Assurance Workbench features needed for streamlining the scrutiny and data transformations of datasets and the actual assembly of the CoL. Several of the final steps in assembly of the latest edition were done using features in the new Workbench.

MELnet

Spotlight on a contributing global species database

MELnet is an expert-annotated list of accepted and synonymized names in the large tropical family Melastomataceae

The Myrtales family Melastomataceae (including Memecylaceae) comprises an estimated 3,000 "good" species in the Neotropics, 240 in Africa, 230 on Madagascar, and about 1,000 in Asia. One genus, *Rhexia*, is endemic in North America. Melastomataceae make up a sizeable percentage of the World's tropical flowering plant species and include numerous well-documented mutualisms with birds, bees, ants, mycorrhizal fungi, and specialized herbivorous insects. A few species have also entered the horticultural trade.

In 2006, the Global Biodiversity Information Facility (GBIF), awarded a grant to a group of experts to develop an authoritative list of the more than 13,200 names of Melastomataceae, with information on recognized species, their synonyms, and citations of the relevant protologues, monographs, or floras. The project also involved collaboration among institutions, mainly the California Academy of Sciences, the Missouri Botanical Garden, the New York Botanical Garden, the Botanische Staatssammlung Munich, and the Herbarium of the University of Paraná-Curitiba.



Now, 5 years later, MELnet data are available at Melastomataceae.Net (www.melastomataceae.net), Planetary Biodiversity Inventory: Miconieae (sweetgum.nybg.org/melastomataceae/) and as GSD MELnet for the Catalogue of Life. The MELnet curators deal with names published in the family and together are working to arrive at a consensus taxonomy based on recent molecular phylogenies. The data are managed using the software applications of the Diversity Workbench (www.diversityworkbench.net).

User review of new services

One of the main objectives of the 4D4Life project is to develop and enhance the services provided by the CoL. A user survey carried out by BGCI in 2009 identified a range of services requested by users. These requests were assessed and prioritised and the set of new services to be developed by the project was agreed by the project partners.

The main software alterations needed to implement the new services have now been put in place and the new services have been reviewed and commented on by the User Panels established by BGCI. Most users returned a favourable response when testing the new services, providing very valuable feedback. Final fine tuning is now underway and these services will be launched later in the year. Examples of the new services include:

- Additional download options to allow greater flexibility in how CoL data can be accessed, to enable easier data analysis or integration within other information systems;
- Greater transparency about data sources, quality and completeness, with species numbers statistics being shown at all levels of the hierarchy and quality indicators provided;
- selected images being displayed on species pages;
- 'Fuzzy' search options;
- Multi-lingual interface;
- List matching services and enhanced web-service functionality.



Further services are still being tested. If you would like to comment on these, please contact meirion.jones@bgci.org.

Web browser search plugin

The search plugin, which is available for Firefox 2 and Internet Explorer 7, allows you to search the Catalogue of Life directly from your web browser. Once installed the search plugin enables you to search the Catalogue of Life using the search toolbar in your web browser.

Find out more here:

http://www.sp2000.org/index.php?searchword=snippet&option=com_content&task=view&id=65&Itemid=67

Add a CoL search box to your website

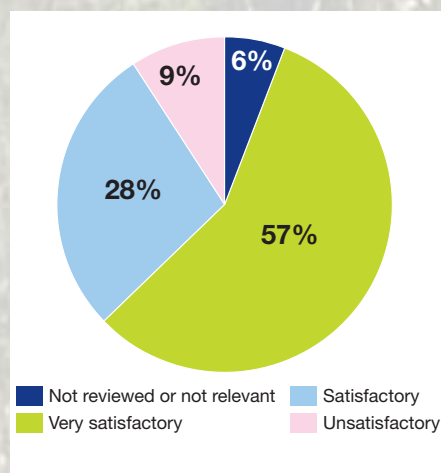
If you are the web master of a biodiversity website you may like to assist your visitors by adding a Catalogue of Life search box to your website. A code snippet has been developed for you to add to the relevant place on your page.

This can be downloaded here:

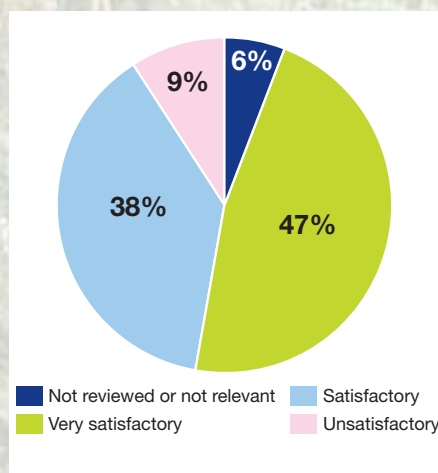
http://www.sp2000.org/index.php?searchword=snippet&option=com_content&task=view&id=65&Itemid=67.

If you do this, we would be grateful if you could send the URL of your webpage to the Species 2000 Secretariat (email: sp2000@sp2000.org) as we would like to know how the Catalogue of Life is being used.

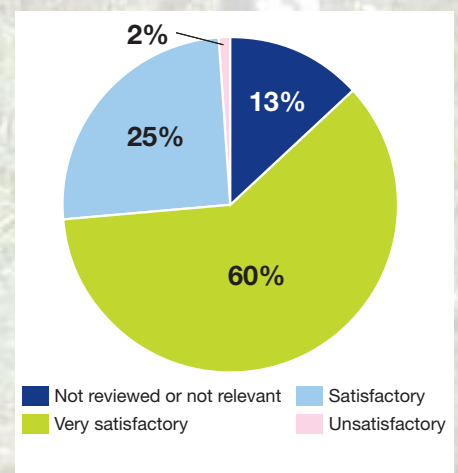
Responses to user surveys



Show data sources and completeness of the catalogue



Display selected images



List-matching services

i4Life news

The i4Life (Indexing for Life) project is gathering major global biodiversity programmes together to create a Virtual Research Community which aims to harmonise and enhance the differing species catalogues using The Catalogue of Life as a backbone. This synthesis has enormous significance in providing a comprehensive view of the biodiversity on Earth and to be able to protect it more effectively.

The key to achieving this goal is the transformation of Catalogue of Life data to a common and internationally-recognised data exchange format. The objective of this process was to come to a consensus on the use of the format and begin to publish the Catalogue of Life data in a standard form. This task was one of main activities of WP2 during the first year of the project. The format is now specified and in use across the project to exchange information between the partners and the Catalogue of Life.

The GBIF data portal has now upgraded from the 2007 Catalogue of Life with 1 million species to the 2011 Catalogue containing 1.3million species (<http://data.gbif.org/datasets/provider/2>). This increased coverage by the Catalogue of Life will help resolve some of the problematic taxonomic records in GBIF making searches more successful.

The DNA database at EBI now has a public portal available in prototype (<http://www.ebi.ac.uk/ena/data/view/Taxon:9606>, described in <http://www.ebi.ac.uk/ena/about/page.php?page=browser#1.8>) and EBI are currently engineering a more robust backend data warehouse to support this. Visit <http://www.ebi.ac.uk/ena/data/view/Taxon> to test this out by typing in the name of a species. There are some 826,148 taxa in the EBI database.



Over the next two years the i4Life project will develop tools to allow the cross referencing of the global partners' taxon names with the taxonomically edited Catalogue of Life list. This will allow a gap analysis of taxonomic coverage among them to identify missing taxa from the Catalogue and to help complete the taxon lists in the global partners served data.

We had a successful meeting in Berlin in September. It was focused on the revision of tools developed in the project and planning the next steps.

The first i4Life workshop: CoL interaction with GNA was held in the CODATA premises in Paris in November.

i4Life has just entered the second year. During the first year, the project focused on developing the tools which allow the flow of data among CoL and the other major portals. WP2 and WP4 have completed development of the internal i4Life download service and successfully agreed on the standard which will be used across the project for data exchange. WP11 has provided a preliminary version of the cross-mapping tools enabling partners to compare their species lists and discover which taxa are missing. Further developments will be focused on the relations between taxa listed in different catalogues. The i4Life Piping tools are being developed by WP12. The first part of the tool - the supply-side pipeline is now being tested by the global partners.

A successful meeting between the Management Committees of the i4Life and 4D4Life projects was held in Prague in March - for more details, see page 2.



i4Life

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The CoL is now Tweeting

The Catalogue is now extending its online presence with twitter. Come and see our tweets at: <http://twitter.com/catalogueoflife>

