David Ride’s contributions to zoological nomenclature were monumental and live on in the legacy of the Code. The Commissioners and Members of the Trust extend sincere condolences to his family and friends.


Professor Frank A. Bisby (1945–2011), Director Catalogue of Life and Species 2000
Frank A. Bisby was the initiator and director of the Catalogue of Life and Species 2000, and several other major biodiversity informatics projects that were closely linked with the work of the ICZN. He died unexpectedly on 25 October, the day after the announcement of the release of the 2011 edition of the Catalogue of Life (CoL). This dynamic database lists 1,370,276 species (with ‘accepted names’ and limited synonymies) sourced from 101 databases that are validated by taxonomic specialists. It is widely seen as the most complete taxonomic e-infrastructure project for living organisms today. Frank was keen on collaboration with the ICZN and worked to ensure that the nomenclatural authority that will be available through ZooBank is linked with the taxon concepts presented in CoL.

Frank Bisby was also Professor of Botany at Reading University, U.K. with a speciality in legumes. He was an inspirational teacher, who was particularly popular for his field courses. He had moved to Reading from a faculty position at Southampton University after finishing his PhD at Oxford.

Frank Bisby was a leader with vision, bringing together teams of people to contribute skills in a global endeavour of cataloguing the world’s species. His contributions were enormous and he will be missed.

**Anchoring Biodiversity Information: From Sherborn to the 21st century and beyond**

Charles Davies Sherborn provided the bibliographic foundation for current zoological nomenclature with his magnum opus *Index Animalium*. In the 43 years he spent working on this extraordinary resource, he anchored our understanding of animal diversity through the published scientific record. No work has equalled it since and it is still in current, and critical, use.

Until now, Sherborn’s contribution has been recognised and relied upon by professional taxonomists worldwide but he has escaped the celebration of his accomplishment that is his due. This changed on Friday, 28 October 2011, with a symposium in his honour in the 150th year of his birth organised by the
ICZN, in collaboration with the Society for the History of Natural History at the Natural History Museum (NHM), London. The full day meeting included an international panel of experts on bibliography and biodiversity bioinformatics who linked a view of the past with an active debate on the future of the related fields.

The symposium was structured with an introduction to Sherborn as a man, scientist and bibliographer, then provided historical context for taxonomic indexing from the 19th century to today. Current tools and innovations were presented. The final sessions tackled the future of biological nomenclature, including shifting publishing modes and changing sociology of science in taxonomy. There were fifteen talks from distinguished speakers from around the world, and ten posters, including an exhibition of 'Sherborniana', or artefacts from Sherborn's tenure at the NHM.

The event was very well attended, with an audience of over 120 people present throughout most of the day. As the composition of the audience changed somewhat throughout the day, the number of people celebrating Sherborn was impressive.

The symposium was dedicated to Professor Frank Bisby, whose untimely death a few days earlier had shocked and saddened the biodiversity informatics community. Frank had initiated and directed Species 2000 and the Catalogue of Life, ambitious global taxonomy projects that build on the foundation laid by Sherborn’s indexes.

The global and temporal reach of this event is being extended through podcasts of all the talks, posters and discussion, including slides and poster downloads, and videos of all the talks available through this site: iczn.org/sherborn and http://backdoorbroadcasting.net/2011/10/anchoring-biodiversity-information-from-sherborn-to-the-21st-century-and-beyond/

The event was organised and sponsored by the ICZN (Int’l Commission on Zoological Nomenclature) and the Society for the History of Natural History, with significant sponsorship support from the Linnean Society, BHL-Europe (Biodiversity Heritage Library-Europe), Pensoft Publishers (ZooKeys), The NHM – Natural History Museum, and ViBRANT – Virtual Biodiversity.

The inaugural plenary talk was given by Neal Evenhuis, who provided personal and highly sympathetic insights into the incredible drive and bibliographic skills Sherborn had to harness in his effort to make an essentially universal index to all animal names. Evenhuis served as a Commissioner and President of the ICZN for many years, and is a self-described ‘index-aholic’ whose wit made Sherborn’s labours seem a natural endeavour, at least for those of a Herculean mindset. Gordon McOuat provided a sparkling overview of the evolution of nomenclatural codes and controversies in the decades around Sherborn, bringing the history of science to life.

Edward Dickinson presented a detailed scrutiny of Sherborn and Richmond’s indexes in ornithology, a taxonomic best-case that illuminates problems that need attention in the larger whole of the corpus. Chris Thompson explained how research on the important (and beautiful!) megadiverse insect group Diptera has benefited from building an outstanding bibliographic index based on Sherborn’s original work, with modern tools and additions providing a resource of greater utility than even Sherborn could have imagined. Suzanne Pisk, with extraordinary zing, described how the Smithsonian libraries have made Sherborn’s Index Animalium accessible online and how this is the dawn of a new age for bibliographic information access as we go from paper to bytes. This was followed by a companion talk from Nigel Robinson, who showed how Zoological Record’s Index of Organism Names...
integrated *Index Animalium* in collaboration with the Smithsonian libraries, creating a continuously updated bibliographic source for published names.

The session covering current practice in bringing information into the modern age began with Chris Lyal’s pertinent observations on limitations of digitizing objects and information. Lyal underscored our current tendency to build forward from the past, using e-charged traditional methods with digital analogues of paper, rather than developing new tools that make the most of cybertechnology and assessment of future needs and opportunities. Henning Scholz gave a thorough overview of the monumental resource that the Biodiversity Heritage Library (BHL) has become, increasing the efficiency of access to early published literature and increasing archival stability for historical works. David Remsen showed how GBIF’s (the Global Biodiversity Information Facility) 300 million records are linked through nomenclatural and taxonomic authority files, thus is an expansion on Sherborn’s dream. In a tectonic talk presenting results of ICZN committee deliberation, Daphne Fautin, with Miguel Alonso-Zarazaga, detailed the requirements and opportunities for Lists of Available Names (LANs) to proceed through ICZN Article 79 to stabilise large taxonomic sections of nomenclature at once. Although it is not a light task to implement a LAN, a result is that ‘nomenclatural archaeology’ will find the footing pulled out from under it, thus increasing stability and transparency in scientific names of animals.

In the final session Chris Freeland showed how museums and libraries are enhancing educational outreach, scholarly dissemination and archiving by pursuing a focused programme to make information electronic. Despite a volatile technology landscape, progress in scanning prints, manuscripts and specimens has been prodigious and benefits are irrefutable. Sandra Knapp got back to the source, suggesting that evolution or revolution is necessary to change the way taxonomists work and how we compile the ‘definitive references’. Knapp emphasised that modern tools allow, indeed require, the modern equivalent of the monograph to be broader and richer in data content and more regularly updated, and that the role of the taxonomist must become as a collaborative partner, not sole executer, in these works. Lyubomir Penev followed this with a very practical glimpse of what revolutionary e-tools look like, presenting the new work flow and publishing mechanism developed by the journal *ZooKeys*. He pointed out that technical tools can radically change the landscape for the persistent, intractable controversies of registration and e-publication across all biological nomenclature. Rod Page took no prisoners with his manifesto for a truly ‘open taxonomy’. His criticism that taxonomy today is only marginally open, not really digital and not notably linked was followed by suggestions of ways this could change with concerted focus and shared vision from the taxonomic and bibliographic community.

The wrap-up plenary by Richard Pyle made a convincing case that, even in this time of major technological improvements across taxonomic science, the most revolutionary change is the means by which we manage and communicate information to the world. Pyle showed how a multitude of major taxonomic resources are all linked through taxonomy and nomenclature. The granddaddy of all the taxonomy projects, where it all comes home, is the GNA (Global Names Architecture), which will be the dynamic index to interconnect and streamline the entire taxonomic enterprise. Finally, a panel discussion was held under the banner ‘What Would
Fig. 1. Anchoring Biodiversity Information: From Sherborn to the 21st century and beyond (1) Graham Higley, Head of NHM Libraries & Archives and BHL Chair, dedicates the symposium to Professor Frank Bisby, whose untimely death a few days before shocked the biodiversity informatics community; (2) Neal Evenhuis presents an insightful plenary on the mind of an indexer, with a cartoon drawn by Sherborn in the background showing his exhaustion at the end of his Herculean task; (3) Daphne Fautin and Miguel Alonso-Zarazaga present the results of ICZN Committee deliberation on Lists of Available Names (LANs, Article 79) with a graphic indicating the tension between taxonomic and purely nomenclatural inclusiveness of LANs; (4) Suzanne Pilsk describes the bibliographic and informatics challenges of getting Sherborn’s *Index Animalium* online; (5) Chris Freeland puts Sherborn in his crystal ball for the future of biodiversity publishing; (6) Richard Pyle raises a fist in support of Global Names Architecture, showing how taxonomy and names are the nexus for all biodiversity information in his closing plenary talk; (7) Chris Thompson fires another fierce and insightful question; (8) the full panel of speakers under the heading *WWSD? What would Sherborn Do?* From left to right: Suzanne Pilsk, Chris Lyal, Henning Scholtz, Edward Dickinson, Neal Evenhuis, Daphne Fautin, Sandy Knapp, Lyubomir Penev, Rod Page, Chris Thompson, Chris Freeland, Gordon McOuat, (behind podium Richard Pyle; David Remsen).
Sherborn Do? with all the speakers taking questions from the audience. This provided a lively debate on the importance of names, the role of publishing and the future for scientific bibliography. It was agreed that we have powerful new tools at our disposal, but the major challenge for the future is the required sociological shifts in how taxonomists work and how information is presented. Sherborn would have been proud.

Introduction to the Programme, Dedication to Frank Bisby
Ellinor Michel (ICZN) & Graham Higley (BHL & NHM Libraries)

Session 1: History of Taxonomic Literature, Indexing and Traditional Taxonomic Nomenclature

Opening Keynote: SHNH Annual Ramsbottom Lecture Neal Evenhuis (Bishop Museum): Sherborn: Work history and impact of bibliography, dating and zoological informatics
Gordon McOuat (University of King's College, Halifax): Sherborn's context: Cataloguing nature
Edward Dickinson (Aves Press): Reinforcing the foundations: Filling in the bibliographic gaps in the historical legacy
F. Christian Thompson (Smithsonian) & Thomas Pape (Copenhagen): Systema Dipterorum: Sherborn's critical influence in getting information control over a megadiverse group
Smithsonian Institution Libraries (Suzanne Pilsk, Martin Kallatovic & Joel Richard): Unlocking the Index Animalium: From paper slips to bytes and bits
Nigel Robinson (Zoological Record): Sherborn's Index Animalium integration into ION: access to all

Session 2: Current Taxonomic Practices

Chris Lyal (NHM): Digitising legacy taxonomic literature: processes, products and using the output
Henning Scholz (Museum für Naturkunde Berlin): BHL-Europe: Tools and Services for Legacy Taxonomic Literature
David Remsen (GBIF): Biodiversity Informatics: GBIF's role in linking information through scientific names
Daphne Fautin (Univ. Kansas/ICZN) & Miguel Alonso-Zarazaga (MNCN-CSIC/ICZN): LANs: Lists of Available Names - a new generation for stable taxonomic names in zoology?

Session 3: Future of Biological Nomenclature

Chris Freeland (Missouri Botanical Garden): Preserving digitized taxonomic data: problems and solutions for print, manuscript and specimen data
Sandra Knapp (NHM/IAPT/TZCN): New workflows for describing and naming organisms
Lyubomir Penev (Pensoft Publishers): ZooKeys: Streamlining the registration-to-publication pipeline
Rod Page (University of Glasgow): Towards an open taxonomy

Closing Keynote and wrap-up plenary discussion. Richard Pyle (Bishop Museum): Towards a Global Names Architecture: The future of indexing scientific names