

Our Activities

Biological Collections: A standard for record-level details about existing and emerging biological collection data banks.

Collections Descriptions: A Standard for describing collections of biologically-related items

Darwin Core: Facilitate the exchange of information about the geographic occurrence of organisms and the physical existence of biotic specimens in collections.

Geospatial: The spatial aspect of biological and biodiversity observations

Globally Unique Identifiers: Standardize the use of globally unique identifiers within the Biodiversity Informatics community.

Images: Managing and transferring descriptive information about media including metadata terminologies, ontologies, descriptions, file exchange formats, and associated resources.

Invasive Species: Standards for expressing and transferring information about invasive species, including taxonomies, distributions, terminologies, descriptions, identification tools, invasiveness and management information.

Biological Descriptions: Mechanisms for expressing and transferring descriptive information about biological organisms, including terminologies, ontologies, descriptions and identification tools.

Taxonomic Names: Data models for representing taxon names and taxon concepts (taxa) and how these are related to other biodiversity information models.

Technical Architecture: Develop a common architecture for TDWG, and to provide advice to the Executive Committee, group Convenors and members about technical aspects of TDWG standards.

Transfer Protocols: A standardised, stateless, HTTP transmittable, XML-based request and response protocol for accessing structured data that may be stored on any number of distributed databases of varied physical and logical structure.



Biodiversity Information Standards T D W G



<http://www.tdwg.org>

Chair: Professor Walter Berendsohn

Secretary: Adrian Rissóné

Treasurer: Stanley Blum

GBIF Liaison: Donald Hobern

Project Liaison: Lee Belbin

Regional Representatives: Alex Chapman (Australia), Gerald Guala (North America), Renato De Giovanni (South America), Nozomi Ytow (South East Asia)

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Information Technology Skills Needed to Support Biodiversity Standards



“When we try to pick out anything by itself, we find it hitched to everything else in the Universe”

John Muir

Biodiversity Information Standards

Biodiversity Information Standards (TDWG) was known as the Taxonomic Database Working Group. We develop international standards and protocols for the exchange of natural history and biodiversity data.

Our standards are used by museums, botanical gardens, research departments, government agencies and organizations who work with any type of biological data.

Our standards enable biological data to be managed more effectively in databases, then shared and discovered over the Internet.



Use your skills to help save the planet!

The diversity of our members is our strength. Members include biologists, information technologists, bioinformaticists, taxonomists, ecologists, librarians, geoscientists... and more.

Biodiversity Information Standards is affiliated with the International Union of Biological Sciences. We collaborate with other international initiatives such as GBIF, OGC, Species 2000, ZooBank, IPNI, CODATA, uBio, NBII, and many others who encourage the open sharing of biological data.

We Need People with IT Skills

If you have a background or interest in any aspect of Information technology, we need your help: We have biologists, taxonomists, zoologists, geoscientists who know what they need to do when it comes to sharing data.

But, this community does not have information technology skills to advance the development of international standards at the rate that is now required if we are to conserve the planet.

Biodiversity
Information
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We urgently need people skilled in

1. Requirements gathering, application design, prototyping.
2. Semantic web technologies - with a grounding in practical applications.

This is extremely important work. Biological scientists and Earth scientists are increasingly aware of the inter-relatedness of all things on Earth. They find they need to share data about oceans, land cover, atmosphere, soils, aquifers, and particularly living species. It is the 'biological bit' that is complex. The urgency of sharing bio-data needs a concerted global effort to develop and implement relevant information technology standards.

Challenges

1. How can new Internet technologies (Web 2.0) be used to better integrate heterogeneous biodiversity data from multiple sources?
2. Can we develop highly visual tools for effective mash-ups and analysis of biodiversity data by the biological community?

Our Goals

1. Develop, adopt and promote standards and guidelines for the recording and exchange of data about natural history
2. Promote the use of standards through the most appropriate and effective means and
3. Act as a forum for related discussions

Getting Involved

You do not have to be a member to be involved with the development of TDWG standards, but it helps. The list of current activities can be found at <http://www.tdwg.org/activities>

Each activity is supported by a group. The group charter outlines what the group is doing and what help it needs. All groups need help with particularly IT skills.

If you want to help, please register (at no cost) on the web site nominating an activity or group that you want to get involved with <http://www.tdwg.org/membership/registration/>

Then email the Convener of the group—they will be very glad for any help that you can provide.

More Information

If you would like more information, please contact lee@tdwg.org (UTC+10) or adrian@tdwg.org (UTC) and we would be glad to answer any questions.

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