



IMPLEMENTING THE GLOBAL TAXONOMY INITIATIVE OBJECTIVE 3: INCREASING ACCESS TO TAXONOMIC INFORMATION IN MESO-AMERICA

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Implementing the Global Taxonomy Initiative

The CBD has developed the Global Taxonomy Initiative (GTI) to help implement the Convention.

To implement the CBD taxonomists need information of many types, e.g.:

- Images of living organisms, specimens and dissections
- Data from specimens held in collections worldwide
- Published information, including original descriptions, identification keys, revisions
- Information on names
- Geographic information
- Molecular sequences
- A wide variety of ecological information



Information can be found in many unconnected places:

- Collections of specimens
- Databases
- Publications
- 'Grey' literature
- Index cards
- Field notebooks



Most taxonomists, other researchers and 'users':

- Cannot access all these information sources
- Do not know how to find them
- Cannot afford the time and money to travel to the institutions where they are held

Consequently:

Only a limited amount of the potential information are used in most work, limiting the completeness and effectiveness of the results, and hindering implementation of the CBD

An Information System to solve the problem

Operational Objective 3 of the Global Taxonomy Initiative Programme of Work is to provide a global taxonomic information system.

All information should be accessible:

- From any location
- With user-friendly front ends



Which seamlessly access and make interoperable appropriate databases around the world

The Biología Central-Americana Centennial project

Responding to the GTI mandate:

A vision for electronic access to taxonomic resources

The Biología Central-Americana:

- A fundamental work for the study of New World biota
- Issued 1879 – 1915 by The Natural History Museum (London)
- Leading biologists of the time provided treatments
- Includes most everything known at the time about the region's biological diversity
- For many groups still the current state of published knowledge
- 63 volumes with 1677 plates covering 50,263 species of plants, vertebrates, insects, spiders and related invertebrates, and mollusks
- The entire 63 volume BCA believed held by only 8 libraries; many other libraries hold individual volumes or partial sets
- A few volumes have been republished but never the entire series
- Some Central American countries lack a complete set and the BCA is not generally accessible to taxonomists working in the region



Phase I:

Create images in multiple formats of all 40,000 pages of the 58 biological volumes, including illustrations, and make freely available on the World Wide Web



Phase II:

- Create eXtensible Markup Language (XML) schema for taxonomic literature
- Apply to BCA and digitize full text
- Information in the BCA text will be searchable and addressable with web tools
- Make freely available on the World Wide Web



Phase III:

- Link the digitized text to the digital Flora Meso-Americana (and similar modern works)
- Link to specimen, taxonomic and geographic data, and to images
- Ultimately, information from all sources will be interoperable and treated by web-based analytical tools



Current state of project

- Funding for Phase 1 and much of Phase 2 obtained by Smithsonian Institution Libraries
- All pages now turned into JPEGs and web access planned for January 2004
- Currently developing XML schema applicable to all taxonomic literature

Project web page:

<http://www.sil.si.edu/bcaproject/index.htm>



Project Partners

This is a collaborative project, including: Smithsonian Institution (NMNH, SI Libraries, STRI), USA; The Natural History Museum, London, UK; The National Commission for the Knowledge and Use of Biodiversity, Mexico (CONABIO); Instituto Nacional de Biodiversidad, Costa Rica (INBio); Missouri Botanical Garden, USA; American Museum of Natural History, USA; Royal Botanic Gardens, Kew, UK; Museo Entomológico de León, Nicaragua; Global Biodiversity Information Facility ... and you



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