Bi Byte
The Quarterly Newsletter of
Project BioMap

www.biomap.net

Increasing biodiversity knowledge to support conservation

Issue 2 | May 2002 | Page 1 of 4

E d i t o r i a l

Why Museums Matter:

Making Bird Collection Data Available for Biodiversity Studies

The world's museums comprise great hidden storehouses of data on the distribution of animals and plants. For example, the bird collections of The Natural History Museum at Tring, contain almost one million bird skins obtained from all over the world during the past 200 years, with a majority of these having sufficient data on their labels to give useful insight into where the specimens came from. For museums as a whole this number of specimens can be increased at least ten-fold. However, the problem lies in bringing these data together in ways in which their potential can be fully realised.

For some of the smaller museums, and a few of the larger, the information associated with specimens has already been computer databased, but for most it exists only on specimen labels and, sometimes, in museum registers. Even when the data for individual specimens are available electronically, problems may exist in the accuracy and lack of standardisation of the transcribed information, often arising from databasing having been considered as a 'simple clerical task' and approached accordingly, as well as in the lack of geo-referencing.

Based on my experiences as manager of The Natural History Museum's bird collections over the past several years, the most satisfactory way of making our specimen data available comes through the forming of partnerships with experts, whether on particular taxa or on the birds of particular countries, who are willing to undertake the databasing themselves because they have a vested interest in using the results in their own work. Costs can be shared, and the knowledge of the experts permits rapid and standardised solutions to the intricacies of archaic taxonomy and obscure place names as well as, on occasion, detection of mis-labelled specimens. Recent examples of such comprehensive databasing of NHM bird specimens include all our holdings from Mexico and Spain, as well as all our Caprimulgidae.

Along with the challenge of getting the specimens databased in individual museums is the requirement to combine these data with others from museums worldwide. There is an urgent need for museums to explore ways of linking together information available on their holdings electronically, thereby moving towards an ultimate goal of complete syntheses in forms available for biodiversity documentation. Project BioMap has been conceived with the aim of achieving all of this for Colombian birds. Already underway, this will require a rolling programme of reaching agreements with individual museums to allow their data to be brought together, combined with a huge databasing effort from the expert staff of Project BioMap over the coming years. The challenge is substantial but the rewards should be great, as we work together to release the potential inherent in the world's combined museum resources!

Dr. Robert Prys-Jones,
Chair of BioMap Alliance Committee, rpp@nhm.ac.uk

Conservacion Internacional Colombia | The Natural History Museum | Center for Applied Biodiversity Science at Conservation International | Darwin Initiative | Instituto de Ciencias Naturales | King's College London, University of London

NewsBytes

February 4: Commenced cataloguing in ICN.

February 28: The first issue of BIOBYTE newsletter (English and Spanish versions) was emailed to over 500 people and institutions as well as downloadable from www.biomap.net.

March 25-27: BioMap presented at the International Student Conference on Conservation Science in Cambridge.

April 2: BioMap visits the bird collection of Laboratoire des Mammifères & Oiseaux, Musée d'Histoire Naturelle de Paris. Many thanks to Eric Pasquet and Rémy Bruckert.

April 11-12: BioMap participated in the Colombian 'Congreso Ambiental Nacional', held in Bogotá.

April 15: Memorandum for museum cooperation drafted.

April 22-26: BioMap poster presentation at Conservation International's Annual Meeting, 'Zero Biodiversity Loss'.

April 30: First year Darwin Initiative Report completed.

March-April: Increasing website hits!
www.biomap.net: 1,138 hits; 202 downloads of BioByte#1!
www.nhm.ac.uk/zoology/biomap: 275 hits.
.....and still increasing in May 2002!

April 30: WorldMap analysis program capacity enhanced for point-locality analysis to 5x5 km grids in Colombia.

May 15: Databasing in the USA commenced at AMNH by the Darwin Fellows.

BioMap logo

Selected by BioMap Alliance Partners with the grid and recognizable outline of South America signifying representing data dissemination and mapping of biodiversity.

The Andean Condor is the National Bird of Colombia and seen on their national flag (see background right).

General NewsBytes

The Data Entry Tool was completed and will soon be online.

Copenhagen Biosystematics Centre-COBICE (Denmark) is to support BioMap for three weeks cataloguing their bird collection – many thanks to Dr. Jon Fjeldså for his support.

Thanks to the San Diego Natural History Museum and Philip Unitt for providing Colombian specimen details, but we were unable to access the collection, owing to remodeling work.

The American Museum of Natural History in New York is assisting BioMap by subsidizing the living costs of Darwin Fellows for the duration of cataloguing – many thanks to Joel Cracraft, Paul Sweet and Thomas Trombone at the AMNH.

In April, we launched a new BioMap initiative; the 'BIOMAP ALLIANCE PARTNERSHIP' – an agreement for participating institutions, principally of institutions and organisations that contribute information to the Darwin Database. We aim to establish a global BioMap Alliance partnership during the project. The agreement is going through the final stages of ratification by the core BioMap partners before distribution to institutions and organisations.

BioMap Diary

June 1-15: Zoological collection management course at ICN.

June 15: UK & Colombia press release of Project BioMap.

June 17: Darwin Seminar in London - BioMap presentation.

July 5: BioMap presents at the Annual Conference of the Society of Conservation GIS 'Biodiversity Spatial Datasets: Essentials for Information Interchange' in California, USA.

July 15: Data Entry Tool for Observation data released.

August 15–19: Technical workshop for monitoring birds in the Otún-Quimbaya Flora & Fauna Sanctuary (BioMap).

August 30: Issue 3 of BioByte emailed. Includes editorial *Collecting for conservation* by Dr. Gary Stiles.

August 30: HIGH LAT & Parsyst application deadline.

Sept 23: King's College MSc term commences.

November 7–11: XV Colombian Ornithological Meeting in Valledupar.

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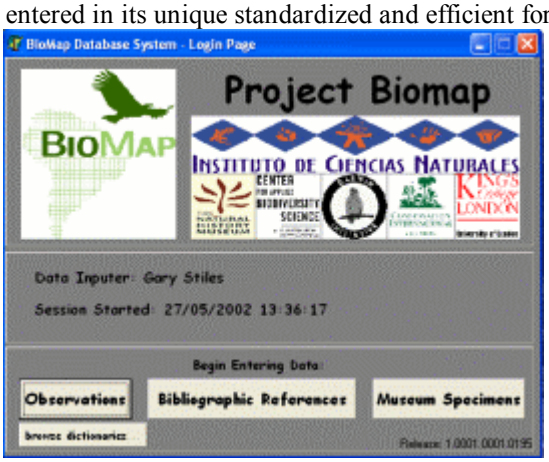
Data Entry Tool

Our special THANKS goes to **Alvaro Espinel** at CI-CABS for a colossal effort in getting the BioMap Data Entry Tool ready for starting cataloguing. It has been a challenge as the Tool programmer left suddenly and stalled the program's final release. However, the database has been through a rigorous testing phase and is now at full steam with data being entered in its unique standardized and efficient format.



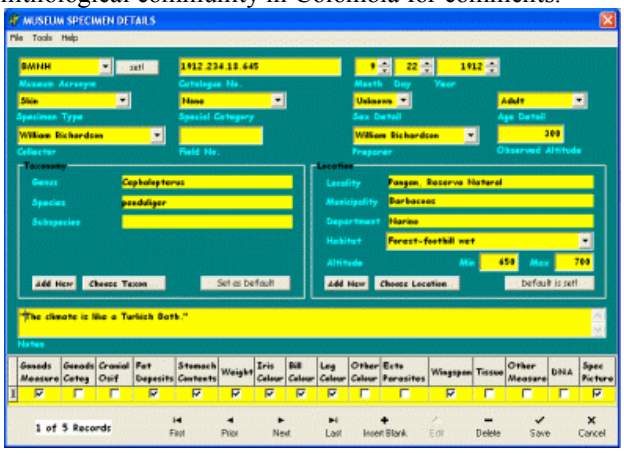
The Data Entry Tool, developed in Delphi programming language, is available in two packages (publicly from July):

1) The complete Tool where databasing specimens, literature and observations can be undertaken.

2) Specifically for bird observations, so that birders and ornithologists can input their sightings quickly and simply. The Tool also permits users in export or import into Excel so has the convenience that non-users can receive and review sightings.

To request a copy email biomap@nhm.ac.uk. The file is 4.28 Mb (zipped) and comes with a complete listing of all Colombian bird taxa and over 1,500 site localities. They can also be downloaded from the project website.

The Data Entry Tool for Observations is undergoing further rigorous testing and will be translated for final public release in early July. We'll keep you posted when this is published. The next step will be to circulate the program to the ornithological community in Colombia for comments.



BioMap staff news

After another hectic three months of setting up the project by the Project Manager, **Paul Salaman**, there is much good news to report. The period has been full of great developments and, importantly, the commencement of the core objective of the project – databasing specimens in North America, Europe, and Colombia. Despite delays getting travel visas and finding computer programmers we have managed to stay on track for our key activities to date.

Paul is supervising the two Darwin Fellows in AMNH; has visited the Paris Natural History Museum as well as contacted various other collections in the USA and Europe; completed the first-year Darwin Report; and presented at one international conference and a workshop. The extent of open cooperation and eagerness to participate in BioMap by collections has been quite overwhelming. This exemplifies the true spirit of cooperation by bird collection managers, to assist conservation and research objectives and encourage the databasing and ground-truthing of their own specimens.

Darwin Fellows **Juan Carlos Verhelst** and **Clara Isabel Bohórquez** were prevented from starting on time at the AMNH by a month-long delay in the US Embassy issuing travel visas. When their passports and visas finally arrived, Juan Carlos and Clara immediately commenced databasing the largest foreign bird collection of Colombian specimens – AMNH contains the famous Chapman expedition collections from 1910–1915. We extend our gratitude to Thomas Trombone, Paul Sweet, and Joel Cracraft, in the Department of Ornithology, who have been very helpful and patient.

In Colombia, the Colombian Coordinator – **Sussy de la Zerda** – reports that the project has advancing very well these past three months. Much time has been spent expanding dictionaries and testing the Data Entry Tool and coordinating Andrea Morales and Diana Arzuza working in the ICN collection, as well as preparing a course and workshop. Other activities have included liaisons with the Museo de La Universidad Javeriana (Fabio Gómez and Camilo Peraza), Museo de la Universidad de Caldas in Manizales (Jesús Vélez and Andrés Mauricio López), and Instituto Geográfico Agustín Codazzi to determine obscure location data. Meetings and informal discussions have taken place with María Lucía Rosas (Proyecto Chocó Biogeográfico), Carlos Niño (Geospacial), Pablo Leyva (ICN), Patricio von Hildebrand (Fundación Puerto Rastrojo – Atlas de la Amazonía), and Fernando Salazar (ProSierra). David Riaño, María Lucía Rosas and Luis Germán Naranjo (WWF) have greatly helped with bibliographic information.

From February, **Andrea Morales** and **Diana Arzuza** have been systematically databasing the ICN Ornithological Collection with specimens of three Families (Parulidae, Vireonidae, and Coerebidae) completed.

Identification of difficult subspecies has been greatly assisted by Professor Gary Stiles, who oversees taxonomical and

locality problems. Sussy, Andrea and Diana have further enhanced their training by participating in an excellent course titled 'Managing Collections' at ICN held throughout May. Many thanks to course director Yaneth Muñoz.

The ICN collections has already yielded 170 additional locations to the Ornithological Gazetteer of Colombia (Paynter 1997), and a further 48 locations are being determined. Geo-referencing is laborious, as over 90% of new locations include no coordinates. To aid us, we have various detailed maps, the *Diccionario Geográfico de Colombia* (Instituto Geográfico Agustín Codazzi 1971), *Listado de Coordenadas Geográficas de Municipios y Corregimientos Departamentales de Colombia* (June 2000), plus the Colombian mapping institutions – IGAC – is around the corner from ICN and frequented regularly!

Despite these difficulties, with increasing experience and streamlining of the Data Entry Tool, databasing efforts have excelled in recent weeks. Andrea and Diana are preparing to produce BioMap presentations for the XV Nacional Ornithological Congress in Valledupar, November 2002.

BioMap Workshop Plans

From late May the BioMap staff in Colombia will have a once-weekly workgroup discussion that will include reviews of recent articles relevant to the project. The group, with Gary Stiles, will also undertake field excursions into Cerros de la Sabana, near Bogotá, to train in collecting and preparing specimens.

Following on from the highly successful BioMap training course in January, we're presently planning an advanced fieldwork training course during August in Otún-Quimbaya Flora & Fauna Sanctuary (Central Colombia) for 60 dedicated ornithology students from across Colombia.

In alliance with Fundación ProAves, who are jointly organizing the course, BioMap staff (Sussy, Andrea and Diana), together with Gary Stiles will conduct a series of practical fieldwork courses over a five-day period. This will include mist-netting techniques, preparing specimens, databasing records, and bird conservation. Details of the course will be posted on www.biomap.net shortly.

Furthermore, Project BioMap is making available eight scholarships covering 50% of the course fee. If a success, there is potential for similar future ventures to encourage the rapidly growing body of students interested in ornithology.

Sussy de la Zerda and Gary Stiles are presently planning an important workshop for October 2002 at ICN, Bogotá. The aim is to gather the key ornithological curators in Colombia to undertake a weekend workshop to explore closer collaborative links and potential proposals for strengthening the ornithological collections in Colombia.

BioMap Directive Committee

Robert Prŷs-Jones (chair) – The Natural History Museum
Gonzalo Andrade and **F. Gary Stiles** – Instituto de Ciencias Naturales, Universidad Nacional de Colombia
Jose Vicente Rodriguez – Conservation International, Colombia
Alvaro Espinel –Conservation International, Center for Applied Biodiversity Science, USA