



# iabin

Inter-American Biodiversity Information Network



## Pollinators Thematic Network

*The Pollinator Information Network of the Americas*

Facilitating the discovery, collection, digitization, management, and exchange of pollinator data in the Americas

Pollinators provide an essential ecological service to over 75 percent of the world's wild and cultivated flowering plants and an estimated one-third of the food consumed by humans. There is a positive correlation between plant diversity and pollinator diversity. Recent studies in Europe and the Americas have concluded that rapid declines are evident in some very important pollinator populations including honey bees (*Apis mellifera*). While declines are suspected in populations of many other species of pollinators, in many cases, data and experts are not available to test this hypothesis.

The successful monitoring, management, and conservation of pollinators will depend on the availability and accessibility of pollinator data and information. In 2002, the Conference of the Parties to the Convention on Biological Diversity (CBD) invited "Parties and other Governments, and relevant Organizations to contribute to the implementation of the International Pollinators Initiative," which promotes "coordinated action worldwide to monitor pollinator decline, its causes and its impact on pollination services; [and] addresses the lack of taxonomic information on pollinators" (COP Decision IV/5 2002).

### Building a Network for Pollinators

Established at the Summit of the Americas for Sustainable Development in Santa Cruz, Bolivia, in 1996, the Inter-American Biodiversity Information Network (IABIN) has a mandate from the Heads of State of the Americas and the Organization of American States (OAS) to organize and make available online biodiversity information in the Western Hemisphere. IABIN has received a grant from the Global Environment Facility, implemented through the OAS, to facilitate this task.

One of five IABIN thematic networks, the Pollinators Thematic Network (PTN), was initiated in May 2006 with \$180,000 in funding from the World Bank. The network will address the needs and information gaps identified by the CBD, and by the pollinator research and conservation communities. Coordinated by The Pollinator Partnership (P2), the PTN will be developed by a consortium of organizations consisting of the University of Sao Paulo (Laboratory of Agricultural Automation and Bee Laboratory), the Integrated Taxonomic Information System, and the National Biological Information Infrastructure (NBII) of the United States Geological Survey (USGS).

*The Conference of the Parties to the Convention on Biological Diversity "invites Parties and other Governments, and relevant organizations to contribute to the implementation of the International Pollinators Initiative" (COP Decision IV/5 2002).*



Photo credit: Elizabeth Sellers, NBII

*A tiny bee – one of the most important pollinators in the world – forages among the flowers of an Aldrago tree in Brazil.*

### Data and Standards for Pollinators

In July 2008, the PTN held a technical workshop in conjunction with the 8th Meeting About Bees in Ribeirão Preto, Brazil. Representatives from the pollinator research and conservation communities reviewed network development progress and defined the network's content acquisition strategy and plan for integration with other networks. Pollinator community needs, data availability, and standards for effective pollinator information collection, exchange, and management were reviewed. Three DarwinCore schema extensions (Interaction, Pollination, and Environment Measures) that the PTN is developing with international partners were also examined and tested against real world examples. Grant recipients also presented progress reports and received training on the PTN Data Digitization tool <<http://groselha.pcs.usp.br/sowb/>>, which implements the Interaction extension; the PTN Data Portal <<http://iabinptn.pcs.usp.br/>>; and on the Pollinator and Pollination Contacts Database that is now

available online at <<http://groselha.pcs.usp.br/contacts/>>.

The 2008 workshop continued the work initiated at a joint workshop held in December 2006 in collaboration with the Global Biodiversity Information Facility (GBIF), the Food and Agriculture Organization of the United Nations (FAO), the Reference Center on Environmental Information (CRIA) in Brazil, the National Biodiversity Institute (INBio) in Costa Rica, the American Museum of Natural History, and others.

### **Making Pollinator Data Available**

Recognizing the contributions of GBIF to making pollinator specimen data widely and freely available, the PTN will cooperate with GBIF and encourage owners of pollinator specimen data to make them available through GBIF. Where necessary, the PTN will provide data hosting services to pollinator data owners. The PTN will also work to implement standards and develop tools for the management and dissemination of pollinator observation data.

### **Bringing Pollinator People Together**

The first of several tools being developed by the PTN, the Pollinator Contacts Database provides access to contact information for people knowledgeable in pollinator species biology, ecology, taxonomy, research, habitats, and other related subjects. In addition to the Pollinator Contacts Database, the PTN is working with international data holders to develop an online Pollinator Data Portal modeled after and integrated with

GBIF. This portal will provide access to pollinator and plant-pollinator association data. This and other products of the PTN will be widely and freely available via the Internet.

To support the continued growth of the IABIN PTN, the University of Sao Paulo developed an intranet portal and listserv that is hosted by the Foundation for Research Support of the State of São Paulo (FAPESP) online at <<http://pollinators.incubadora.fapesp.br/portal>>. The NBII developed and hosts the PTN Web site at <<http://pollinators.iabin.net>>. Through these and other tools the PTN will facilitate communication and collaboration among international pollinator people and data holders.

### **Training in 2009**

Training sessions will begin in 2009 to ensure that digitization of new data is conducted to the highest scientific standards and that the protocols are easy even for those inexperienced in data entry. Contact <[info@pollinator.org](mailto:info@pollinator.org)> for information about training.

### **An International Priority, an International Mission**

With the assistance and facilitation of the OAS for activities within the Western Hemisphere, the PTN will facilitate the discovery, collection, digitization, management, and exchange of pollinator observation and collection data together with, and in support of, The Forgotten Pollinators Campaign (1996), the North American Pollinator Protection Campaign (1996) (also administered by The Pollinator Partnership [P2]), the Brazilian Pollinator Initiative (1998), the

African Pollinator Initiative (1999), the International Pollinator Initiative in the Convention on Biological Diversity (2000; 2002), and the European Pollinator Initiative (2004).

### **For More Information**

Laurie Davies Adams  
Director  
The Pollinator Partnership (P2)  
432 Washington Street, 5th Floor  
San Francisco, CA 94111-2339 USA  
Phone: 415-362-1137  
Fax: 415-362-3070  
E-mail: [LDA@pollinator.org](mailto:LDA@pollinator.org)  
<[www.pollinator.org](http://www.pollinator.org)>

Dr. Antonio Mauro Saraiva  
Coordinator, Laboratory of  
Agricultural Automation  
University of Sao Paulo  
Polytechnic School  
Caixa Postal 61548  
Sao Paulo – SP Brazil 05424-970  
Phone: +55-11-3091-5366  
Fax: +55-11-3091-5294  
E-mail: [saraiva@usp.br](mailto:saraiva@usp.br)  
<<http://www.pcs.usp.br/~laa>>

Dr. Michael Ruggiero  
Integrated Taxonomic Information  
System (ITIS)  
Smithsonian Institution  
P.O. Box 37012  
NMNH, Room CE-120, MRC - 0180  
Washington, DC 20013-7012  
Phone: 202-633-2148  
Fax: 202-786-2934  
E-mail: [ruggierm@si.edu](mailto:ruggierm@si.edu)  
<<http://www.itis.gov/>>

**Find the PTN on the Web at**  
<<http://pollinators.iabin.net>>.