



August 15, 2006

TO: IABIN Executive Committee and IABIN Council

IABIN Executive Committee:

Gladys Cotter* – (Chairperson) United States of America
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Christoph Haeuser - Global Biodiversity Information Facility

FROM: GS/OAS and the IABIN Secretariat

RE: 3rd Semester Report – Period: January 01 – June 30, 2006
Building the Inter-American Biodiversity Information Network” (IABIN)

1. IABIN Project Milestones by Component

- The World Bank (WB) conducted a Supervision Mission on June 19, 2006. The IABIN Project, as it ends 20 months (June 2006), is making progress on a number of fronts: (i) the Coordinating Institutions for the Ecosystems and Pollinators Thematic Networks were selected in May, 2006. The Memorandum of Cooperation between the IEC and the CIs, and the Coordinating Institution Transfer Agreement between OAS and the CIs are estimated to be signed by August 2006. To this end, all six thematic networks have designated a CI. (ii) The Species and Specimens and Protected Areas TNs started functioning in early 2006, (iii) The selection process under the IABIN Catalogue Service did not proceed due to the fact that the firms that sent proposals did not cover all the requirements. At the IEC meeting, it was agreed to divide the ToRs into three distinct functions and to start a new selection process for three different consultants during the third quarter of 2006.
- The implementation of the second year of the IABIN-DGF project is going smoothly.
- Two workshops were carried out by the IABIN-DGF project in Panama City.
- Version 1 of the portal for the IABIN-DGF project for the Connectivity Program is fully operational (<http://geospatial.iabin.net>). This portal contains a version 1 of the geo-integrator. This tool will allow the integration of biological and geospatial data. The new version for the geo-integrator was developing using IABIN standards,
- The Secretariat has been active in establishing good working relationships with all network members. It has kept fully informed IABIN Council and Executive Committee (IEC) members of project execution and network activities, and has followed their directives. It has played a key role in carrying out negotiations with chosen CIs and has acted as a facilitator and technical guiding force to develop the TNs. This technical leadership was particularly helpful during the development of the Western Hemisphere Migratory Species Initiative (WHMSI) where IABIN provided comments on standards and protocols to support the digitization of species and specimen data on migratory species. We also proposed the

adoption of tools and standards similar to the ones being developed by IABIN for the WHMS initiative. We initiated contacts with UNEP to be part of the “Gateway for Environmental Information” (EcoMundus) initiative, probably as regional lead institution in the area of biodiversity information.

- IABIN webpage. www.iabin.net is operational in Spanish and English and is receiving an average of 6767 visits per month, and an average of over 108106 hits per month. The old website is kept maintained with updated information for each TN.
- The first “Coordinating Institutions Information Technology Experts Meeting” was organized by the Secretariat and held in Washington D.C., from June 11 to 13 with the support of the OAS and the IEC Chairperson. This meeting was held to establish a common framework for all Thematic Networks and the Catalog Service regarding the infrastructure to be used across IABIN, the design of common elements, an understanding about IABIN and its goals and data exchange between TNs and other initiatives. The IT Technical Working Group was established.
- The first IABIN Executive Committee (IEC) meeting took place in Washington D.C., from June 14 to 16; it was organized by the Secretariat with the support of the GS/OAS and the IEC Chairperson. The IEC meeting was convened to discuss the progress and immediate future actions and long-term direction of IABIN. The participation of eight (Antigua and Barbuda, Argentina, Chile, Costa Rica, Ecuador, United States, Uruguay, and GBIF) out of the nine members of the IEC indicated considerable commitment from the member countries to the development of the network and the execution of the IABIN project.

2. Summary of the “Building IABIN” Project.

The PIP outlines a \$35 million project. IABIN requested and was awarded \$6 million from the Global Environment Facility (GEF) towards this plan. The legal agreement was signed between the WB and the General Secretariat of the OAS (GS/OAS) on July 15, 2004, and was amended on February 10, 2006 and June 26, 2006. The PIP outlines agreements with the primary biodiversity informatics institutions throughout the Americas based on biodiversity data sharing priorities of these institutions and mandates of the first three IABIN Council Meetings. Co-financing of \$28.9 million has been identified from 76 regional or national institutions and programs.

Thirty-four out of 34 countries have designated IABIN Focal Points. Thirty out of 32 recipient countries have endorsed the GEF “Building IABIN” project. (Missing are Bolivia and SVG.)

The overall project will:

- (i) Develop an Internet-based, decentralized managed network to provide access to scientifically credible biodiversity information currently existing in individual institutions and agencies in the Americas,
- (ii) Provide the tools necessary to draw knowledge from that wealth of resources, which in turn will support sound decision-making concerning the conservation of biodiversity, and
- (iii) Provide a mechanism in the Americas to exchange information relevant to conservation and sustainable use of biological diversity, thus promoting and facilitating technical and scientific cooperation to help fulfill the mandate of the Clearing-House Mechanism of the Convention on Biological Diversity.

3. Component 1. Interoperability and Access to Data

3.1. IABIN Catalogue Service

The formal no-objection of the WB to the RfPs package for the development of the IABIN Catalogue Service procurement process was received in March 2006. Formal proposals from short listed institution were requested and two were received. None of the proposals addressed all the requirements and additional questions were submitted to the institution with the highest score. The answers received still did not address the issues to the Evaluation Committee's satisfaction. The Bank eventually recommended in June 2006 the process to be cancelled because the proposals had been insufficiently competitive. During the IEC meeting, it was agreed that the work required in the ToRs was too much for just one institution and that it would make sense to divide the work into three or four components and carry out an evaluation, and selection process for each. The IEC instructed the Secretariat to consult with the Information Technology Working Group (ITWG) and ask for their recommendation as to how to proceed. After consultation, it was recommended to the IEC that the ToRs should be divided and a new selection process during the 3rd quarter of 2006. The IEC has, after review, endorsed the recommendation made by the ITWG.

3.2. Thematic Networks (TNs)

3.2.1. General comments:

All TNs (Species and Specimens, Protected Areas, Ecosystems, Invasive Species, and Pollinators) now have a CI selected by the IEC. The following is the status of each CI:

Thematic Network	Coordinating Institution	Selected	Signed MOC	Signed CI Transfer Agreement	Procurement Plan
		(minimum criteria and authorized to start negotiations)			
Invasive Species	United States Geological Survey	PAD	Under Discussion	Not applicable	Submitted to WB on 23-Jul-06 together with the Procurement Plan for the whole project, the no-objection from WB was received on 2-Aug-06
Species and Specimens	Instituto Nacional de Biodiversidad	19-Sep-05	23-Feb-06	24-Feb-06	
Protected Areas	Fundação O Boticário de Proteção à Natureza	6-Oct-05	3-Mar-06	9-Mar-06	
Ecosystems	Smithsonian Tropical Research Institute	25-May-06	In process	Not applicable	
Pollinators	Coevolution Institute	25-May-06	17-Jul-06	In process	

As evidenced by the meeting of IT experts from the CIs, exciting developments are in store for interoperability between the TNs. Although GBIF is taking a lead globally on standards for specimens, it would seem that IABIN is positioning itself to be the global leader on standards for species, ecosystems, and protected areas and how they are inter-operable.

3.2.2. Review of Thematic Networks

3.2.2.1 Protected Areas TN

After several reviews, the Memorandum of Collaboration and Transfer Agreement for Fundacao O Boticario to become the Coordinating Institution were signed and the first transfer of funds of \$35,750.00 was disbursed on March 20. Initial discussions regarding the formation of the project management committee for this TN were held.

Currently, the CI of this TN is carrying out procurement processes to develop among other things this network's website, to choose the data digitizing tool service provider. In addition, they have carried out the following activities:

- A first meeting was held in Curitiba, during the COP8 with the participation of consortium members and the Secretariat Director to review TN draft plan to produce technical documents with the following achievements:
 - ✓ Establishment of governance policy
 - ✓ Recommendations for Parallel Financing
 - ✓ Revision and agreement on activities and goals to be achieved
 - ✓ Quantitative performance indicators discussion
- Participation in the Protected Areas Management Effectiveness Meeting held in Cambridge, UK, 14-15 June, were participants from BirdLife International, Conservation International, Equilibrium consultants, Global Environment Facility, University of Cambridge, University of Queensland / IUCN WCPA, IUCN / Conservation International, World Bank, The Nature Conservancy, UNEP-World Conservation Monitoring Centre, WWF International (the last three members of the CI consortium) met to review currently used system to evaluate Protected Areas Management Effectiveness (PA ME) and to propose the establishment of a global system for reporting on PA ME. At the meeting it was highlighted that IABIN is planning to link national databases on protected areas information and to include management effectiveness information in this. It was also pointed out by WCMC, TNC, and the World Bank that IABIN will play an important role as a regional node to develop a decentralized system for spatial and non-spatial data management. They reiterated their intention to continue their support to IABIN.
- Development of Terms of Reference (ToRs) for the planned technical documents
- Evaluation and adjustment of consultancy contract
- Participation in the Technical and Executive Meeting – Washington, D.C., July

3.2.2.2. Species and Specimen TNs

After several reviews, the Memorandum of Collaboration and Transfer Agreement for INBio to become the Coordinating Institution were signed and two transfers of funds were disbursed, the first one of \$49,800 on March 7, and the second one of \$47,850 on May 24. The Secretariat held initial discussions with INBio regarding the development of IABIN policies on use of information that will be presented to the IEC for their approval. In addition, initial discussions regarding the formation of the project management committee for this TN were conducted.

During the first trimester the CI (i.e., INBio) concentrated on planning activities and review of previously generated information to develop products. There is already a draft version of the TN website that follows recommended standards prepared by the Secretariat. A workshop for the first half of the second semester is being planned to review among CI consortium members, other CIs and the Secretariat information already gathered and advances in products development.

3.2.2.3. Ecosystems TN

After a cancelled procurement process, a new call for Expression of Interest was published in IABINfriends, posted in the IABIN website, and sent to OAS for posting in additional website and other media. Two EoIs were received and evaluated. The RfP were sent to the two organizations short listed. Deadline to receive proposals was 2nd May, 2006. Two proposals were received and evaluated. The consortium led by the Smithsonian Tropical Research Institute (STRI) was selected as the Coordinating Institution in early June. Currently, the Memorandum of Collaboration is in process and will be signed by STRI and the IEC, in order for STRI to be officially designated as the CI of the Ecosystems TN. The disbursement of funds for this network will be executed directly through GS/OAS rather than through a transfer agreement to the CI.

3.2.2.4. Invasive Species TN

- At the IEC Meeting in June, the I3N Manager presented progress made by I3N. The main feedback on I3N from the IEC was: excellent progress, continue including focal points/country institutions as much as possible, continue with capacity building as primary focus, continue with practical products useful to local institutions, try to have joint activities with other TNs to help with integration. These recommendations are being implemented.
- Uruguay joined I3N. Co-leads were appointed and began working on setting up I3N-Uruguay.
- I3N training workshops were offered in Chile, Paraguay, Ecuador and Venezuela this year; in Uruguay and Dominican Republic last year; and a scaled down database training was offered in Mexico. Additional workshops are being planned in several other countries.
- A report was produced identifying capacity building needs and developing suggestions for a capacity building plan; the final report is being reviewed.
- The permanent TWG was established and the first meeting is being planned.
- An I3N TWG member/I3N lead participated in GISIN meetings to help harmonize I3N and GISIN standards, start to disseminate our tools to Asia, and to have I3N presence on the GISIN steering committee.
- The cataloging and data output tool (I3N IAS Database template) was completed and tested, as was the associated XML output function. A Web page for requesting I3N DB was created, with a request form to be used for keeping track of users and sending updates to them. A Website template, which draws from I3N database structure, and a Web-based input tool for remote users are nearly complete. Two I3N Tools Representatives were identified; they began distributing the tools and are collating feedback for analysis.
- Searching I3N country catalogs and products: The search interface and URLs were updated. The public can access the search engine that includes all country catalogs from the I3N home page, <http://www.iabin-us.org/projects/i3n/i3n_project.html>. The public can also view updated information on the I3N products page, <<http://www.iabin-us.org/projects/i3n/products.html>>, and on the I3N standards page, <http://www.iabin-us.org/projects/i3n/i3n_tools/i3n_standards.html>.
- Progress reports were submitted by I3N management and several I3N leads; they can be downloaded from the I3N website at <http://www.iabin-us.org/projects/i3n/products.html> [go to the country you are interested in under "OTHER PRODUCTS"].
- The I3N logo to be used by anyone creating and distributing information on I3N is available on the central I3N website.
- A discussion paper on I3N-IABIN relationships was prepared and discussed with key stakeholders, and presented at the IT and IEC meeting in Washington for use by other TNs.
- Presentations/posters on I3N have been given at international meetings, including CBD COP8 (Brazil); Western Hemisphere Migratory Species Initiative conference (Costa Rica); Weeds Across Borders (Mexico); Ecological Society of America International Conference on Ecology in an Era of

Globalization: Challenges and Opportunities for Environmental Scientists in the Americas (Mexico); GISIN Invasive Species Profile Schema Review (Morocco).

- I3N Database in Africa/Asia: As a result of outreach activities, organizations in Morocco, Ghana, Gambia, Ethiopia, Seychelles, Portugal, Bangladesh, China, Malaysia, and Sri Lanka have now indicated their interest in using the I3N tools. CABI became interested in using the database in Africa, and organized a training session in July. Training was provided to government representatives from Ghana, Uganda, Ethiopia, Kenya and Zambia, who then became trainers to implement the use of the database in each country. Organizations represented in this training session were: Environmental Council of Zambia, Water Research Institute of Ghana, National Agricultural Research Organization of Uganda, Ethiopian Institute of Agricultural Research, and the National Environment Management Authority, CABI Africa and IUCN Eastern Africa Regional Office in Kenya.

3.2.2.5. Pollinators TN

The Expression of Interest (EoI) was published in IABINfriends, and posted on the IABIN and OAS websites. Two EoIs were received and evaluated. The RfP were sent to the two organizations short listed. Deadline to receive proposals was 3rd May, 2006. Two proposals were received and evaluated. The consortium led by the Co-Evolution Institute was selected as the Coordinating Institution.

The Secretariat and the GS/OAS/DSD have worked with the Co-Evolution Institute to draft and sign the MOC and the CI Transfer Agreement, respectively. The MOC has been signed between the Co-Evolution Institute and the IEC. As this point, the Co-Evolution Institute has carried out a number of activities to implement the Pollinators TN (PTN) as follows:

- Secured competitor's application to become CI for PTN to determine if there are elements in their proposal that should be included in PTN operating plan
- Successfully engaged competitors in becoming members of PTN team
- Completed revision of proposal to address the 18 points suggested by the review committee
- Created PTN annual operating Plan for 2006-2007
- Met as a group for 6 conference calls
- Added IABIN PTN as an agenda item to the NAPPC International meeting, the Mexican NAPPC Meeting and other NAPPC organizations
- Developed assignments for the AOP
- Four of CI team members attended IABIN IEC meeting in Washington DC
- Reviewed the standards and interfaced with GBIF regarding Pollinator Databases.
- Investigated three sites in Brazil to find most cost-effective/logistically relevant location for our PTN Technical Advisory Group meeting scheduled for December 13-16 in Brazil
- Hired intern to initiate key word search in Spanish and Portuguese to locate Western Hemisphere databases
- Compiled list of software currently being used in relevant and identified databases
- Reviewed draft TN Standards and GBIF protocols to ensure compatibility
- IABIN PTN Presented at bi-annual Bee Meeting in Brazil (Encontro de Abelhas, in July). Meeting with a group of experts to discuss about data elements regarding plant/pollinator relationships.
- Contacted Brazilian IABIN focal point to inform about project activities and increase cooperation.
- Began to compile list of invitees and to draft agendas for December meeting
- Discussed issues regarding the needs assessment and other aspects of 1st and 2nd quarter deliverables
- Initiated definition of use cases and questions for information needs survey of potential contributors and users of the TN
- Initiated structural and standards-based analysis of existing Experts databases

- Initiated development of Terms of Reference and preparation of Letter of Invitation for Technical Advisory Committee

In summary:

To date, five institutions have been selected as Coordinating Institutions (CIs):

- a. The National Biodiversity Information Infrastructure (NBII) of the United States Geological Survey (USGS) for the Invasive Species Thematic Network (I3N) and the Catalog Service
- b. Instituto Nacional de Biodiversidad (INBio) for the Species and Specimen Thematic Network
- c. Fundação O Boticário de Proteção à Natureza for the Protected Area Thematic Network
- d. Smithsonian Tropical Research Institute for the Ecosystem Thematic Network
- e. The Co-Evolution Institute for the Pollinators Thematic Network

4. Component 2: Data Content Creation

In general, this component deals with matching grants and training that will begin with an RfPs for Matching Grants in year 2. A concerted effort has been undertaken by the Secretariat to meet with potential data providers in order to inform details of network development, particularly as it relates to the TNs, standards and protocols adopted by IABIN, and the data content building grants.

- A meeting with potential data providers for IABIN was held in the Dominican Republic in June, 2006, which was attended by 24 representatives from different organizations, and negotiations to hold meetings in Peru, Ecuador, and Chile during the second semester of 2006 were initiated.
- RfPs for data digitizing grants under I3N were posted, through the IABIN website (www.iabin.net), IABINfriends, and other websites early in January 2006. These grants are intended to promote digitalization of high-quality invasive, alien species (IAS) information and data. Seven proposals were received and five were awarded to organizations in Jamaica, Colombia, Uruguay, Argentina and Paraguay.
- At the IT (Information Technology) Technical and IEC Meetings in June, 2006 it was agreed that standards must be adopted by each of the TNs before RfPs for data digitizing grants can be published. The Species and Specimens TN are planning a workshop in late August for this purpose. It is expected that the RfP for this TN will be published before the end of the year. The Protected Areas TN will carry a similar workshop in early 2007 and the publication of the RfP will follow soon after. The Work Plans for Pollinators and Ecosystems TNs will reflect the expected dates for the publication of the respective RfP in 2007.
- The IEC agreed with CI that the Specimens TN will use the standards developed by GBIF in the development of ToRs for data content grants.

In order to facilitate participation in the data content building grants as part of the amendment of the Trust Fund Agreement negotiated between GS/OAS and the World Bank during the second quarter of this year, operating costs of the grant recipients (Eligible Institutions) have become eligible expenses and this will facilitate further disbursements under this category.

During the IEC meeting the following schedule was proposed for CIs to carry out calls for proposals for data-content creation grants:

- I3N, second call, September 2006
- Species & Specimens TN, first call, September 2006
- Species TN, first call, December 2006
- Protected Areas, first call, first quarter of 2007

4.1. Data digitizing grants

As previously mentioned five grants were awarded and sub-projects are being developed, which are:

Argentina – Fundación Universidad Nacional del Sur

Summary of I3N Argentinean project: Consolidation of the Argentinean database on Biological Invasions

- In May 2006 an initiative was launched to enhance the I3N Argentina database with the aid of I3N thru a *Content Building Grant*. Since then data has been gathered that increases the knowledge on the situation of IAS at the national level, including information about sites of occurrence.

Jamaica - Institute of Jamaica

Summary of I3N Jamaican project: Implement, update and maintain an I3N IAS Database in Jamaica

- Production of an Educational CD on Invasive Alien Species, including photographs and information on known IAS in Jamaica was done. This CD was produced by the team of the Jamaica CHM/I3N Ja and distributed on May 22nd (International Day for Biological Diversity) at a Biodiversity Symposium hosted by the Institute Of Jamaica. This CD is meant for free distribution to schools, libraries and other government and NGO's in Jamaica. A copy will be sent to the IABIN.
- Through the IABIN Content-Building Grant, the first disbursement was received and the computer equipment has been procured for the project. The recruitment process for the Research Assistant is close to completion as it is now at the Interview stage. The National Invasive Species Working Group is also working in an advisory role to this project for its effective implementation.
- The I3N IAS Database template for Jamaica is now in its final stages of design in collaboration with Silvia Ziller, and this will be used for the Content-Building Project. This new format will be used to input new information as well as to reformat existing data on IAS in Jamaica.
- Planning for a national 3-day workshop on I3N for September 13-15, 2006 has begun. This workshop will be administered by Silvia Ziller and Sergio Zalba along with the Institute Of Jamaica.

Paraguay - Asociación Guyra Paraguay

Summary of I3N Paraguayan project: Building Capacity for the Paraguayan Invasive Network

- Discussion with the Environmental Office (Secretaría del Ambiente) about cooperation and further steps to implement the invasive network. During the meeting it was decided to make the data base available in the national CHM portal.
- The Invasive Species Data Base was adapted to Paraguay in coordination with Silvia Ziller from the Instituto Hórus, Brasil and Sergio Zalva from the Universidad del Sur, Argentina. Fields adapted to Paraguay were those related to habitat and political division.
- Dissemination of the initiatives to institutions maintaining databases or information on invasive species. Reception of the initiatives by the National Herbarium and Museum of Natural History Paraguay
- Database user training workshop with the support of Argentinean and Brazilian I3N Leads on July 5-6 2006, participation of 48 people among representatives of governmental and non governmental institutions, research institutions and students. Collection of information for invasive species within protected areas. Invitation and well reception of technicians to join the initiative.
- Set up of the Database and training to national administrators.
- Discussion with I3N Lead about the national coordination of activities to maintain the national database.
- Coordination of representatives of the Wildlife Directorate within SEAM to deuplicate the list of invasive species elaborated in 2001 by the CDC-Paraguay.
- Review and correction of the national list of invasive species with the support of the National Herbarium and Museum of Natural History Paraguay, together with the School of Chemical Sciences of the National

University of Asunción. Elimination of native species in the official list and inclusion of new species before never considered.

- Coordination with Dr. Sergio Zalva to launch the Paraguayan DataBase and usage of the Web Template.
- Elaboration of the distribution map of the Jaragua Grass, *Hyparrhenia rufa*, at Paso Bravo National Park and presentation of information to the SEAM.
- Hiring of the technician in informatics for the elaboration of the *mapping tool* to be incorporated to the database.

Uruguay - Universidad de la República Oriental del Uruguay (UDELAR) through its Facultad de Ciencias
Summary of I3N Uruguay project: Implement, update and maintain an I3N IAS Database in Uruguay

- The different environments of the database, aquatic and terrestrial were defined and together with politic/geographic divisions to be adapted to the Argentina's data base. These activities are being performed in cooperation with Uruguayan colleagues, specialists in invasive terrestrial species and with Sergio Zalva co-leader of the I3N-Argentina. After the conclusion of this stage, it is expected to receive the data base from Argentina adapted to Uruguay; therefore, it will be initiated the information input.

Colombia - Instituto de Investigaciones de recursos Biológicos Alexander von Humbolt

Summary of I3N Colombia project: Implement, update and maintain an I3N IAS Database in Colombia

- It is in process to be funded.

5. Component 3: Tools for Decision-making

The Secretariat identified the need to hire a consultant to find and evaluate existing decision making tools and propose those that could be used and/or modified for use by IABIN.

The Secretariat also developed draft of Request for Proposals for value added tools and sent to GS/OAS and IEC for review and comments.

Four unsolicited concept proposals were received by the Secretariat for some decision-making tools. These concept proposals were sent to the IEC members and discussed during the IEC meeting in June. The IEC, in general, expressed their reservations about the unsolicited pre-proposals received and stressed that the value added tools should be linked to what the TNs are developing. Creating such tools without knowing what data and in what format will be available through IABIN may result in products that do not address the needs of the countries. As a conclusion to the previous discussion:

- The IEC approved the Secretariat's proposal regarding carrying out a consulting process with the countries to identify the kind of value added tools that would be useful for the decision makers (Annex 1).
- Also approved to carry out an analysis of the decision making tools that are already available
- This process should make use of technological advantages to incorporate more actors and diminish the cost of the sub-regional workshops or consultations to be carried out
- Gave a timeframe of the end of 2006 to have 2 to 4 proposals.

In conclusion, progress has been made in defining possible investments under this component. It is expected that the IEC will soon decide on their priorities; a methodological approach is in place to then proceed with contracting (Annex 1).

NBII furthered work on a Global Data Tool Set under development within the World Data Center on Biology and Ecology that will contribute to improved connectivity between biological and non-biological data for a total of US\$60,000 of core co-financing.

3.1. Connectivity Program

Under this program, which is part of the IABIN project Component 3, an IABIN-DGF project is being developed with WB financial resources. This project is managed directly by the City of Knowledge (CoK), which has hired a technical director. Its goal is the integration of Biological and Geospatial Data. This project facilitates interoperability between biological information in the Americas (being achieved under IABIN) and different sets of non-biological information in order to promote the emergence of cross-thematic value-added applications in the areas of agriculture, disaster reduction, forestry, and rural development. This project is implemented in collaboration with USGS EROS Data Center, The Nature Conservancy, the University of Michigan, and the SERVIR Project led by NASA and Centro del Agua del Trópico Húmedo para América Latina y el Caribe (CATHALAC). With this collaboration, IABIN is taking advantage of the work, data and infrastructure that already exist. Also, IABIN is taking planning and fundraising steps to extend this program to South America.

Some of the most relevant achievements during the first semester of 2006 are:

- Project meeting in Panama on 1-3 February in which the 2006 work plan was reviewed and finalized.
- Training workshops carried out in Panama 6-17 March, 2006. The first workshop was training for the maintenance of geo-servers installed in each country with a participation of 15 people from 7 countries. The second workshop was about advance configuration for geo-servers with a participation of 12 people from 7 countries.
- Meetings regarding the upcoming phases of the project and how to improve it.
- Created the geospatial.iabin.net website.
- Move the final version 1 of the geo-integrator from US to Panamá.
- Set-up five new geo-servers. At today the geo-spatial network has a total of 15 geo-servers.
- Contracted of team of programmers in Argentina to continue with development of the geo-integrator Version 1.5 (Multi-lingua version, late July) and Version 2 (Integration between tabular and geospatial data, early 2007). Also to update and maintain the geospatial network website (geospatial.iabin.net)

A more detailed report is included as Annex 2. IABIN DGF Project Progress Report – Year 2, Jan 1-June 15, 2006

As part of fundraising efforts made by IABIN to expand the Geo-spatial network to South America, we will receive from ESRI a donation of ArcIMS software, valued at ca US\$100,000, to be distributed among those organizations that expressed interest in being part of the expansion of the network.

6. Component 4: Sustainability of IABIN

6.1. IABIN Secretariat.

The IABIN Secretariat is hosted in Panama at the City of Knowledge. The IABIN Secretariat is fully staffed with the Secretariat Director, Data Content Manager, and Thematic Networks Coordinator hired through an international search. Iván Valdespino, Director (Panama), Rita Besana, Data Content Manager, (Mexico) and Boris Ramirez (Colombia) have been contracted on one year GS/OAS contracts. The Secretariat completed the following tasks not noted above:

6.1.1. Planning, Coordination and Reporting

- Monthly phone conferences were carried out with G. Cotter, Chair of the IEC, her staff GS/OAS for planning and coordination, as well as for monitoring of project progress.
- Frequent communication has been maintained with Focal Points and Council members in general.
- Monthly, quarterly, and semester reports were prepared by Secretariat with the collaboration of GS/OAS/DSD and IEC. 2005 Second Semester and 2006 quarterly reports both in English

and translated into Spanish by Secretariat were distributed to IEC members and posted in IABIN website.

- The Secretariat prepared the agendas and working documents for the IT and IEC Meetings that took place in June, 2006 and led some sessions.

6.1.2. Co-financing

CORE PARALLEL FINANCING

Period: Jan - June 06

	Component 1	Component 2	Component 3	Component 4	Component 5	Total
GEF Financing	\$157,308	\$50,266	\$0	\$71,827	\$22,261	\$301,662
Parallel Financing						
PATN -- Fundacao o Boticario	\$73,708					\$73,708
SSTN -- INBio	\$277,658					\$277,658
ISTN -- USGS/I3N	\$196,150	\$123,150		\$32,423		\$351,723
USGS/NBII	\$165,350	\$28,617	\$60,000	\$58,039		\$312,006
City of Knowledge				\$9,401		\$9,401
GS/OAS					\$99,718	\$99,718
Gordon an Betty Moore Foundation	\$99,658					\$99,658
Environmental Systems Research Institute Inc.	\$17,000					\$17,000
Total assured parallel financing	\$986,831	\$202,033	\$60,000	\$171,691	\$121,979	\$1,542,533

There has been a considerable increase of non-core parallel financing from \$101,667 (Jul-Dec 2005) to \$874,151 (Jan-Jun 2006), due to the fact that the Coordinating Institutions and consortium members executed activities to support IABIN. Additionally, a donation of GIS software and training was granted to protected areas managers in the Amazon region by the Environmental Science Research Institute (ESRI)

NON - CORE PARALLEL FINANCING

Period: Jan - Jun 06

Institution Name	Catalogue Service	Invasive Species	Specimens	Species	Protected Areas	Pollinators	Total
World Institute for Conservation & Environment (WICE)					\$87,460		\$87,460
World Wildlife Fund					\$144,600		\$144,600
The Nature Conservancy					\$11,000		\$11,000
IUCN - Sur					\$19,832		\$19,832
UNEP-World Conservation Monitoring Centre					\$90,677		\$90,677
Environmental Systems Research Institute Inc					\$520,582		\$520,582
Total assured parallel financing	-	-	-	-	\$874,151		\$874,151

6.1.3. Data Providers

Communications with Caribbean Focal Points were held regarding organizing a meeting of Potential Data Providers in the Dominican Republic concomitant with the Botanical Congress June 19-26, 2006. This could not proceed since most of the organizations could not cover the costs of participating. It was decided to hold the meeting only for data providers in the Dominican Republic. The meeting in the Dominican Republic took place on 27 June and was attended by 28 people.

Communications were held with FPs in Chile regarding organizing a meeting of Potential Data Providers in that country. Discussion about this meeting were in progress since late October for a potential date in February 2006, but the FP advised that February is a difficult time to schedule such a meeting, since many in Chile would be on holiday. After the holiday month, the FP had to

wait until the new director of CONAMA was appointed before scheduling a date which is now set for September, 2006.

Communications were also held with the FP in Peru regarding organizing a meeting of potential Data Providers in Lima after the GBIF13 meeting that will take place in Iquitos and which the Secretariat will attend. Tentative date is October 9th.

Communications with the FP in Ecuador regarding organizing a data providers meeting planned for the end of May. This had to be postponed in early May until August because difficulties securing price quotations and in sending invitations in time.

6.2. Partnership and Communications

- IABIN webpage. www.iabin.net is operational in Spanish, English and Portuguese and is receiving an average of 6767 visits per month, and an average of 108106 hits per month. This webpage is being re-designed to become the IABIN Portal. This was possible after having a web designer hired through resources provided by the IABIN-DGF project. It is expected that the new IABIN Portal version could be on-line by 31 August, 2006. Already the architecture of this Portal has been submitted for comments to OAS, World Bank, and IEC.
- The Secretariat presented the draft of a new template for IABIN TN portals. The basic structure was reviewed at the IT experts meeting. The portal will be updated as TNs carry out more activities and provide more inputs to the web contents.
- Preparation of abstract and presentation about IABIN given at the III Ibero-American Sustainable Development Conference held in Panama City
- Presentation of an IABIN poster at the Ecological Society of America's Conference in Merida, Mexico in January 2006.
- IABIN, through, I. Valdespino was elected to the GBIF Outreach and Capacity Building Subcommittee.
- Communications with GBIF regarding a new on-line survey on how data custodians are overseeing the sharing of Sensitive Primary Species Occurrence Data.
- Represented IABIN at the ESA Conference held in Merida, Mexico.
- IABIN participated of the Western Hemisphere Migratory Species Initiative (WHMSI) meeting held in Costa Rica from 16 to 20 Jan, 2006. We participated, providing technical advice, in working groups charged with revising the proposal they are preparing to be submitted for funding to GEF. We also offered IABIN collaboration for them to adopt standards and protocols for species and specimen dataset digitization developed or adapted by IABIN, as well as those of our other TNs.
- IABIN initiated contacts with UNEP to be part of the "Gateway for Environmental Information" (EcoMundus) initiative, probably as regional lead institution in the area of biodiversity information. To this end we participated of the EcoMundus workshop sponsored by UNEP that took place from June 6 to 9 in Curitiba, Brazil, where we gave a presentation on IABIN and its networks.

EcoMundus is an UNEP effort to put in place a global coordinated mechanism that provides access to reliable and authoritative environmental data and information. This is a strongly collaborative initiative to apply harmonized information technology standards so that information and data holdings of partners are widely accessed and better utilized. The workshop brought together a number of partners from the Latin American and Caribbean Region and their respective information systems with a view of linking these systems through a common mechanism.

We need to follow-up this initial step with UNEP developing a joint strategy so IABIN is officially appointed as the lead institution in the area of biodiversity information for the Americas and resources are identify and obtained to carry out this task. This advances and action were discussed during the IEC meeting in Washington and the Secretariat was asked to prepare the strategy and coordinate action items with the point person at UNEP, Mr. Sean Khan.

- Teleconference with NBII regarding the possibility of hosting GITAN in the server provided by CATHALAC: It was decided not to proceed at present.
- Collaboration with City of Knowledge and CIDES
- Presentation on IABIN given at the Smithsonian Tropical Research Institute in Panama.
- Several meetings with the director and other staff of STRI.
- Communication with Caribbean FPs regarding their potential participation in TNC Conservation Training week.
- Participation in FAOs meeting on FAO's Land Cover System Project (GLCN)
- Participated in the conference dictated by Prof. Jeffrey D. Sachs, as part of the Catedra de las Americas organized by OAS Panama and the UNDP.
- Agreement to endorse the Conservation Commons at the COP8
- The first "Coordinating Institutions Information Technology Experts Meeting" was organized by the Secretariat and held in Washington D.C., from 11 to 13 June with the support of the OAS and the IEC Chairperson. This meeting was held to establish a common framework for all Thematic Networks and the Catalog regarding the infrastructure to be used across IABIN, the design of common elements, an understanding about IABIN and its goals and data exchange between TNs and other initiatives.
- The first IABIN Executive Committee (IEC) Meeting under the auspices of the IABIN-GEF project was organized by the Secretariat and held in Washington D.C., from 14 to 16 June with the support of the OAS and the IEC Chairperson. The IEC meeting was convened to discuss the progress and the immediate future actions and long-term direction of IABIN. The participation of eight (Antigua and Barbuda, Argentina, Chile, Costa Rica, Ecuador, United States, Uruguay, and GBIF) out of the nine members of the IEC indicated considerable commitment from the member countries to the development of the network and the execution of the IABIN-GEF project.
- During the IEC meeting it was decided to hold next council meeting around June 2007 and for this to take place in a Southern Cone country.
- An IABIN workshop was carried out at the IX Latin American Botanical Congress in Dominican Republic in June, 2006. This workshop was attended by over 31 botanical scientists who are potential IABIN data providers. They showed support for our initiative and in conjunction with IABIN drafted a resolution proposed to the plenary of the Congress requesting support for biodiversity informatics, promotion of biodiversity information sharing, and the work that is being made in this area by scientist, institutions and initiatives such as IABIN. Annex 3.
- The Secretariat received, read, and process a monthly average of 1335 emails and sent an average 1203 emails
- Collaboration and Technical Support to the City of Knowledge in the establishment of the Network of Knowledge with FAO. The Network of Knowledge is part of the CIDES, International Center for Sustainable Development.

6.3. Fund Raising

- The proposal sent to the National Aeronautics and Space Administration (NASA) to fund the expansion of the Geo-spatial network to South America was withdrawn from consideration by the Principal Investigator (PI) and lead on the proposal, Mr. Daniel Irwin. To the best of our knowledge, Mr. Irwin had to withdraw the proposal from NASA funding consideration after receiving a note from CATHALAC informing it withdrew its support of said proposal because they felt it was not in line with their view of institutional arrangements in Central and South America.

This situation was discussed at the IEC meeting and the Secretariat was instructed to produce a letter to be sent to those organizations supporting the expansion of the Geo-spatial network to South America informing of the situation.

The technical team of the Geo-spatial network and the Secretariat are currently carrying out efforts jointly with IPGH and EROS to secure additional funding for the expansion. As a result of this effort a donation of ArcIMS software from ESRI, valued at ca. US\$100,000 was received, as explained above.

- During the IEC meeting the Secretariat submitted for discussion an outlined strategy for IABIN sustainability. This included identification of potential donors and tailored proposals to be submitted to them. In addition, it included a proposal by the Secretariat to host an IABIN Donor's Conference late 2006 or early 2007.
- The donor's conference was received as a positive idea that could be organized to appeal to a wide range of international donors. The Secretariat will review the possibility of this option and will propose ideas to carry it out. The Bank suggested that it may be prudent to hold the conference when we have more concrete products to show, particularly through the implementation of the TNs.
- Received several communications regarding potential funding sources (e.g. the Critical Ecosystems Partnership Fund., Ducks Unlimited, and NSF)
- The Secretariat has worked to establish partnerships with PAIGH, Patricia Solis of the American Geographers, University of Michigan, GITAN, Virginia Tech University to submit proposal for funding to several potential sources including US-AID, NSF, and ESRI.

6.4. Additional Activities:

7. Component 5: Project Administration

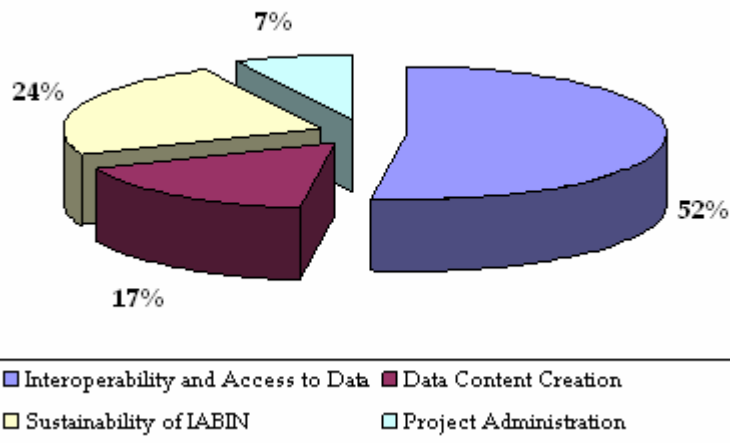
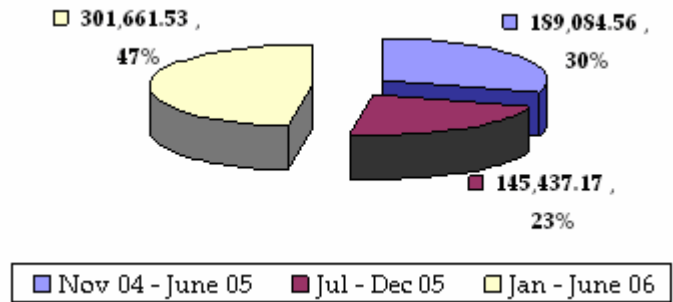
- Secretariat Travel Plan has been kept updated reflecting vision of Secretariat's role and activities for next 12 months.
- The PIP and Operational Manual have been updated and may be found on www.iabin.net.

8. Achievement of Project Objectives

- Certain parts of the project are nevertheless proceeding slowly, particularly the thematic networks and the catalogue. Significant procurement and legal difficulties have slowed implementation. The Secretariat, the OAS, and the IEC have worked in a very harmonious and complementary manner to come up with solutions to resolve these issues and, at this point in time, it would seem that great progress has been made on resolving the various bottlenecks and it would seem that both the project and disbursements should pick up considerably in the next six months.

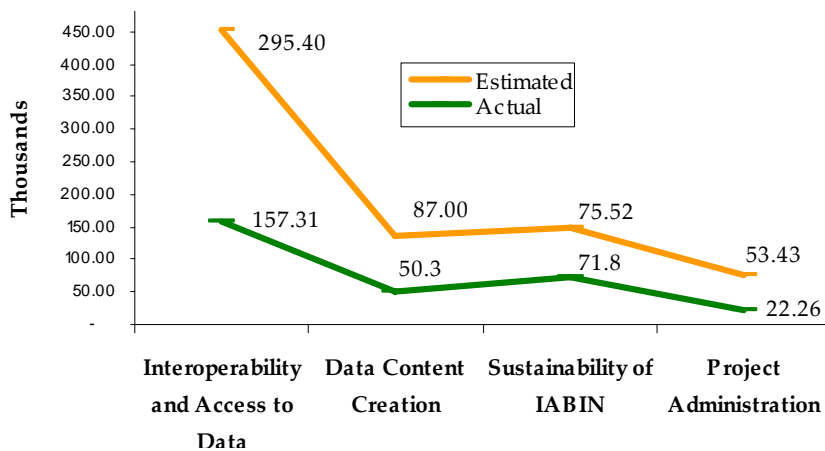
9. Financial Status.

The project has disbursed funds greater than in prior semesters. The disbursement in the third semester was US\$301,661.53, which represents 47% of the total of US\$636,183.26 since November 2004.



The allocation of disbursed funds by IABIN component, illustrate that 52% is under Component 1: Interoperability and Access to Data. Three of the five Coordinating Institutions (INBio, Boticario, and USGS) received funds to executed activities.

The IABIN Secretariat and GS/DSD/DSD made efforts to execute the activities, especially the activities performed by CIs. However, the disbursement is inferior to what was estimated. Delays occurred in Component 1, because the CIs need to submit procurement plans of goods, consultants and non consultant services. The preparation of the procurement plan for each CI required GS/OAS/DSD and IABIN Secretariat guidance.



Annex 1. Component 3. Information Products for Decision Makers

- Objective: **Develop value-added tools** to help guide environmental management, biodiversity conservation, and sustainable development decision-making processes throughout the Western Hemisphere
 - ✓ Integrate and provide access to socio-economic and geo-spatial data relevant to biodiversity
 - ✓ Visualize and analyze data and information (e.g., dynamic map showing actual and predicted spread of a invasive species across several countries)
 - ✓ Utilize data with models to develop scenarios (options and consequences) for decision makers
- It is included within the “Consultancy Category” of the Grant Agreement between OAS and the World Bank to develop IABIN
- In order to use the resources available in this component (*500K over five year period*) World Bank procurement process will have to be followed including:
 - ✓ Development of detailed Terms of Reference (ToRs)
 - ✓ Announcement of Expression of Interest (EoIs). This includes at least 1 month waiting period to receive letters of EoIs
 - ✓ Preparation of short list
 - ✓ Preparation of Request for Proposals (RfPs)
 - ✓ Send of RfPs to short-listed firms / institutions / organizations. This includes at least 1 month waiting period to receive letters of EoIs
 - ✓ Evaluation and selection process
 - ✓ Signature of contract between the OAS and selected organizations
 - ✓ There is a possibility of sole sourcing (it needs to be justified)

Proposed methodological approach to execute component 3:

- ✓ A fact finding first phase (what decision-making tools are available and what are the countries needs in terms of value-added tools).
- ✓ A second phase during which gathered information would be used to prepare a list and description of tools to be submitted to countries (FPs) so they set up a priority list of tools to be financed by IABIN. This phase would benefit also from Thematic Networks feedback.
- ✓ A third phase in which a call for proposal would be posted in order to finance priority tools.

Operational methodological approach:

1. Carry out three sub-regional workshops with Focal Points, Government Officials at hand, partners, and rep. from private sector to:
 - a) Research currently available decision support tools related to biodiversity management
 - b) Conduct a fact finding survey among our partners and users (countries) as to what decision support tools are needed. This process should also include a review of needs from and developments in the TNs and Catalog
 - c) Propose a prioritized list of decision support tools needed by countries
 - d) Secretariat develops draft ToRs and evaluation criteria for request for proposals (RfPs) to initiate the process to select and fund consultancy services to produce value-added tools prioritized as needed
2. OAS would submit ToRs & RfP for World Bank no-objection and once approved:

- a) The Secretariat would make a formal call for Expression of Interest (EOIs)
- b) Follow up normal process for selection
- c) OAS would make formal and legal arrangements to hire the consultant to produce the value-added tools

Components 1 – Development of the Geospatial Network:

- The IABIN DGF Project with technical assistance from EROS and NASA have continued the development of the GeoIntegrator, which allows for a simultaneous view of spatial data sets staged in different geoservers held by partner agencies.
- The system provides access to more than 400 spatial datasets from the ministries of environment of Costa Rica (MINAE), Panama (ANAM), Nicaragua (MARENA), El Salvador (MARN), Honduras (SERNA), Guatemala (MARN), the Dominican Republic (SEMARENA), and Mexico (SEMARNAT); the ministry of agriculture of Nicaragua (MAGFOR); the International Center for Tropical Agriculture (CIAT); The Nature Conservancy (six geoservers), the U.S. Federal Geographic Data Committee (FGDC), ESRI, and several geoservers established by UNEP’s Solar and Wind Energy Resource Assessment (SWERA).
- During the second quarter the system was upgraded, new functionality was incorporated, and small problems and bugs were corrected.
- NASA developed a new mechanism that allows the viewer to review the metadata and legends of each data layer displayed in the GeoIntegrator, provides an abstract of each layer, and also links to the data directly (if available online). A new pull-down menu allows for direct access from the GeoIntegrator to the geoservers.
- The GeoIntegrator code was provided to the IABIN Secretariat, who hired a programmer under the DGF Grant to continue to expand the GeoIntegrator. A manual for partner agencies to adapt their datasets for seamless viewing in the GeoIntegrator, was developed.
- Developed an online database containing a summary list of the spatial data holdings in geoservers of partner agencies. Thus far nine agencies have incorporated their inventories in this database, providing information on more than 600 spatial datasets (prototype dataset can be consulted at <http://servir.nasa.cathalac.org/wms/inventories.html>).
- TNC developed four new geoservers for Puerto Rico, St. Vincent & the Grenadines, Grenada, and St. Lucia that are currently hosted by the SERVIR project.
- Two new geoservers were established at the National Mapping Agency and the Ministry of Agriculture of El Salvador during the second week of May.
- A new version of a model geoserver (IMS Template) was developed for the IABIN-DGF project. A GIS and IMS software donation was obtained from ESRI for the Land Information Center of Belize for the establishment of its geoserver.
- Seventeen participants from Central America and the Caribbean attended a capacity-building workshop on IABIN/DGF-related topics such as ArcIMS, WMS (Web Map Server protocol), IMS Template, and metadata development. This one-week workshop took place on March 13 - 17 at the City of Knowledge in Panama.
- Michelle Anthony (EROS) and Arturo Cabrera (SEMARNAT) continued providing IMS and GIS technical assistance during this project phase to all participating agencies that established geoservers during the first project year - and to the ones that are currently establishing geoservers in year 2.
- Participating agencies incorporated more than 100 new spatial datasets to the geoserver network. For the most part these are datasets that had to be reviewed prior to final release - or datasets that needed minor modifications.

- Modifications were carried out to the TerraLook software. These modification will allow: point and click panning (smooth panning is forthcoming), measure of area and distance, improved multiple view capability, and improved ability to create new vectors.

Component 2 - Deployment of Central American and Caribbean elevation derivatives.

- The development of elevation derivatives for all the Central American and Caribbean countries (except Cuba and Trinidad and Tobago) has been completed.
- A contract was signed between the City of Knowledge and the Pan-american Institute of Geography and History (PAIGH) for the completion of national digital river maps at 30-meter resolution, by refining the streamlines maps derived from the SRTM dataset.
- Fourteen participants from Central America and the Caribbean attended a capacity-building workshop (March 7-10) on the development and use of SRTM digital elevation model (DEM) derivatives.

Component 3: Protected Area DSS Training and Classification of Socio-Economic Threat for Freshwater Systems

- New components were added to the DSS based on user requests
- Draft tutorials for the first two DSS modules
- Beta-testing of the DSS modules
- Two DSS training sessions have been conducted in Jamaica and Mexico
- The region-wide socio-economic freshwater threat layer has been assembled.

Component 4: Use of Geospatial and Biological Data to Predict Invasive Species Distributions in Northern MesoAmerica

- Created an index of water bodies for the project area;
- Correction of the synthetic streamlines generated by USGS for IABIN-DGF is in progress and
- Assemble a large scale fish database to serve as the foundation of the modeling.

Component 5: Link biodiversity and environmental information with hydrological-SRTM derived data.

- INETER and SINIA are doing the SRTM derivative data corrections for the Lake Nicaragua basin.
- The Lake measurements were made on May 3, 2006 and have been analyzed.
- ASTER satellite passes to be used to generate the reflectance curves for Lake Nicaragua have been identified and are being bought.
- A collection of socio-economic data for the 27 municipalities surrounding the region is in progress.

Annex 3. Resolución: Mesa Redonda “Promoción del intercambio de información sobre biodiversidad en las Américas, a través de la Red Interamericana de Información sobre la Biodiversidad (IABIN): Redes Temáticas de Especies y Especímenes”, IX Congreso Latino-Americano de Botánica, Santo Domingo, Rep. Dominicana

Resolución

Los participantes de la Mesa Redonda “Promoción del intercambio de información sobre biodiversidad en las Américas, a través de la Red Interamericana de Información sobre la Biodiversidad (IABIN): Redes Temáticas de Especies y Especímenes” (23.06.06)

Considerando

1. Los esfuerzos que están realizando los herbarios, los museos nacionales y otras instituciones dedicadas a la custodia e investigación basada en colecciones biológicas para digitalizar la información contenida en sus colecciones y hacer que ésta esté disponible a una gran variedad de usuarios, incluidos los tomadores de decisión a varios niveles
2. Que las labores de digitalización, control de calidad, actualización de la información y uso de herramientas informáticas novedosas que están permitiendo los objetivos mencionados en el apartado anterior, mediante la inclusión de toda la información generada en motores de búsqueda, páginas de Internet y a través de iniciativas nacionales, regionales y globales de bioinformática e intercambio de información de biodiversidad
3. Reconociendo la labor que iniciativas como la Red Interamericana de Información sobre Biodiversidad (IABIN) están desarrollando para promover el intercambio y uso de información sobre biodiversidad en los procesos de toma de decisión para fomentar el uso sostenible y la conservación de la biodiversidad
4. Reconociendo que en el ámbito local hay una falta de reconocimiento de la labor científica y académica necesaria para lograr la digitalización de información científicamente confiable sobre el patrimonio de biodiversidad de nuestros países y que a menudo ésta no es reconocida como productos concretos de de investigación

Resuelve

1. Proponer a la Asamblea General del IX Congreso Latinoamericano de Botánica que haga un llamado a los gobiernos e instituciones regentes de la investigación científica de los países asistentes a este evento y miembros de la Asociación Latinoamericana de Botánica para que incluyan dentro de sus agendas de fomento y apoyo a la investigación la digitalización de las colecciones biológicas, apoyando las iniciativas nacionales, regionales tales como IABIN y globales que promueven esta tarea
2. Que la Asamblea haga un llamado a las instancias antes mencionadas para que se considere como un producto de investigación científica el que los datos digitalizados de las colecciones biológicas se hagan disponibles a través de iniciativas nacionales, regionales y globales y mediante medios electrónicos
3. Que la Asamblea haga una exhortación para que las Sociedades o Asociaciones Botánicas y de otras disciplinas científicas y académicas del hemisferio promuevan la adopción de las iniciativas de digitalización de colecciones biológicas como prioridades nacionales de investigación y que éstas sean consideradas como productos concretos de investigación, de tal manera que los gobiernos dirijan los recursos económicos necesarios para apoyar esta iniciativa.

Adjunto: Listado de participantes en la Mesa Redonda.