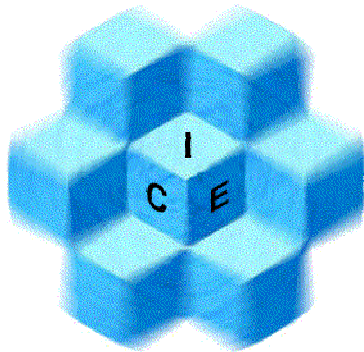
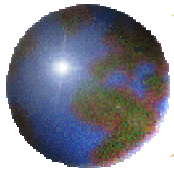


*Information Center for the
Environment (ICE) Biological
Inventories of the World's
Protected Areas - Overview*



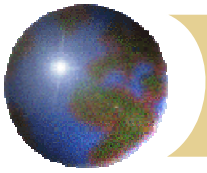
Robert J. Meese
Information Center for the Environment
University of California, Davis

Organization of American States
Washington, DC
January 31, 2006



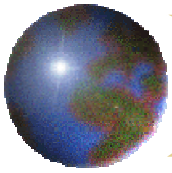
ICE Databases: Goal

To produce and to help others to produce and to disseminate via the Internet, documented, taxonomically harmonized species inventories of the world's protected areas.



ICE Databases: History

- Work began in 1989 with U.S. NPS and TNC of California
 - Development of “custom input device” to create documented biological inventory databases
 - Accumulate and standardize (on both structure and content) existing biological inventory data
- Assemble data for desktop databases
- Subsequent efforts included Internet dissemination of accumulated data (ca. 1992)



ICE Databases: Strategy

1. Collaborators

1. Taxonomic community – naming standards for both desktop application and Internet databases
2. Data providers
3. Agencies and NGOs

2. Custom data input device

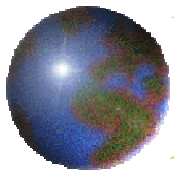
BioInventory Builder - used to input new data

3. Technical Expertise

database management, programming, taxonomic reconciliations

apply to existing, or “legacy”, electronic data

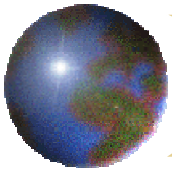
4. Data dissemination via Internet



ICE Databases: Nomenclators

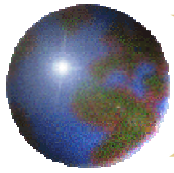


NEW New CD-ROM available as of April 2005.



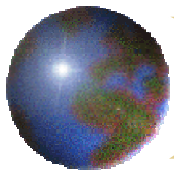
ICE Databases: Data Sources

- U.S. National Park Service
- TNC
- Parks Canada
- Parques Nacionales de Argentina
- MAB Russia
- Guyra Paraguay
- Turkmenistan
- Smithsonian Institution (MAB/GSAB)
- InBIO
- NBII
- Peer-reviewed publications & books
- Many individual contributors



ICE Databases: Supporters

- U.S. N.P.S.
- U.S. MAB Secretariat
- California Parks & Recreation
- U.S.G.S.
- N.B.I.I.



ICE Databases: Current Status

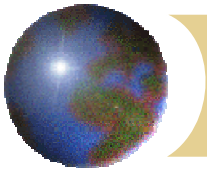


- Ca. 133 countries
- Ca. 1,415 protected areas
- Ca. 492,374 records
 - 75% of the world's birds
 - 62% of the world's mammals

<http://www.ice.ucdavis.edu/bioinventory/bioinventory.html>

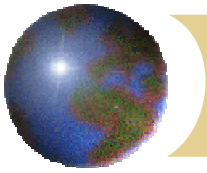
WELCOME TO THE ICE
BIOLOGICAL INVENTORY DATABASES

CLICK AN IMAGE IN THE TABLE
TO BEGIN YOUR SEARCH



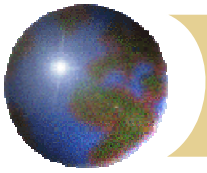
ICE/NBII/Guyra Collaboration

- ICE, NBII, and Guyra Paraguay collaborated to provide Internet access to biological inventories of protected areas in Paraguay
- MOBOT provided query of TROPICOS for plant name standard
- ICE developed version of *BioInventory Builder* for plants of Paraguay and Argentina in Spanish
- Training sessions in Asunción in April, 2004
- Cost-free distribution of *BioInventory Builder* CD
- Results
 - 589 plant records (487 unique taxa) from 11 protected areas
 - 7,409 animal records (1042 unique taxa) from 28 protected areas
 - 52 additional plant taxa added to plant “master list”
 - Data available via the Internet
(<http://www.ice.ucdavis.edu/bioinventory/bioinventory.html>)



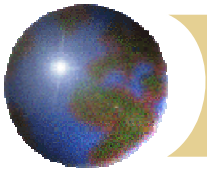
ICE/NBII/Guyra Collaboration

- NBII supported and co-ordinated effort
- Guyra Paraguay
 - Provided in-country logistics
 - Staff and collaborators received training, used *BioInventory Builder* to input data
 - Contributed data
- Collaboration may serve as model for IABIN PA and Species thematic networks



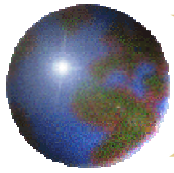
Benefits of Collaboration

- ➊ Enhanced local capacity through use of cost-free tools for accumulating, standardizing, and disseminating biological inventory data
- ➋ Contribute to local, national, regional, and international bioinformatics efforts
- ➌ Site and species names adhere to global standards
- ➍ Ability to query across sites with reliable results to queries



ICE Databases: Future

- ✿ Move from centralized to distributed structure
- ✿ Modify internet databases
 - ▣ Open-source software
 - ▣ Enable remote queries, greater interactivity
 - ▣ Graphical (geo-spatial) interface
 - ▣ Many more onward links
- ✿ Modify *BioInventory Builder*
 - ▣ Open-source software
 - ▣ Greater support of local, on-site or in-country capabilities
 - ▣ More languages (Portuguese in development)
- ✿ Increase collaborations



ICE Databases Overview

The End.....