Session 4: Building / connecting databases

Data and knowledge sharing with, and delivering to the communities.

National Survey on the Natural Environment of Japan





Biodiversity Center of Japan, MOE

- Establishment: 1998
- Purpose: To encourage the conservation of biodiversity in Japan and also to contribute to international efforts toward conserving biodiversity.
- Staff: Approx. 20 people

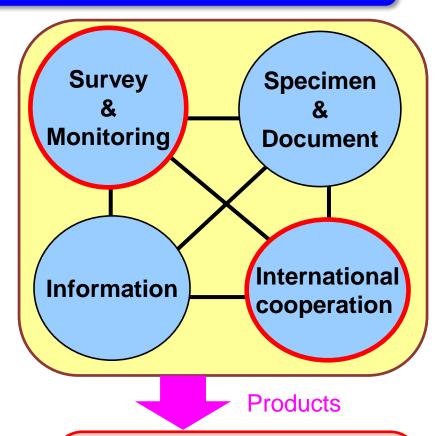




Functions of Biodiversity Center

Survey & Monitoring

- Vegetation Survey
- Monitoring Sites 1000
- IkimonoLog, etc.
- Specimen & Document Collection and storage of biological specimens and documents
- Information
 Collection, management, and public service of information concerning biodiversity
- International cooperation
 Development of biodiversity information
 system and observation network



Conservation of Biodiversity

- Policy-making
- Environmental impact assessment
- academic research, etc.

Nat'l Survey on the Natural Environment

- Since 1973, Ministry of the Environment has been conducting the Survey to gather information nationwide that will provide the basic data needed for the nature conservation.
- The Survey, known as the "Green Census", is specified in the Nature Conservation Law.
- The survey is comprehensive and includes Japan's variety of terrestrial and coastal environment.

Target of the Survey

Land

Vegetation **Plants Specific Plant Community Big Trees Animals Animal Distribution Geologic Environments** Geography **Surface Ground Alterations** and Natural Landscape Resource

Historic Natural Environment

Coastal areas

Marine	Changes to Coastline Tidal flats, Seaweed beds, and Coral reefs Distribution	
Areas • Coastal Area		
		Life in Coastal Areas
Marine life		Marine Environments
		Marine Animal

Surface water

landscape

River **Lake and Marsh** Wetland

Genetic diversity

Genetic Diversity

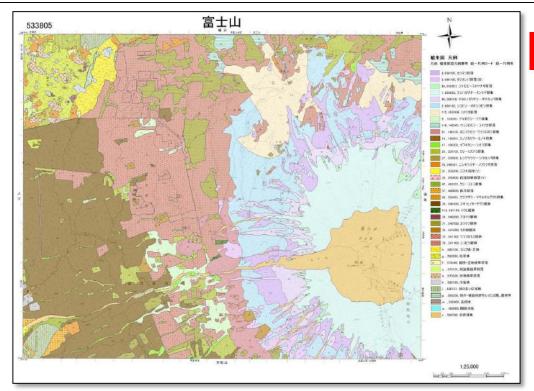
Ecosystems

Ecosystem	
Typical Ecosystem	
Ecosystem Survey for Regional Diversity	

Vegetation survey

Purpose: to get information on the present state of natural vegetation and to create actual vegetation maps* nationwide.

* Vegetation map: provide the most basic and essential data for the conservation of natural environment



Scale: 1:25,000

More than 80% of Japan is already completed!

Vegetation map of the Mt. Fuji area

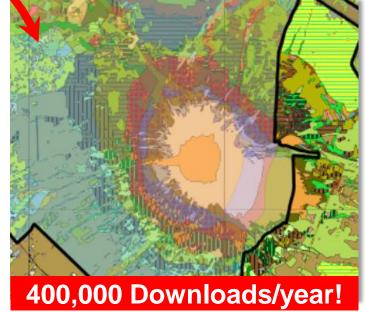
GIS data of vegetation map

GIS data of vegetation map are created, and available for free download on our Web-GIS system



Multi-layered map:

- Vegetation
- Animal distribution
- Protected area
- Geography etc.



http://gis.biodic.go.jp/webgis/_(only in Japanese)



Monitoring Sites 1000







Purpose:

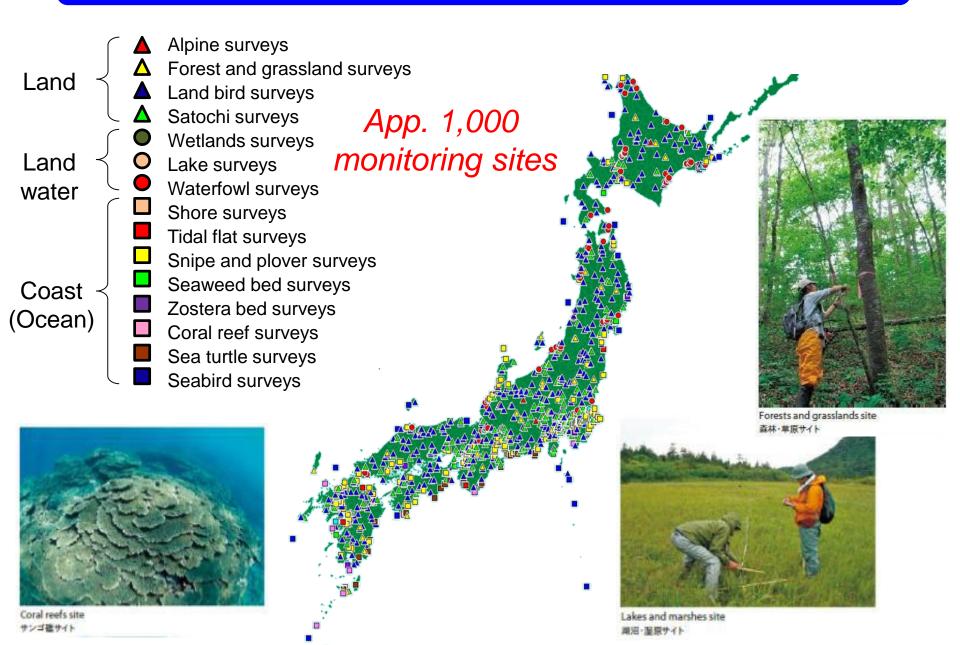
- To detect signs of ecosystem change (e.g. species composition and population) by I o n g - t e r m monitoring survey, accumulating and analyzing quantitative data on various types of ecosystem of Japan
- And, to publish the results in order to assist academic research and develop appropriate nature conservation measures

Monitoring period:

The project was launched in 2003, and it will be continued for 100 years or more



Location of Monitoring Sites 1000





IkimonoLog

Purpose: to collect the information of biological observation nationwide by using the internet, and to provide open access to these information.



Main functions:



Search



Report



Apply the system for other surveys

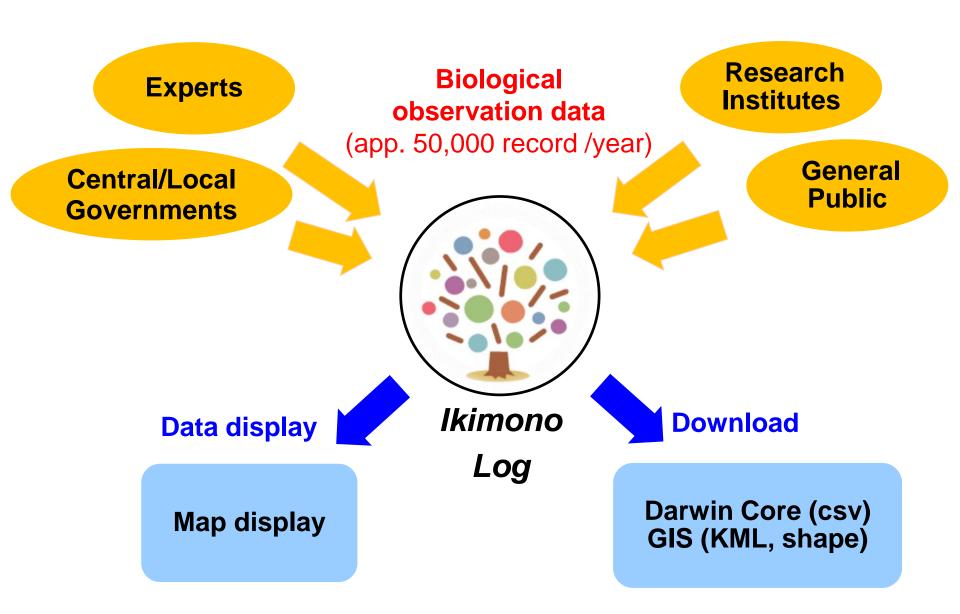
Annual access:

More than 15,000,000

http://ikilog.biodic.go.jp/ (only in Japanese)



Data flow of IkimonoLog



Data sharing of Biodiversity Center

Biodiversity Center

Various basic information on biodiversity is open to the public





Survey & Monitoring





Access and search

On the web



Access and search

International databases

- -GBIF
- -OBIS
- BISMaL
- JaLTER, etc.

Global data sharing (more than

(more than 800,000 records so far)

Cooperation with ESABII



East and Southeast Asia Biodiversity Information Initiative

Goal

Contribute to the implementation of the Strategic Plan* for the CBD

* Strategic Plan 2011-2020

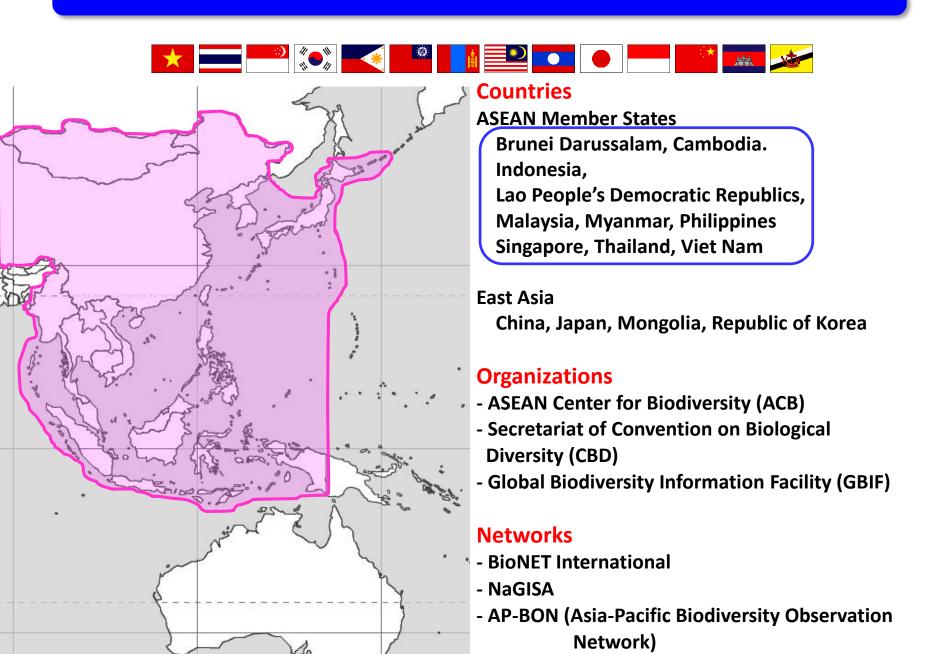
Means

Particularly by addressing the Target 19 of the new Strategic Plan through:

- ✓ Development of biodiversity information system
- ✓ Raising taxonomic capacity

Target area

ESABII Members



Capacity Building in ESABII

Capacity building programme for taxonomy

Development of networks

- Experts and institutes on taxonomy
- Networks for information sharing and dissemination



(Nagao Natural Environment Foundation)

Development of tools

- Species identification guidebooks



(Nagao Natural Environment Foundation)

Human capacity building

- Expert training in Universities and research institutes
 - Training for para-taxonomists
- Specific training for law enforcement (Custom officers)

Training Workshops for Capacity Building

- 2010 Coral Taxonomy (Malaysia)
- 2011 Training of Trainers on CITES (Malaysia)
 Terrestrial Plants [dicots] (Indonesia)
 CITES Training (Viet Nam)
- 2012 CITES Training (Cambodia)
 Terrestrial Plants [monocots] (Indonesia)
- 2014 CITES Training (Malaysia)
 Plants [Bryophytes & Pteridophytes 1st] (Indonesia)
 Plants [Bryophytes & Pteridophytes 2nd] (Indonesia)
- 2015 Plants [Bryophytes & Pteridophytes 3rd] (Thailand) Plants [lowland forest trees] (Malaysia)
- 2016 Training of Trainers on CITES (Malaysia)
- 2017 Training of Trainers on CITES (Malaysia)
 Large Fungi (Indonesia)



Today's Points

- The Center opens most of the data and knowledge mainly on the web.
- The Center collaborate closely with international efforts such as AP-BON and ESABII.

Data and knowledge shared with the communities, utilized as basic scientific information in policy making, environmental assessment, academic researches, etc.

Contribute to the SDG's.

