

Application of biodiversity database in Japan



January 17, 2008

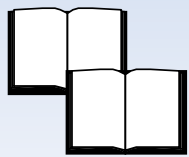
Kumiko Yoneda, Mutsumi Natori
Japan Wildlife Research Center

Data dissemination for biodiversity conservation by Ministry of the Environment (MoE), Japan

- ◆ Biodiversity Center of Japan (BiodiC-J)
 - ❖ Established in 1998
 - ❖ Japanese FP of CHM
- ◆ Data collection: National Survey on the Natural Environment since 1973
- ◆ Output: Japan Integrated Biodiversity Information System (J-IBIS)
 - ❖ Website since 1997

Data processing

From paper-based survey results to digital formats



• Reports



• html, pdf

• Maps

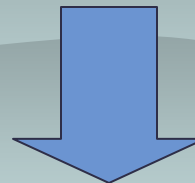
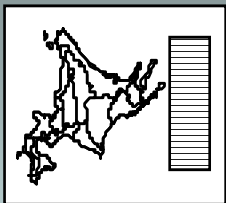


• image(.jpg), GIS file (.shp)

• Field data sheets

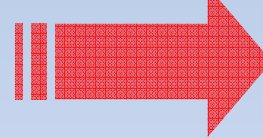


• table(.csv), Oracle DB



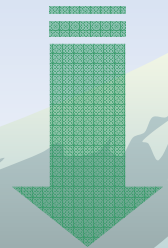
- html, pdf
- image(.jpg), GIS file (.shp)
- table(.csv), Oracle DB

Classified



Classified data (e.g. distribution of endangered species) are managed by MoE and BiodiC-J.

Unclassified



Biodiversity Database

Japan Integrated Biodiversity Information System (J-IBIS)

- Website <http://www.biodic.go.jp/english/J-IBIS.html>

Nature Information GIS

- GIS data set (CD-R) published in 1997 and 1999

Example of J-IBIS (1) (Vegetation map by WebGIS)

http://www.biodic.go.jp/english/kiso/map/sy_map_f.html - Microsoft Internet Explorer


ファイル(E) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

戻る 検索 お気に入り メディア アドレス(D) http://www.biodic.go.jp/english/kiso/map/sy_map_f.html 移動

J-IBIS Japan Integrated Biodiversity Information System

- National Survey
- Threatened Species
- Local Natural
- National Parks
- Laws & Treaties
- Links
- TOP
- Sitemap

Top > National survey on the natural environment > Vegetation Naturalness Survey/Vegetation Survey > Vegetation Map Search




Natural vegetation in Vaccinio-Piceetea Region

- Empetrum heurtaultii and wind-exposed grassland(10200)
- Snow patch community(10300)
- Abietum veitchii-mariesii(20502)
- Tsuga diversifolia community (20503)
- Larix kaempferi community(20700)
- Smilacina yezoensis-Betula ermanii(20800)
- Trollius-Ranunculus acris japonicae (21001)

Substitutional Communities in Vaccinio-Piceetea Region

- Plant communities in clear-cut area (30300)
- Betula ermanii community(30400)

Natural vegetation in Fagetea crenatae Region



displayed the map when click this display

The present setup Move For displaying map of this page, the Digital National Land Information produced by the Geographical Survey

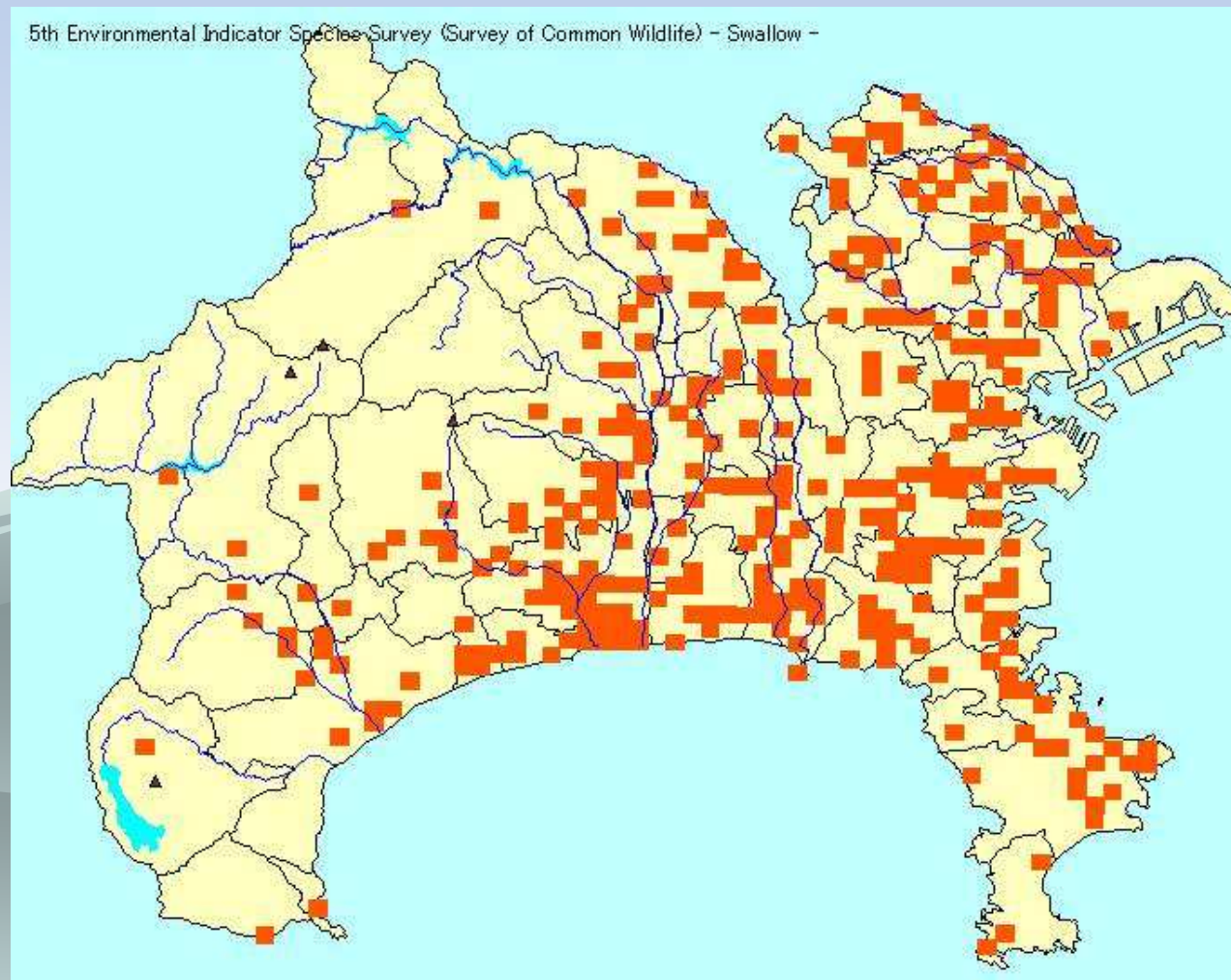
Information Area

Move(700,450)

インターネット

スタート ML http://www.biodic.g... Microsoft PowerPoint - ... 39% 23:35

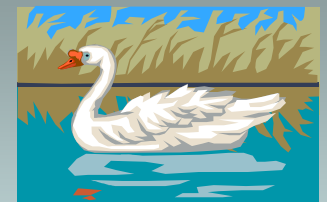
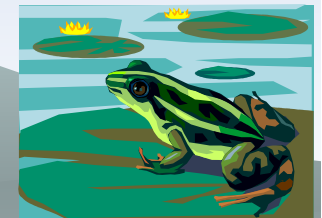
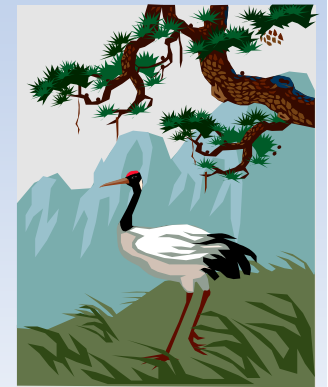
Example of J-IBIS (2) (Example of distribution map)



- ◆ Grid Square System (1km x 1km)

Examples of National policy-making supported by the biodiversity database

- ◆ Red Lists of Japan: to define animal distribution
- ◆ National Biodiversity Strategy: to identify “Three Crisis”
- ◆ Important Wetlands 500: to select wetlands for this list (and for Ramsar Convention)
- ◆ World Natural Heritage sites: to provide scientific basis for the selection of candidate sites including Shiretoko (inscribed in 2005)

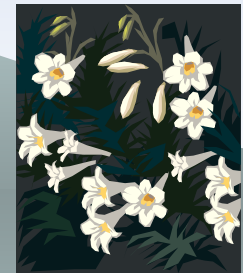


Application of biodiversity database to implementation of the 3rd NBS (1)

◆ Biodiversity Hotspots

Hotspots will be identified by the following data;

- ❖ Distribution of endangered species
- ❖ Important Habitats (e.g. rare plants communities, wetlands)
- ❖ Vegetation and land use
- ❖ Protected areas (e.g. National parks, wildlife protection areas)



Application of biodiversity database to implementation of the 3rd NBS (2)

◆ SATOYAMA initiative

Important rural landscape (called “Satoyama” in Japanese) will be identified by the following data;

- ❖ Important areas for biodiversity (e.g. distribution of endangered species in rural area)
- ❖ Socio-economic factors affecting rural landscape (e.g. population density, agriculture census)
- ❖ Cultural factors (e.g. Lists of 30 important SATOYAMAs, 100 rice terraces, and important cultural landscapes)

Other applications of the biodiversity database

- ◆ Environment consultant firms:
for Environmental Impact Assessment



- ◆ Local governments:
for environmental conservation planning

- ◆ Scientists:
for academic researches



- ◆ Educators:
for environmental or computer education



Benefits of data dissemination

- ◆ Development of effective data management system

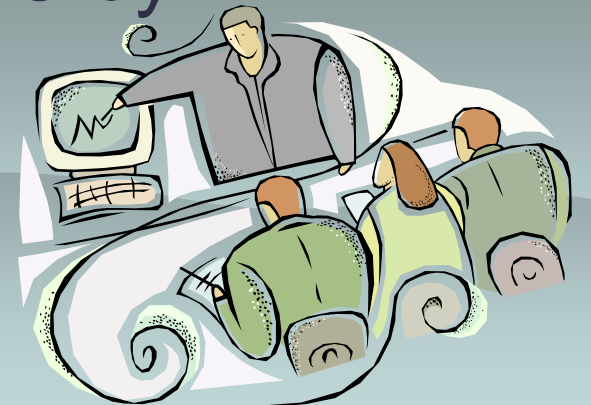


- ◆ Encouraging environment-conscious projects by local governments
- ◆ Raising public awareness for nature conservation



Promotion of Database

- ◆ Training program for national and local government officers on nature conservation policies and activities by MoE
- ◆ Japan International Cooperation Agency (JICA) training course on Biodiversity Information System since 1998 by BiodiC-J





Thank you!