

11. Collection and Use of Information

National Survey on the Natural Environment has been undertaken, in order to document the current status of the natural environment and changes taking place, and to collect basic data from across Japan. The survey results are used in various fields concerned with nature conservation, including research, administration and education. The Biodiversity Center of Japan conducts surveys of the nation's natural environment, and collects, maintains and shares with the public the data and information gathered.

11.1 National Survey on the Natural Environment

(1) What's "National Survey on the Natural Environment"

National Survey on the Natural Environment (the Survey) is also called "Green Census". The Ministry of the Environment has been undertaking the Survey approximately every five years since 1973, based on Article 4 of the Nature Conservation Law. The purposes of the Survey are to document the current status of the natural environment of the country as a whole and changes that are taking place, and to prepare basic data and information for drawing up nature conservation policies. Summaries of these surveys are below (5.2).

The results of the Survey are published in many forms such as printed reports, maps, digital information, etc., and are open to the public. They also provide a primary source of information about the natural environment for nature conservation administration, such as designation and planning of natural parks, environmental impact assessments and other purposes.

Nature Conservation Law, Article 4

The State shall endeavor to conduct at approximately five-year intervals surveys of the topography, geology, fauna and flora and other basic surveys as necessary for building the policies to be taken for the conservation of the natural environment.

(2) Timeline for the Survey

◆ The First National Survey(1973)

There had been no national surveys to collect basic data and information about the natural environment until 1973, when survey was first undertaken. The survey was intended to aid in understanding the current status of the natural environment nationwide, scientifically and comprehensively; to clarify what existed and what was in need of preservation; and to prepare basic data for the enhancement of nature conservation administration.

◆ The Second National Survey(1978~1979)

The Second Survey was planned with a focus on an all-inclusive and objective collection of basic information on the natural environment. Actual vegetation maps (1:50,000 scale) were prepared (mapping was completed countrywide after the Third National Survey), and mammal distribution survey was conducted.

◆ The Third National Survey(1983~1987)

Comprehensive and objective basic information on the natural environment was continuously gathered, in order to determine changes in natural conditions after the Second Survey. Additional surveys included Natural Landscape Resources and Survey of Common Wildlife.

◆ The Fourth National Survey (1988~1992)

The Fourth Survey took place. As in the Third Survey, inclusive and objective information gathering and determinations of changes since the last survey was conducted. Additional surveys included surveys of big trees and of marine organisms biological environments (seaweed beds, tidal flats and coral reefs).

◆ The Fifth National Survey(1993~1999)

Wetland survey and coastline survey were conducted, mainly to generate data for comparison with the data and information collected during previous surveys. Survey with a new framework, namely a "biodiversity survey" and a "national survey of the marine natural environment" started in 1994 and 1997 respectively.

◆ The Sixth National Survey(1999~2004)

The Sixth Survey include: projects for overall renewal of the actual vegetation maps changing the scale from 1:50,000, as prepared in the Second and Third Survey, to 1:25,000; medium-to-large mammal distribution survey to compare the current status with that reported in the Second Survey; and tidal flats and seaweed beds surveys using a unified method.

◆ The Seventh National Survey (2004~2009)

The Seventh Survey has been continuously started after the Sixth Survey. They are the vegetation surveys for the renewal of the actual vegetation map (1/25,000); the coast and neritic region surveys on the biota of tidal flats, seaweed beds etc. and the census and habitation surveys on five species of medium-to-large mammals that have a significant impact on agriculture and forestry or ecosystems and some other surveys.



Specified mammals distribution survey (Japanese shika deer)

11.2 Monitoring Sites 1000

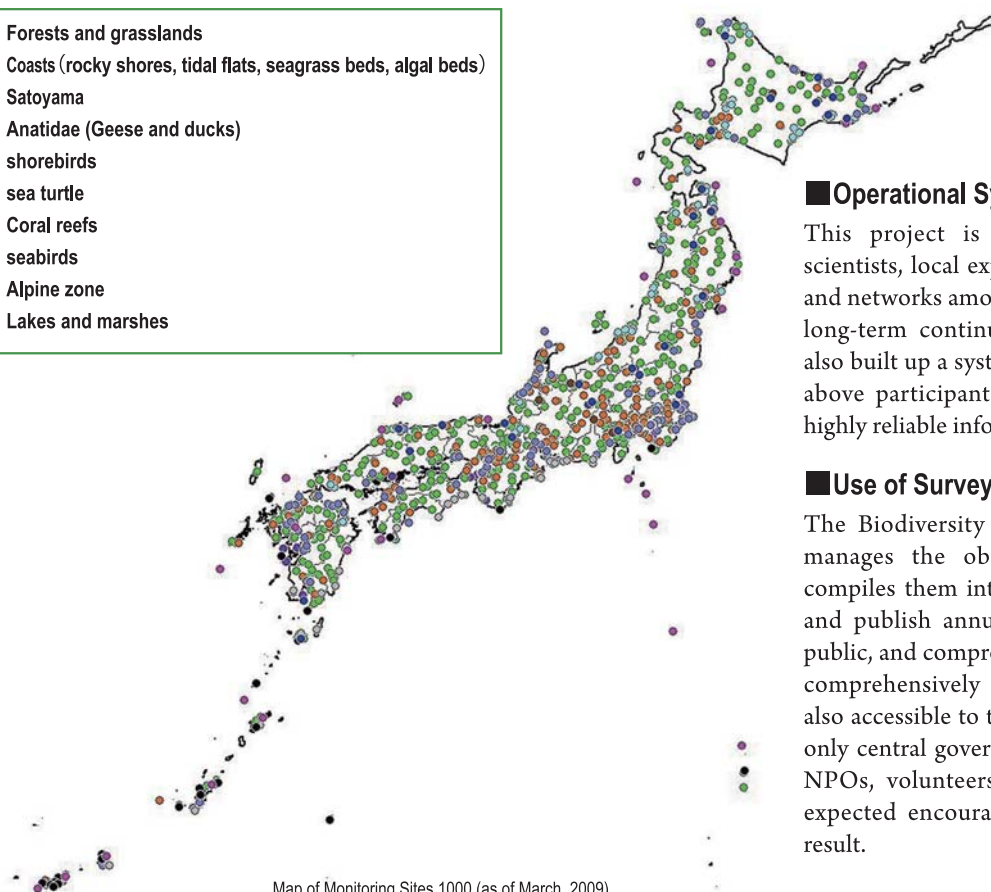
The "Monitoring Sites 1000" project was launched in fiscal 2003 in accordance the Second National Biodiversity Strategy of Japan. This is a long-term ecosystem monitoring project at about 1000 monitoring sites in various types of ecosystems throughout Japan -such as alpine zones, forests, grasslands, Satoyama, lakes and marshes, sandy beaches, rocky shores, tidal flats, seagrass beds, Algal beds, coral reefs and, islands and islets. The project aims to detect signs of ecosystem degradation, such as decrease of the population size in particular species, as early as possible by analyzing the monitoring results, and to contribute to prompt and appropriate measures for biodiversity conservation.



Monitoring Sites 1000
Since 2003

"Monitoring Sites 1000" Logo mark

- Forests and grasslands
- Coasts (rocky shores, tidal flats, seagrass beds, algal beds)
- Satoyama
- Anatidae (Geese and ducks)
- shorebirds
- sea turtle
- Coral reefs
- seabirds
- Alpine zone
- Lakes and marshes



Map of Monitoring Sites 1000 (as of March, 2009)

■ Operational System

This project is conducted in cooperation with scientists, local experts, NPOs and volunteer citizens, and networks among them has been developed for this long-term continuous survey. The government has also built up a system for sharing information with the above participants so as to quickly collect and use highly reliable information.

■ Use of Survey Results

The Biodiversity Center of Japan accumulates and manages the obtained data on the monitoring, compiles them into available information and figures and publish annual reports or news letters for the public, and comprehensively analyze the survey results comprehensively every five years. These results are also accessible to the public through the website. Not only central governments but also local governments, NPOs, volunteers, researchers and schools will be expected encourage to use of this information and result.

Survey items and number for the Monitoring Sites 1000 project (as of March, 2009)

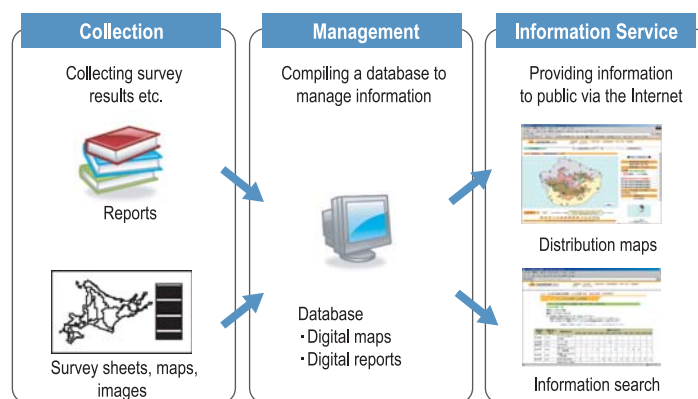
Ecosystem types		Site categories	Major survey subjects	Site number	Surveyors	
Terrestrial	Alpine zone		During examination	5	Scientists/experts	
		Core	①vegetation ②tree census ③litter ④ground beetles ⑤terrestrial birds	19	Scientists/experts	
	Forests and grasslands	Sub-core	①vegetation ②tree census ③terrestrial birds	25	Scientists/experts	
		Satellite	①vegetation ②terrestrial birds	422	Citizen collaborators	
	Satoyama	Core	①human impacts ②herbaceous plants ③aquatic environments ④indicate faunas	18	Citizen collaborators	
		Satellite	one of the survey subjects of core sites	179	Citizen collaborators	
Inland waters	Lakes and marshes	Core	①vegetation ②plankton ③fishes	30	Scientists/experts	
		Satellite	①vegetation ②Anatidae	81	Citizen collaborators	
Marine	Coasts and shallow seas	Sandy beach	①area, vegetation ②sea turtle egg-laying	41	Citizen collaborators	
		Rocky shore	benthos	6	Scientists/experts	
		Tidal flats	Core	benthos	8	Scientists/experts
			Core Satellite	①tidal flat structures ②shorebirds	123	Citizen collaborators
		Seagrass beds	①seagrass ②benthos	6	Scientists/experts	
		Algal beds	①algal vegetation ②benthos	6	Scientists/experts	
		Coral reefs	①substrate, turbidity ②coral coverage, community type, crown-of-thorns starfish population	24	Scientists/experts	
		Islets	①vegetation ②avifauna ③focus species	30	Scientists/experts	
Total				1023		

11.3 Information Service

(1) Japan Integrated Biodiversity Information System (J-IBIS)

The Japan Integrated Biodiversity Information System (J-IBIS) is an integrated system to collect, manage and provide a broad range of biodiversity information, especially the results of the National Survey on the Natural Environment. Digital data of reports, maps (GIS data) and other survey results are made available to public via the Internet. J-IBIS has been practically used in a variety of areas including nature conservation administration, environmental assessment, environmental education and NGO activities.

(URL: <http://www.biodic.go.jp/english/J-IBIS>)



(2) Internet Nature Information System

In order to protect the environment, it is important for the Ministry of the Environment to share information so that people individually come to realize the richness of nature. The Ministry has therefore opened the Internet Nature Information System so that people can examine nature more closely, and actively gather information over the Internet.

(URL: <http://www.sizenken.biodic.go.jp>)

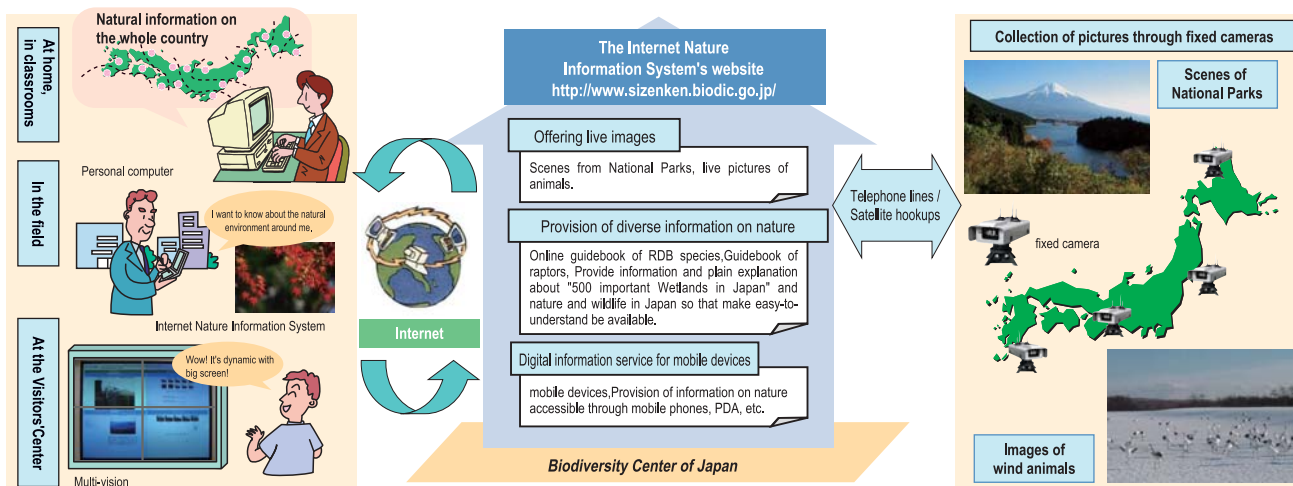
■ Live images of nature from nationwide

Live images of National Parks and wild animals, from fixed cameras set up in 40 locations or more around the country, can be viewed over the Internet.

■ Provision of various kinds of information on nature

In addition to the information mentioned above, this information system provides (Online guidebook of Red Data Book species), information on "500 important Wetlands in Japan" selected by the Ministry of the Environment, websites for you to learn about nature from season to season in Japan (party Japanese version only).

Internet Nature Information System



(3) Biodiversity Information Clearing-House Mechanism (CHM)

Based on the Convention on Biological Diversity, the Biodiversity Center of Japan developed the "Biodiversity Information Clearing-House System" as a mechanism to promote exchange of information related to biodiversity. CHM operates on the website and compiles a database of information (metadata) including the contents, location and access methods.

of biodiversity information scattered all over the nation. The database is open to the public, and users are able to know the location of and access to relevant information easily via the Internet, by searching metadata registered by the information holders.

(URL: <http://www.chm.biodic.go.jp/> (Japanese version only))

(4) Natural Environment Information GIS

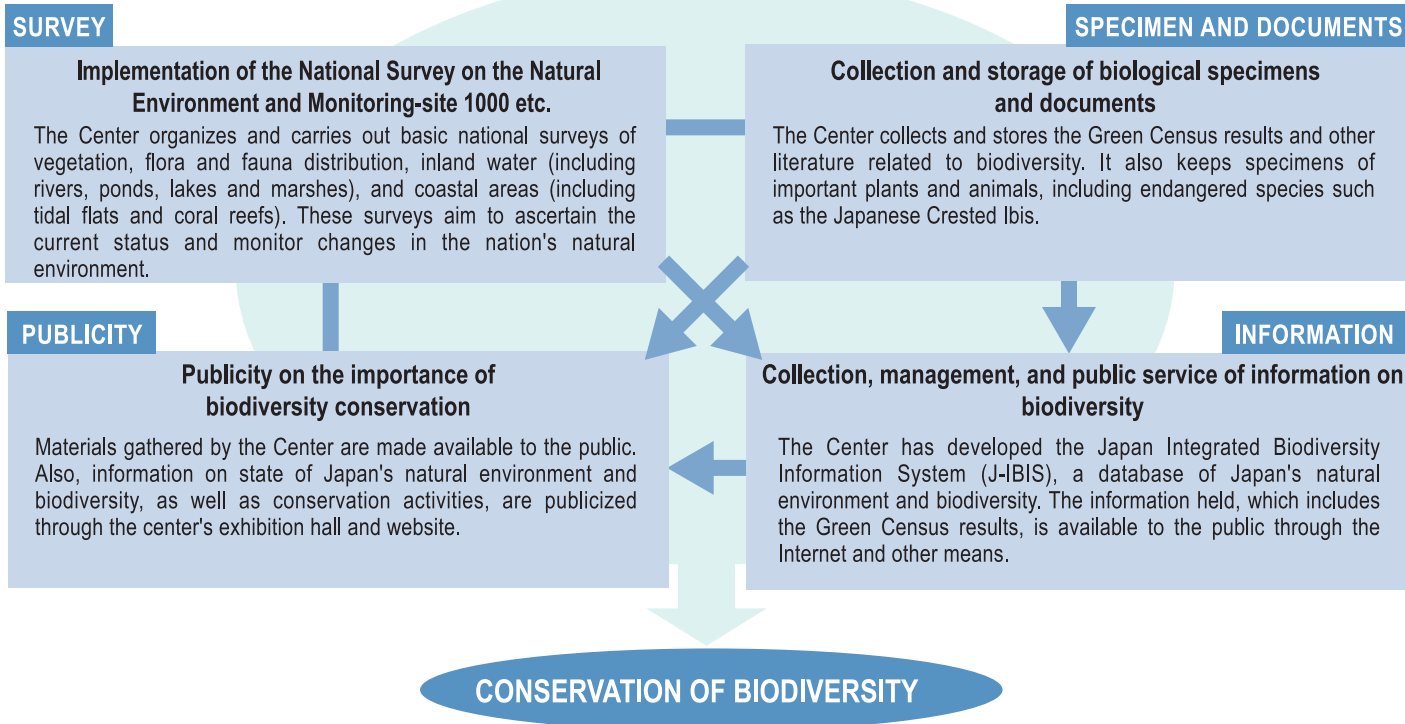
Natural Environment Information GIS is a data set of electronic data with geospatial information on natural environment are compiled by using the Geographic Information so that users can access it easily. This system provides such information as the National Survey results accumulated by the Ministry of the

Environment. It can be downloaded from J-IBIS, or is available in the form of DVD, CD, etc. Natural Environment Information GIS is being used in various fields including some administrative branches of the government in charge of environmental conservation, research, education, etc.

11.4 Biodiversity Center of Japan

As called for in the National Strategy of Japan on Biological Diversity, the Biodiversity Center of Japan was established in 1998 under the former Environment Agency. The Center promotes network of people and information for conservation of biodiversity through fulfillment of its four functions in an integrated manner: survey, information, specimen and documents, and publicity.

Functions



- Open : 9 a.m. - 5 p.m. daily
- Closed : <Exhibition Facilities>
in winter (November - April)
weekends, national holidays,
New Year Holiday period (12/28 ~ 1/4)
- <Library>
weekends, national holidays
New Year Holiday period (12/28 ~ 1/4)
- Admission fee : free
- Address : 5597-1, Kenmarubi, Kamiyoshida, Fujiyoshida City,
Yamanashi Prefecture
- Telephone : 0555-72-6031
- Homepage : http://www.biodic.go.jp/index_e.html