



Japan's experience on National Level Biodiversity Assessment

– Finding from Japan Biodiversity Assessment and response
through NBSAP–



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Background

Global

2001-2005 Millennium Ecosystem Assessment

2002 "2010 target" Adopted

2006 GBO2

2010 GBO3

2010 COP10

"Aichi Biodiversity Target" Adopted

2012 COP11

National

2008 The Basic Law for Biological Diversity

2010 NBSAP2010

2010 Japan Biodiversity Outlook

2011 Great East Japan Earthquake

2012 Revision of NBSAP
based on COP10 outcomes



JBO (Japan Biodiversity Outlook)

Purpose

- To raise public awareness about “Biodiversity”
- To promote national and regional conservation activities of various stake holders

Target of JBO

Biodiversity throughout Japan

- Drivers of biodiversity loss
- State of biodiversity

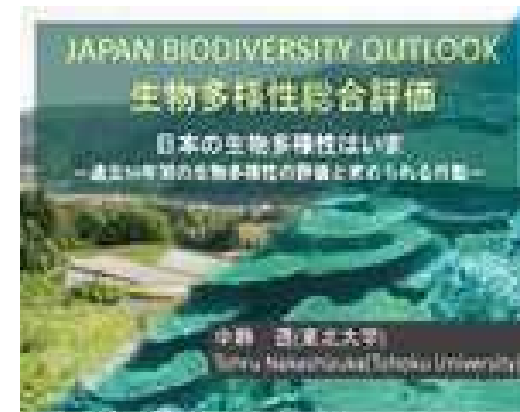
Assessment Period of JBO

From the latter half of the 1950's to 2010




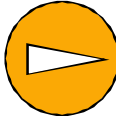
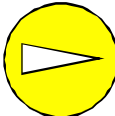







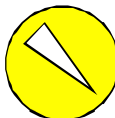

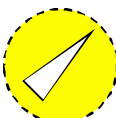
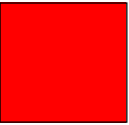

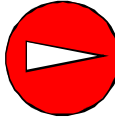


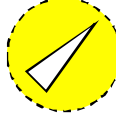





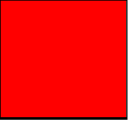

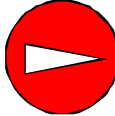
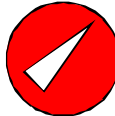

From the latter half
of the 1950's
Rapid economic
growth

From the latter
half of the 1970's
Stable economic
growth

From 1990's
Population decrease,
Low economic growth



Assessment Results of JBO

	State and trends		Drivers and trends			
	From Original	Since Late 1950s	Over Use	Underuse	Alien Species	Climate Change
Forests						
Agriculture	-					
Urban	-			-		
Inland water						
Marine Coastal				-		
Islands				-		

Summary of Assessment Results

Results

- Biodiversity has been lost in every ecosystem and is still being lost in
- Freshwater, marine, coastal and island ecosystems are still under severe threat.

Drivers of biodiversity loss

- Development pressure has the most serious impacts, though the rate of additional biodiversity loss is slightly reduced.
- 2nd Crisis is still increasing at a slow rate.
- Invasive species pose a great threat.
- Global warming is a serious threat particular to some vulnerable ecosystems.

Structure of the new NBSAP of Japan

Part I: Strategy

Importance of biodiversity and rationales

“Realizing a truly enriching society grounded on natural ecosystem”

Current Situation and Challenges

- 4 crises
- 5 challenges

Targets

◆ Long-term targets <2050>

In order to halt the loss of diversity, we will take effective and urgent action aimed at the achievement of the national targets of Japan determined according to the attainment of the Aichi Biodiversity Targets.

◆ Short-term Targets <2020>

Through the maintenance and recovery of biodiversity and the sustainable use of its components, the current biodiversity in Japan will be enriched further and a society in harmony with nature will be achieved where humans can benefit from ecosystem services into the future.

Long-term Perspective (100 years)

Grand design for national land in a society in harmony with nature

Basic strategies until roughly 2020

5 Basic Strategies

- I. Mainstreaming Biodiversity in our daily life
- II. Re-building sound relationship between man and nature in local communities
- III. Securing linkages among forests, countryside, rivers and the sea
- IV. Taking action with global perspective
- V. Strengthening Scientific Basis for Policy Making <New>

Part II: Roadmap for the achievement of the Aichi Biodiversity Targets

5 Strategic goals / 13 national targets / 48 Key action goals

Part III: Action plan

Roughly 700 specific measures / 50 numerical targets

National Targets related to resilience

A-1:
Achieving the “mainstreaming of biodiversity across society”

B-1:
Reduce the rate of loss of natural habitats, as well as their degradation and fragmentation

B-2:
Engage in agriculture, forestry, and fisheries that ensure the conservation of biodiversity in a sustainable manner

B-3:
Improve the state of contamination from nitrogen and phosphorous, conserve aquatic organisms and increase their productivity, and maintain water quality and habitats

B-4:
Identify invasive alien species based upon the results of examinations of the enforcement status for the Invasive Alien Species Act, and lay out the order of priority for controlling these invasive alien species, etc.

B-5:
Promote initiatives for minimizing human-induced pressures

C-1:
Appropriately conserve and manage 17% of inland areas and the like, and 10% of ocean areas and the like

C-2:
Prevent the extinction of threatened species, and maintain the genetic diversity of crops and livestock animals, etc.

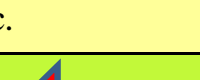
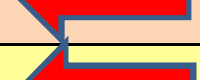
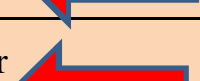
D-1:
Strengthen the benefits received from biodiversity and ecosystem services through the conservation and restoration of ecosystems

D-2:
Restore at least 15% or greater of degraded ecosystems, thereby contributing to climate change mitigation and adaptation

D-3:
Ratify the Nagoya Protocol on ABS and implement domestic measures

E-1:
Promote policies based on the NBSAP

E-2:
Have traditional knowledge be accorded respect, strengthen scientific grounds as well as the connections between science and policy, and effectively and efficiently mobilize the funds needed to achieve the Aichi Biodiversity Targets



Examples of indicators at national level

Strategic Target B: 81 national level indicators for Biodiversity Assessment

Advance initiatives geared towards minimizing human-induced pressures that degrade ecosystems and promote their sustainable use.

Related indicators

- Percentage of wetlands restored in particularly important water systems
- Percentage of tidal flats restored

Strategic Target D:

Strengthen the benefits obtained from biodiversity and ecosystem services.

Related indicators

- Surface area covered by forest plans
- Total number of participants in regional community activities related to the conservation and management of regional resources, such as agricultural land and water

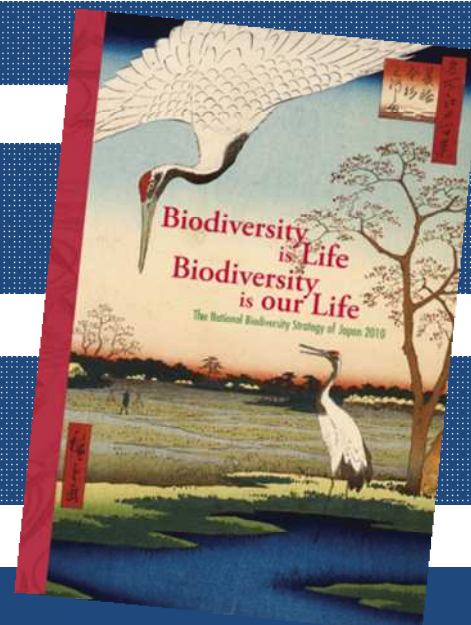
Five Basic Strategies of NBSAP

1. Mainstreaming Biodiversity in our daily life

2. Re-building sound relationship between man and nature in local communities

3. Securing linkages among forests, countryside, rivers and the sea

4. Taking action with global perspective



5. Strengthening Scientific Basis for Policy Making <New>

- Promotion of National Survey on Natural Environment
- Conduct Japan Biodiversity Outlook
(Comprehensive assessment on biodiversity)
- **Enhancing the science-policy interface**

Sanriku Reconstruction (Fukko) National Park Initiative

Reformation of natural parks in the disaster affected area



Contribute to the recovery of disaster-affected areas by establishing a new type of National Park, which will be closely connected with disaster prevention/mitigation and revival of fishery industry

A photograph of a sunset over the ocean. The sun is low on the horizon, creating a bright, shimmering path of light across the water's surface. The sky is filled with soft, golden light and some wispy clouds. The water is dark blue with gentle ripples. In the foreground, the sandy beach is visible, with the sun's reflection shimmering on the wet sand. The text "Thank you for your attention." is overlaid in white, centered in the lower half of the image.

Thank you for your attention.

Extra slides

Function of ESABII

Capacity building

- Terrestrial plants
- Marine biodiversity (corals)
- Brackish and freshwater fish
- CITES appendices species



Biodiversity information

- Migrant birds
- Threatened mammal species
- Threatened vascular plant species
- Red data information

The screenshot displays the ESABII website interface for the Kentish plover. It includes a table of taxonomic information, a description, identification details, ecology, and a range map.

Kentish plover	
Common Name	Kentish plover BirdLife International
Species name	<i>Charadrius alexandrinus</i> BirdLife International
Family	Charadriidae BirdLife International
Genus	Charadrius

Description

Identification

[USGS](#)

Length: 6.25 inches. Small shorebird. Short, fairly thin. Black bar at side of breast. White forehead and supercilious gray upperparts. White underparts. Gray upperparts and Basic and juvenile plumages are similar to adult but black

Ecology

Behavior

[BirdLife International](#)

Although some populations of this species are sedentary, coastal populations are fully migratory and have distinct breeding grounds chiefly from March to October, dispersing southward migration peaking in September. The species densities of 0.5 to 20 pairs per hectare (exceptionally up to other species (e.g., Least Tern *Sterna antillarum*)¹². Outflocks of 20-30 individuals^{1, 6}, and occasionally in larger species flocks⁴.

Habitat

[World Bird Info](#)

Chiefly sea coasts, but also open flats near brackish or salt depressions. Usually on sand, silt or dry mud with even su

Visual and sound images

Photos

Western Sandpiper, seen at Mono Shore State Beach, Moss Landing, CA

Range

Figure-2: Occurrence overview of Kentish plover

[GBIF](#)

The range map shows the distribution of the Kentish plover across the world, with yellow dots indicating occurrence. The map is titled "Figure-2: Occurrence overview of Kentish plover" and is sourced from GBIF.

AP-BON

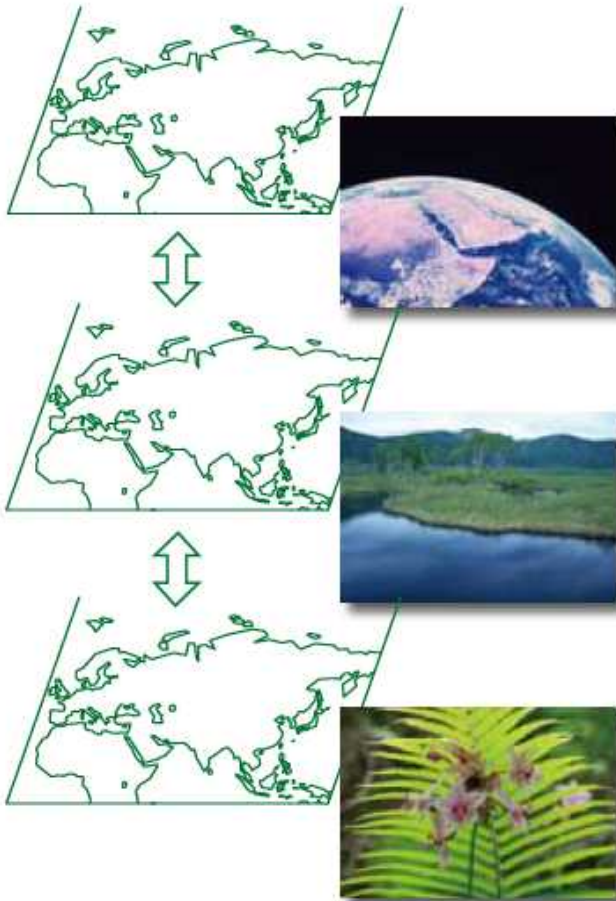
Asia-Pacific Biodiversity Observation Network



National

Regional

Global



Satellite remote sensing

- Ecosystem and land-use types
- Vegetation structure
- Temporal change in ecosystems

Research and modeling of ecological processes

- Primary production (carbon flux and cycling)
- Ecohydrology and nutrient cycling
- Ecosystem services

Species and genetic level research

- Plant species distribution
- Wildlife habitat assessment
- Biological interactions

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:

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

Target area

