Initiatives in Biological Diversity Conservation of National Forest in Japan

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### Introduction of Forests in Japan

- **Total forest area:** 25 million ha, or the two-thirds of national land area.
- **15 million ha** (60%) natural forests, **10 million ha** (40%) planted forests.
- **30% of forests** (equivalent to approximately 20% of the land) are national forests.

#### [Land use]

- **Forest area:** 25.06 million ha (66%)  
  - Naturally regenerated: 7.66 million ha (31%)
  - Planted: 1.94 million ha (12%)

- **Agricultural land:** 4.47 million ha (12%)
- **Residential:** 1.94 million ha (5%)
- **Other:** 6.33 million ha (17%)  

#### [Ownership]

- **Public forests:** 2.99 million ha (12%)
- **Private forests:** 14.39 million ha (58%)
- **National forests:** 7.66 million ha (31%)

**Source:** “Land-Related Trends in FY2016,” Ministry of Land, Infrastructure, Transport and Tourism (Land area as of 2015)  
“State of Forestry Resources,” Forestry Agency (as of March 31, 2017)

<table>
<thead>
<tr>
<th></th>
<th>Forest coverage</th>
<th>Naturally regenerated</th>
<th>Planted</th>
<th>Publicly owned*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World (avr.)</strong></td>
<td>31%</td>
<td>93%</td>
<td>7%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Asia (avr.)</strong></td>
<td>20%</td>
<td>78%</td>
<td>12%</td>
<td>77%</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>68%</td>
<td>59%</td>
<td>41%</td>
<td>41%</td>
</tr>
</tbody>
</table>

**Source:** FRA2020  
(* in 2015 *)
Distribution of National Forests and Public & Private Forests
National forests in Japan

- covers 30% of total forest
- distributed in mountainous backbones and reservoir areas
- widely distributed across Japan.

Important role for land conservation of biological diversity, providing valuable habitats for wildlife.

### National forest in various forms of nature

<table>
<thead>
<tr>
<th></th>
<th>Area (1,000 ha)</th>
<th>% of national forest land</th>
</tr>
</thead>
<tbody>
<tr>
<td>National forest (managed by the Forestry Agency)</td>
<td>7,590</td>
<td></td>
</tr>
<tr>
<td>National forest land</td>
<td>7,580</td>
<td></td>
</tr>
<tr>
<td>Protection forest</td>
<td>6,850</td>
<td>91%</td>
</tr>
<tr>
<td>Protected forest</td>
<td>980</td>
<td>13%</td>
</tr>
<tr>
<td>Green corridor</td>
<td>580</td>
<td>8%</td>
</tr>
<tr>
<td>Forest zone for recreation</td>
<td>290</td>
<td>5%</td>
</tr>
<tr>
<td>World Natural Heritage</td>
<td>80</td>
<td>1%</td>
</tr>
<tr>
<td>Natural park</td>
<td>2,210</td>
<td>29%</td>
</tr>
<tr>
<td>Wildlife protection area</td>
<td>1260</td>
<td>17%</td>
</tr>
</tbody>
</table>
Protecting primeval natural forests (≒primary forests, old-growth forests) by three types.
- 978,000 ha (13% of national forest) as of April 2020. (Initially set up in 1915)
- IUCN Protected Area Category: Ib (Ecosystem Reserve), IV (the other two)

<table>
<thead>
<tr>
<th>Type</th>
<th>Objective</th>
</tr>
</thead>
</table>
| Forest Ecosystem Reserve (Ib)             | Protect and maintain **primeval natural forests which represent Japan’s climatic zones or forest zones**, thereby contributing to maintaining natural forest ecosystems, protecting wildlife, preserving genetic resources, advancing forest management, forest control technology and academic researches.  
(A measure to ensure and maintain the value of the forests as the UNESCO World Natural Heritage to the future) |
| Biocenosis Protected Forest (IV)          | Protect and maintain **forests with endemic biological community**, thereby contributing to maintaining natural forest ecosystems, protecting wildlife, preserving genetic resources, advancing forest management, forest control technology and academic researches.                          |
| Rare Population Protected Forest (IV)     | Protect and maintain **forests necessary as inhabitation of rare wildlife**, thereby contributing to increasing the sustainability of such species, protecting wildlife, preserving genetic resources and academic researches.                                      |
Four World Natural Heritage sites are registered in Japan.

- **Shirakami-Sanchi**
  - Date of inscription: 1993
  - Criterion for inscription: Ecosystem
  - Fagus Crenata forest which is globally distinct due to its high purity, preservation of old-growth trees and biodiversity

- **Shiretoko**
  - Date of inscription: 2005
  - Criteria for inscription: Ecosystem and biodiversity
  - Seasonal sea ice at the lowest latitude in the world and the interaction of marine and terrestrial ecosystems

- **Ogasawara Islands**
  - Date of inscription: 2011
  - Criterion for inscription: Ecosystem
  - Never connected to any continent, the ocean islands are presenting ongoing evolutionary processes in oceanic island ecosystems, with its high levels of endemism and speciation through adaptive radiation

- **Yakushima**
  - Date of inscription: 1993
  - Criteria for inscription: Natural landscape and ecosystem
  - A biota composed of Japanese cedar, globally distinct forest called “Yakusugi”, which are over 1,000 years in age, and many endemic subspecies. Vertical plant distributions extending from coastal area up to a central peak, which is a typical distribution of vegetation

Note: Graphs show the percentages of national forest in the World Heritage area (terrestrial area). Figures in ( ) are percentages of forest reserve.
Green corridors

- A network to secure the wildlife passageways connecting different habitats of wildlife for promoting population exchanges to secure the conservation of species and genetic diversity.
- IUCN Protected Area Category: V
- 24 green corridors in national forests, with the area of 584,000 ha (8% of national forest) as of April 2020.
- Maintaining efforts are made in cooperation with research institutes.
**Reform of the Protected Forest System (2015)**

**Purpose:**

1) Adapt new methodologies for administration in line with advancement of scientific knowledge on conservation of biodiversity
2) Replace with a simplified and more efficient administration system for conservation of biodiversity

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1. **Re-classification of protected forests: 7 → 3**

- Forest Ecosystem Reserve
- Forest Bio-genetic Resources Preservation Forest
- Forest Tree Genetic Resources Preservation Forest
- Plant Community Protected Forest
- Specific Animal Habitat Protected Forest
- Specific Topography Protected Forest
- Hometown forest

   - Use of other systems and care in operations to be considered

2. **Restructured administration scheme**

   1) Reorganization of committees
   2) Modification in intervals between monitoring surveys

3. **Introduction of restoration**

   (Biocenosis Protected Forest)

   - Preservation Zone
   - Conservation & Utilization Zone

4. **Introduction of wildlife conservation & administration methods** (RPP Forest)

   1) Human interventions for creating habitats, etc.
   2) Conservation of a group of populations (meta-population) needed for the wildlife to survive

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**Simplified & Efficient administration system**

**advancement of biodiversity conservation methods**
Thank you!