

## **Bioinvasion and Global Environmental Governance: The Transnational Policy Network on Invasive Alien Species**

### Japan's Actions on IAS

#### **Description<sup>4</sup>**

Japan is a chain of islands between the North Pacific Ocean and the Sea of Japan, east of the Korean Peninsula in Eastern Asia. It neighbors to the east of the Sea of Japan are People's Republic of China, North Korea, South Korea and Russia. Japan comprises over 3,000 islands; the largest islands are Honshū, Hokkaidō, Kyūshū and Shikoku, together accounting for 97% of Japan's land area. Japan has the world's tenth largest population, with about 128 million people. Japan has a long cultural history with archeological evidence dating back several thousand years before the Christian era. Following the Treaty of Kanagawa with the US in 1854, Japan opened its ports and began to intensively modernize and industrialize. During the late 19th and early 20th centuries, Japan became a regional power. Since adopting its constitution in 1947, Japan has maintained a unitary constitutional monarchy with an emperor and an elected parliament, the Diet. Japan has the world's second largest economy by nominal GDP. It is a member of the United Nations, G8, OECD and APEC.

#### **Overview of Biodiversity**

Japan has 67% of the land covered with forest. The length of natural coast is approximately 18,100km, with 51,500ha of tidal flats, 201,200ha of Moba (seaweed/seagrass beds) and about 34,700ha of coral reefs. These are especially important coastal ecosystems in the context of biodiversity conservation. At least 90,000 species inhabit Japan and its ocean areas.

- [CBD Country Profile](#)
- [Earth Trends Country Profile on Biodiversity and Protected Areas](#)
- [Biodiversity Center of Japan](#)

#### **Legislation relating to IAS**

- [Invasive Alien Species Act](#) (Law No. 78 (June 2004))
- [National Parks Law](#)
- [Law for the Promotion of Nature Restoration](#)
- The Law for the Conservation of Endangered Species of Wild Fauna and Flora
- Foreign Exchange and Foreign Trade Control Law (No. 228/1949).<sup>5</sup>
- [Law relating to Protection of the Environment in Antarctica](#)

#### **Government Agencies/Programs/Ministries dealing with IAS**

- [The Animal Quarantine Service](#)
- [Ministry of Environment](#)
- [The Ministry of Agriculture, Forestry and Fisheries](#) (MAFF)
  - Food Safety and Consumer Affairs Bureau

- Plant Protection Division
- Plant Quarantine Office
- Animal Health Division

For a complete listing and organizational structure of the Ministry of Agriculture, Forest and Fisheries, see [here](#).

### Major Invasive Alien Species<sup>1</sup>

*Altermanthera philoxeroides* (aquatic plant, herb)

*Boiga irregularis* (reptile)

*Bufo marinus* (amphibian)

[\*Bursaphelenchus xylophilus\*](#) (nematode)

*Herpestes javanicus* (mammal)

*Myocastor coypus* (mammal)

[\*Pacifastacus leniusculus\*](#) (crustacean)

[\*Polysiphonia brodiei\*](#) (algae)

*Rana catesbeiana* (amphibian)

*Solenopsis invicta* (insect)

*Solidago Canadensis* (plant)

[\*Tradescantia fluminensis\*](#) (herb)

### Native Species Exported/Introduced to Non-Native Environments<sup>1</sup>

[\*Acanthogobius flavimanus\*](#) (fish)

[\*Aedes albopictus\*](#) (insect)

[\*Asterias amurensis\*](#) (sea star)

[\*Batillaria attramentaria\*](#) (mollusc)

[\*Berberis thunbergii\*](#) (shrub)

[\*Celastrus orbiculatus\*](#) (vine, climber)

[\*Ceratostoma inornatum\*](#) (mollusc)

[\*Cinnamomum camphora\*](#) (tree)

[\*Corbula amurensis\*](#) (mollusc)

[\*Crassostrea gigas\*](#) (mollusc)

[\*Fallopia japonica\*](#) (herb, shrub)

[\*Harmonia axyridis\*](#) (insect)

[\*Hemigrapsus sanguineus\*](#) (crustacean)

[\*Lespedeza cuneata\*](#) (herb, shrub)

[\*Lonicera japonica\*](#) (vine, climber)

[\*Lygodium japonicum\*](#) (vine, climber, fern)

[\*Microstegium vimineum\*](#) (grass)

[\*Miscanthus sinensis\*](#) (grass)

[\*Musculista senhousia\*](#) (mollusc)

[\*Polistes chinensis antennalis\*](#) (insect)

[\*Rosa multiflora\*](#) (shrub)

[\*Sargassum muticum\*](#) (aquatic plant)

[\*Schizoporella unicornis\*](#) (bryozoan)

[\*Spiraea japonica\*](#) (shrub)

[\*Tridentiger trionocephalus\*](#) (fish)

[\*Undaria pinnatifida\*](#) (aquatic plant, algae)

[\*Wisteria floribunda\*](#) (vine, climber)

[\*Zosterops japonicus\*](#) (bird)

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### Table 1 Actions to prevent, detect and manage IAS categorized into three themes: biodiversity, human health, and economic

Note: Actions (such as projects, publications and programs) are classified according to the most obvious theme but may also fit into the dimensions of another.

Theme	Action
Biodiversity	<ul style="list-style-type: none"> <li>• The <a href="#">Invasive Alien Species Act</a>:               <ul style="list-style-type: none"> <li>- <b>Article 1:</b> This Law shall have the purpose of preventing Adverse Effects on Ecosystems caused by Invasive Alien Species (IAS) through regulating raising, planting, storing, carrying (hereinafter “Raising”), importing, or other handling of invasive alien species and through taking</li> </ul> </li> </ul>

	<p>measures such as the mitigation of IAS by the national government and other entities, with the aim to help stabilize and improve national life through contributions to conservation of biodiversity, human safety and sound development of agriculture, forestry and fisheries.</p> <ul style="list-style-type: none"> <li>- In general, the Act also contains regulations on handling, import prohibitions and exceptions, prohibition for planting sowing or seeding IAS, mitigation measures and exceptions, and compensation of losses from IAS. The Act divides species into two categories: IAS and Uncategorized Alien Species. In order to designate species as IAS under the Act risk assessments are conducted on potential invasive alien species.<sup>2</sup> A list of IAS, UAS and Living organisms requiring a certificate can be found <a href="#">here</a>.</li> <li>- The process of passing and disseminating the <a href="#">Invasive Alien Species Act</a> (which can be found <a href="#">here</a>) started with a 2001 public survey that indicated public concern about IAS was increasing.</li> </ul> <ul style="list-style-type: none"> <li>• The Oku-Nikko-Shitsugen National Park system (a Ramsar site) is currently threatened by various problems including invasive species; there are local organizations working towards conservation through various means including the control of IAS, and capacity building training for youth. The Kume-jima streams (another Ramsar site) is affected by the invasive species <i>Rana catesbeiana</i> (Bullfrogs), which is mitigated by a management plan. Furthermore, the Uryunuma-shitsugen Ramsar site is also threatened by invasive species, especially <i>Solidago altissima</i>; continuous control measures taken by the local management authority deal with the threats posed by these species.<sup>3</sup></li> <li>• Japan takes part and contributes to the <a href="#">Asian-Pacific Alien Species Database</a> (APASD)<sup>2</sup></li> <li>• Research on the impacts of IAS on biodiversity and the mitigation of these impacts has been conducted in the ecosystems of Ogasawara (Bonin) Islands under the Global Environment Research Fund.<sup>2</sup></li> <li>• There is a Plant Protection Division under the <a href="#">Ministry of Agriculture, Forestry and Fisheries</a> (MAFF) which is responsible for plant protection and for the implementation of any action to control and prevent the spread and introduction of pests in plants.<sup>7</sup></li> </ul>
Human health	<ul style="list-style-type: none"> <li>• Quarantine inspections are required for the import and export of cattle, pigs, goats, sheep, other cloven-hoofed animals (hippopotamuses, giraffes), horses, members of the horse family, chickens, ducks, turkeys, ostrich, geese, quail and</li> </ul>

	<p>honey bees.<sup>8</sup></p> <ul style="list-style-type: none"> <li>• There are 18 points of entry where these products can be imported into the country.<sup>9</sup></li> <li>• <a href="#">The Animal Quarantine Service</a> (AQS) is responsible for the quarantine and inspection of animals.<sup>9</sup> Laws concerning the prevention of infections and medical care include: <ul style="list-style-type: none"> <li>- Agriculture and Health Ministries Ordinance No.2 (1999)</li> <li>- Ministry of Agriculture, Forestry and Fisheries Ordinance No.82 (1999)</li> </ul> </li> <li>• A new notification system has been introduced for the importation of terrestrial mammals and birds, requiring a written declaration with the name and number of each animal to be imported as well as a health certificate issued by the government of the exporting country.<sup>10</sup></li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Aquaculture in natural areas must be licensed by each species designated by a prefectural governor; aquaculture of non-designated species is prohibited based on provisions of the Fisheries Law.<sup>2</sup></li> <li>• Article 15 of The Law for the Conservation of Endangered Species of Wild Fauna and Flora prohibits the export and import of national endangered species of wild fauna and flora unless they satisfy the requirements by a Cabinet Order.<sup>5</sup></li> <li>• The Plant Protection Division is responsible for the administration of plant quarantine as well as <a href="#">Plant Protection Stations</a> (PPS) which issue phytosanitary certificates and perform import/export inspections. The PPS consist of 5 head offices, 15 sub-stations, 53 branches, 3 detached offices, and 1 plant inspector's office including 859 plant quarantine officers authorized to implement appropriate inspections and certifications. All plants and plant products which are imported into Japan must be cleared by plant quarantine procedures which are enforced at all seaports or airports of entry.<sup>7</sup></li> <li>• According to the <a href="#">Plant Protection Stations</a> All plants and plant products are separated into three categories:<sup>8</sup> <ul style="list-style-type: none"> <li>- Articles prohibited entry;</li> <li>- Articles subject to import inspection; and</li> <li>- Articles not subject to import inspection.</li> </ul> </li> </ul>

**Table 2 Actions on IAS in cooperation with other countries**

Agreement/ Organization	Countries/ Member	Action
<a href="#">Sino-Japan Friendship Center for Environmental</a>	China and Japan	It is a platform for Sino-Japan environmental protection, international environmental exchanges, opening up to the society, and for providing

<a href="#">Protection</a>		management and technical supports to SEPA. Its work fields covers the following areas, including research on environmental policies, environmental publicity and education, management of environmental information, study on and services for analyzing and testing technologies, research and manufacturing of samples for environmental standards, management of solid wastes, environmental impact assessment, environmental certification, and study and exchanges on international environmental issues. [IAS not mention directly]
Japan-China Comprehensive Forum on Environmental Cooperation	China and Japan	Environmental cooperation between Japan and China is conducted not only between the two governments but also involves various implementation bodies, such as private enterprises, local governments, academics and NGOs. Japan-China Comprehensive Forum on Environmental Cooperation was first held in May 1996 to provide a forum for comprehensive dialogue to further promote collaboration between the parties concerned. The Forum has since been held regularly, greatly contributing to the progress of environmental cooperation between Japan and China, by tostering among others, common awareness of the challenges for environmental cooperation between the two countries. [IAS not mention directly]

## References

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