Japanese IAS Act and its practical implementation for addressing intentional animal imports

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Japan Ministry of the Environment
Outline

- Background of the IAS Act
- Framework of the IAS Act regarding animal imports
- Practical implementation of IAS Act addressing animal imports
Background of IAS Act
Ryukyu Islands
Rate of endemic species

<table>
<thead>
<tr>
<th>Animal Group</th>
<th>endemic,</th>
<th>non-endemic,</th>
</tr>
</thead>
<tbody>
<tr>
<td>amphibians</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>reptiles</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>birds</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>mammals</td>
<td>9</td>
<td>14</td>
</tr>
</tbody>
</table>

There are many vulnerable island ecosystems in southern part of Japan.
### Import of alien species: status quo ante

- **Importation of live animals (except livestock animals) into Japan**

<table>
<thead>
<tr>
<th>Number of live animals imported in 2003 (head)</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td>636,337</td>
</tr>
<tr>
<td>Birds</td>
<td>121,114</td>
</tr>
<tr>
<td>Reptiles</td>
<td>713,415</td>
</tr>
<tr>
<td>Amphibians</td>
<td>28,912</td>
</tr>
<tr>
<td>Ornamental fishes</td>
<td>71,073,056</td>
</tr>
</tbody>
</table>

Ministry of Finance. Trade statistics of Japan
Number of articles on alien species in main 4 newspapers of Japan

1994: 1st National Biodiversity Strategy
2002: 2nd National Biodiversity Strategy
2002: CBD Guiding Principle
2005: IAS Act enter into force

Public concerns on alien species raised from latter half of 1990s
Two species brought IAS Act!
Largemouth bass (*Micropterus salmoides*)

1925: introduced from USA for aquaculture

Anglers or sports fishing industry released into lake, pond or river

1999: established all prefecture

Damage to native-fishes

Damage to fisheries

Damage to biodiversity
Raccoon (*Procyon lotor*)

- Intentionally introduced as pets but some were discarded to the wild

Random spread of Raccoon in Hokkaido

Damages on agricultural crops in Hokkaido

Hokkaido prefectural government

Plant Quarantine
✓ Plant protection Act
<preventing damages to agricultural plants>

Animal Quarantine
✓ Infectious diseases prevent Act
✓ Domestic animal infectious diseases control Act
<preventing damages to domestic animal or human health caused by infectious diseases>

Not covered by existing Acts
Framework of the IAS Act regarding animal imports
Invasive Alien Species (IAS) designate Competent Ministers MOE / MAFF

Invasive Alien Species Act 2004

Control

Damages

Ecosystem Human safety Agriculture, forestry & fishery
IAS Act (main points regarding importation)

- **Point 1**: Prohibition of various actions (e.g. import) with regard to IAS without permission

- **Point 2**: Suspension of importing UAS (Uncategorized Alien Species)
Point 1: Prohibition of various actions

“Invasive Alien Species” (IAS),

- Raising is prohibited without permission from the competent ministers
- Planting
- Keeping
- Transporting
- Transferring
- Importing IAS is prohibited unless the importer has the permission
- Releasing IAS to the wild is prohibited under any condition

Cases in which permissions are given
- Exhibit at zoo etc.
- Education/Research purpose
- Sustaining livelihood
- Individual pet/ornamental organism
Point 2: Suspension of importing UAS

Uncategorized Alien Species (UAS)

- Same genus or family as IAS – similar ecological impacts are predicted in principle
- Not substantially introduced to Japan

Example of designation IAS and UAS

<table>
<thead>
<tr>
<th>family</th>
<th>genus</th>
<th>IAS</th>
<th>UAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cercopithecidae</td>
<td>Macaca</td>
<td>M. cyclopis</td>
<td>genus Macaca</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M. fascicularis</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M. mulatta</td>
<td></td>
</tr>
<tr>
<td>Mustelidae</td>
<td>Mustela</td>
<td>M. vison</td>
<td>genus Mustela</td>
</tr>
</tbody>
</table>
Point 2: Suspension of importing UAS

Uncategorized Alien Species (UAS)

- Competent Ministers
  - Decide whether the species should be designated as IAS or not
  - Notification
- Importer
- Invasive
  - IAS
- Not invasive
  - No restriction

Suspension of importing UAS until estimation finished
Practical implementation of IAS Act addressing animal imports

- Selection of IAS
- Estimating invasiveness of Alien species
- Considering benefits of Alien Species
First Round Designation of IAS (2005)

Taiwan macaque  Green anole  Cane toad
Largemouth bass  Blue gill  Raccoon
And many more... (Total: 37 types)

Muskrat

Subfamily Cervinae (Red deer)

Bullfrog

Western mosquito fish

Long-armed scarab

And many more… (Total: 42 types)

Large Earth bumblebee
How to decide IAS?

- Competent Ministers
- General expert meeting (12)
- Draft recommendation for designation
- Special working group

6 working groups:
- Mammals/Birds (8)
- Reptiles/Amphibians (4)
- Fishes (5)
- Insects (8)
- Invertebrates (4)
- Plants (9)

Final recommendation

Taxonomy
Ecology
Economy
Agriculture
Animal keeping
Landscape architecture

Largemouth bass
Large earth bumblebee
1st round designation

Competent Ministers
Designation plan

Public consultation

110,000 comments

Anglers and the sports fishing industry

Against designation of largemouth bass
Each papers report designation of Largemouth bass
Situation of Risk assessment

A: Designation by competent minister’s selection

- 100 of the worst IAS, Global invasive species database
- Report of ecological or agricultural impact in Japan (already established)
- Report of ecological or agricultural impact in other countries (not established in Japan)

Scientific data of adverse effect <working group member>
Situation of Risk assessment

B: Decision of UAS (IAS or not)
Notified by Importer

Whether designate as IAS or not ??
<Working Group>

Limited information of risk to native species or ecosystems

Possibility of establishment in somewhere part of Japan

So far, 15 species notified (14 were for Pet trade)
Possibility of establishment - climate matching analysis
**Situation of Risk assessment**

B: Decision of UAS (IAS or not) Notified by Importer

- Limited information of risk to native species or ecosystems

General expert meeting

- Draft recommendation for designation as IAS
  - Undeniable possibility of damage to ecosystems
  - Possibility of establishment in somewhere part of Japan

working groups

- Reptiles/Amphibians

Situation of Risk assessment working groups
Considering benefits of Alien Species

Considering Social and Economic Impacts that arise from designation as IAS

(considering possibilities for obtaining substitutes for Alien Species that bring economic benefits, etc.)

<Basic policy of IAS act 2.3>

Special working group for Large earth bumblebee
Number of distribution of Large earth bumblebee

2003: 70,000 hives

(Number of increase)
(Number of all hives)

(National Institute of Environment Studies、Promote Association of bumblebee)
Number of Large earth bumblebee by witness and capture in the wild (1996-2004)

- 10 head
- 10-100 head
- 100-1000 head
- 1000 head-

By Yokoyama

Special working group for Large earth bumblebee

First round meeting
2004.11.15 (1st) 2004.11.29 (2nd)
Invasiveness? Control measures?

suspension for data arranging
2005. 5.13 (5th) midterm report

2005.11.18 (6th) report of new data
2005.12. 7 (7th) final recommendation

✓ scientists researching bumblebee
  ✓ importers
  ✓ member of farmers association

✓ Evidence of establishment and spreading in Hokkaido
✓ Evidence of competition with native bumblebee etc.

✓ Effective control measures such as covering greenhouse by net etc.
Concerning beneficial species for industry

- Mutual understanding of benefits, risks and practical way to reduce risks among stakeholders (i.e. scientist, user, importer)
- Judgement based on scientific and intelligible data
- Cool discussion among stakeholders on individual species
Permission of using large earth bumblebee

12,000 farmers have permission

51-500 hives
21-50 hives
11-20 hives
6-10 hives
1-5 hives
Concept of risk screening process

1st Screening
Designation of UAS as a group

2nd Screening
Designation of IAS

UAS group (genus or family)
IAS

Public consultation
Comments
WTO consultation
Public consultation
Comments

Consideration of socio-economic impact

If necessary, discuss in individual species working group

Scientist Industrial group
Import of alien species: status now

- Importation of live animals (except livestock animals) into Japan

<table>
<thead>
<tr>
<th>&lt;head/year&gt;</th>
<th>2003</th>
<th>2007</th>
<th>△</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td>636,337</td>
<td>335,417</td>
<td>47.3 %</td>
</tr>
<tr>
<td>Birds</td>
<td>121,114</td>
<td>35,346</td>
<td>70.8 %</td>
</tr>
<tr>
<td>Reptiles</td>
<td>713,415</td>
<td>442,550</td>
<td>38.0 %</td>
</tr>
<tr>
<td>Amphibians</td>
<td>28,912</td>
<td>4,571</td>
<td>84.2 %</td>
</tr>
<tr>
<td>Ornamental fishes</td>
<td>71,073,056</td>
<td>62,928,391</td>
<td>11.5 %</td>
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Ministry of Finance. Trade statistics of Japan
Plant Quarantine
✓ Plant protection Act


Animal Quarantine
✓ Infectious diseases prevent Act
✓ Domestic animal infectious diseases control Act

✓ Unintentional introduction of IAS or UAS
✓ Infectious diseases to wild animal

IPPC

OIE