

Kyoto-Osaka District National Forest Office Overview



View of *Kodajiyama* National Forest from the "Stage of *Kiyomizu*"

July 16, 2010

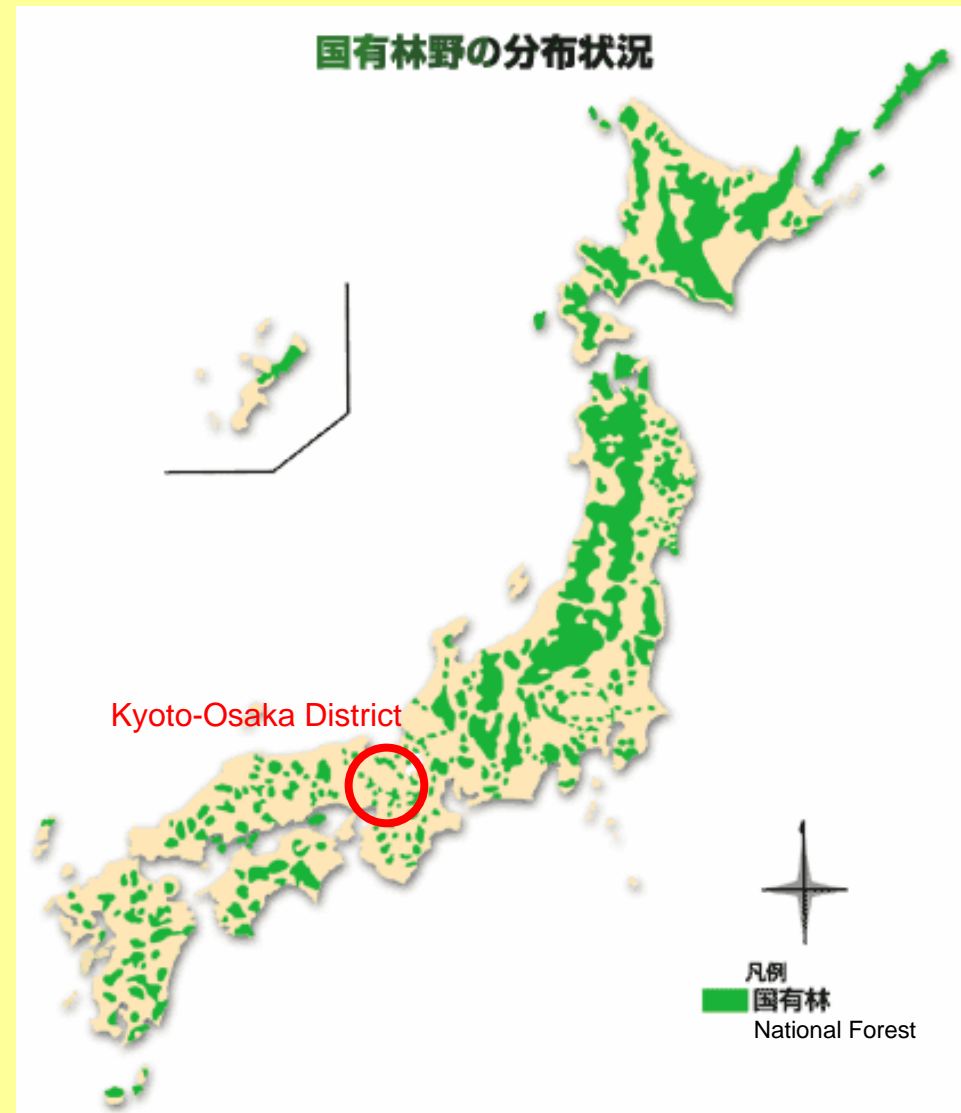
Jun FUKUDA

Contents

1. National Forest in Japan
2. Kyoto-Osaka District National Forest Office
3. National Forests in Kyoto
4. Current Topics

1. National Forest in Japan

- 2/3 of Japan's land covered with forest.
- 1/3 of Japan's forest is "National Forest."
- Therefore, 20% of Japan's land is "National Forest."
- Ratio of National Forest differs among regions: higher ratio in the north and lower ratio in the west.



Location of National Forest

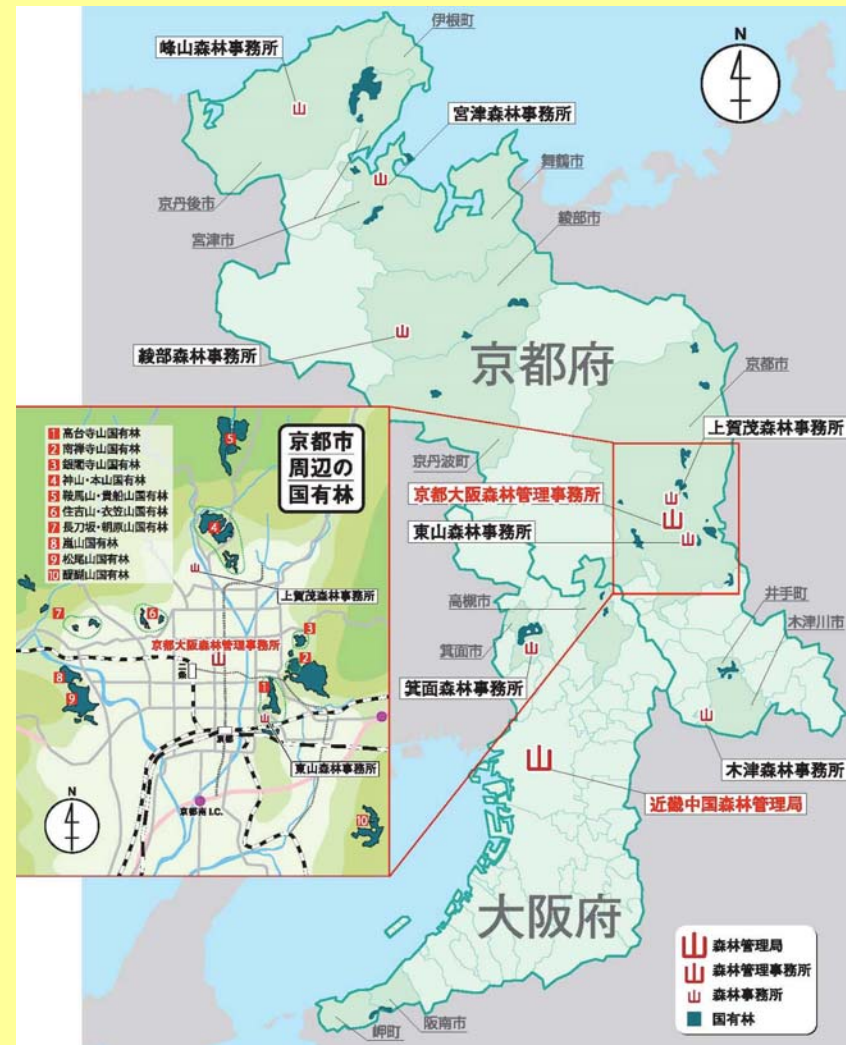
1. National Forest in Japan

- Three origins of Japan's National Forest:
 - forest owned by former feudal government (*bakufu / han*),
 - forest owned by temples and shrines,
 - forest owned by local communities.
- Ownership of these forests were transferred to the new Meiji Government during the Meiji Revolution in 1870s.
- National Forest is managed by the Forestry Agency, Ministry of Agriculture, Forestry and Fisheries.
- Organization: Forestry Agency – seven Regional National Forest Office – 120 District National Forest Office

2. Kyoto-Osaka District National Forest Office

(Overview)

- A branch of Kinki-Chugoku Regional National Forest Office, Forestry Agency.
- Manages **5,700 ha of national forest** in Kyoto and Osaka prefectures, comprising 1% and 2% of total forest area respectively.
- National forest areas **scattered around**.
- In Kyoto City, national forests located in the neighborhood of historical temples and shrines. These national forests are **former temple/shrine forests**.



2. Kyoto-Osaka District National Forest Office

(Forest Resources)

- 54% of national forests managed by the Office “planted,” while 46% “natural.”
- Major species of planted forests: **sugi** (45%), **hinoki** (39%), **matsu** (11%), and others (6%).
- Age of planted forest centered around 40 years. Still maturing.

(Legal Regulations)

- 92% of national forests under the control of some legal regulations, incl. **Forest Law**, **Urban Area Planning Law**, **Historical City Preservation Law**, or **Cultural Asset Preservation Law**. Multiple regulations imposed.
- Each regulation sets the maximum ratio of logging, according to its objective.

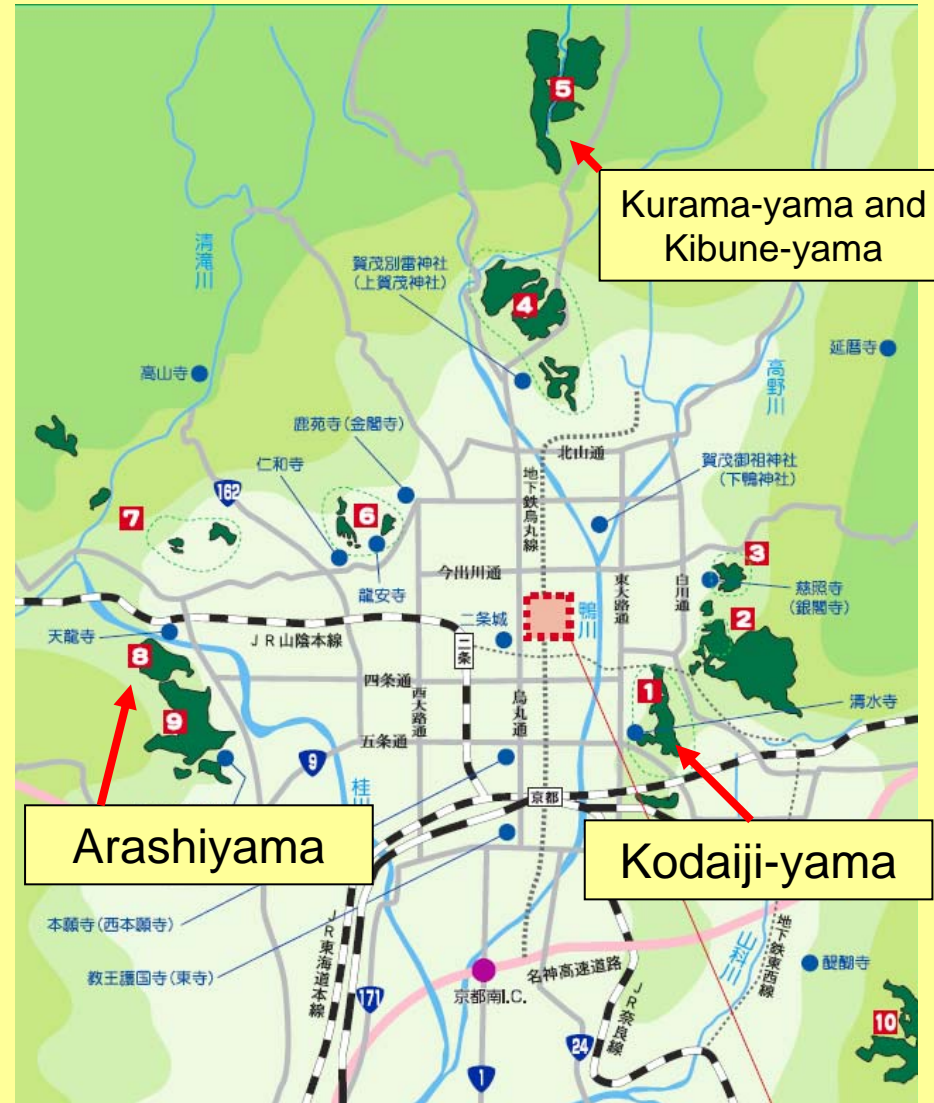
2. Kyoto-Osaka District National Forest Office

(Forest Management)

- Each national forest area categorized into three functional types: “land and water conservation forest” (54% for K-O), “forest and human co-existence forest” (39%), and “sustainable resource use forest” (7%).
- “Thinning” is the most important treatment.
- Pest treatment is an emerging issue.

3. National Forests in Kyoto

- Kyoto city surrounded by mountains in three directions: north, east, and west.
- National Forests also exist in three directions.
- Most of national forests in Kyoto city were **once owned by temples and shrines**, but transferred to the government during Meiji Revolution in 1870s.



National Forest in Kyoto City

3.1. Kodaiji-yama National Forest

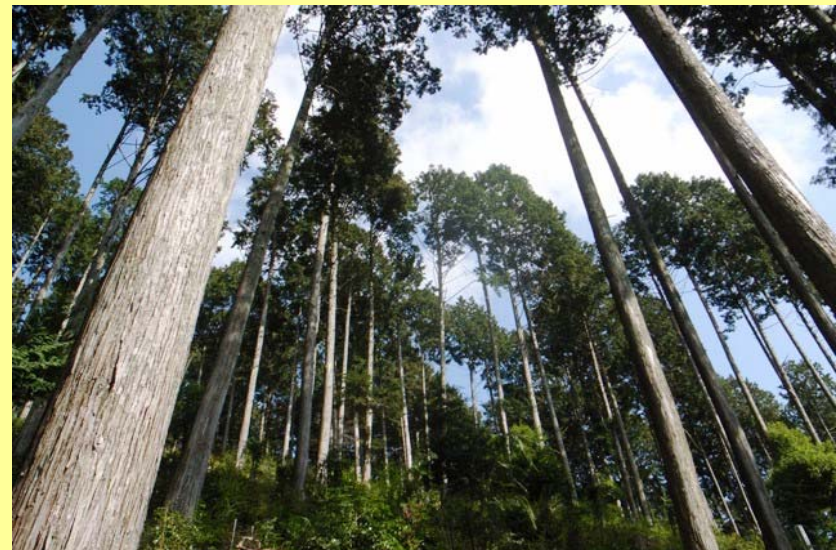
- Background of famous historical temples and shrines, incl. *Kiyomizu-dera*, *Yasaka-jinja*, or *Chion-in*.
- Once *akamatsu* (*Pinus densiflora*) forest due to intensive local use. Since Meiji era, local use prohibited. Natural succession progressed to *shii* (*Castanopsis cuspidata*) forest.
- Serious damage by pinewood nematode and *Platypus quercivorus* (kashi-no-naga-kikui-mushi).
- Activity field of the “**Council for Kyoto Traditional Forest Culture.**”



Shii's flower in May

3.2 Kurama-yama and Kibune-yama National Forest

- Part of scenic landscape around *Kurama-dera temple* and *Kibune-jinja shrine* along *Kibune-gawa* river.
- Partly designated as “*Kyoto Ancient Forest*” for the production of large diameter timber for the repair of traditional wooden buildings.
- Developed *walking trail* around the “*Kyoto Ancient Forest*.”
- Serious by *deer bite*.



Hinoki trees of 100 yrs old in “*Kyoto Ancient Forest*”

3.3. Arashiyama National Forest

- Famous sightseeing spot for **cherry blossoms (*sakura*)** and **pine trees (*matsu*)** for more than one thousand years.
- **Planting *sakura*** for landscape conservation, in cooperation with local community.
- Steep slope & many sightseers. Prevention of **falling rocks** important.
- Initiated **discussion with local community** on the direction of forest management.



Arashiyama in Spring

4. Current topics

- 4.1. Council for Kyoto Traditional Forest Culture
- 4.2. Combating Forest Pests
- 4.3. Stakeholder Participation in Arashiyama

4.1. Council for Kyoto Traditional Forest Culture

- In 2007, the Council established for the management of the *Kodaijiyama* National Forest, through the **participation of various stakeholders**: incl. temples, shrines, researchers, local communities, NGOs.
- Council receives **financial / human assistance** from local “**supporters**” for the implementation of forest management.
- Initiated **experimental logging of shii trees** for the transformation of *shii*-dominating forest.
- Discussing the future direction of forest management



Shii logging ceremony in March 2009

4.2 Combating Forest Pests

- Small insects called *Platypus quercivorus* (*kashi-no-naga-kikui-mushi*) damage *shii*, *kashi* and *nara* species, spreading harmful fungi in wood cells, when they dig into standing trees.
- Since 2005, the insects putting many standing trees into death in Kodaiji-yama NF. Recently, **damage spreading around Kyoto city**.
- Prevents from massive death of forest, through **logging dead trees** and **fumigating with chemicals**.



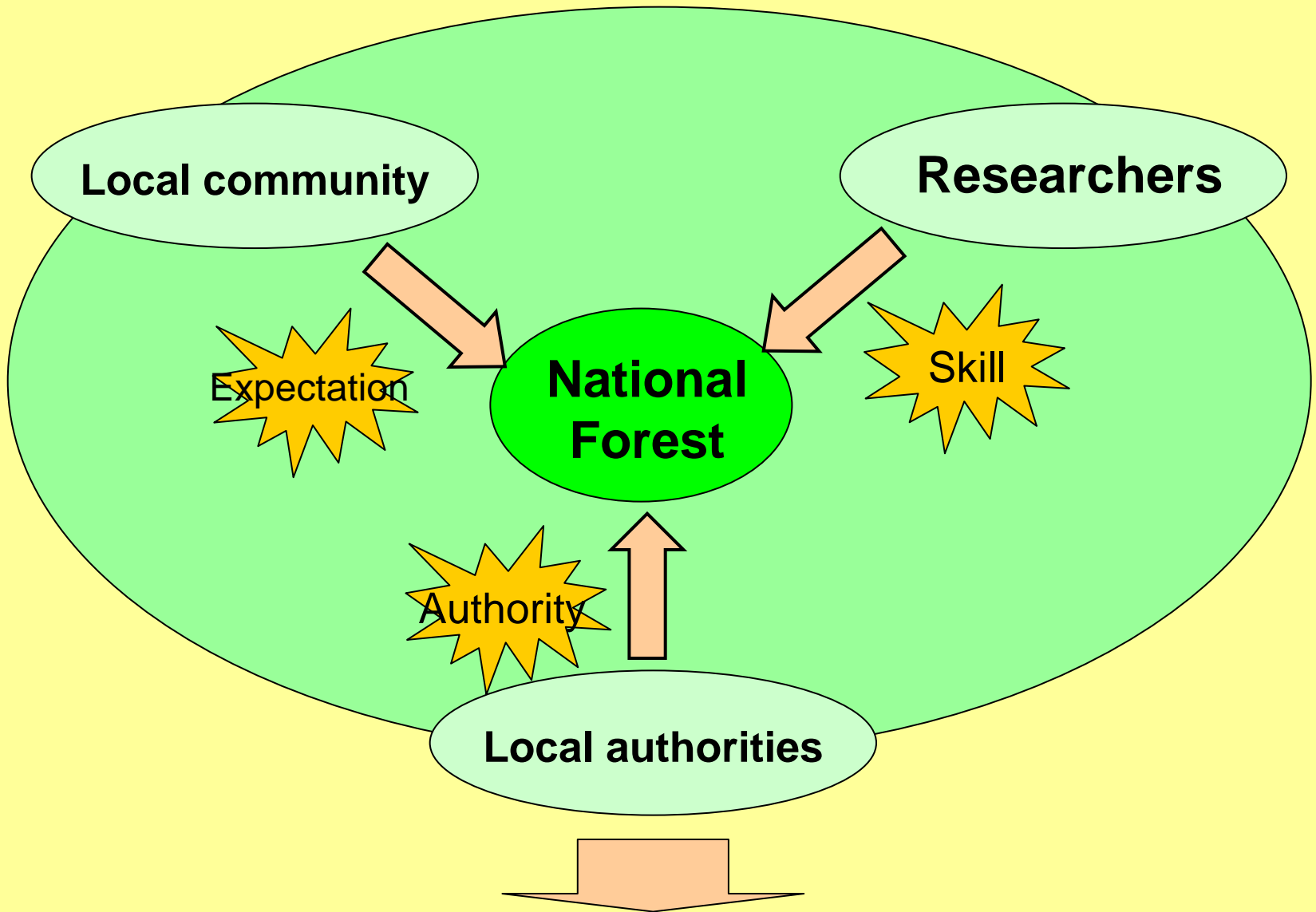
Platypus quercivorus (left), logging of dead trees (right)

4.3 Stakeholder Participation in Arashiyama

- Conditions surrounding Arashiyama NF changing: too old *sakura* and *kaede*, deer damage, possibility of landslide, and many sightseers.
- **Planting efforts unsuccessful**, due to improper planting skill of non-coniferous trees. Further, **coordination with local community insufficient**.
- In 2009, initiated discussion with **local community**, **researchers in four disciplines** (vegetation, landscape, wildlife, disaster prevention), and **local authorities**.
- Developed the **new direction of forest management** of Arashiyama NF: e.g. cutting large area before planting, protecting planted trees from deer bite, developing walking trail.



Discussion with stakeholders



National Forest as “Forest for the People”

Kyoto-Osaka District National Forest Office

Chojiburo-machi 102,

Nishinotoin dori, Shimochoja-machi sagaru

Kamigyo-ku, Kyoto 602-8054

JAPAN

E-mail: kc_kyoto@rinya.maff.go.jp