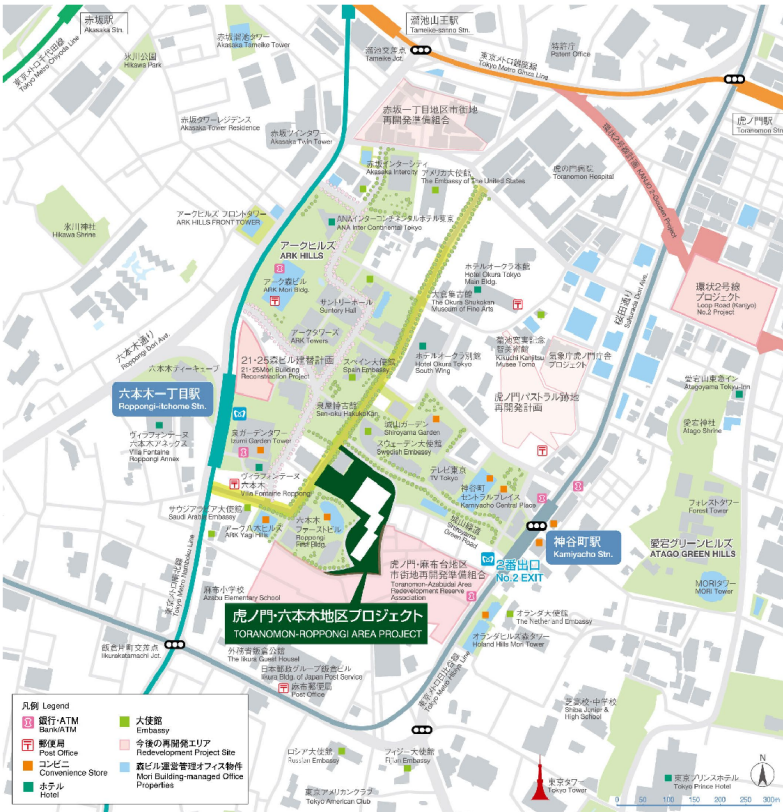




Site Outline

Site Plan : 15,350㎡

Green Coverage : 5,2970㎡



Index

Biodiversity Initiative at Sengokuyama Mori Tower

- 1) Ecological Network Development
- 2) Native Species Landscaping
- 3) Habitat Management
- 4) Quantitative Evaluation of Biodiversity
(Visualization of Fauna and Flora)

Preface: Landscape Planning Concept

A Living Space for Woodpeckers

- ① A comprehensive ecological system that considered biological species, green and seasonal change.
- ② A re-examination of the relationship between human and nature.
An enrichment of lifestyle that could create new life cycles.
- ③ A proactive biodiversity management that creates unique characteristic of the development project.



Preface: Our Returning Neighbours



Japanese Pygmy Woodpecker



Japanese Tit



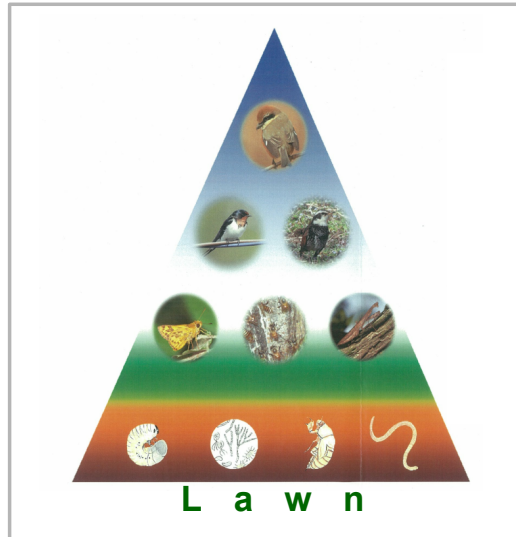
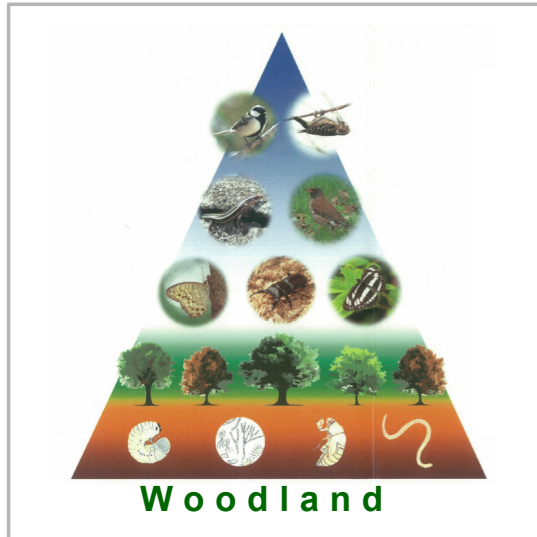
Varied Tit



Common Glider



Goschkevitschi's
Labyrinth



1) Ecological Network Development

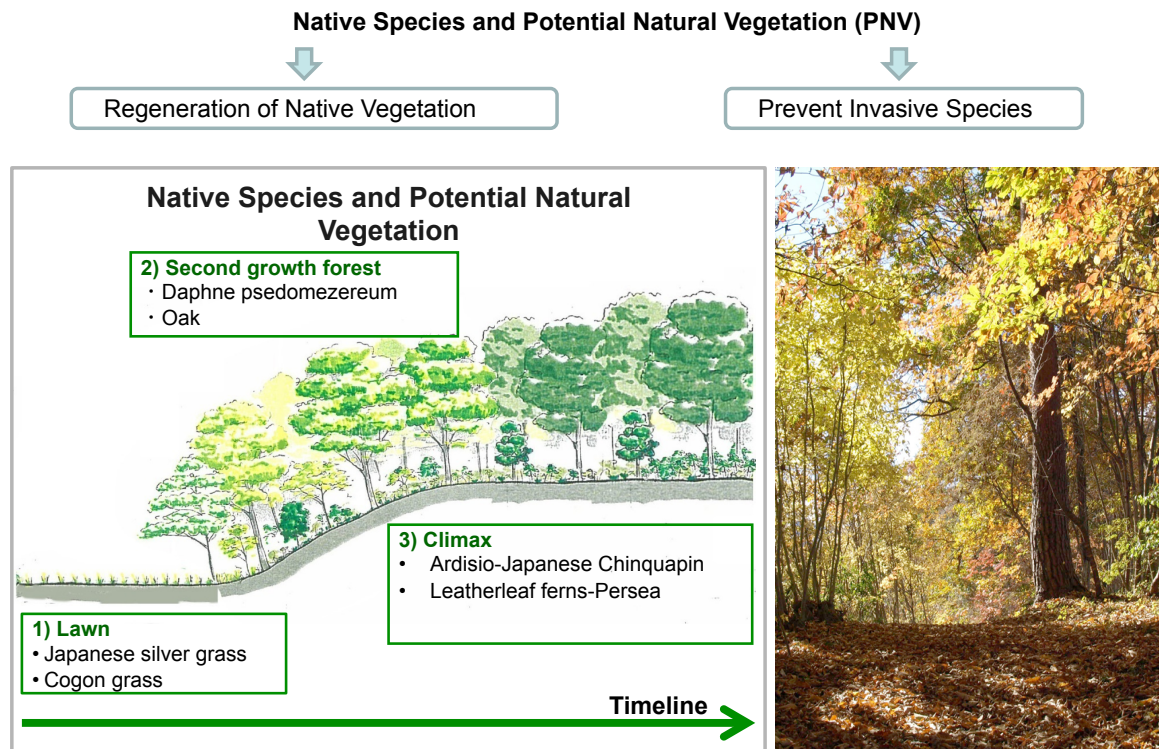


Sengokuyama Mori Tower is:

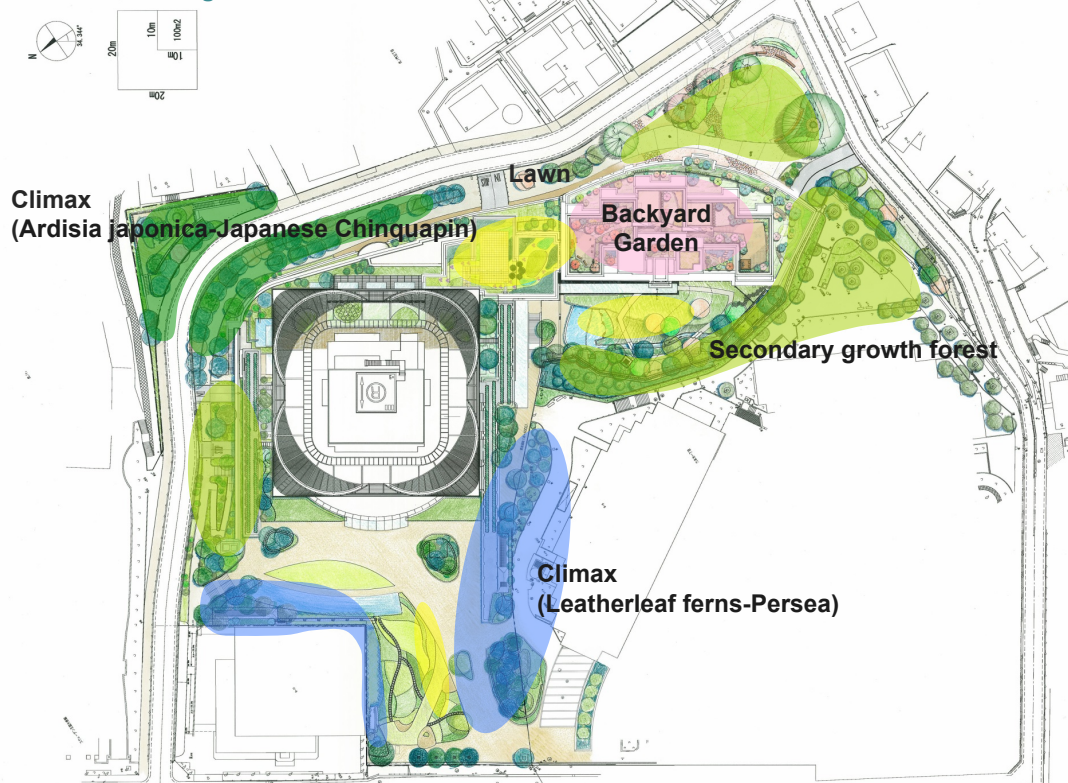
1. A creation of new greenery that forms network with existing green and other development project
2. A gateway to the corridor that leads to Imperial Palace
3. A proactive action to retain routes and space for woodpeckers and other birds

2) Native Species Landscaping

① landscape planning with multiple species that encourage ecological succession



② Mosaic Planning with consideration of biocenose and architectural structure



3) Habitat Management

① Coherent Landscape Planning

⇒ Aim for Openness and Continuity in Green Zone



② Dimensional planning and High Green Coverage Ratio

⇒ Continuous landscape consists of lawn, shrub and tree

⇒ Retain Habitat Segregation



③ Interaction between Site Area and Local Neighbourhood



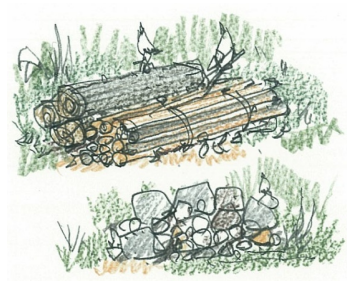
④Deadwood for Wildlife

⇒Attract Woodpeckers
(Nesting and Foraging)



⑤Creation of Biotop

⇒Floor bed vegetation



⑥Creating Ecotone (Community Ecology)



⑦Selection and Procurement of Materials

Soil Conservation and Utilization

- 500 m³ of soil conservation in advance
- Soil conservation is used as topsoil during landscape construction



Material Procurement

- Procurement from Tokyo or Saitama-Prefecture (restricted to Kanto Area)
- Removal of Root Clump in order to prevent invasive species



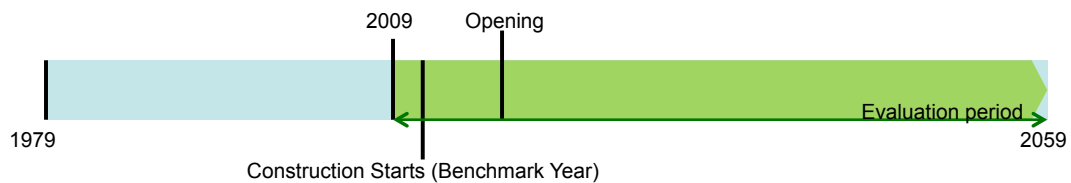
4) Quantitative Evaluation of Biodiversity

Japan Habitat Evaluation and Certification Program (JHEP) - A Quantification of Biodiversity Contribution

Case study: Sengokuyama Mori Tower Project

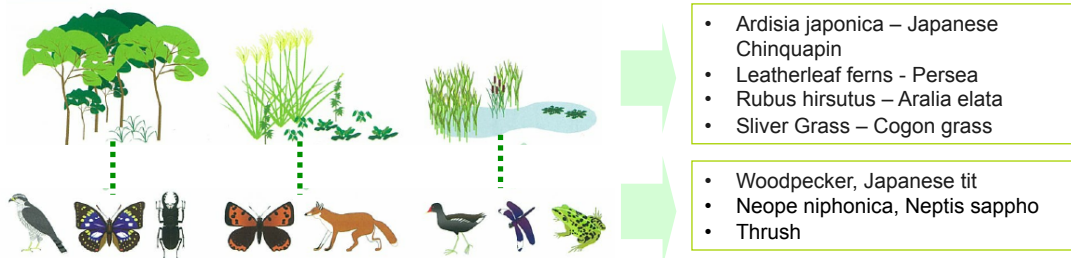
STEP1 : Evaluation Period

The benchmark year is the year when land right is permitted, and the evaluation period is the 50-year-period since this benchmark year. For this project, the benchmark year is 2009, and thus the evaluation period is between 2009-2059.



STEP2 : Measurement Target

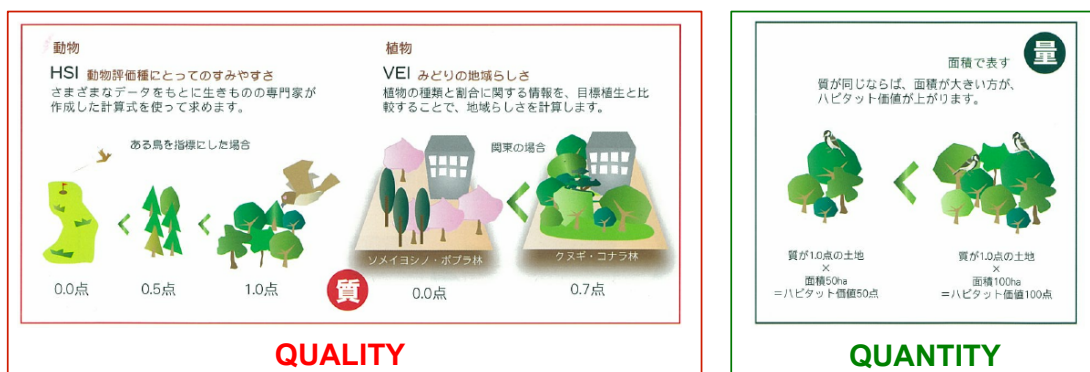
Identify vegetation selection and biological species as measurement target

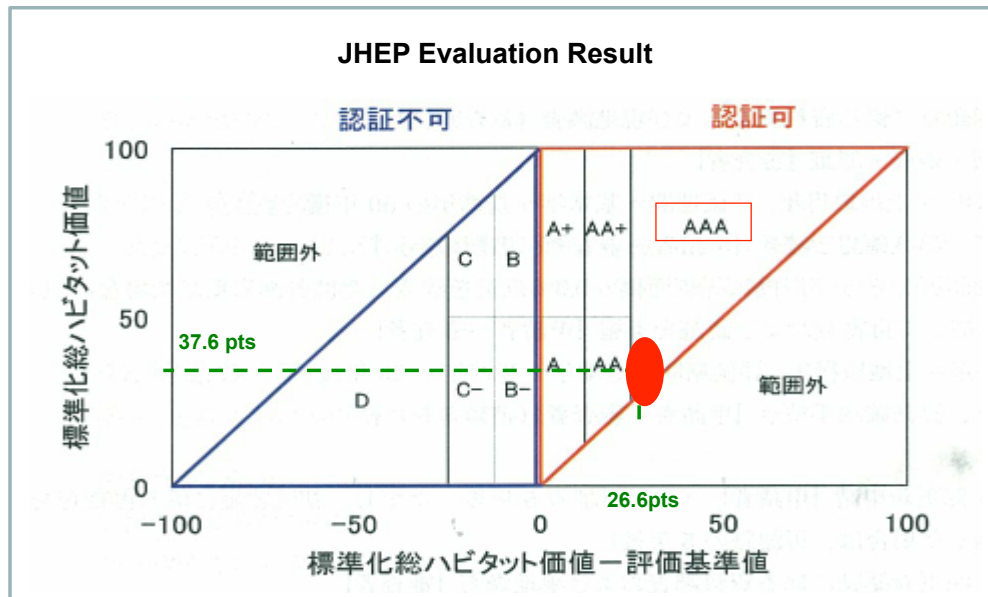


STEP3 : Total Habitat Value

Quality of Greenery = Habitat Suitability Index (HSI) + Vegetation Evaluation Index (VEI)

$$\text{Total Habitat Value} = \text{Quality} \times \text{Quantity} \times \text{Evaluation period}$$





- ・ Post-Project (50 Years after Benchmark Year) Total Habitat Value...37.6 Points
 - ・ Pre-Project (30 years before Benchmark Year) Total Habitat Value...11.0 Points
- Total Habitat Value created by Project...26.6 Points**

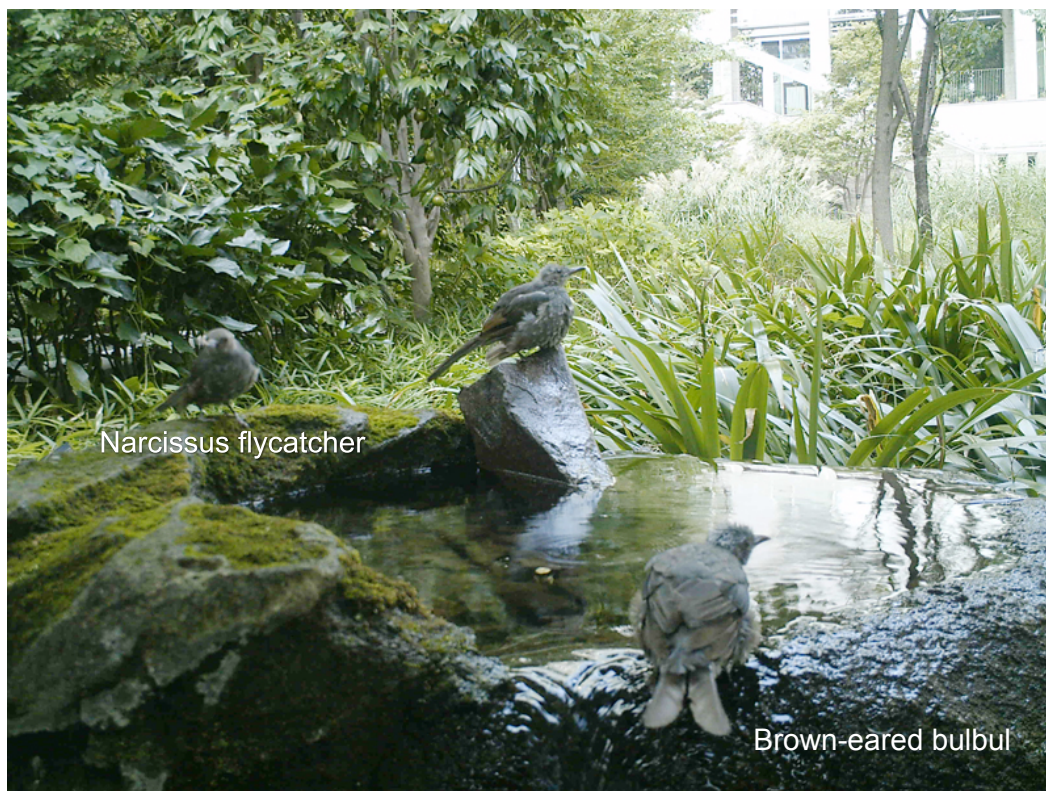




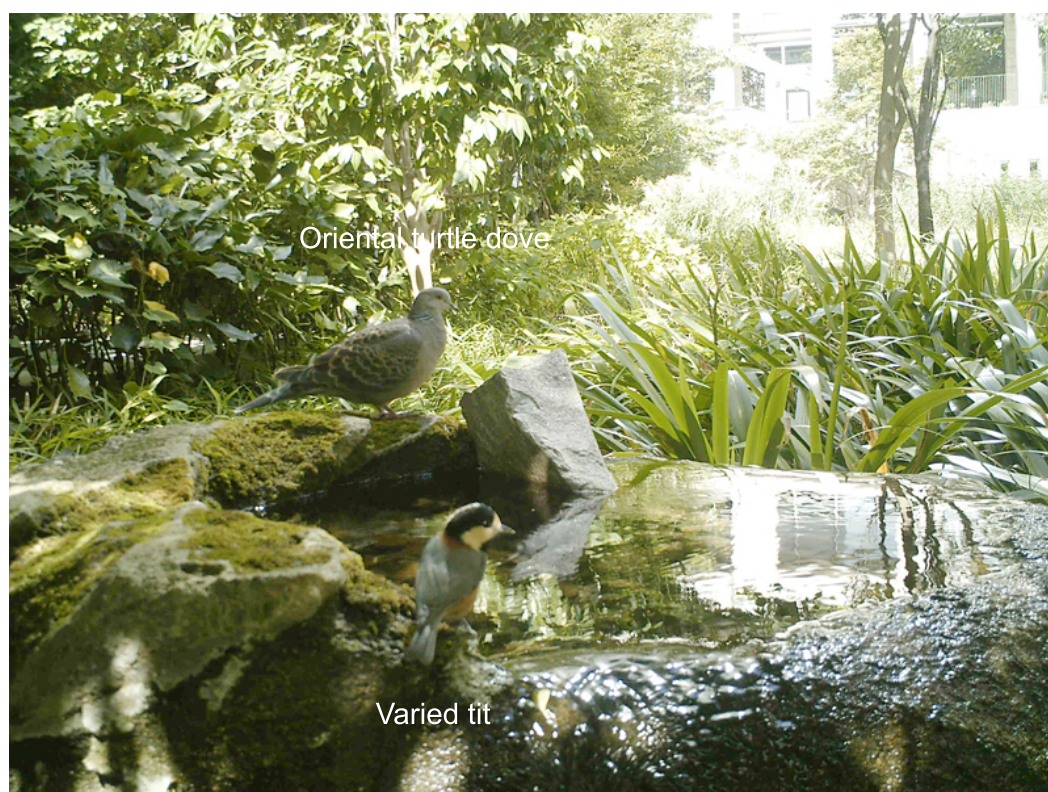
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