

Mt. Moriyoshi Foothill

Goal

Restore the historical beech forest habitat that existed before its conversion to grassland in the 1960s in order to expand habitat for the black woodpecker

Designation:

Mt. Moriyoshi National Wildlife Protection Zone

Location:

Kita-akita, Akita Prefecture

Year Initiated: 2004

Mt. Moriyoshi Foothill Nature Restoration Committee (as of March 2009)

The Committee is working on returning the artificial grassland to the historical deciduous forest and preserving it together with its surrounding natural environment.

Date Established: 19 Jul. 2005

Members: 21

Date Issued the Overall Plan: 31 Mar. 2006

Date Issued the Implementation Plan:

● 20 Oct. 2006 (Mt. Moriyoshi Foothill Project, sponsored by Akita Prefecture)



Grass fields in the restoration site



Explanatory notes

Transitional area from old-growth to secondary forest	Candidate sites for tree nursery
Re-planting area	Pastures
Facilities owned by MOE	Restoration area

The Mt. Moriyoshi Foothill range has an expansive mixture of deciduous forests dominated by beech and coniferous forests of the Japanese cedar (*Cryptomeria japonica*), Japanese arbor vitae (*Thuja standishii*) and Kitagoyo (*Pinus parviflora var. pentaphylla*). The Foothill is one of the few breeding sites for the black woodpecker, *Dryocopus martius*, and partly was designated as a special zone of national wildlife protection zone.

Since the 1960s, however, about 490 ha of the beech forest has been converted to pasture fields, diminishing the wildlife habitat to fragmented small patches. Restoration of beech-dominant deciduous forest was begun for wildlife habitat enhancement and stable breeding of an indicator species of rich nature, the black woodpecker. The project will be pursued by re-creating an expansive forest that is connected via forest corridors to its nearby forest conservation area.

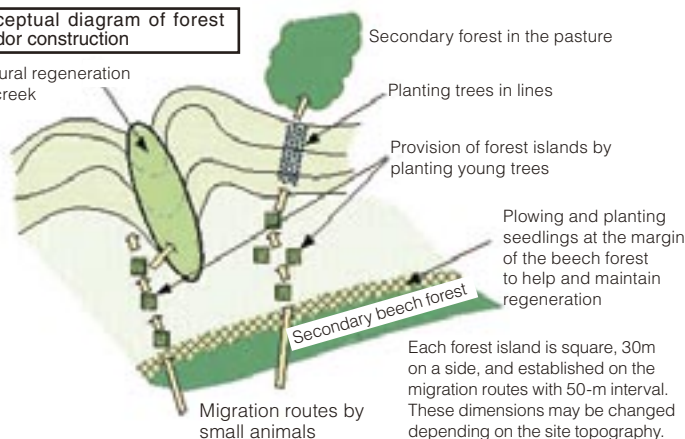
Approaches

- ▶ Re-plant trees in areas suitable for establishment of young trees →①
- ▶ Enhance under-canopy development of young stands →②

Beech and other deciduous young trees will be planted in lines and islands. In the future, the replanted trees will become reproductive, initiating forest regeneration and development. This first effort aims at connecting the isolated forest patches that serve as corridors in habitat connectivity.

Conceptual diagram of forest corridor construction

Ensure natural regeneration along the creek



Related Web Sites

Mt. Moriyoshi Foothill Nature Restoration Project: <http://www.pref.akita.lg.jp/mizutomidori/>

① Re-planting in areas suitable for young tree establishment

Deciduous trees will be planted in selected areas based on evaluation of substrate conditions for young tree establishment. Seedlings and seeds will be collected at nearby forests for preserving local genetic resources.

② Re-planting in areas suitable for young tree establishment

In sites around reproductive beech trees that are tall and located at forest margins and where natural regeneration is highly possible, spraying soil improving agents and plowing will be applied. This soil preparation will ensure the soil amount and softness suitable for emergence of seeds carried by birds or winds and subsequent seedling growth.



A work for regeneration enhancement

Monitoring for performance evaluation

Establishment rates and growth of planted trees, the presence of animal damage and emergence of new seedlings will be monitored. The cause of killed trees will also be sought. This monitoring will be conducted to assess the performance of tree planting and regeneration enhancement.

The results can be used to improve restoration techniques and to refine the project design.