

Spruce Fence Agroforestry Concept

Mustiala Campus - Climate Smart Agriculture Project



Project Idea

- Spruce fence as living boundary
- Two pastures areas for cows
- Nature trail for visitors
- Deciduous trees for shade
- Shrubs and wildflower beds for pollinators
- Biodiversity & microclimate



Final Spruce Design



Spruce Fence
Wind protection

Nature Trail
Walking path for
visitors and
students

Pasture Areas
Grazing zones for
cows

Deciduous Trees
Provide shade &
improve
microclimate

Timeline



Structured Biodiversity model

The prototype shows how a spruce can be used to create a natural boarder around pasture.
The spruce fence works as a living hedge that guides cows, protect fields and improves the microclimate

Budget & Funding

Estimated Cost € 9,500

- Includes :
 - fencing materials
 - planting materials
 - nature trail construction
 - labour cost
- Funding sources :
 - Sales of spruce timber
 - EU CAP enviornmental support
 - Finnish rural development programmes
 - University sustainability funding
 - Corporate forest partners

Project Reflection

This project shows how agroforestry can combine farming, nature, and recreation.
The spruce fence system with trees & wild flowers creates a sustainable pasture.
We designed a pasture area with spruce fences, trees, and wildflowers to support biodiversity.
The design also creates a nice space for animals, visitors, and students.