

Not only forest:

tree planting in *agroforestry*

Joshua Finch

January 28th, 2025

Helsinki

On behalf of...



PELTOMETSÄVILJELYVERKOSTO

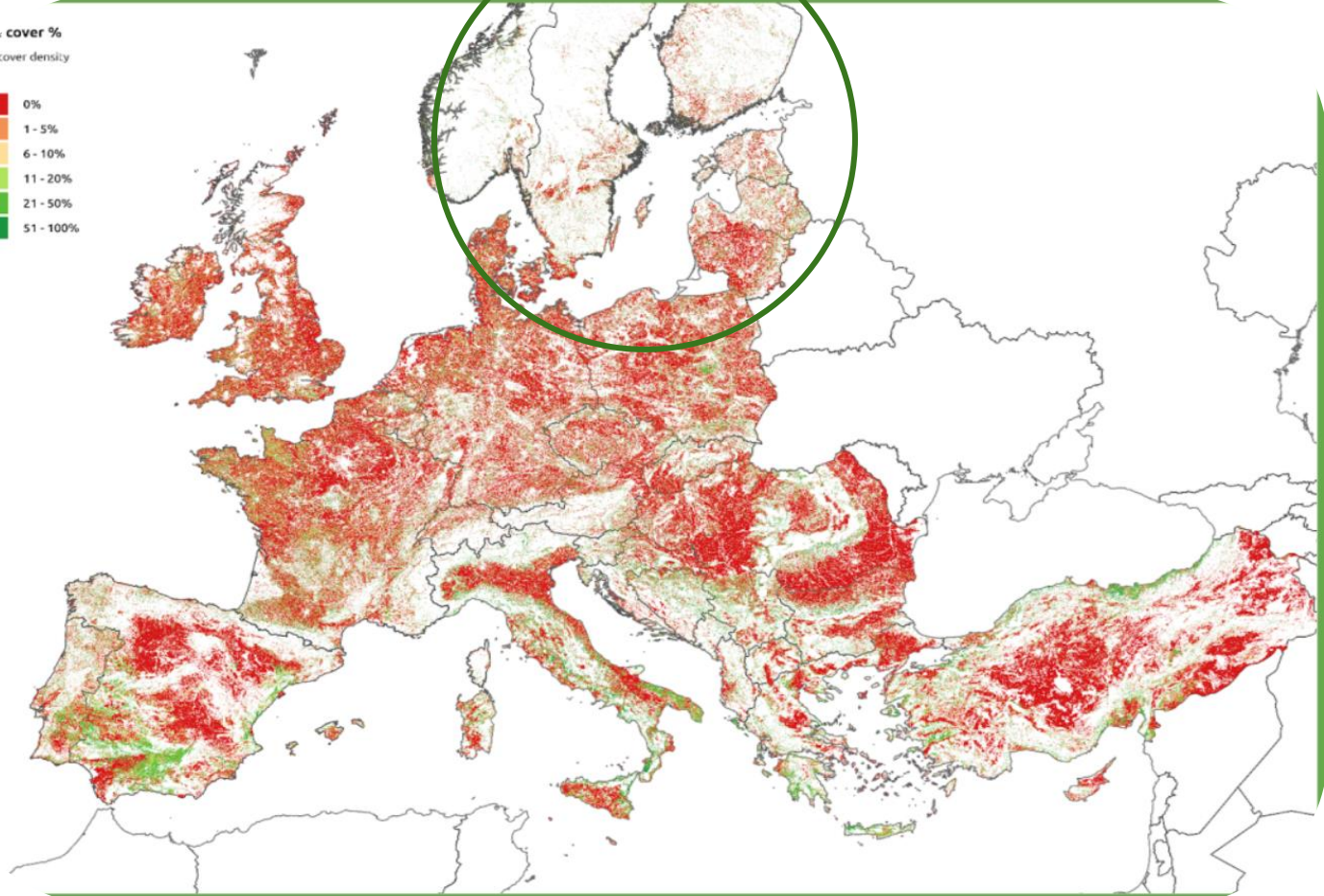
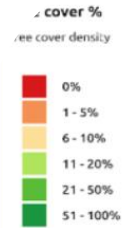


How are we doing with **tree cover in agricultural land**

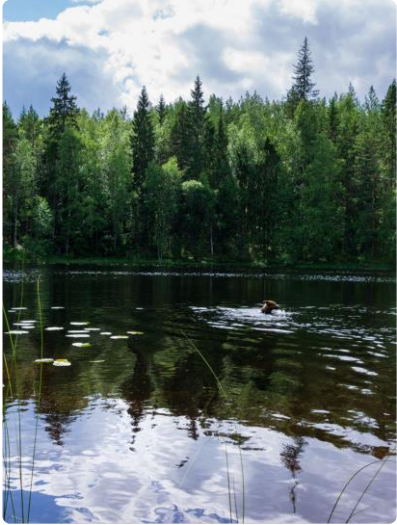
—
in Europe and boreal region?

(Copernicus +
Corine data,
2018)

Source: DigitAF project, produced by Planet Inc and the European Forest Institute.



The Boreal Region: an agroforester's perspective



Forests to the water's edge



Harsh winters, deep snow, deep shade



Trees haven't been the only obstacle



Finland, northernmost cereal producer
(±50% agricultural land)



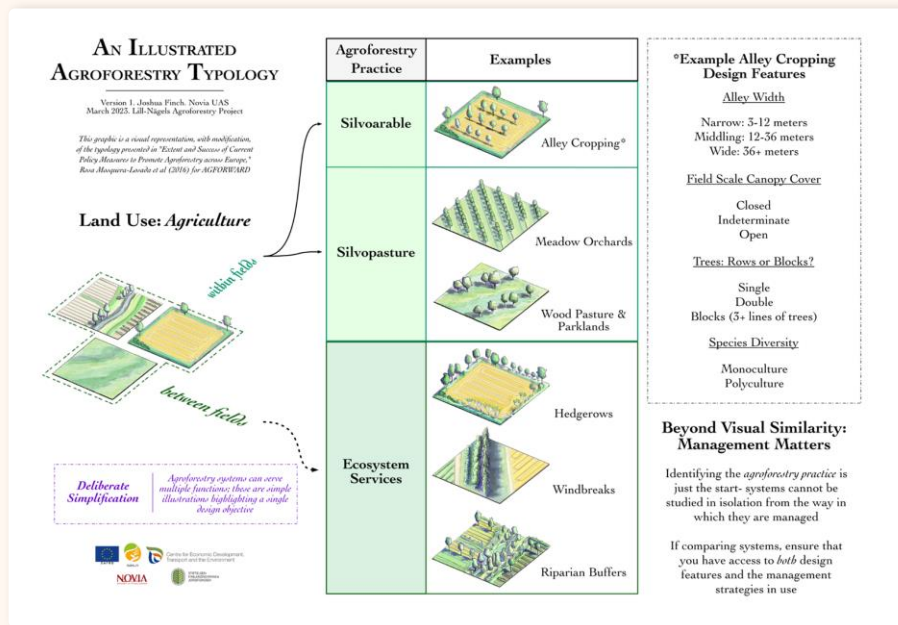
Segregation: by necessity or choice?



± 10% tree cover at the Lill-Nägels Agroforestry Pilot Project in Kirkkonummi, Finland (60°07'N, 24°26'E).
Credit Johan Ljungqvist, Multifoto Ab Oy, June 14th, 2024

Agroforestry is the deliberate integration of woody vegetation in agriculture

“An agroforest parcel is an agricultural parcel, including boundaries, with more than **5% tree-cover**, or with tree-planting or management which is intended to exceed 5% cover. **Shrubs** may also be present” *



* Recommendation 1, “Agricultural trees for resilient landscapes: a vision for European agroforestry,” European Agroforestry Federation (EURAF), version 1, 10.12.2024

Agroforestry is a **key family of practices** to achieve
10% “high diversity landscape features”
by 2030 under EU goals

“For promoting biodiversity,
special attention should be given
to **scattered trees**.

They are considered
keystone structures, because their effect on
ecosystem functioning is
relatively disproportionate
for the small area occupied by any individual tree.

Introducing **just 3-5 trees**
per hectare in treeless sites *can* **double species
richness**, triple the richness of bat species and
increase bat activity one hundred times¹¹⁴.*

Emphasis added



* Quoted from p 43 “Guidelines on Biodiversity-Friendly Afforestation, Reforestation and Tree Planting, European Commission Staff Working Document, 17.03.2023

A short **incomplete** list of agroforestry benefits *as processes*

All agroforestry systems are **multifunctional**:

- Biodiversity (even @ 0 -> 1)
- Habitat
- Windbreaks
- Wildlife corridors
- Water cycle benefits
- Microclimate creation
- Farm access
- Beautification
- Nutrient capture/cycling



Agroforestry as the grand pattern

These are various agroforestry systems

A short **incomplete** list of agroforestry benefits *as things*

Agroforestry systems are designed for **yields**:

- Mulch material
- Animal fodder
- Trellis materials
- Fencing materials
- Fire wood
- Biochar/charcoal
- Mushroom cultivation
- Lumber
- Plant based oils/fuels
- Fruit, nuts, perennial vegetables...



“Agricultural trees for resilient landscapes: a vision for European Agroforestry” presents eleven pages of policy recommendations for both Member States and the EU Commission

European Agroforestry Federation (EURAF) emphasizes the role of **policy** to support agroforestry adoption. Four achievable aims:

- Target 10% crown cover by 2040;
- Hypothecate 1% of the EU Solidarity Fund budget to agroforestry establishment
- Integrate into “well-resourced nature restoration fund”
- Include as a component of the EU Agri-Food Just Transition Fund



Source: Free SVG - Org. - <https://free.svg.org/img/europe>

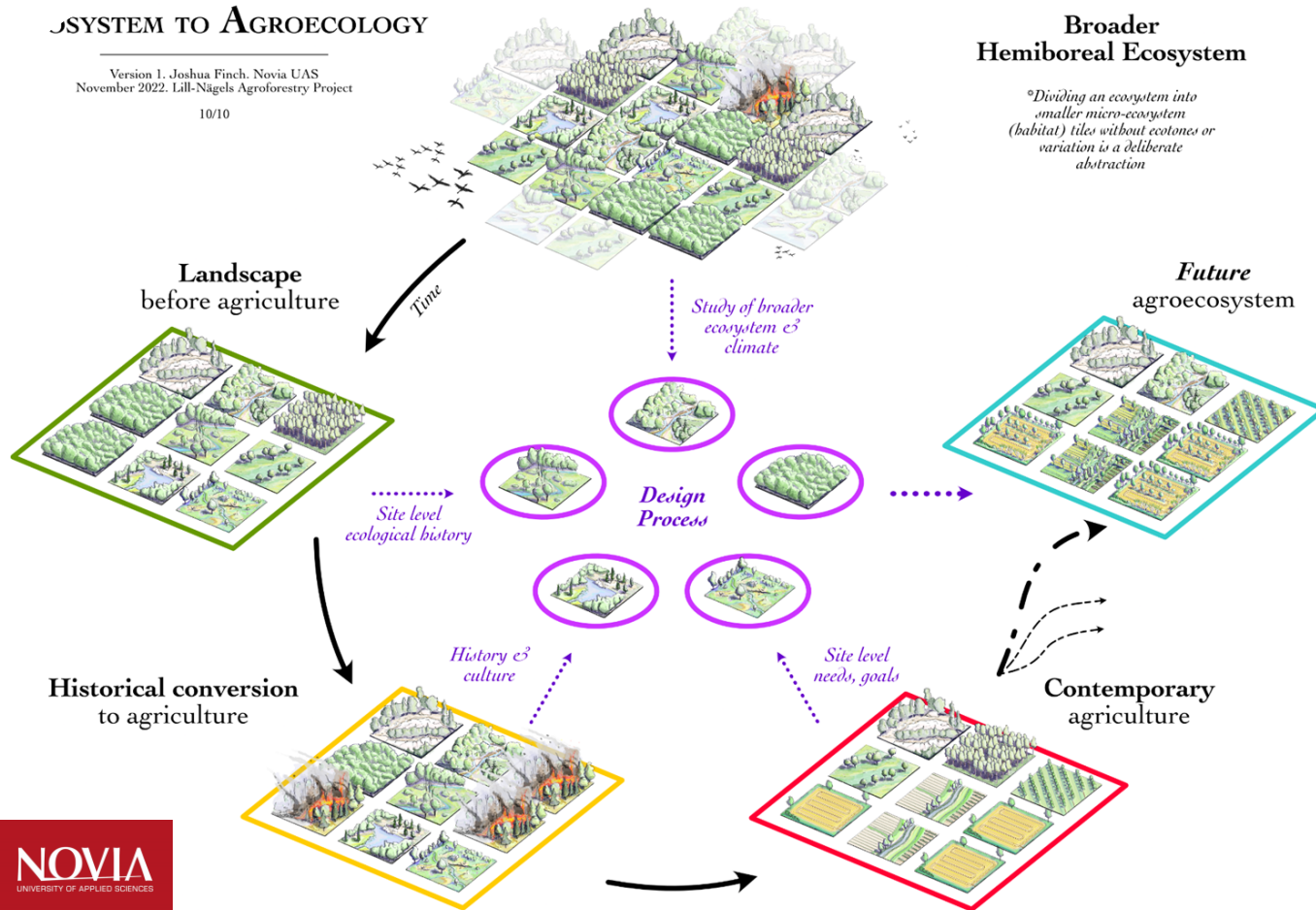
Farmers and their communities are at the heart of sustainable development.

Take their voices seriously and work *with* them

SYSTEM TO AGROECOLOGY

Version 1. Joshua Finch, Novia UAS
November 2022. Lill-Nägels Agroforestry Project

10/10



PELTOMETSÄVILJELYVERKOSTO

