



THINKFOREST

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Closer to Nature Forest Management

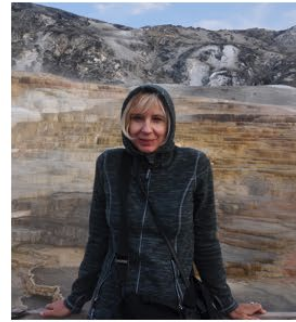
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Closer to Nature Forest Management*

Principles, strategies and a framework for flexible
European-wide implementation

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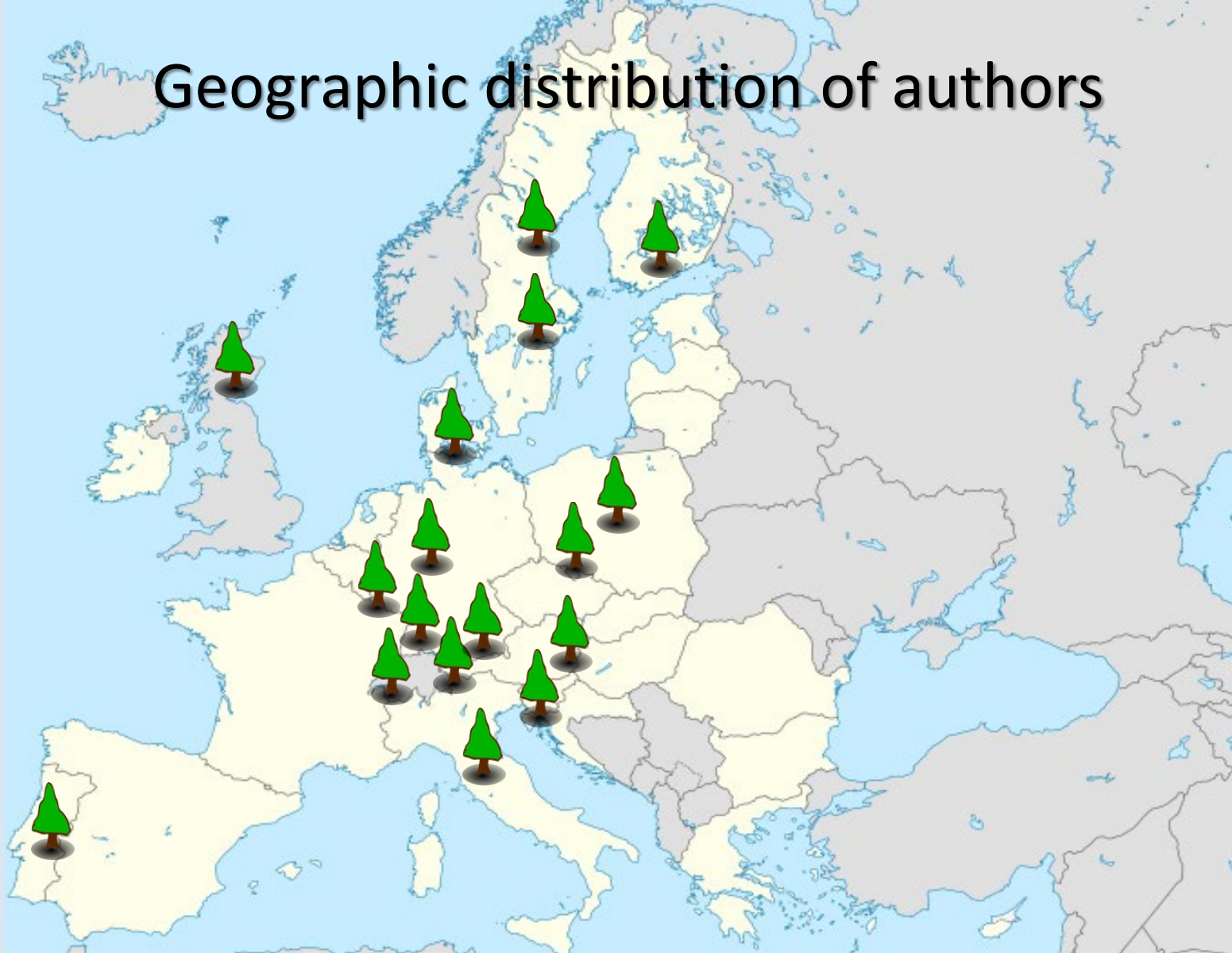
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Geographic distribution of authors



Building on latest scientific evidence our report

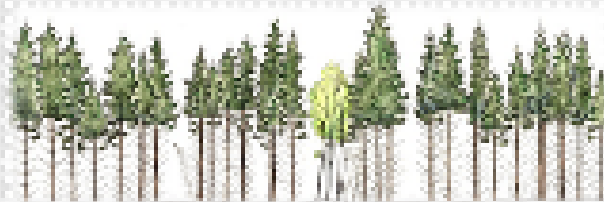
- analyzes the **current pressures on biodiversity, health and resilience** in managed forests
- examines the range of **existing nature-oriented forest management approaches** and analyze their ability to support biodiversity, health, stability and adaptation.
- proposes a **definition, a set of principles and a framework** for flexible European-wide implementation of Closer to Nature Forest Management, and finally
- evaluates **barriers and enablers** for implementing Closer to Nature Forestry

Segregated - - - - - Mosaic (TRIAD) - - - - - Integrated

Natural forests

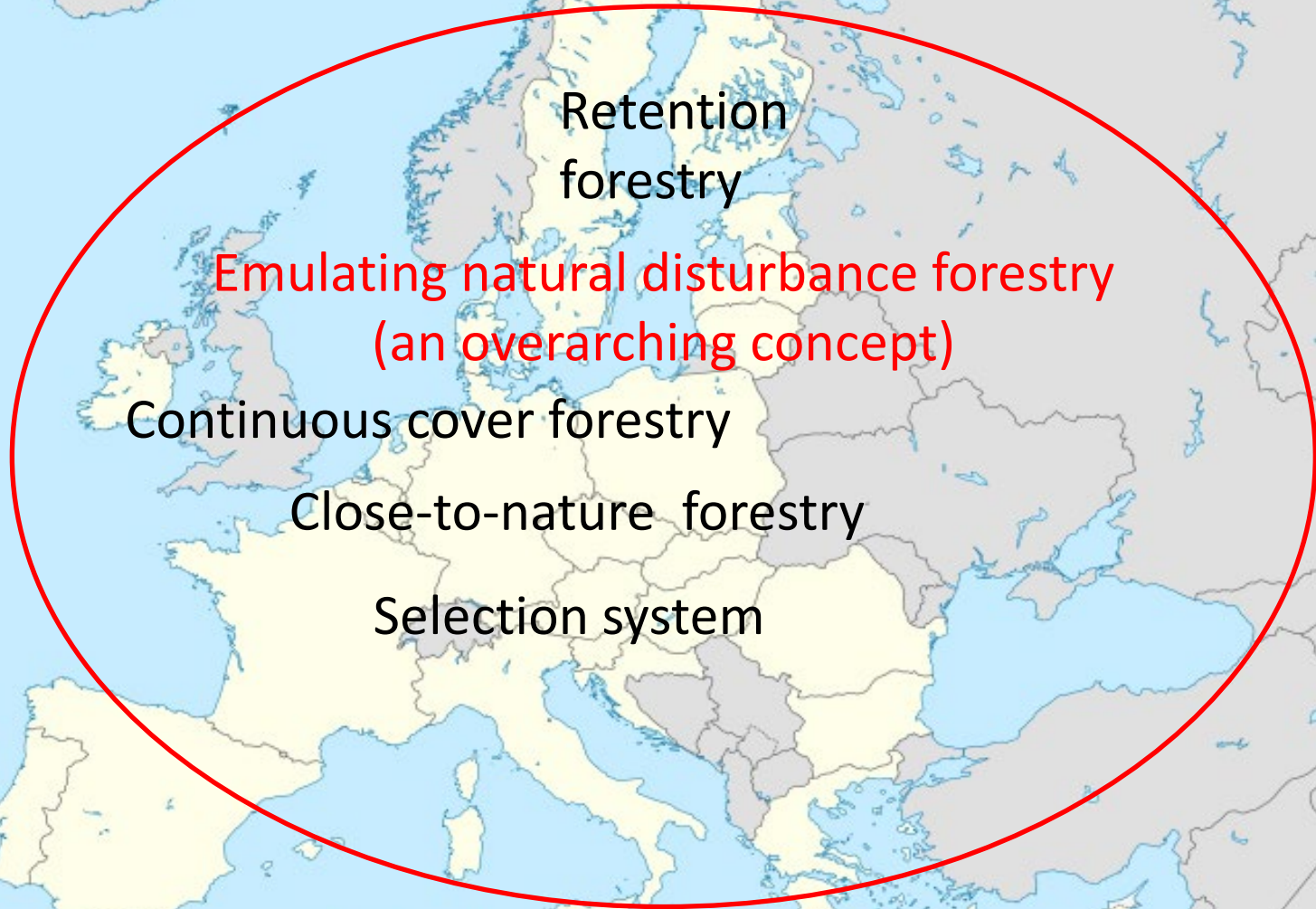


Closer to Nature Forests
(Integrated multifunctional forest landscapes)



Forest plantations

Nature based forest management is not new!



Retention forestry

Emulating natural disturbance forestry
(an overarching concept)

Continuous cover forestry

Close-to-nature forestry

Selection system

Close**r** to Nature principles

- Retention of habitat trees and dead wood
- Promoting native tree species as well as site adapted non-native species
- Promoting natural tree regeneration
- Partial harvests and promotion of structural variation (emulating natural disturbances)
- Promoting tree species variation and genetic diversity
- Avoidance of intensive management operations
- Supporting landscape heterogeneity and functional networks

Natural forest



Far from natural forest



Closer-to-nature forest



Silver fir and beech

Douglas fir, Norway spruce and Beech

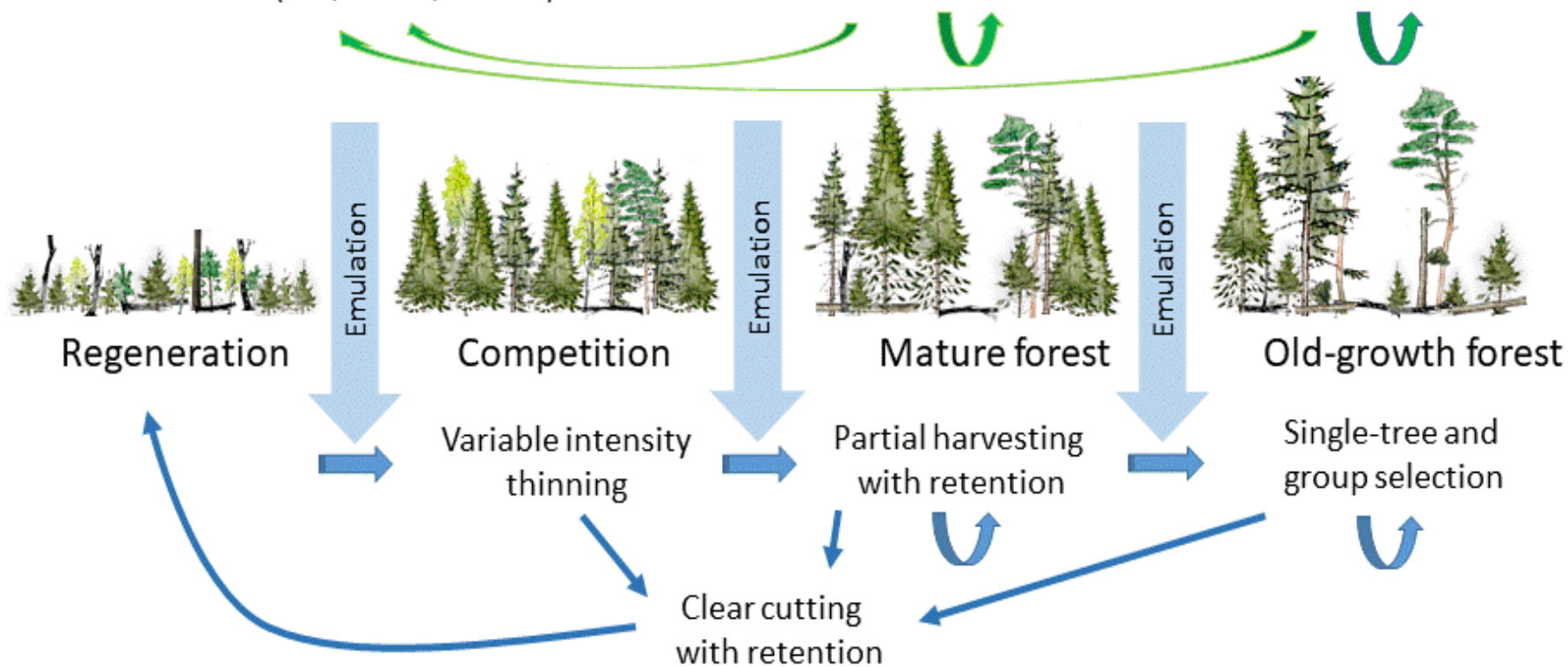
Beech, sycamore maple and ash

Natural disturbance regime

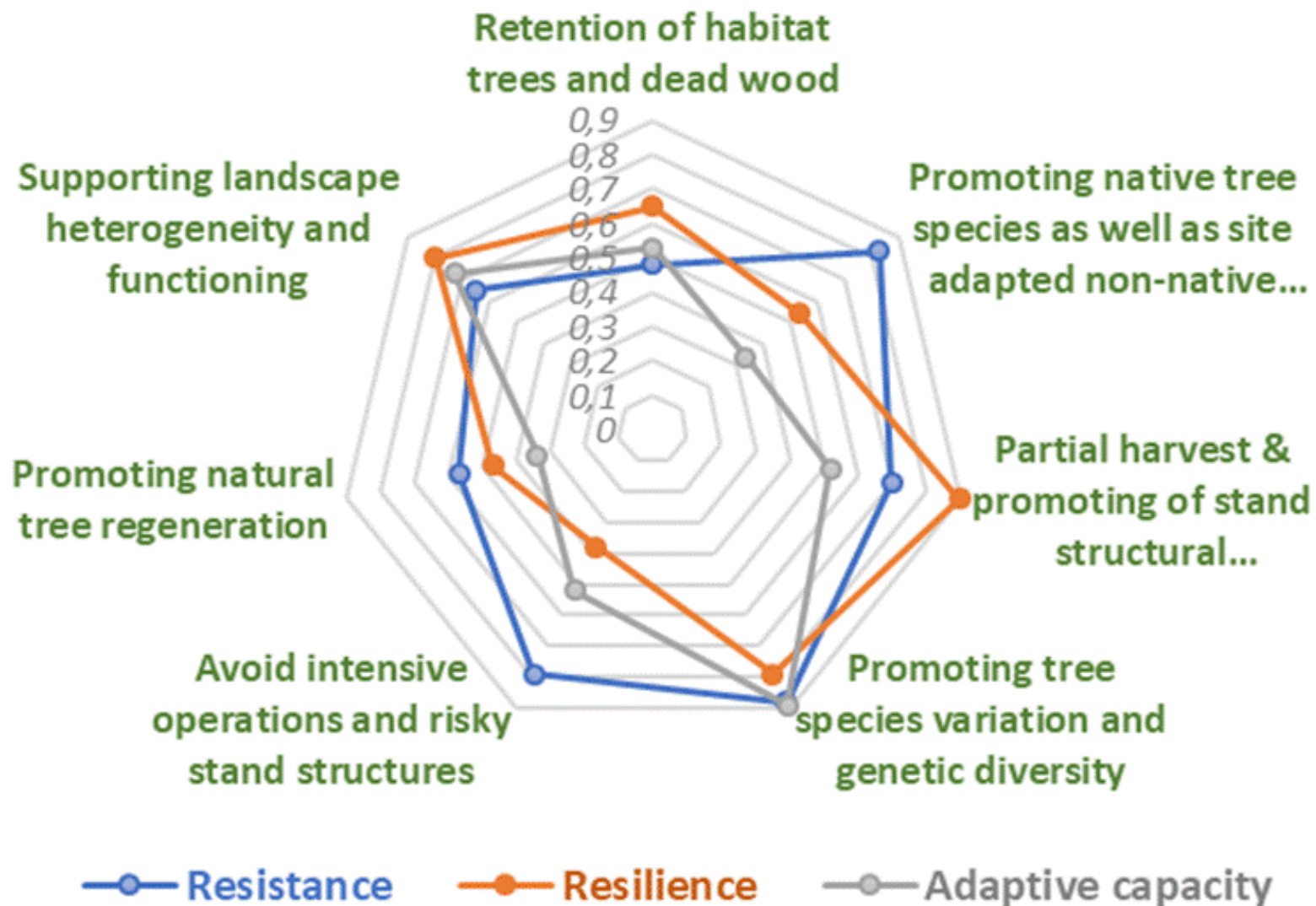
Succession after stand-replacing disturbance (fire, storm, insects)

Cohort and patch dynamics driven by partial disturbance

Small-scale gap dynamics



Natural disturbance based management



Proposed Closer to Nature strategies

Forests managed by Closer to Nature principles:

- aim at promoting components, structures and processes characteristic of natural forests and cultural woodlands
- feature a diversity of tree species and structures, a variety in tree size and development stages, and a range of habitats including habitat trees and dead wood
- timber harvesting will pay as much attention to what is retained in the forest as what is removed

Framework for implementation

- Management approach will reflect regional, ecological, economic, social and cultural variations across the continent.
- Managers will embrace diversity, learn from natural processes that influence their forests and anticipate the impacts of climate change
- Planning is essential and will build on a long-term vision
- Management approach will be developed in consultation with stakeholders
- Adaptive management and learning will be key

Take home messages

Closer to Nature Forest management has great potential to integrate different mgmt. objectives including biodiversity, and enabling forest health and adaptation to climate change

- Different regions need different management approaches
- Learn from the past and consolidate existing networks
- Use adaptive management as a way to tackle uncertainties
- Not a quick-fix – long-term measures are needed
- Review existing subsidy and taxation regimes for private owners
- Develop and use novel technologies and tools
- Collective learning, experimentation and research will be key

Further info:

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Thank you!

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Bill, Dorota, Elisabeth, Frank,
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Renzo, Thomas, Timo, and Bo