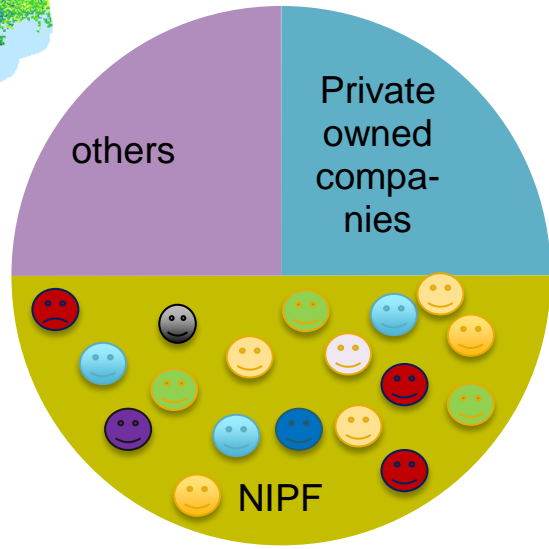
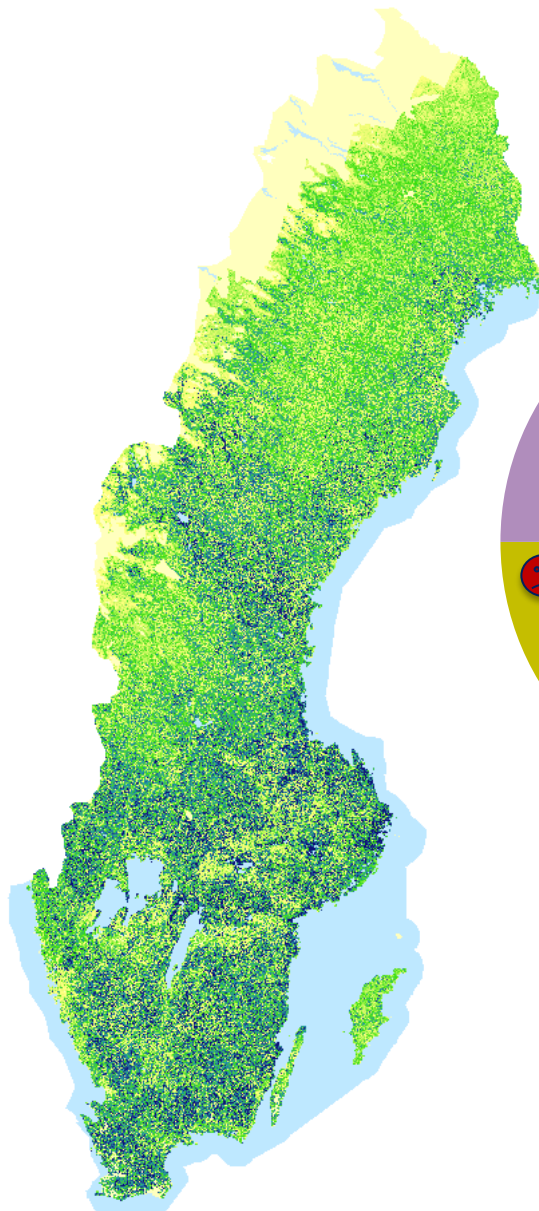




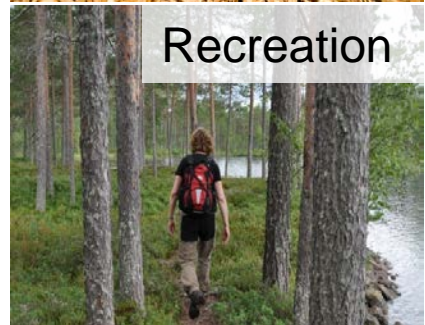
Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Accounting for a diverse ownership structure in projections of forest ecosystem services

Jeannette Eggers, Hampus Holmström, Tomas Lämås, Torgny Lind and Karin Öhman



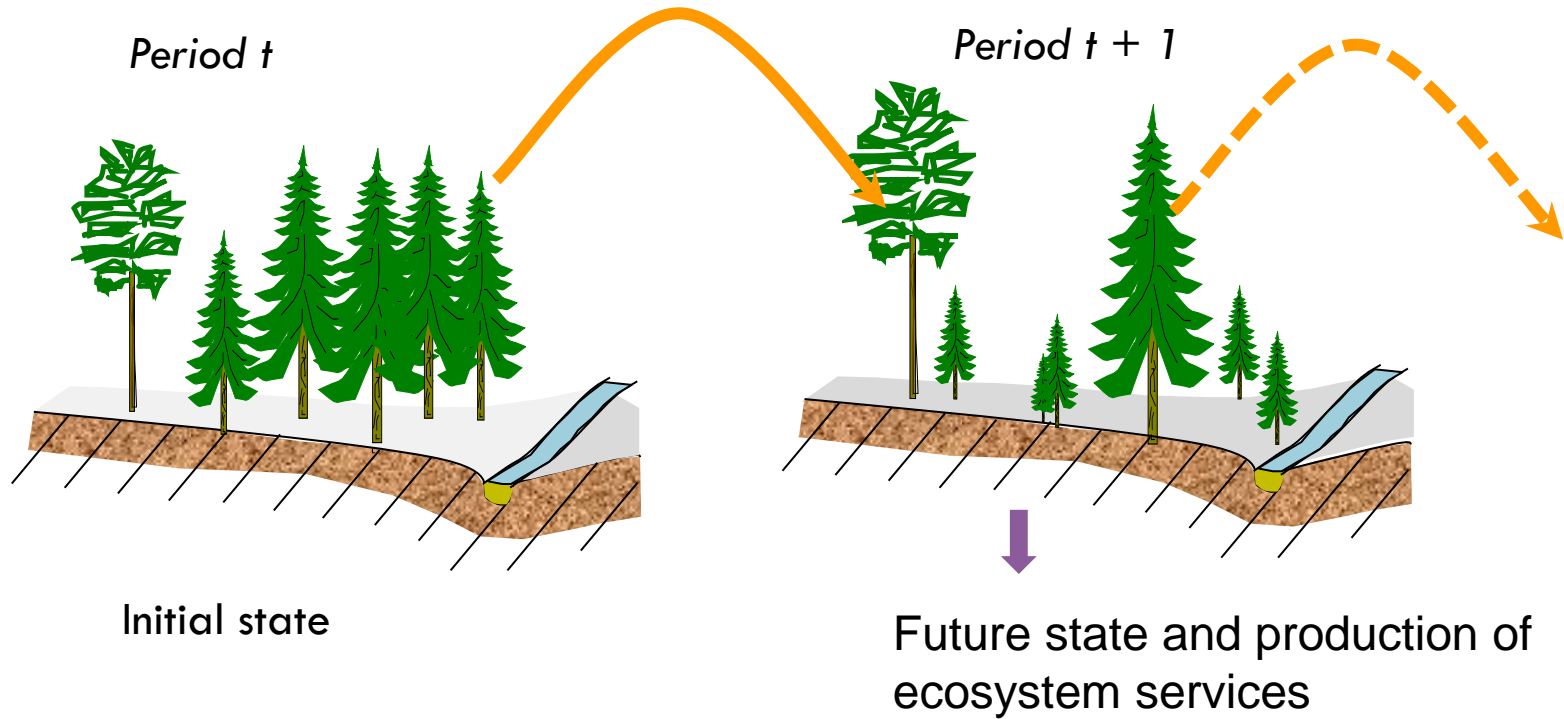
Freedom under responsibility





Heureka forest model

Ecosystem processes and silviculture



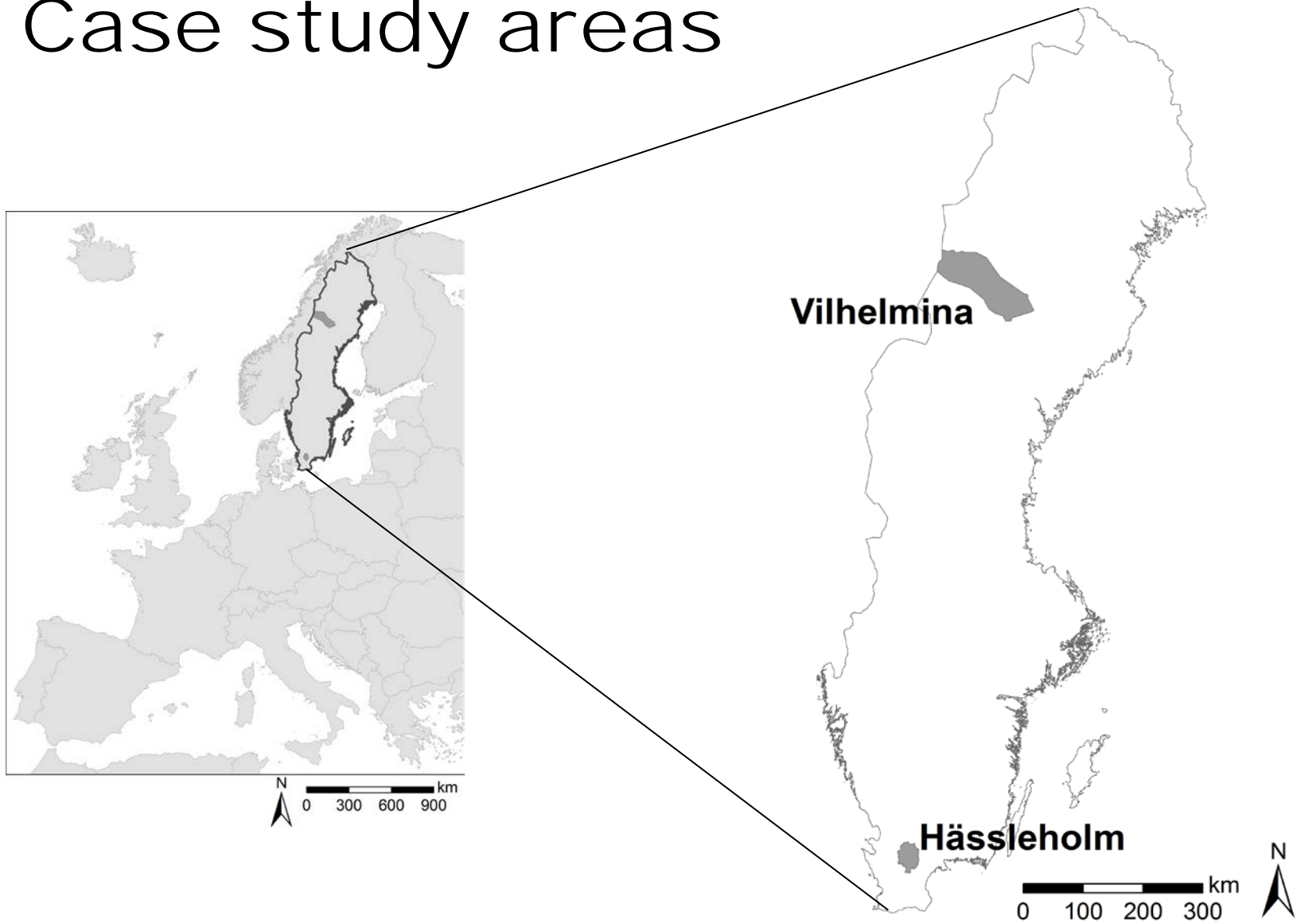


Indicators

Indicator	Related ecosystem services
<u>Economic</u>	
Total harvest (1000 m ³ over bark/year)	Raw materials
Growing stock (m ³ /ha)	Climate regulation
Growth (m ³ /ha/year)	Climate regulation
Potential reindeer winter pasture (%)	Food provision
<u>Ecological</u>	
Mature forest with high share of broadleaves (%)	Lifecycle maintenance
Old forest (%)	Lifecycle maintenance
Large diameter trees (trees/ha)	Lifecycle maintenance
Fresh deadwood (m ³ /ha)	Lifecycle maintenance
<u>Social</u>	
Sparse forest (%)	Aesthetic enjoyment, Recreation and tourism
Clear-cut area (%)	Aesthetic enjoyment, Recreation and tourism
Person-years (years)	

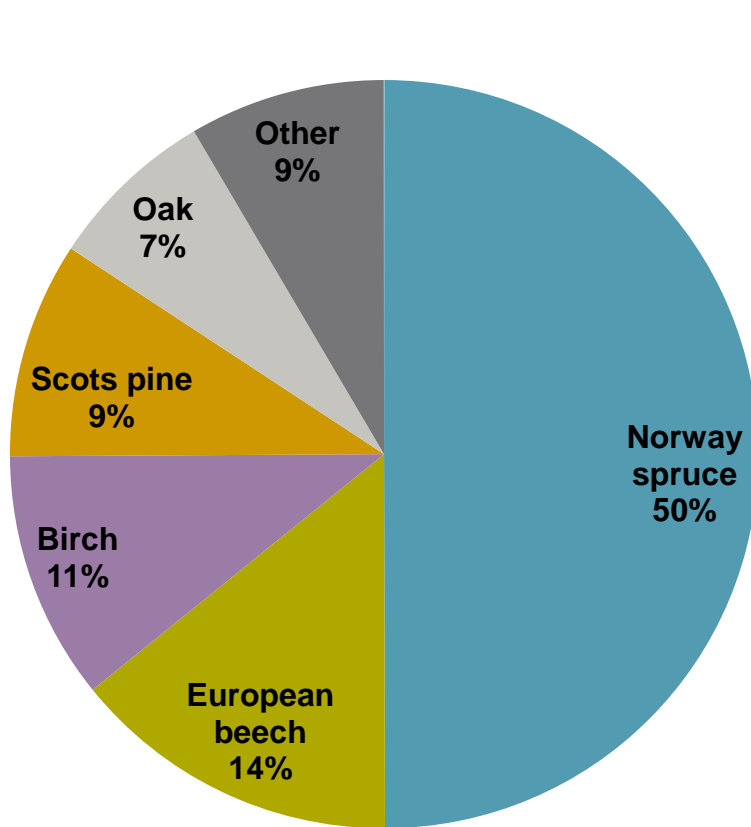


Case study areas

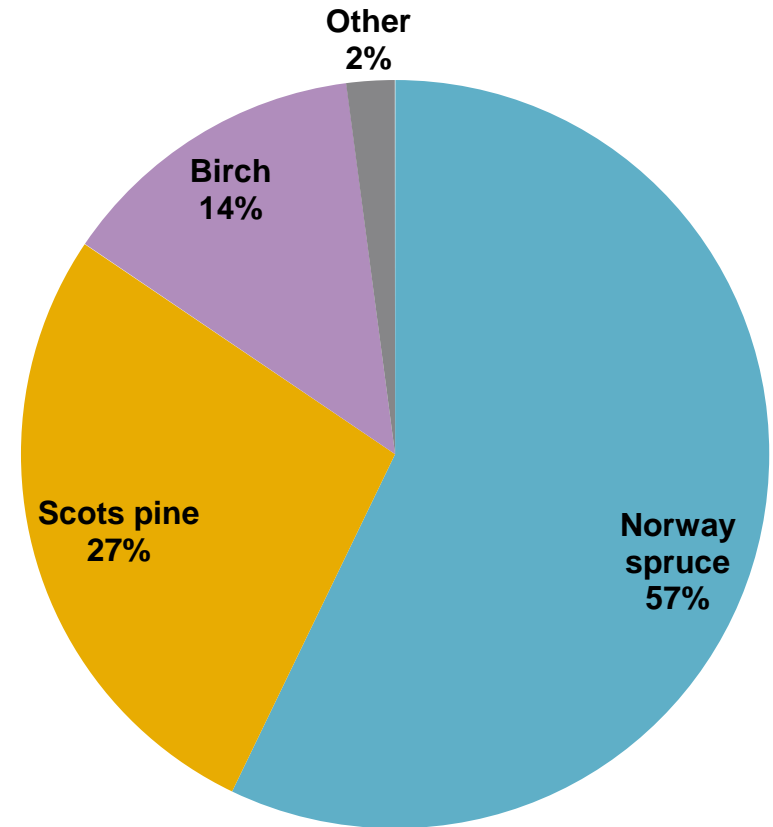




Tree species distribution



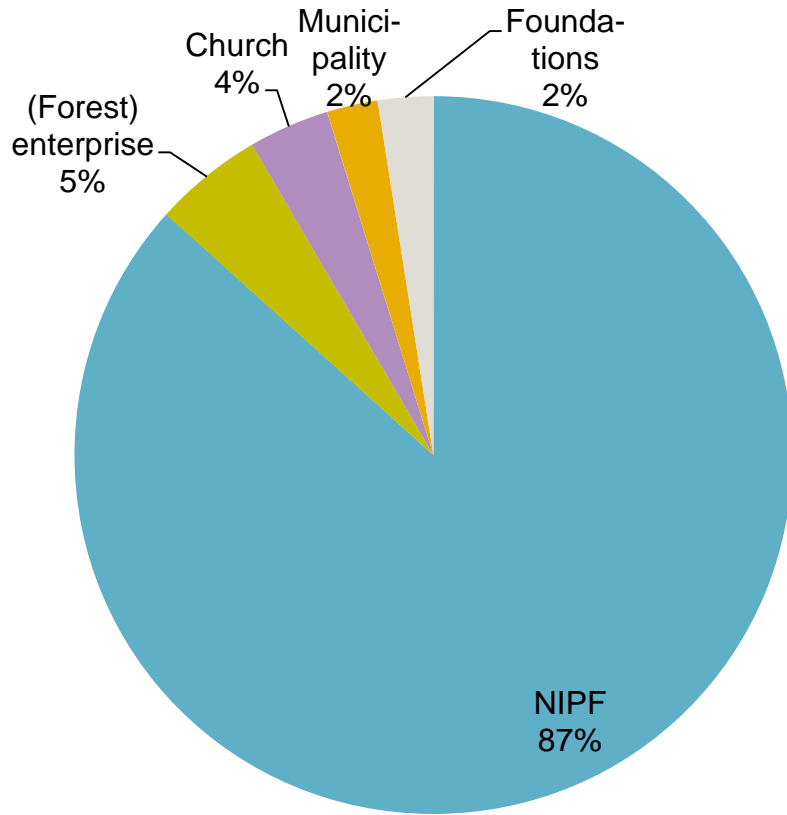
Hässleholm



Vilhelmina

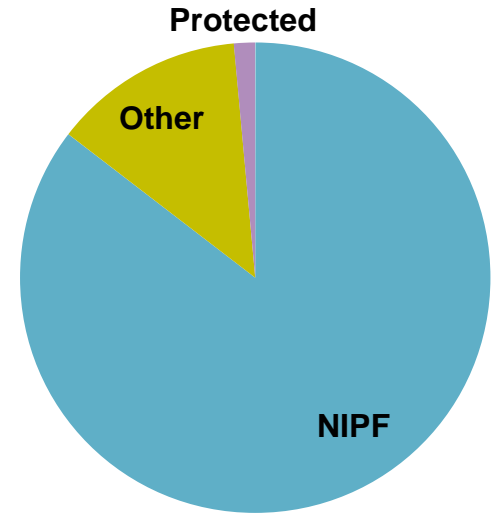
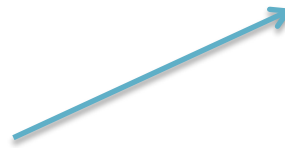


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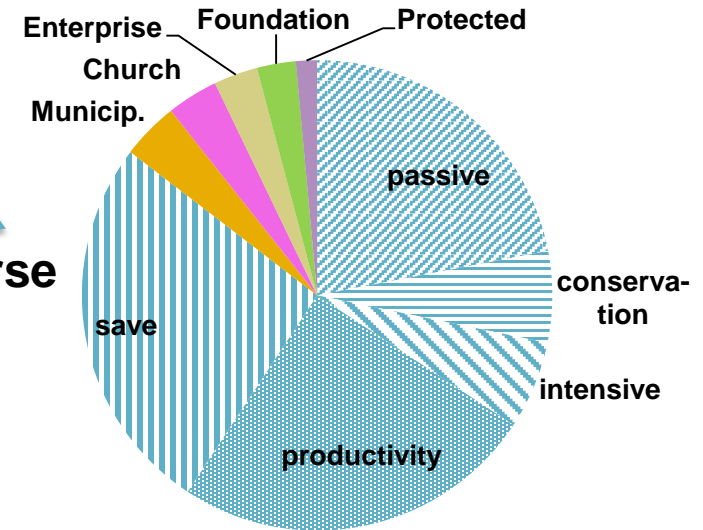
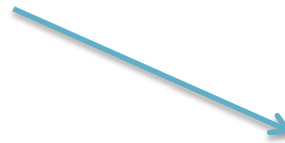


Ownership

Simple



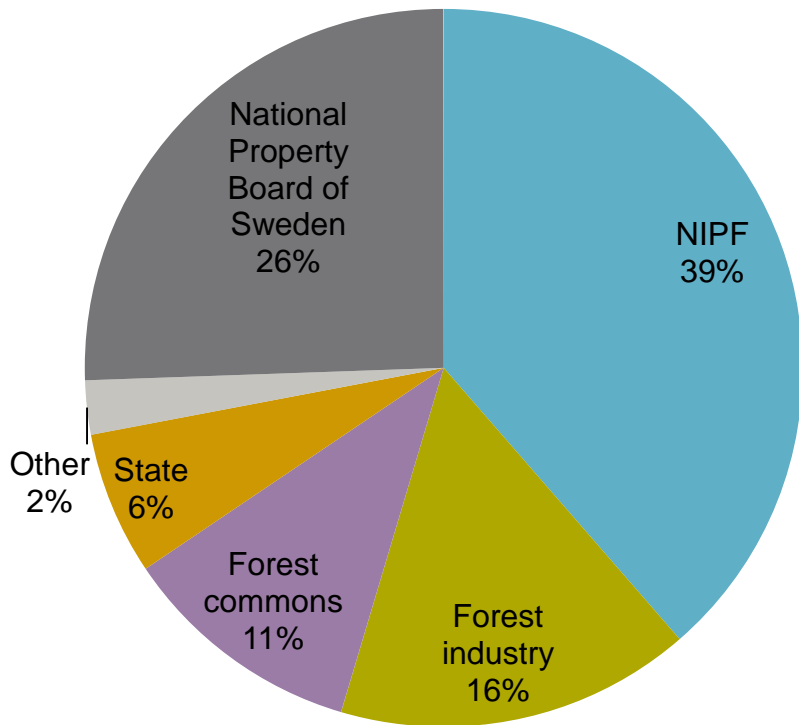
Diverse



Model set-up

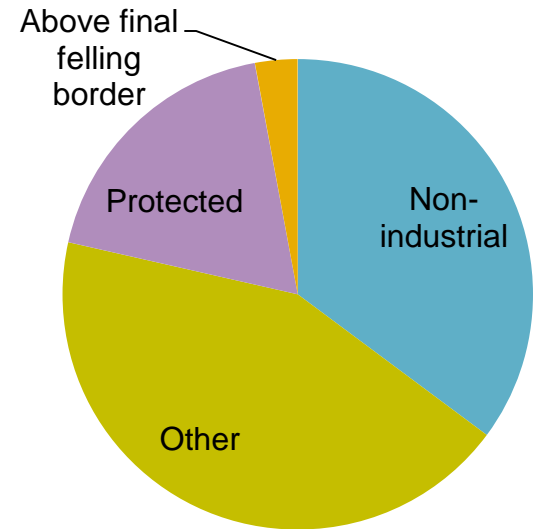


Vilhelmina

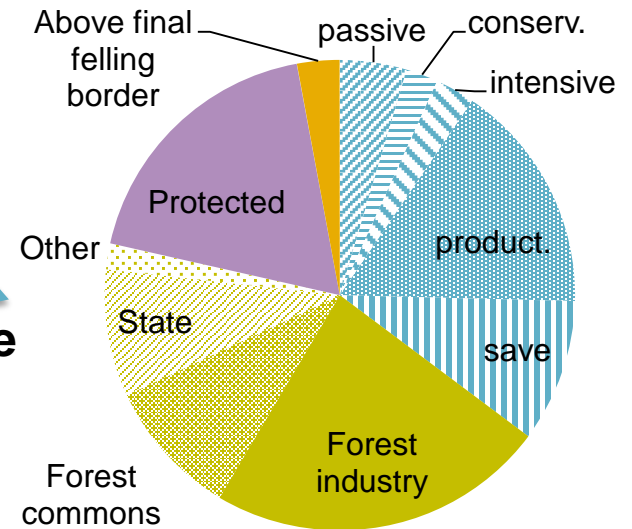
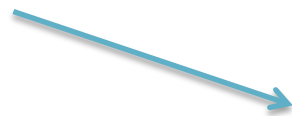


Ownership

Simple



Diverse



Model set-up



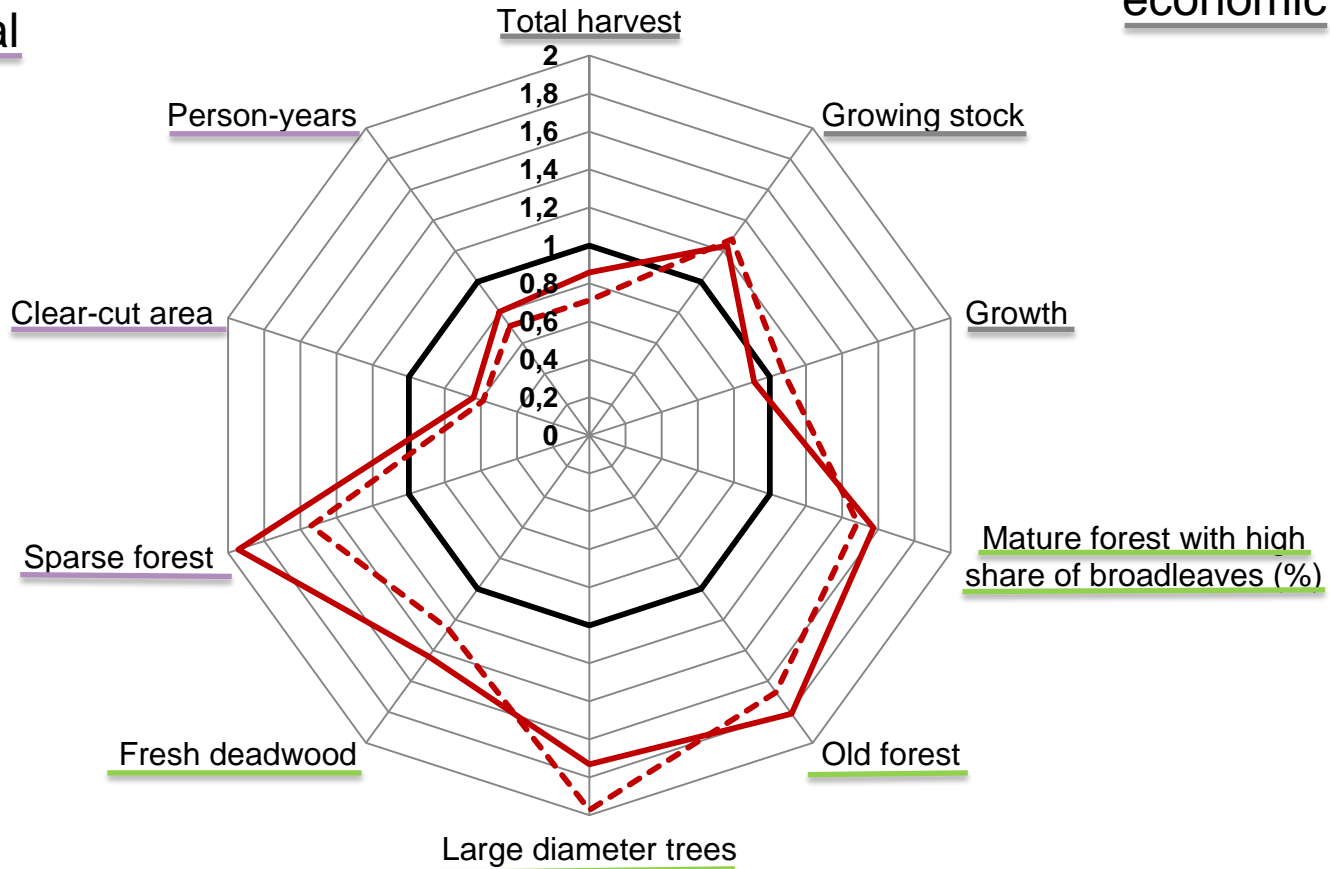
Results



Hässleholm

social

economic



— Simple - - - Diverse 20 years — Diverse 100 years

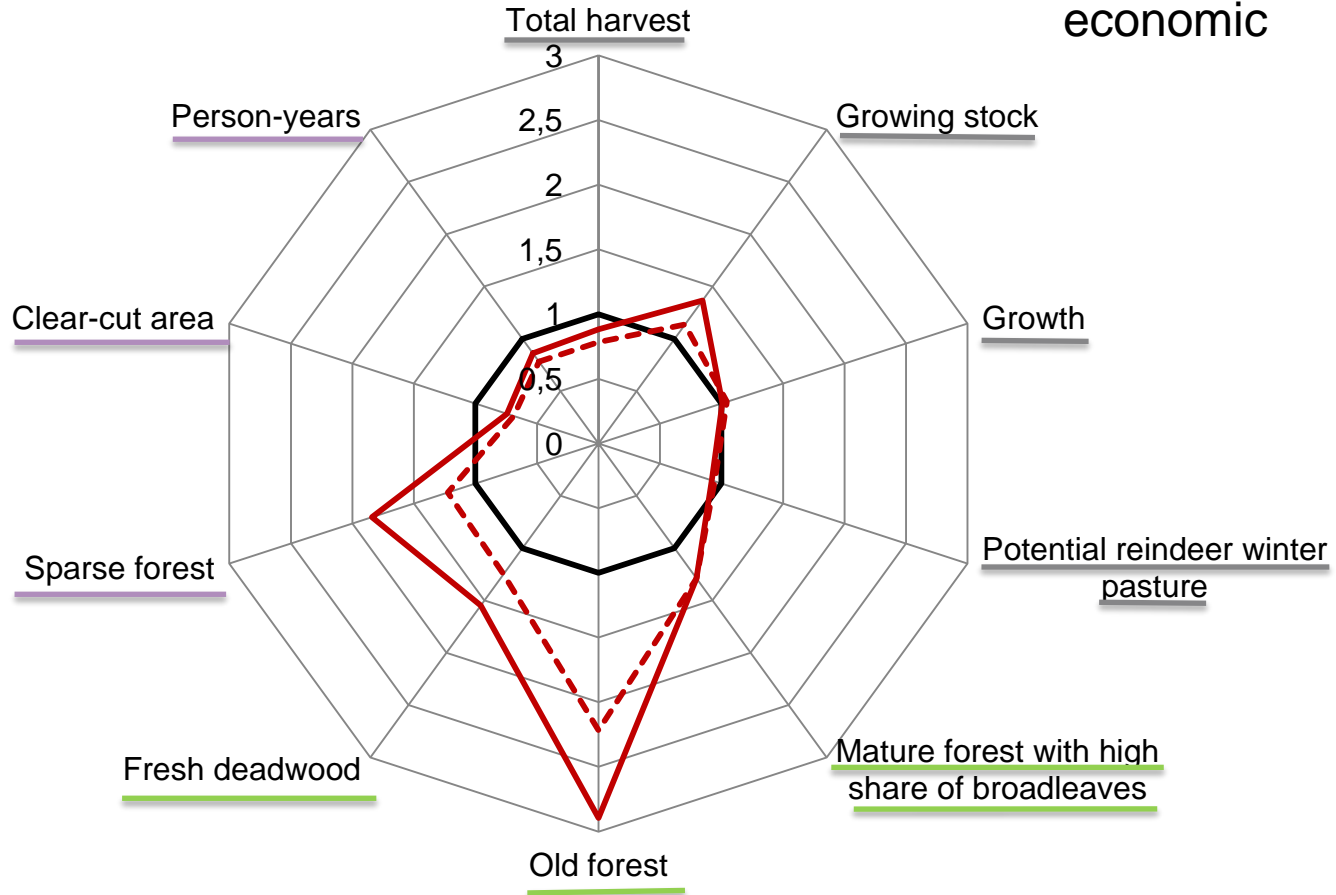
ecological



Vilhelmina

social

economic



— Simple - - - Diverse 20 years — Diverse 100 years

ecological



Discussion & Conclusions

- Diverse forest owner structure – large impact, esp. for biodiversity and recreation
- Method easily adjustable
- Uncertainties
 - Parametrization of management strategies
 - Changes in management strategies over time



Thank you!

jeannette.eggerts@slu.se