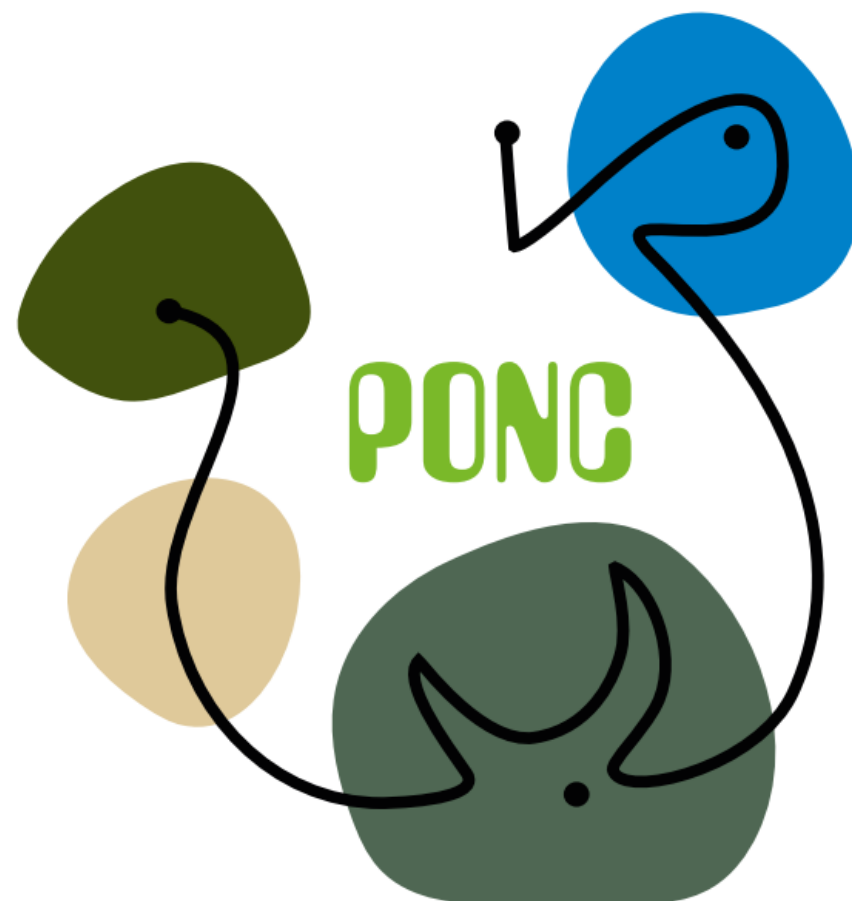


Excursion to Pijnven

13/6/2023

Regional manager Koen Thijs & forest guard Eddy Ulenaers



Process Oriented Nature Conservation

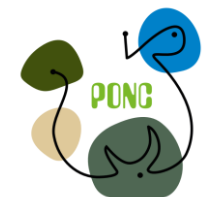
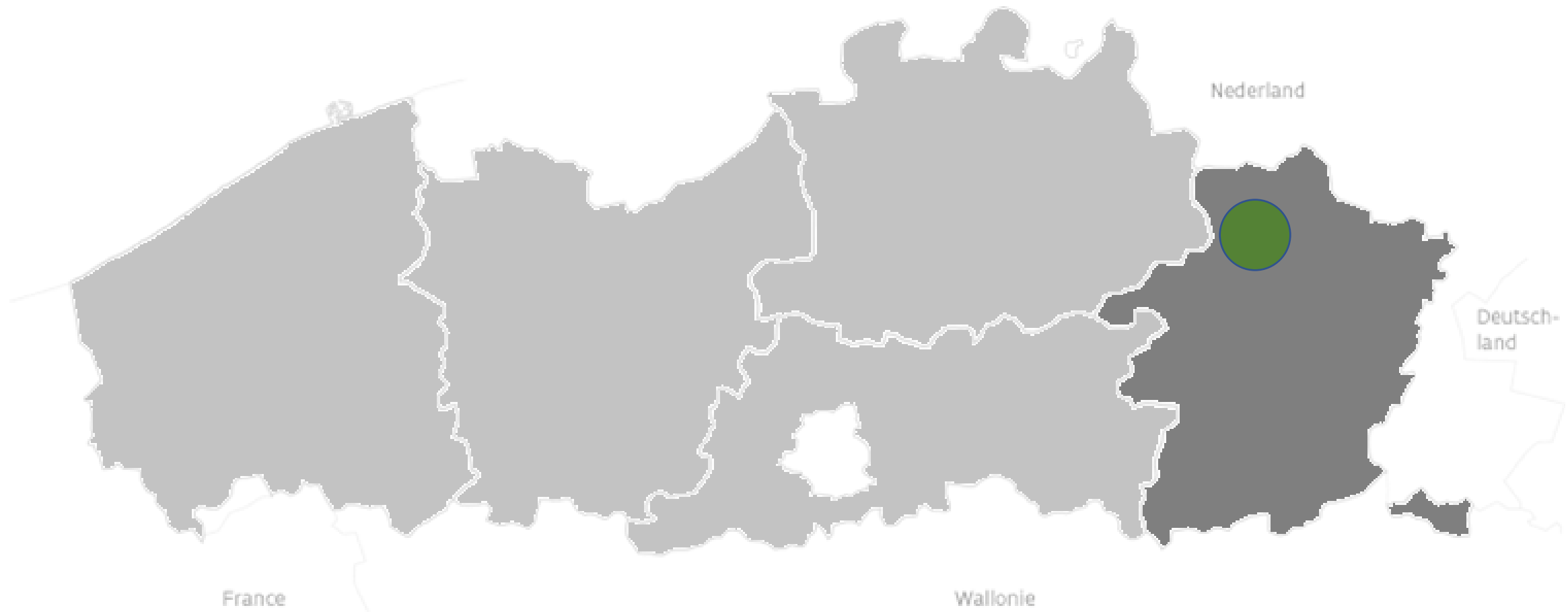
Towards a wilder, cheaper and more robust nature management



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Location of Pijnven



History of Pijnven (18th century)



Land dunes



Dry heaths "La Grande Bruyère"



Standing water "Etang Peijn Ven"



Alluvial forest



Natural processes in over-exploited and coarse-grained human-dominated landscape

History of Pijnven (20th century)

Since 1900 the importance of heathland was

- **Declining** for agriculture (ia introduction fertilizers and mechanization)
- **Increasing** for afforestation (ia pine plantations for mining industry)

Resulting in a landscape metamorphosis from open to close

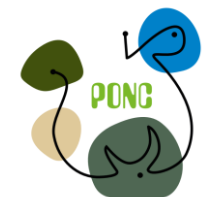


From a sustainable management (20th century)...

- Sustainable management of public forest and natural patrimony
- Valorisation of all possible synergies between the natural landscapes and local society
- Co-designing a long term vision on nature and forest
- Start of Bosland, the most child friendly forest region of Flanders

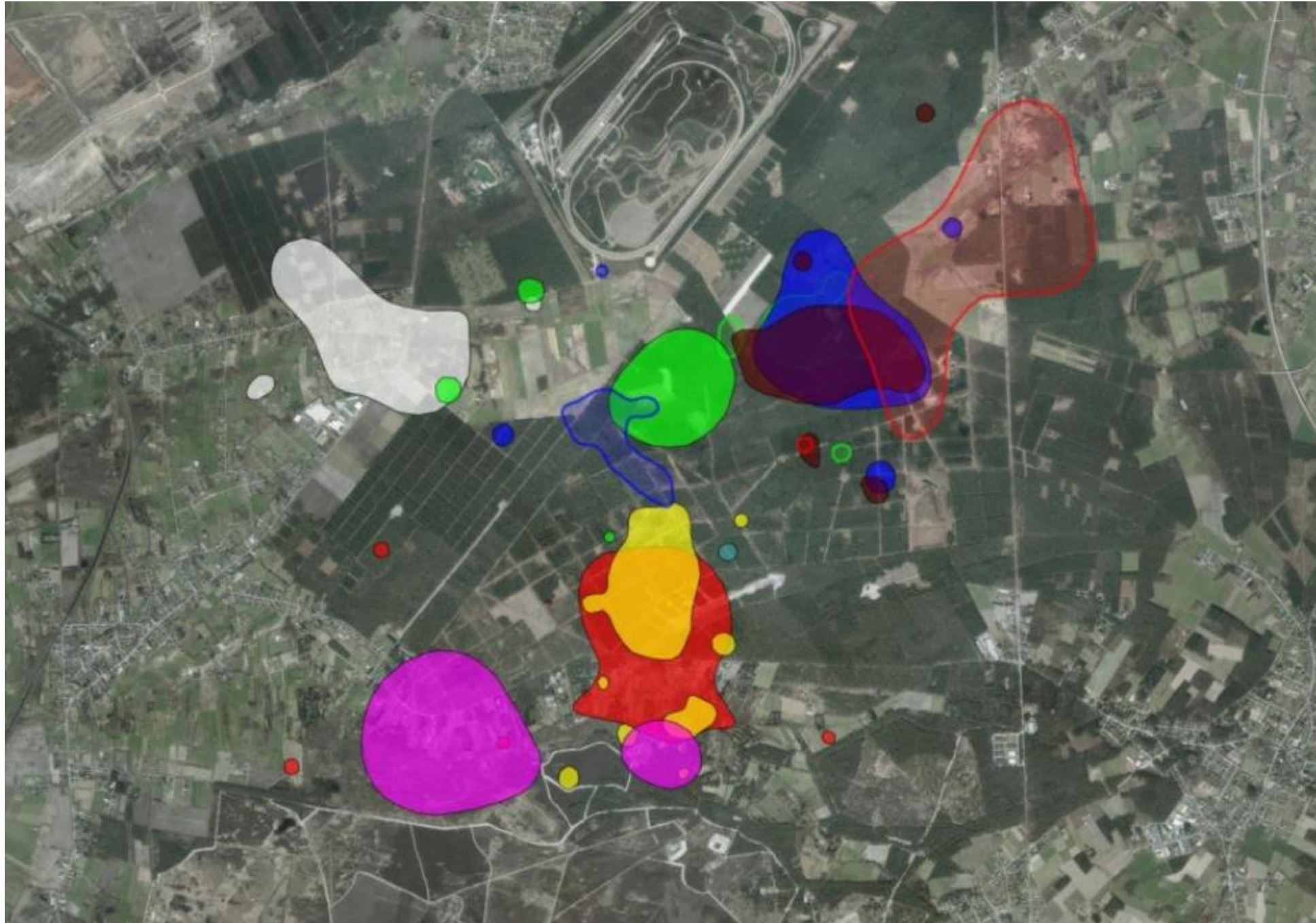
... to a process-oriented nature conservation (21 century)?

- Focusing on the natural processes rather than the habitat or species objectives
- PONC as a process, not as a goal
 - Rethinking management practices
 - Refocusing ecosystem services
 - Spatial and temporal pathway



Scientific research (www.BosLab.be)

Homeranges of individual nightjars in Pijnven



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Restoring trophic levels ~ top carnivores



Wildlife management



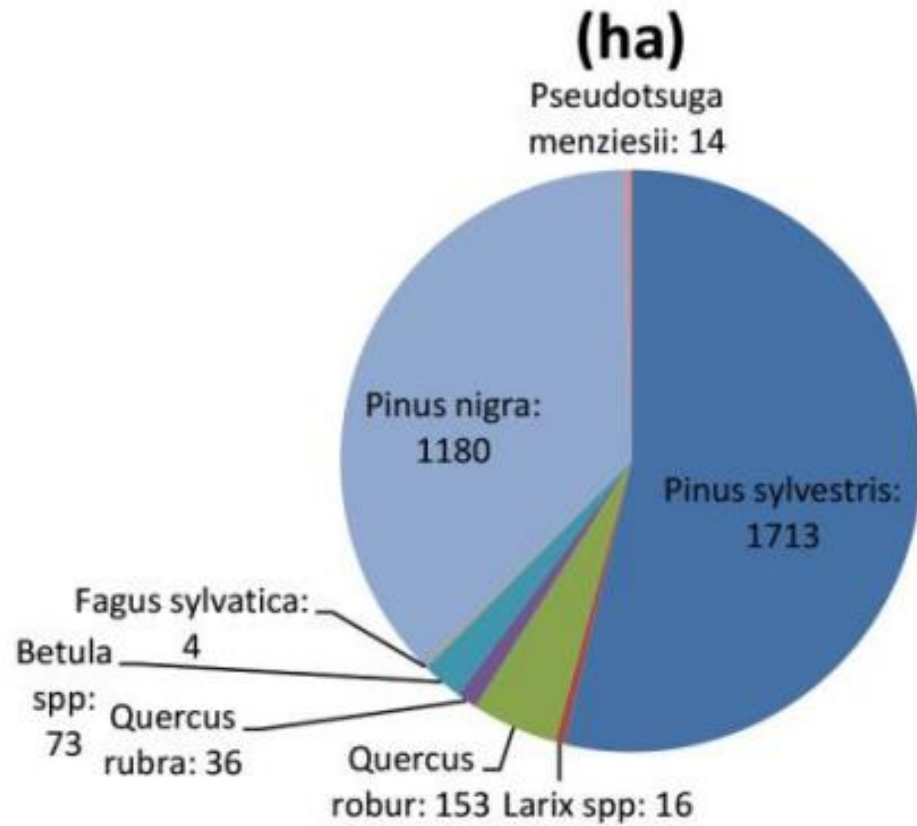
Species protection program

Heivlinder Grayling

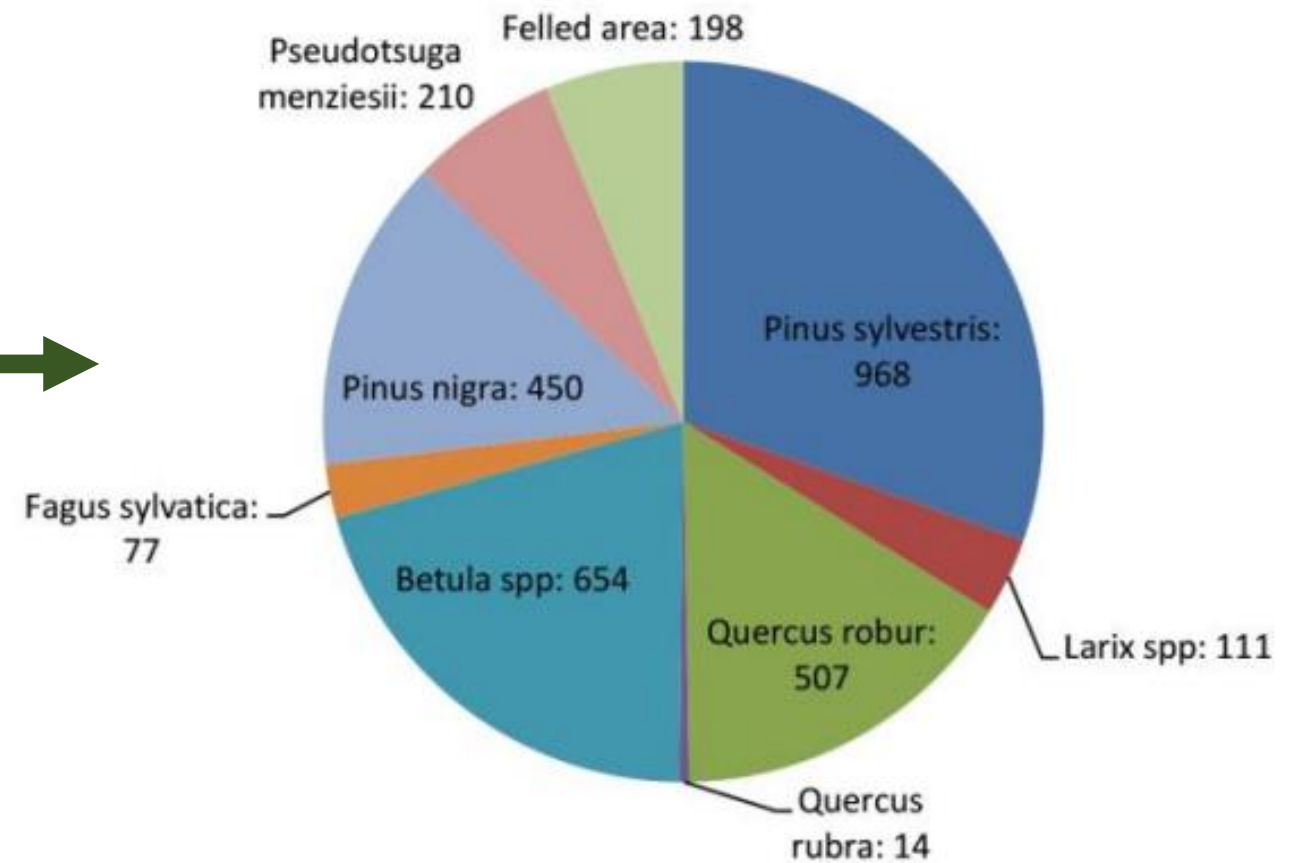


Shift in forest composition

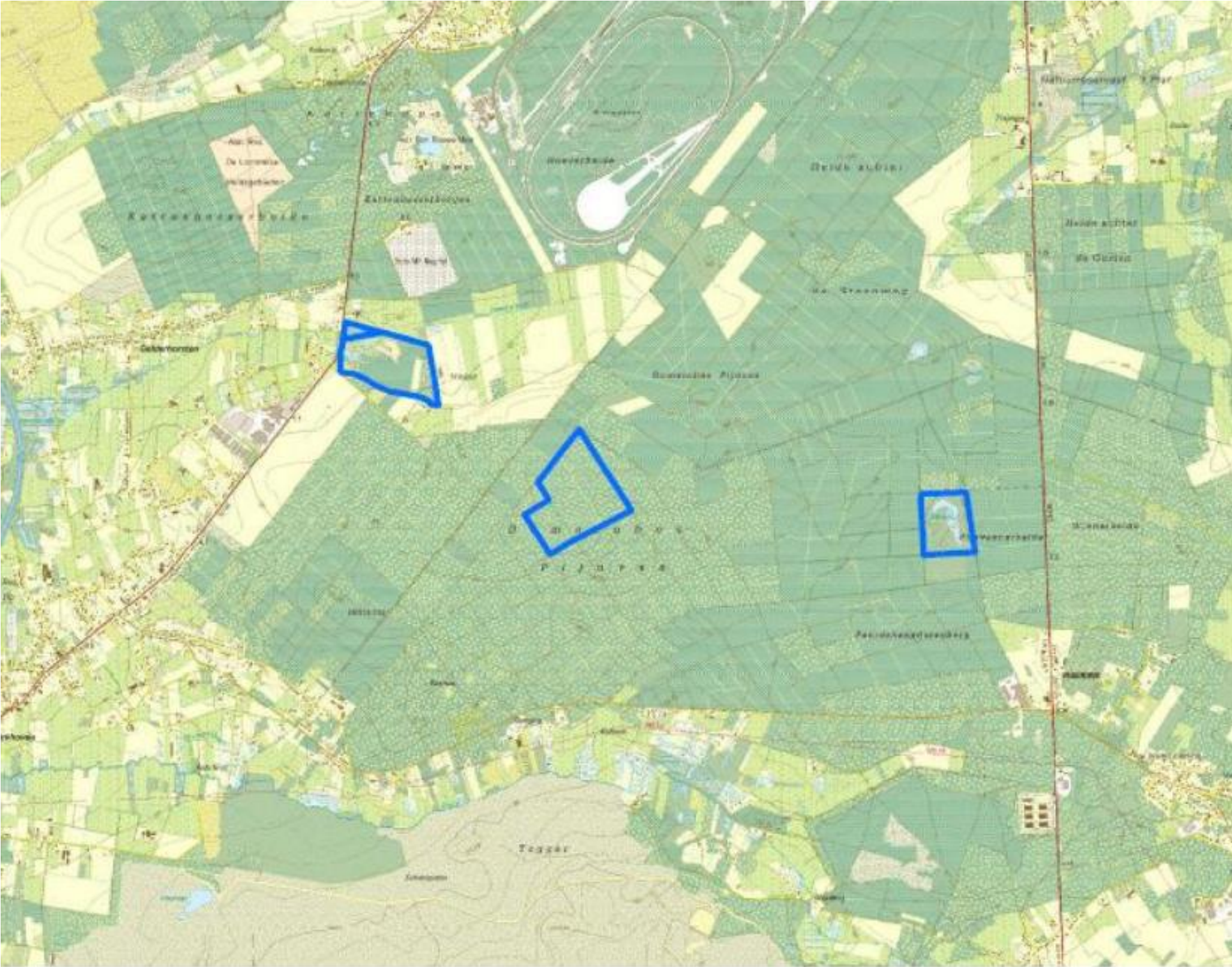
Species distribution in Bosland 2013



Species distribution in Bosland 2070



Forest reserves ~ Non-intervention areas (62ha)



Stimulate abiotic processes (soil)



Large scale

Deforestation to restore land dunes,
allowing wind dynamics



Small scale

Wild boar rooting



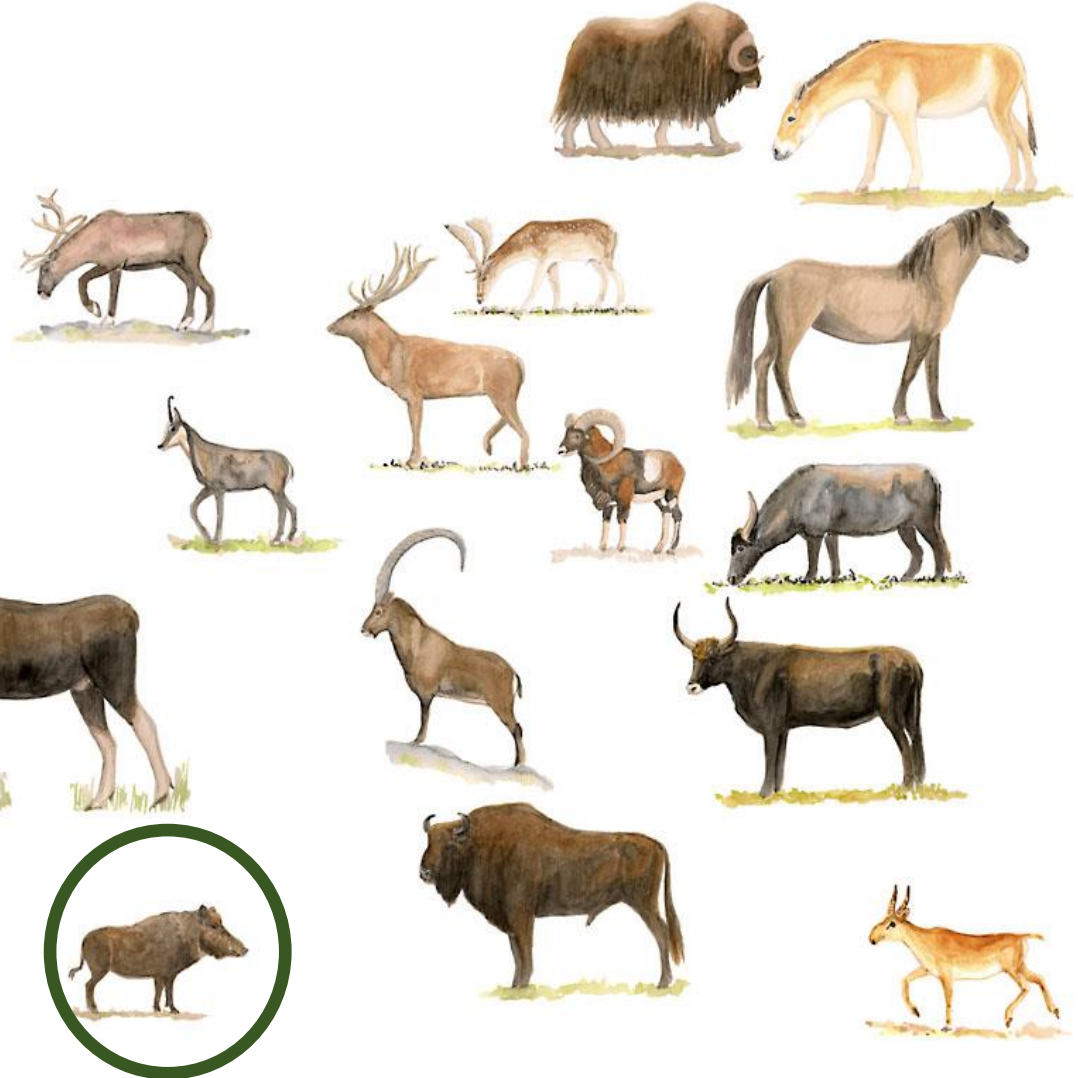
Grazing



Browsers



Intermediate feeders



Grazers



How to deal with invasive species?



Removal of the invasive *Prunus serotina* (Photo: Dany Ruysen)



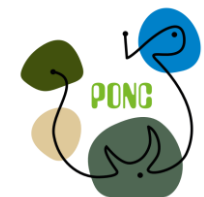
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Exploration of the natural heritage



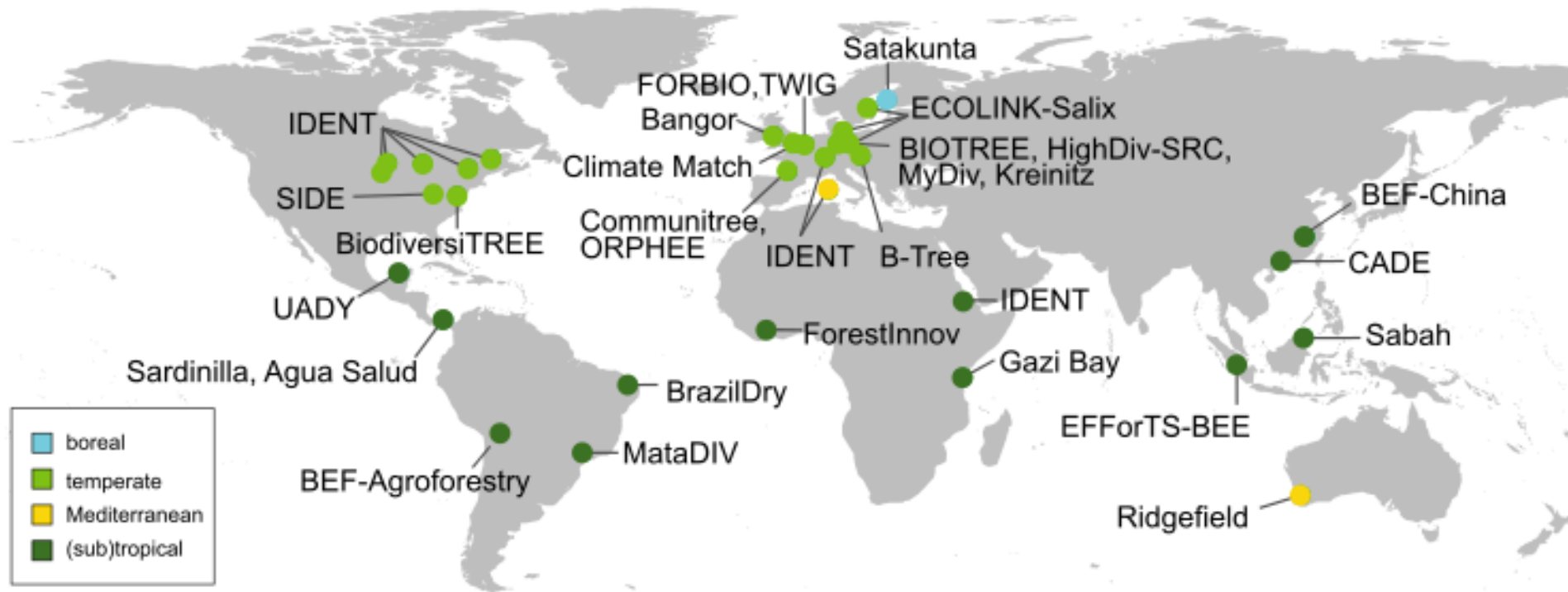
For Bosland: 143km bicycle routes, 134km mountain bike trails, 170 km hiking trails, 150km of horse riding trails and 50ha of play forests



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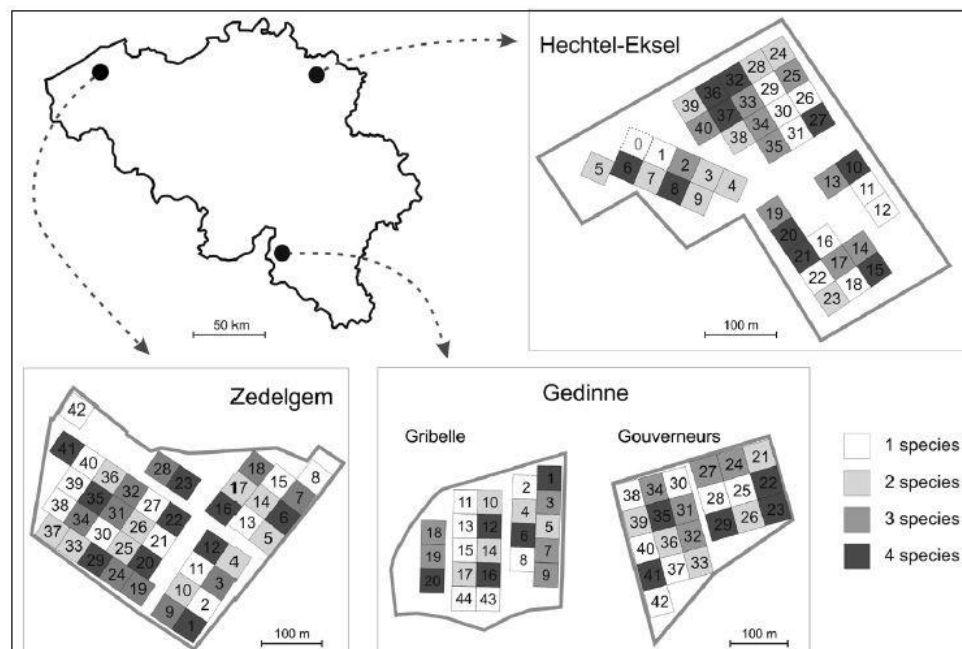


FORBIO (Forest Biodiversity and ecosystem functioning)



TreeDivNet

- 1.200.000 trees
- 29 experiments
- 859ha



Hechtel-Eksel

Betula pendula

Larix kaempferi

Pinus sylvestris

Pseudotsuga menziesii

Quercus petraea



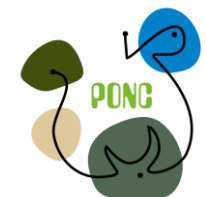
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Working within the natural heritage



The Treehouse ~ the place for sustainable thinking



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Recovery of abiotic processes (water)



Fill up draining canals to restore natural (higher) groundwater levels



Abiotic processes (fire)



Strictly limited in the densely populated Bosland

