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Myst

# Wetland plants in pond networks: the same restorative action leading to different outcomes in two locations



# Restoration assessment including functional diversity

Restorative action: pond network creation

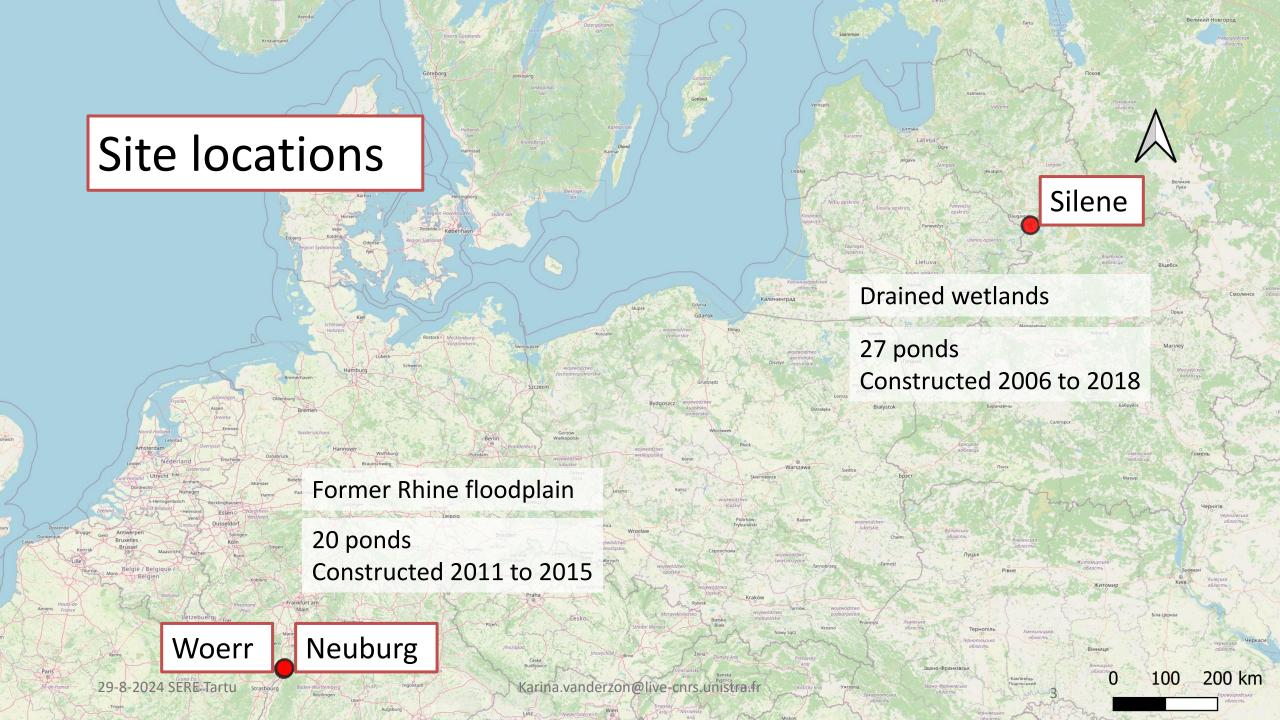
Restoration goal: enhancement of biodiversity

"Are there patterns in the functional diversity of created pond networks?"



29-8-2024

SERE Tartu



# Functional diversity ( $\alpha$ ) and functional dissimilarity ( $\beta$ )

Macrophyte abundances and functional traits



Response traits

- 1. Diaspore vector
- 2.Reproductive method
- 3. Mean seed weight
- 4. Specific leaf area
- 5.Leaf area
- 6.Perennation
- 7.Life form

Diversity  $(\alpha)$  of and dissimiliarity  $(\beta)$  between ponds



Ordination

Double PCoA

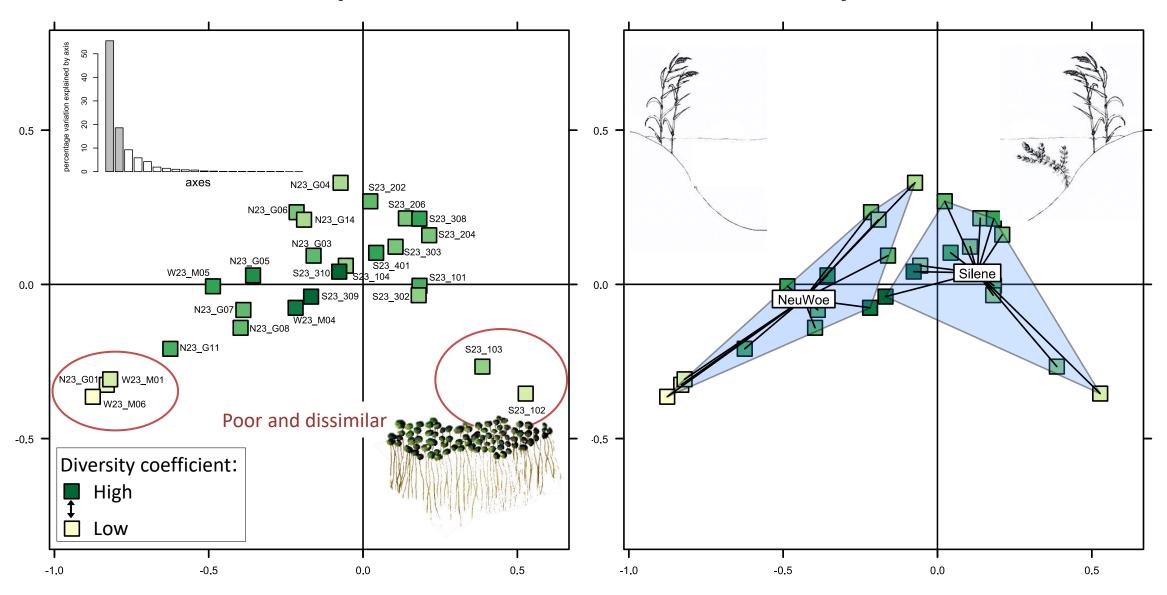
- Fuzzy PCA →
  Functional distances
  between species
- Rao's quadratic entropy

 $\alpha$   $\beta$   $\alpha$   $\beta$   $\alpha$ 

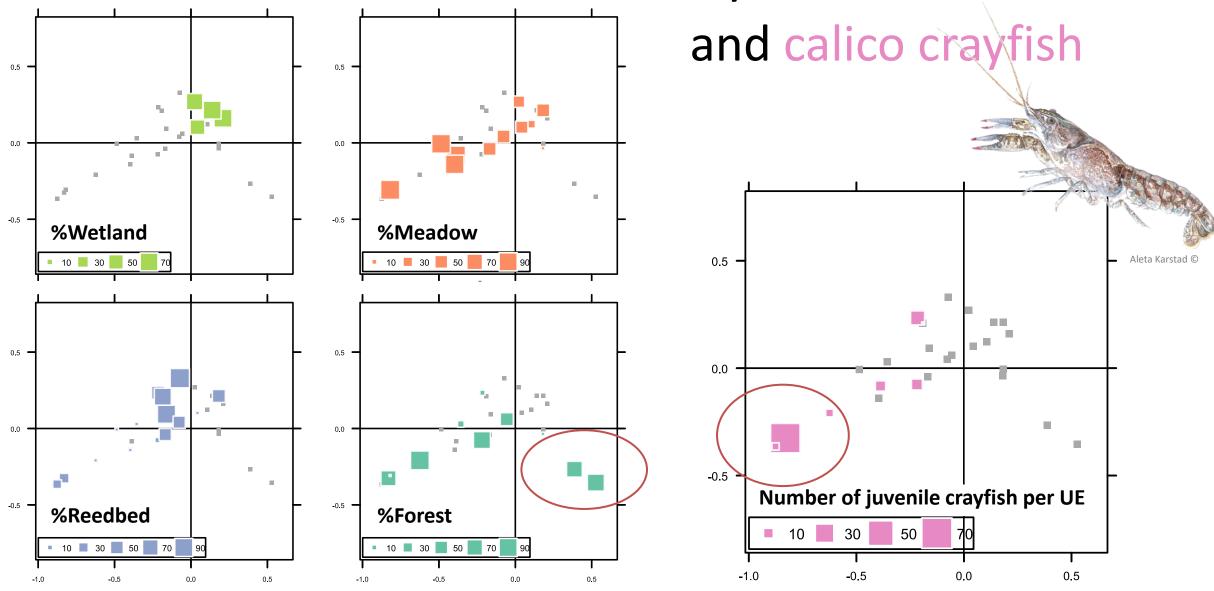
extent of trait values in a pond

differences in trait values between ponds

## Ordination of ponds: sites functionally dissimilar



### Discussion: functional dissimilarity, land cover



#### Conclusion

Range of functional diversities &

functional differences between two pond networks

# Perspectives:

+ taxonomic diversity

"Bechmarking **eDNA** metabarcoding for pond biodiversity surveys"

# Thank you!

#### Questions?

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#### Our website:

