Cross congruence and conservation assessment in dune slacks

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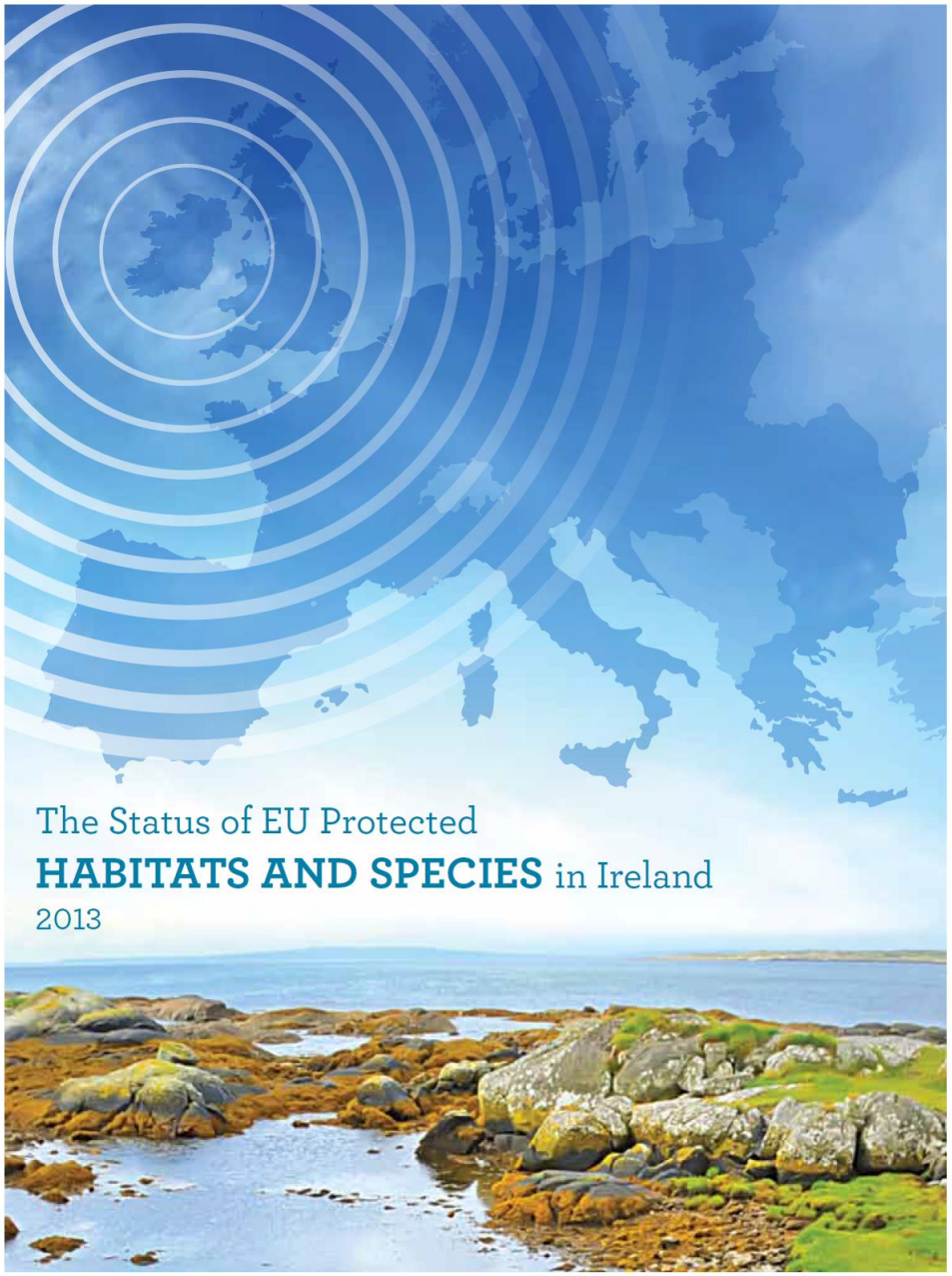

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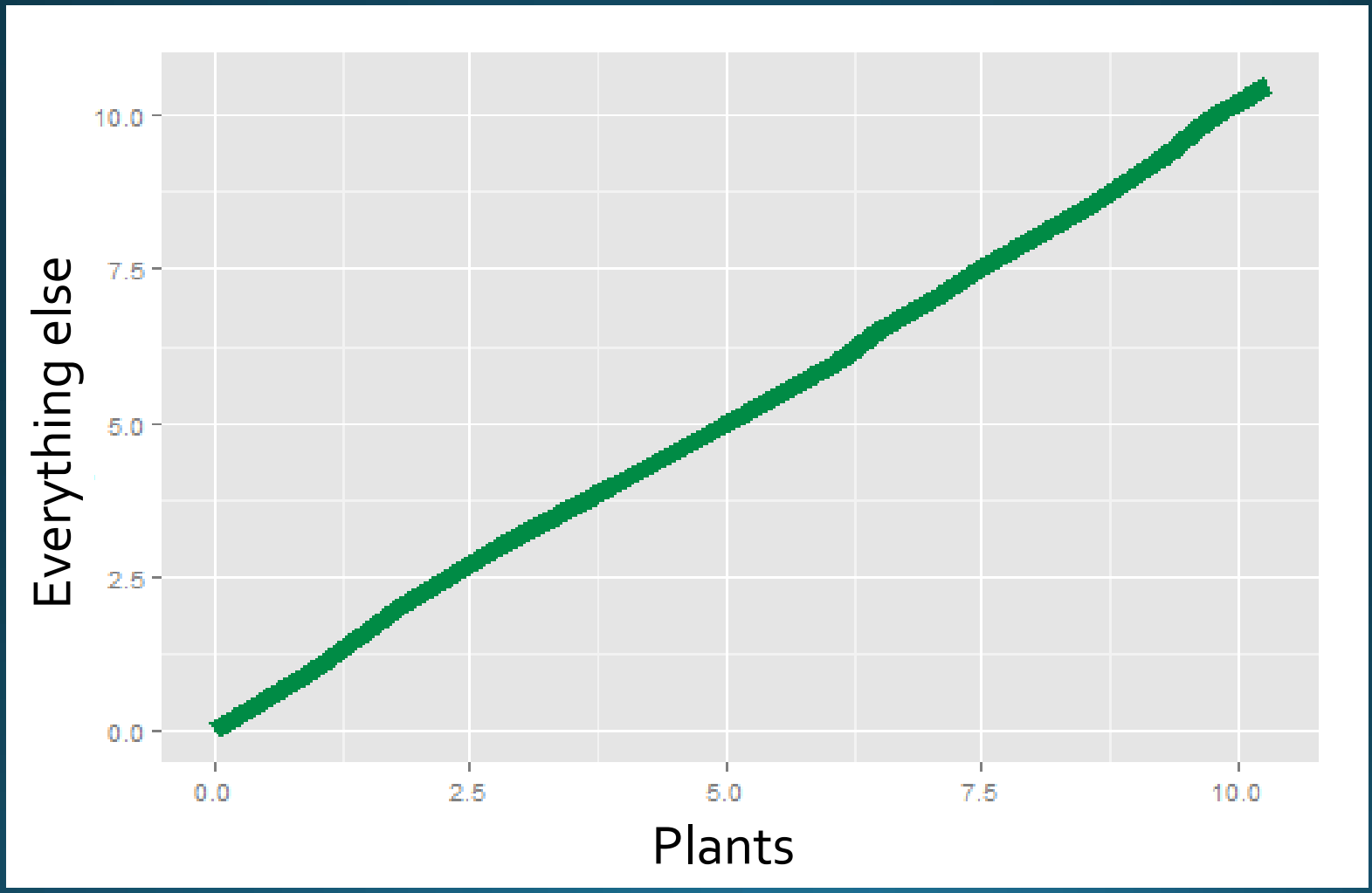
Indicator species

Habitats Directive

Structure and functions

Plant based

Cross congruence



Habitat heterogeneity & disturbance

Dune slacks

Bull Island

Wetland vegetation

Nostoc

Parnassia palustris

Mentha aquatica

Epipactis palustris

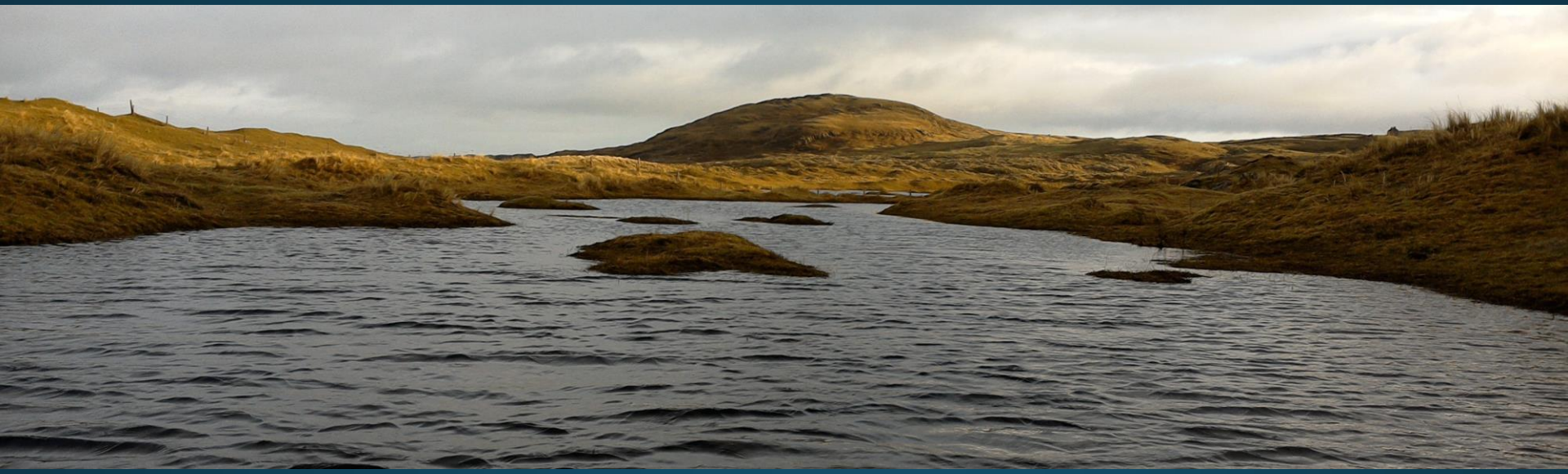
Hydrocotyle vulgaris

Sites

4 regions

24 Sites

Surveys



Habitat assessment

Indicators and vegetation structure

Species are common in all regions

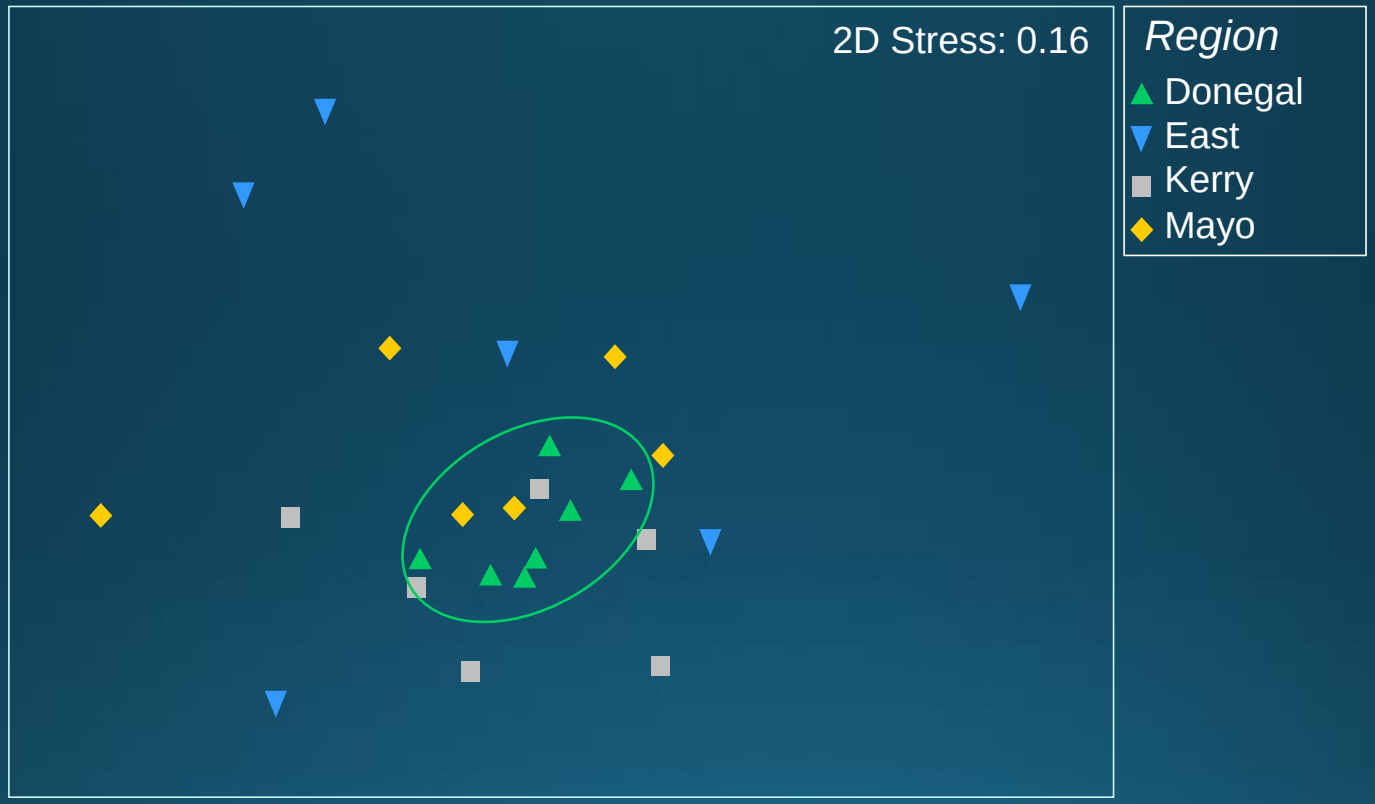
Carex flacca

Agrostis stolonifera

Potentilla anserina

Lotus corniculatus

Plant community NMDS



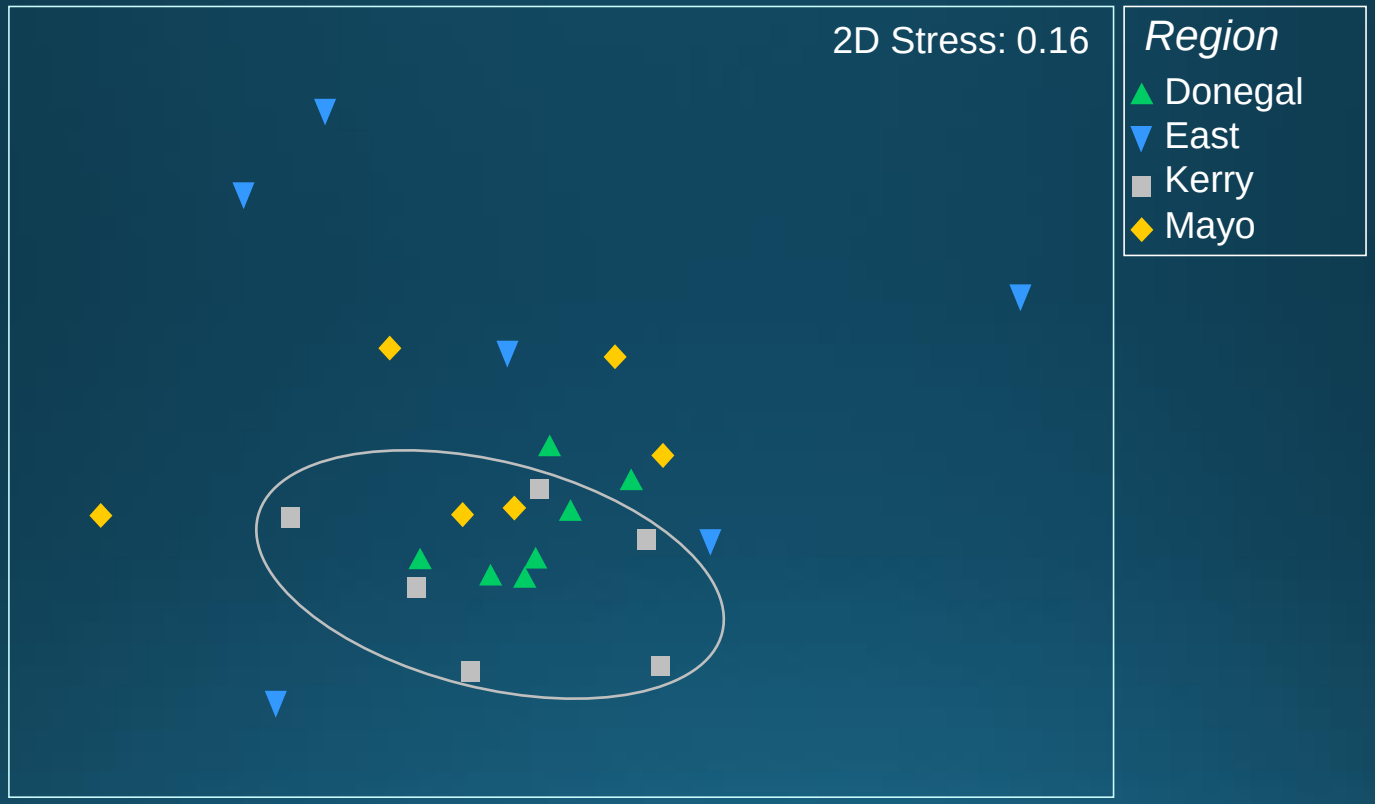
Donegal

Salix repens

Carex nigra

Hydrocotyle vulgare

Ranunculus repens


2D Stress: 0.16
Region
Donegal
East
Kerry
Mayo

Kerry

Poa humilis

Salix repens

Hydrocotyle vulgaris

Carex arenaria


2D Stress: 0.16
Region
Donegal
East
Kerry
Mayo

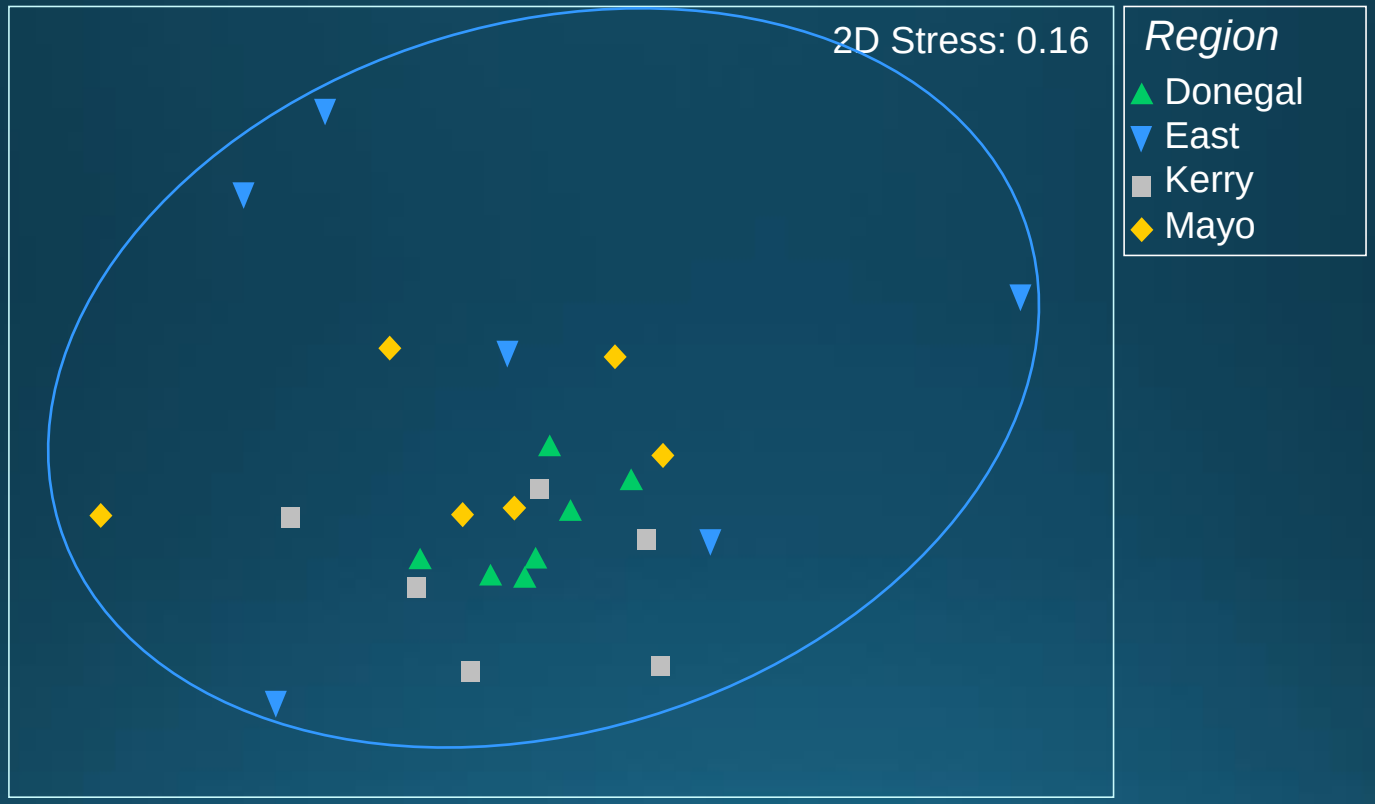
Mayo

Festuca rubra

Carex nigra

Poa humilis

Ranunculus repens


2D Stress: 0.16
Region
Donegal
East
Kerry
Mayo

East

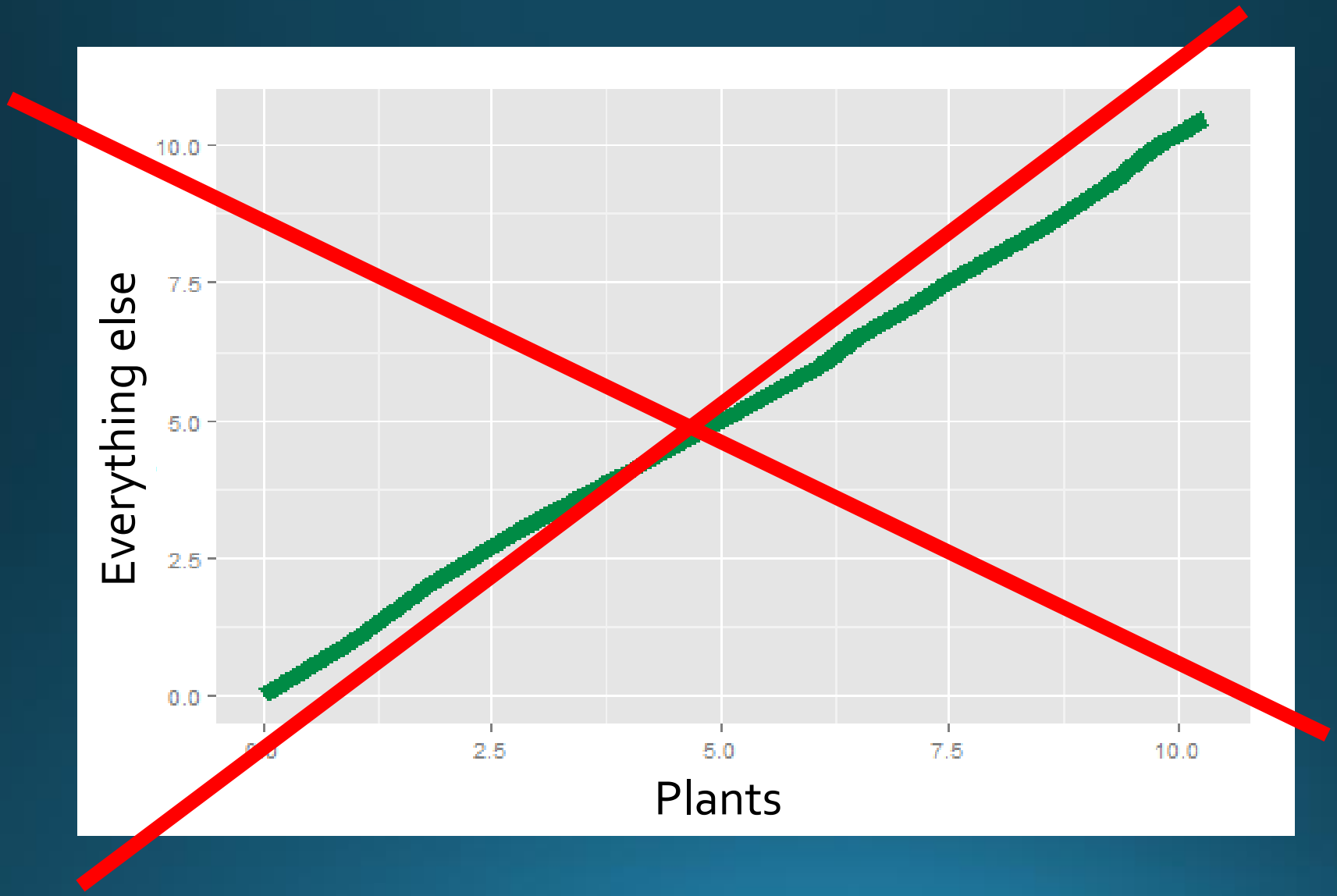
Elytrigia repens

Juncus acutus

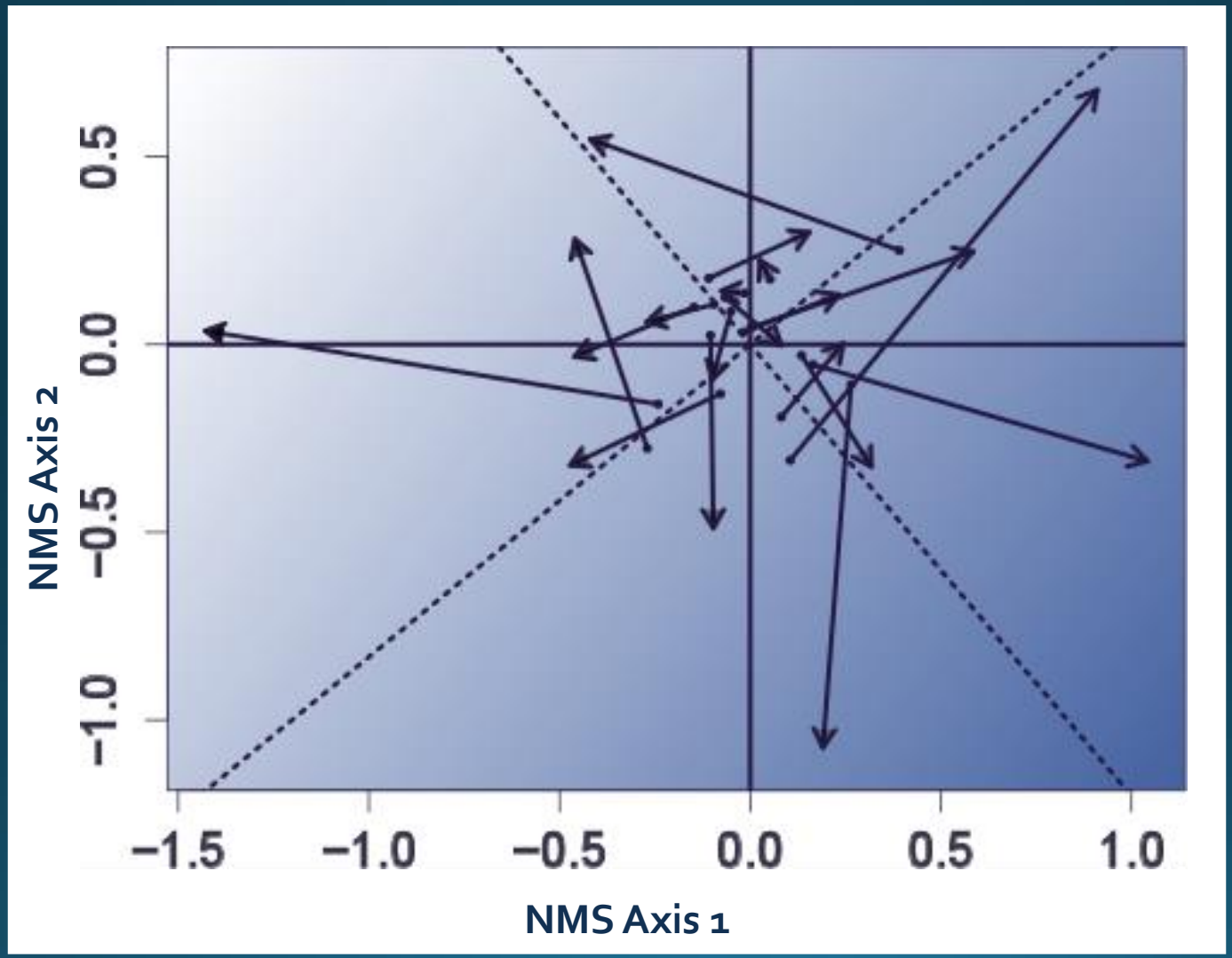
Juncus acutiflorus

Ononis repens

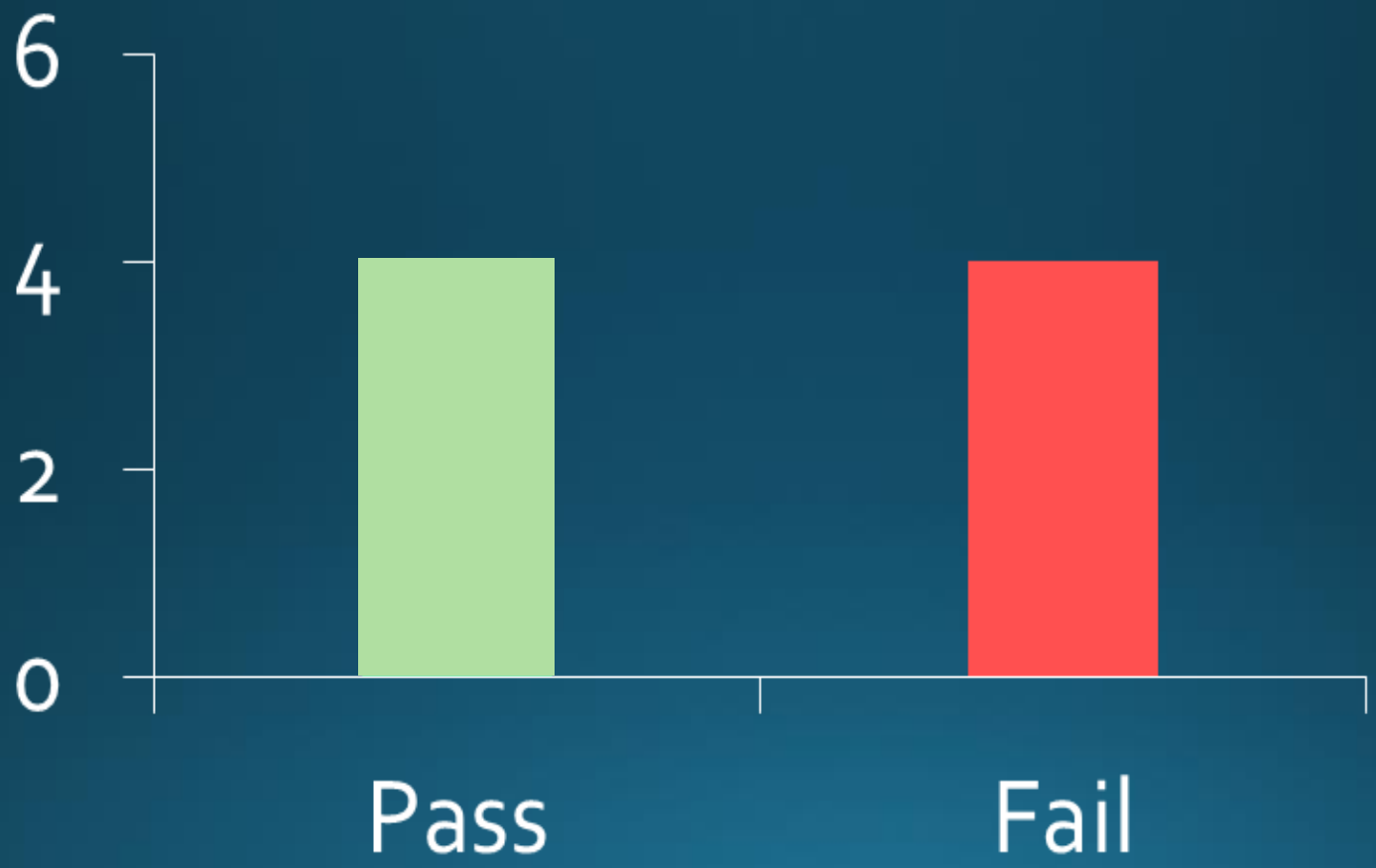
Diversity correlations



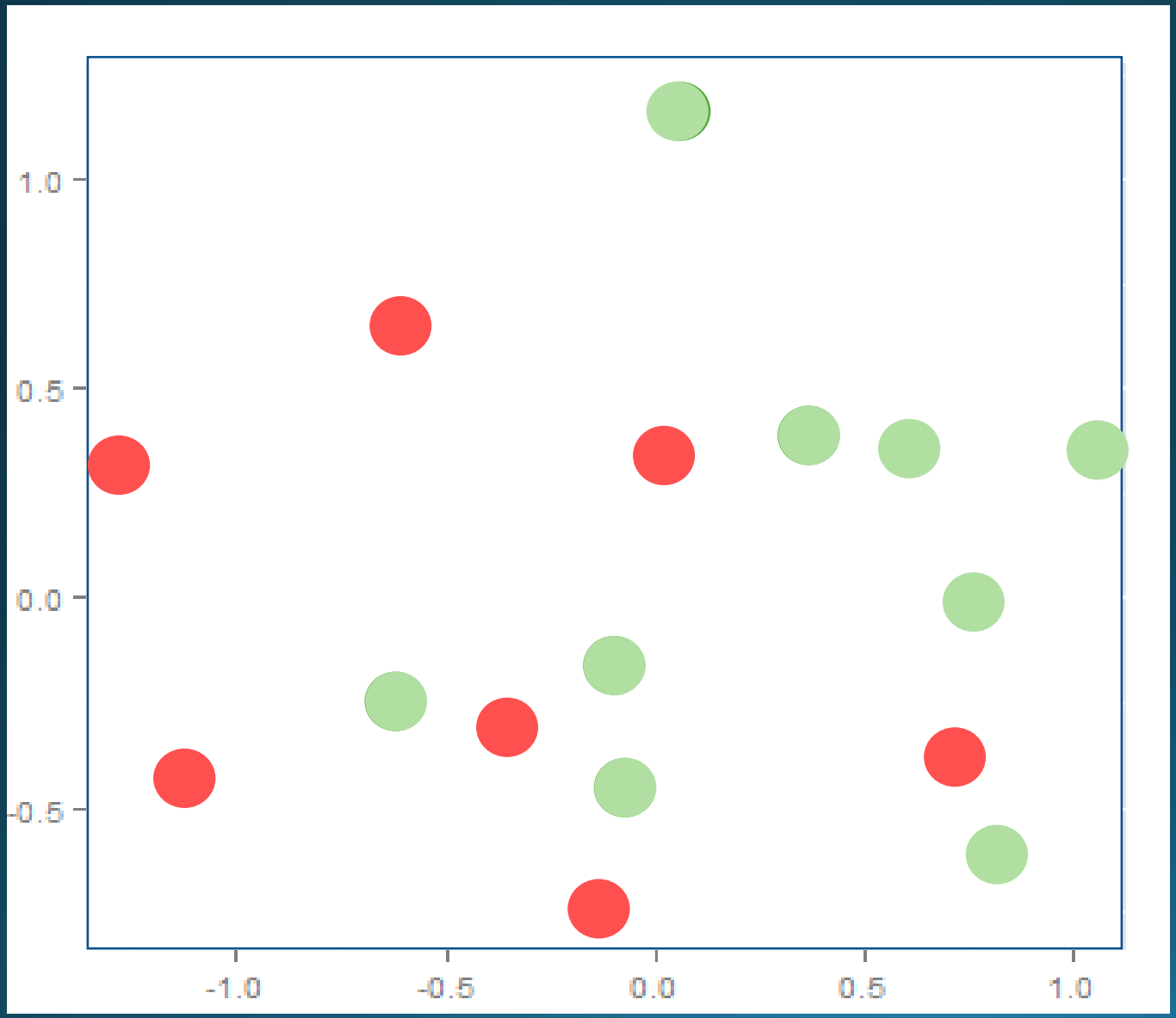
Composition: Procrustean rotation



No significant difference in snail or beetle diversity



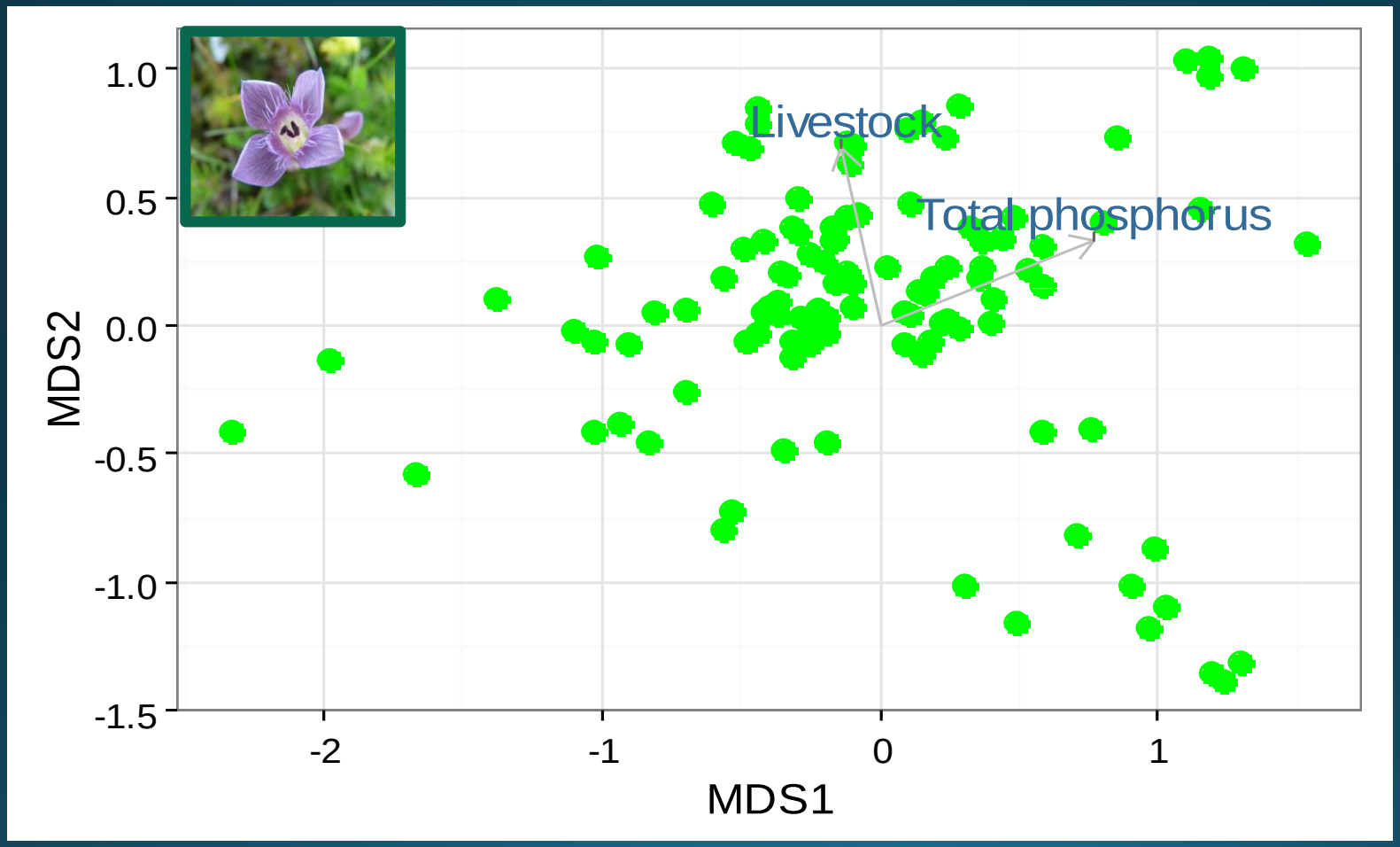
Snail composition



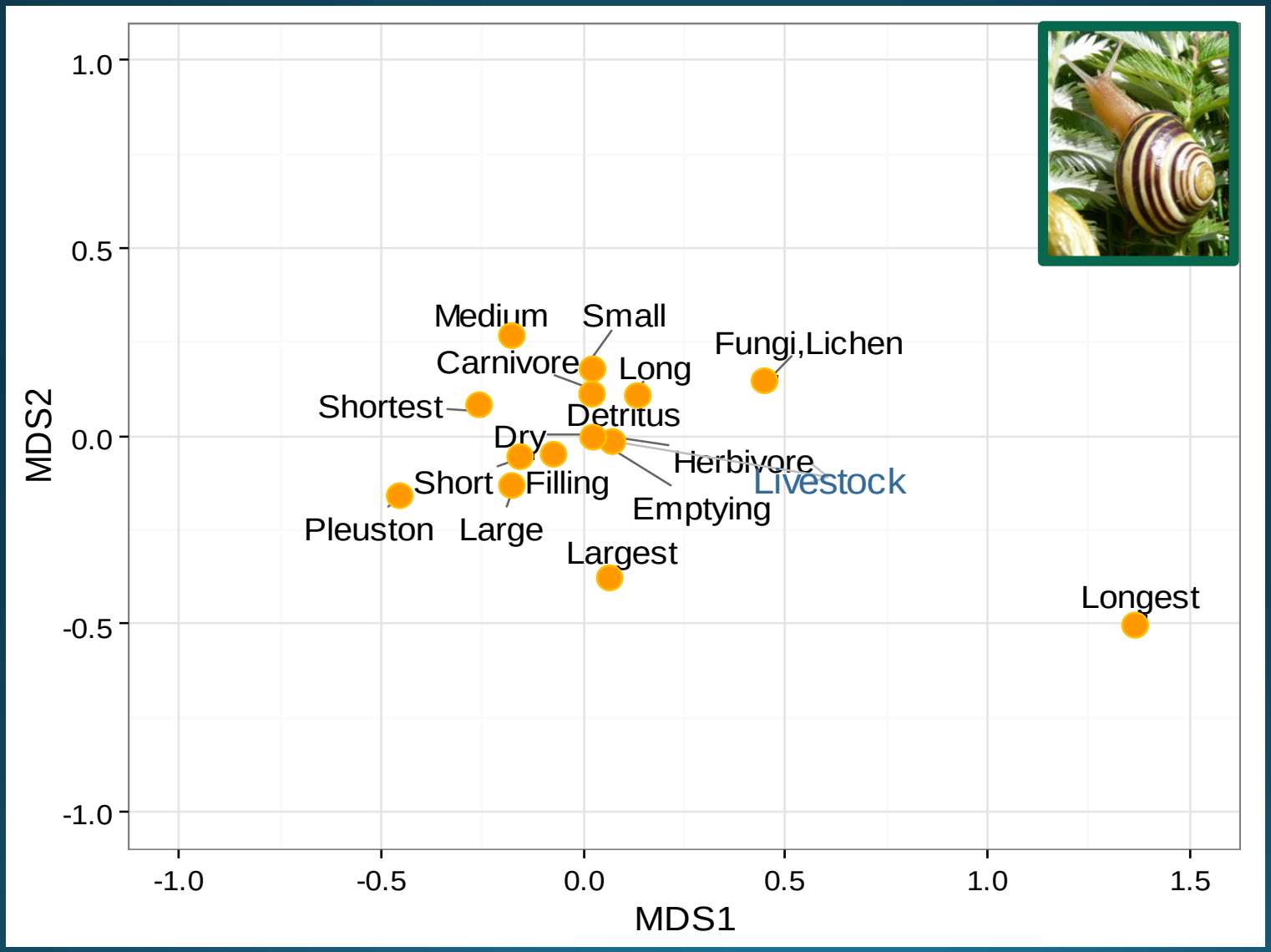
Functional traits

Functional traits & habitat filtering

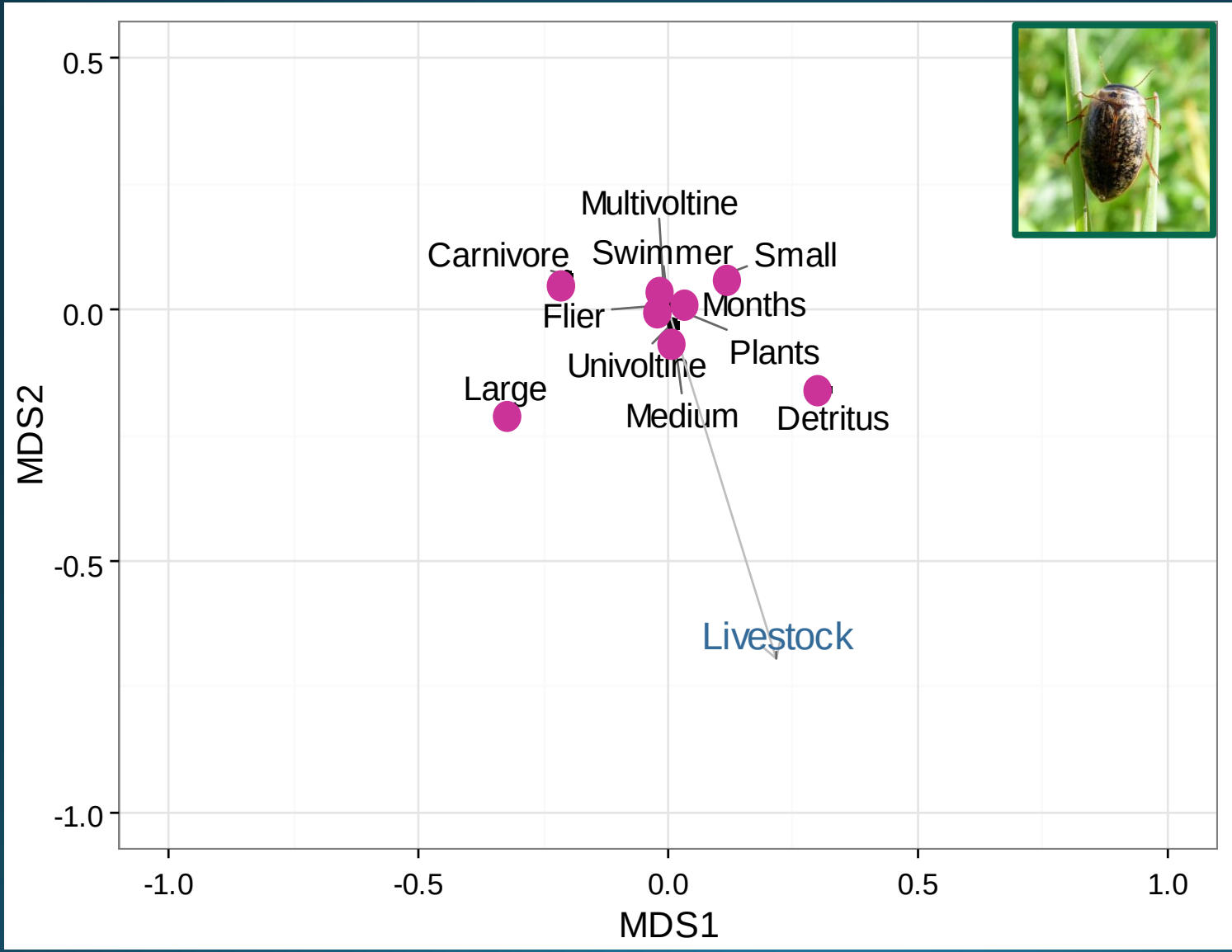
Results



Relationship between phosphorus (p = 0.001) and livestock (p = 0.005) and plant species



Relationship between livestock (p = 0.05) and snail traits



Relationship between livestock (p = 0.05) and beetle traits

More carnivores in ungrazed sites – greater structural complexity?

Rare invertebrates found in ungrazed sites

Conservation assessments

Are plants alone enough?

Misguided conservation interventions?

In disturbed habitats, take a broad approach to conservation assessment