



# **HNV farmland in NW Europe - setting conceptual boundaries for 'HNV farmland' in the UK**

**Gwyn Jones, EFNCP**

[www.efncp.org](http://www.efncp.org)



EUROPEAN FORUM ON  
NATURE CONSERVATION  
AND PASTORALISM





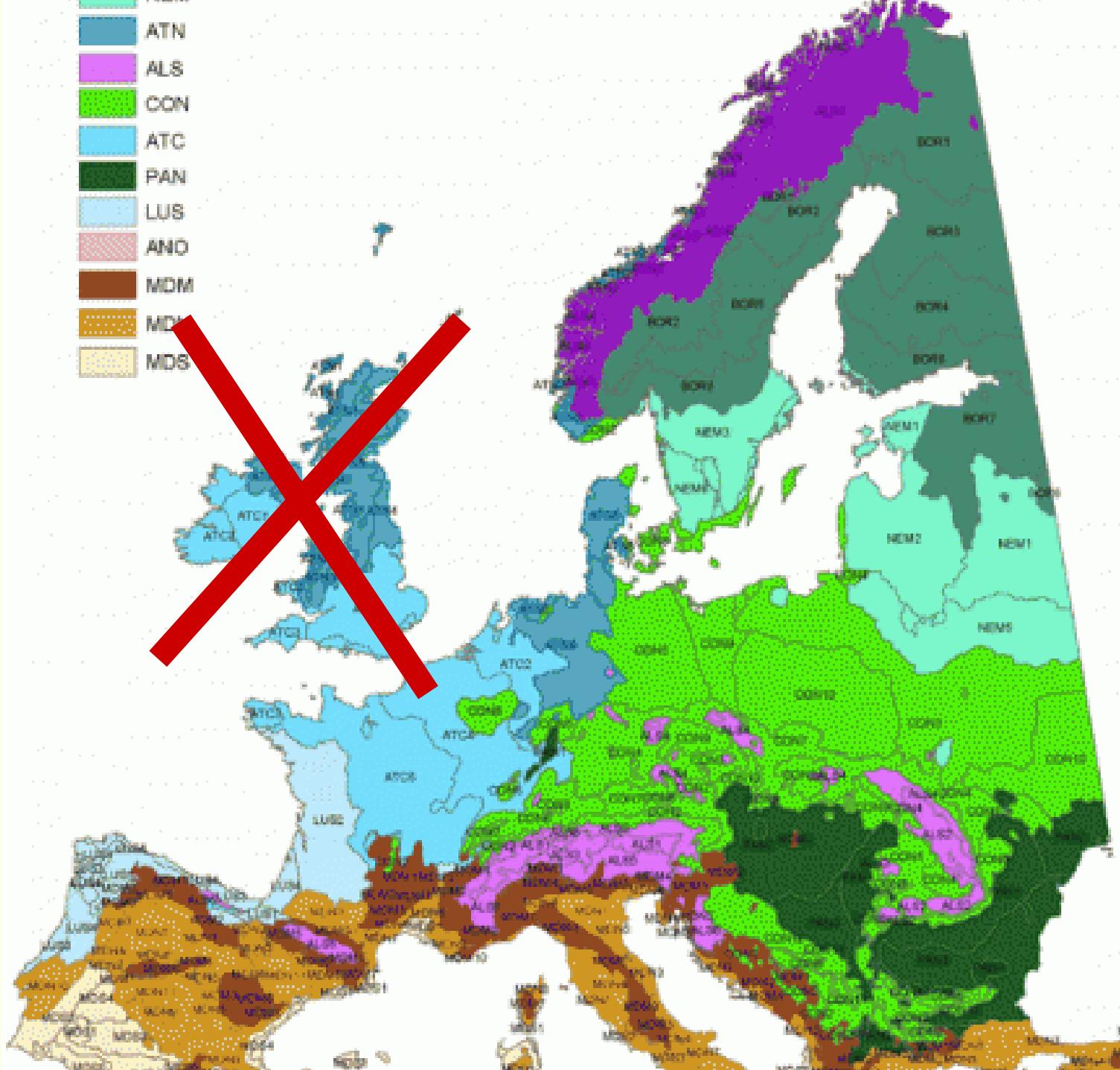
# Most diverse biogeographical zone?

- Rainfall varies from <500 to >3000mm!
- Frosts can be effectively absent or present ½ the year!
- Huge geographical gradients in Scotland and Ireland especially





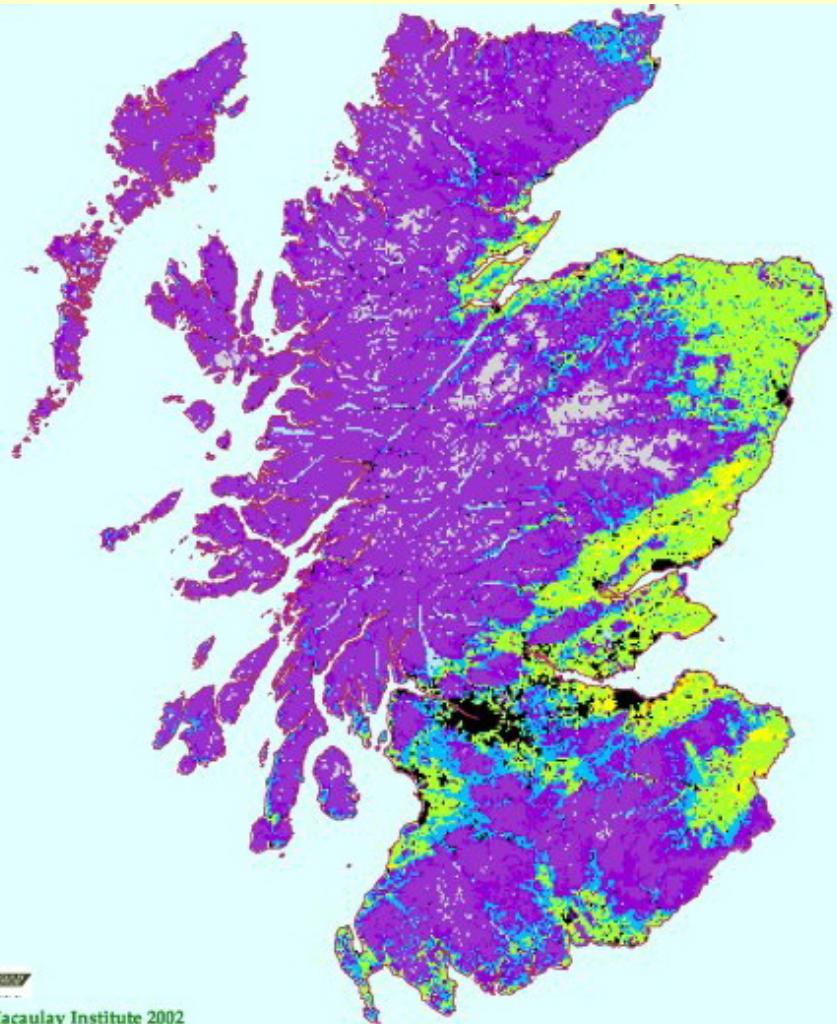
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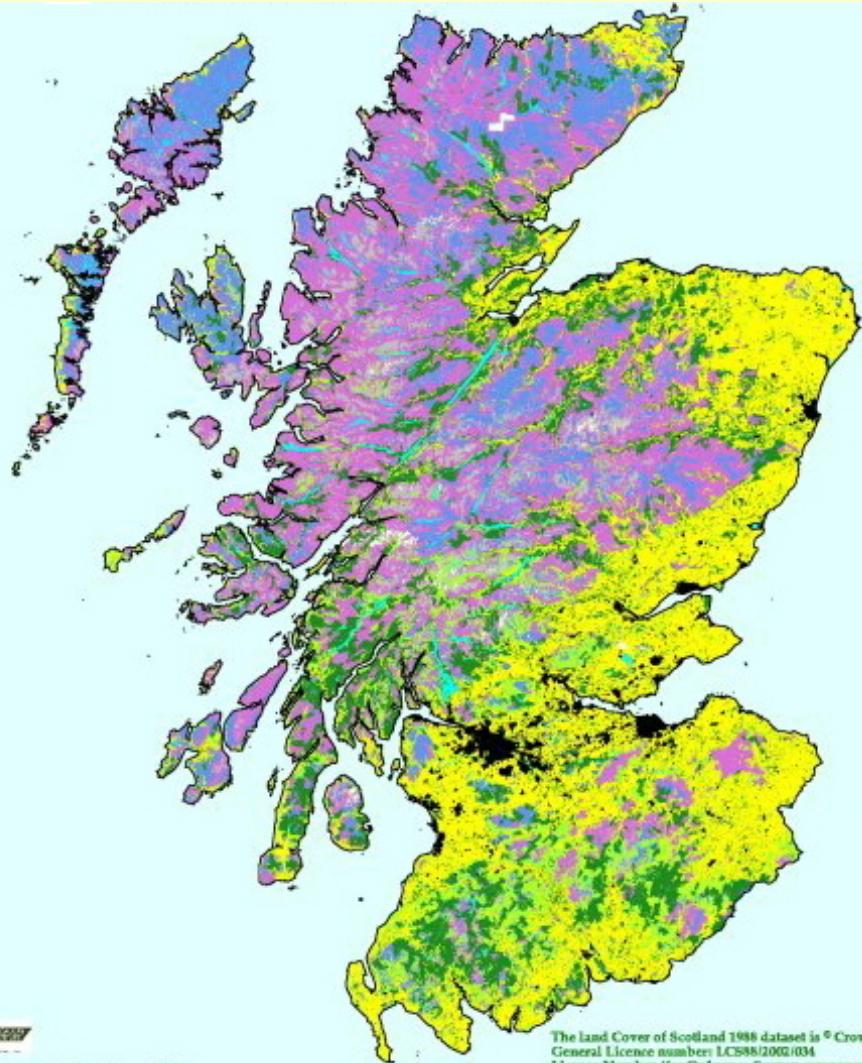
## Generally speaking.....

- Warm but not totally dry summers
- Cool but not excessively long winters
- Variable, but many productive soils
- Moderate gradients
- Capital-rich economies
- Pioneers of agricultural modernisation
- Good transport infrastructure – core/margin effect is large-scale not local driver
- Most improveable land has been improved



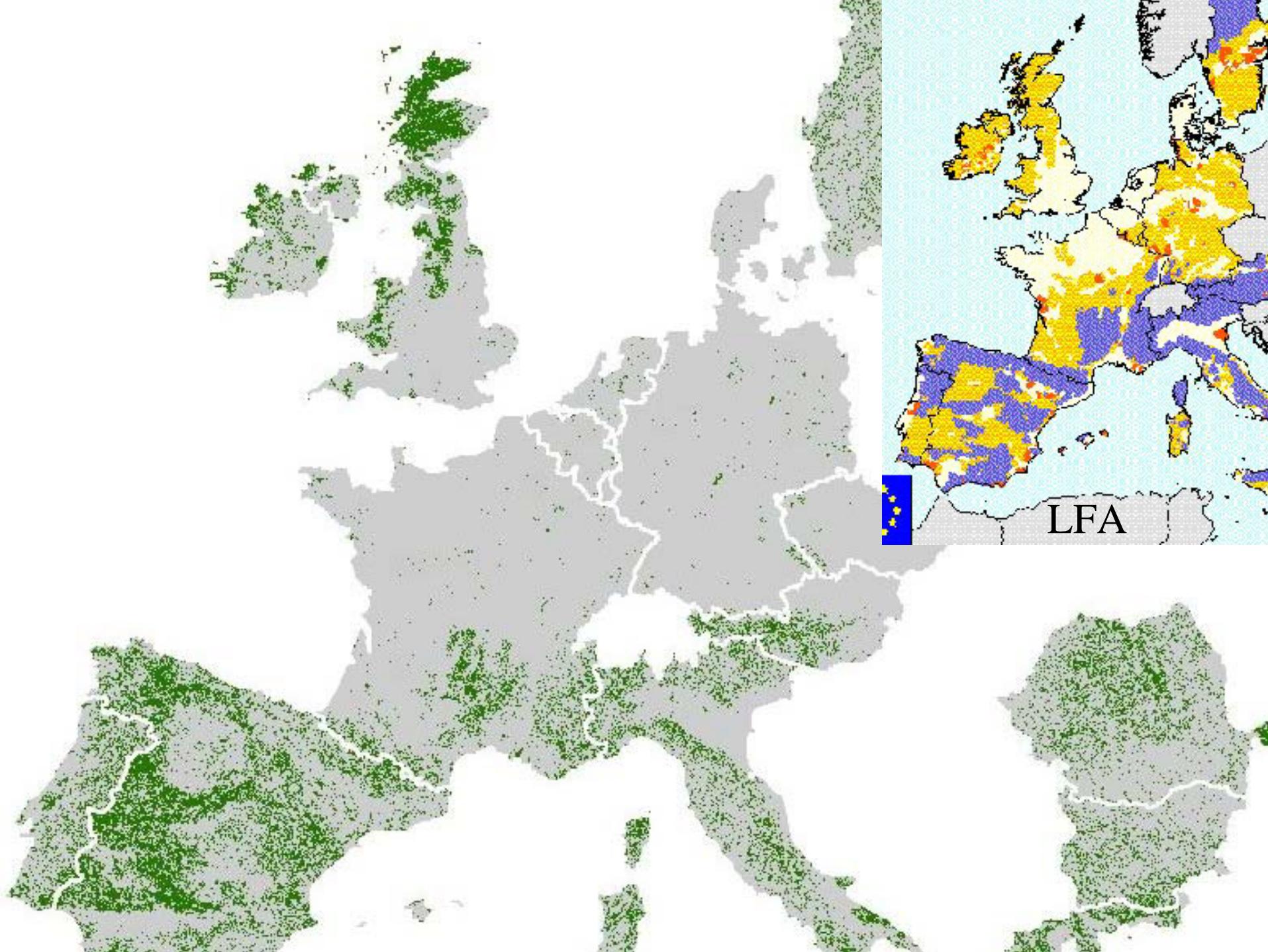


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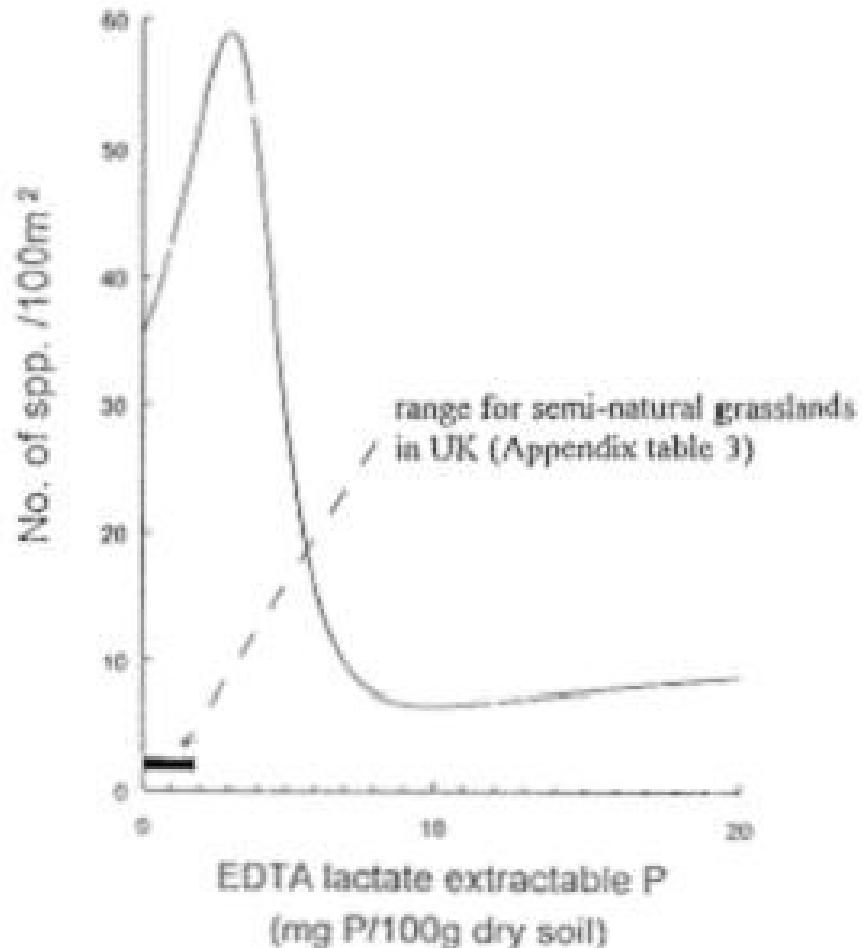
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# Semi-natural grasslands on fertile soils mostly lost

Fig. 5. Number of species /100m<sup>2</sup> in different grasslands within western Europe vs extractable P in top 15cm of soil. Curve fitted to the maximum no. of species for given amounts of extractable P.



# Survival of semi-natural pastures in lowland zones in the UK

- Physical reasons
  - Slope
  - Poor soils
  - Wet soils
  - Areas subject to flooding (rivers and sea)
  - (All especially where there are alternatives)
- Legal/historical reasons
  - Common land
  - Military zones etc.
  - Alternative income sources
- Cultural reasons
  - ‘Horseyculture’
- Socio-economic reasons
  - Few clearly ‘HNV systems’?





Hatfield Broad Oak

I Heath

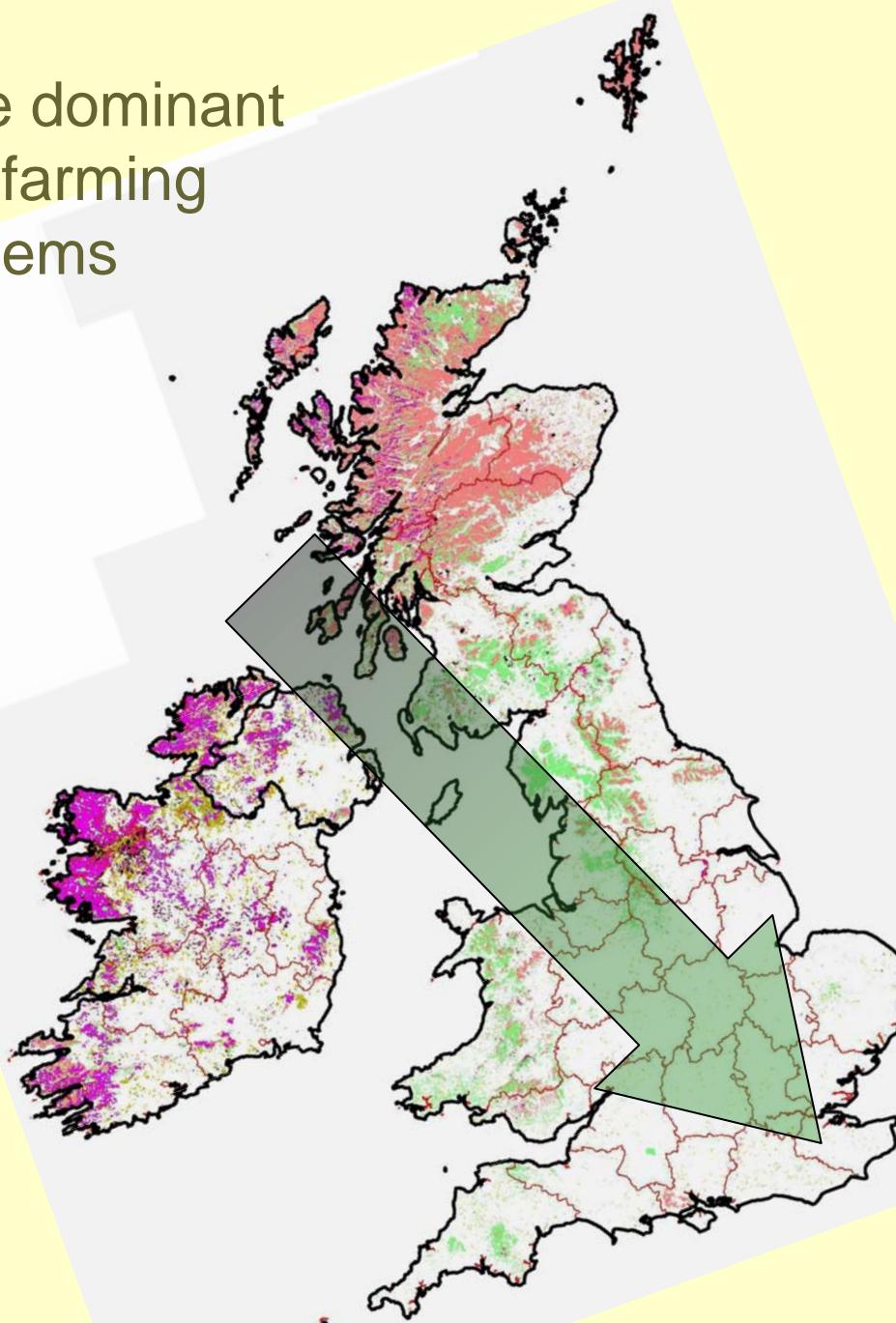
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51°49'16.40" N 0°14'19.42" E elev 242 ft

Eye alt 17639

HNV more dominant  
– HNV farming  
systems



HNV usually only in  
parcels – HNV  
farming systems  
rare or at least  
difficult to identify





**Not farming**

**Type 1**

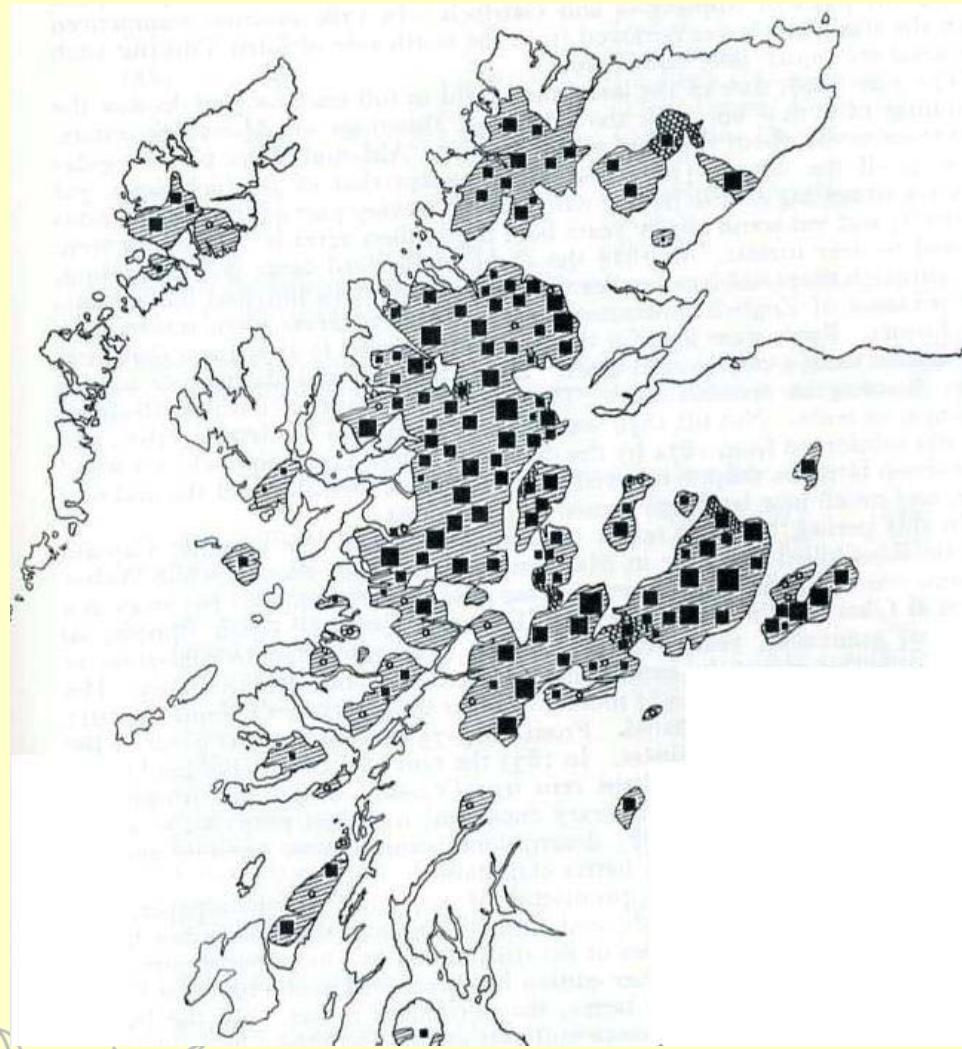
**HNV**

**Type 2**

**Not HNV**









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# Challenges: Fixing the role & importance of “*farming*”

- Working out the consequences for policy
  - Role of (private) non-farmers
  - Role of non-farming practices
  - Has massive implications for spending because HNV farms mainly economically and socially marginal



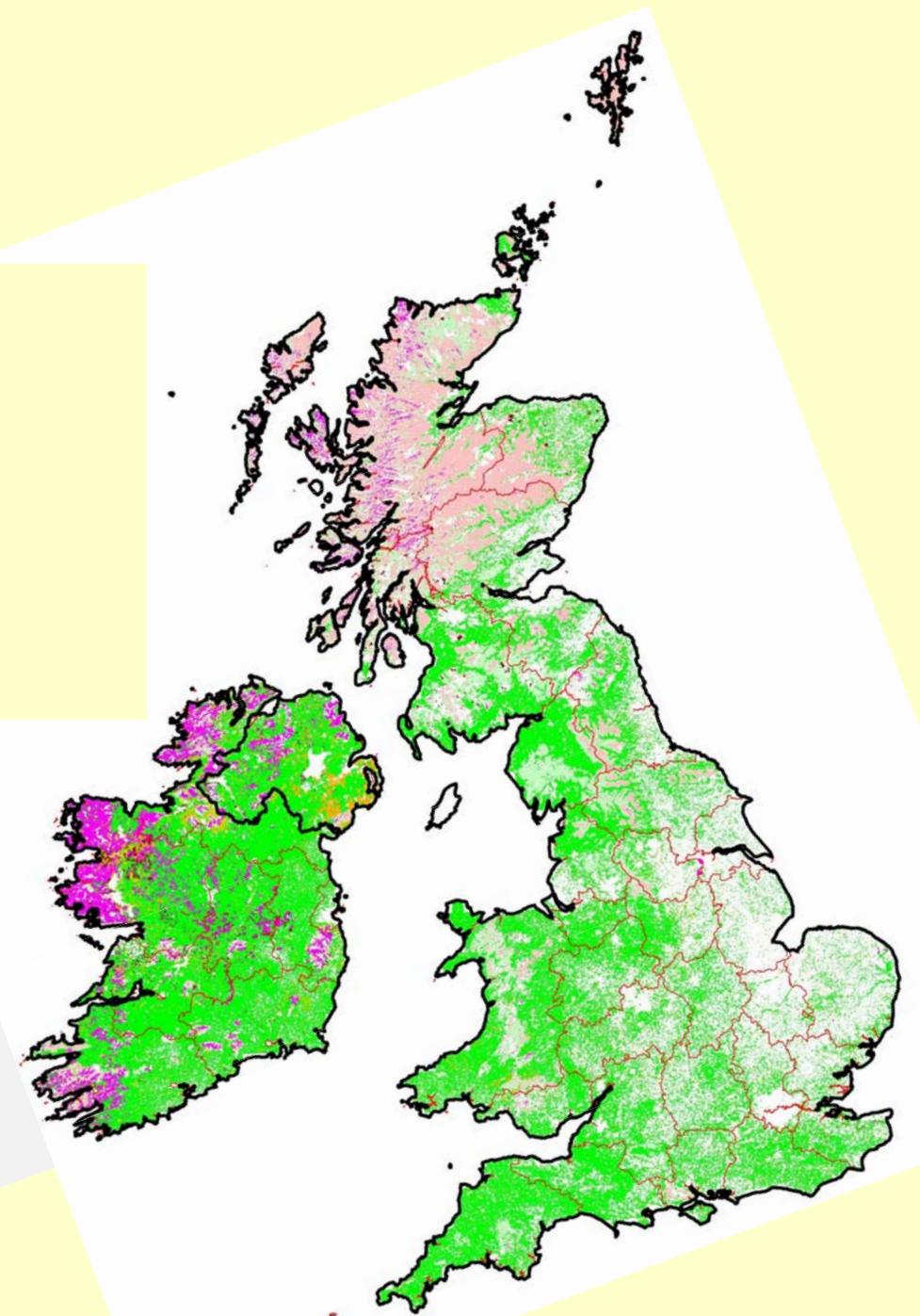
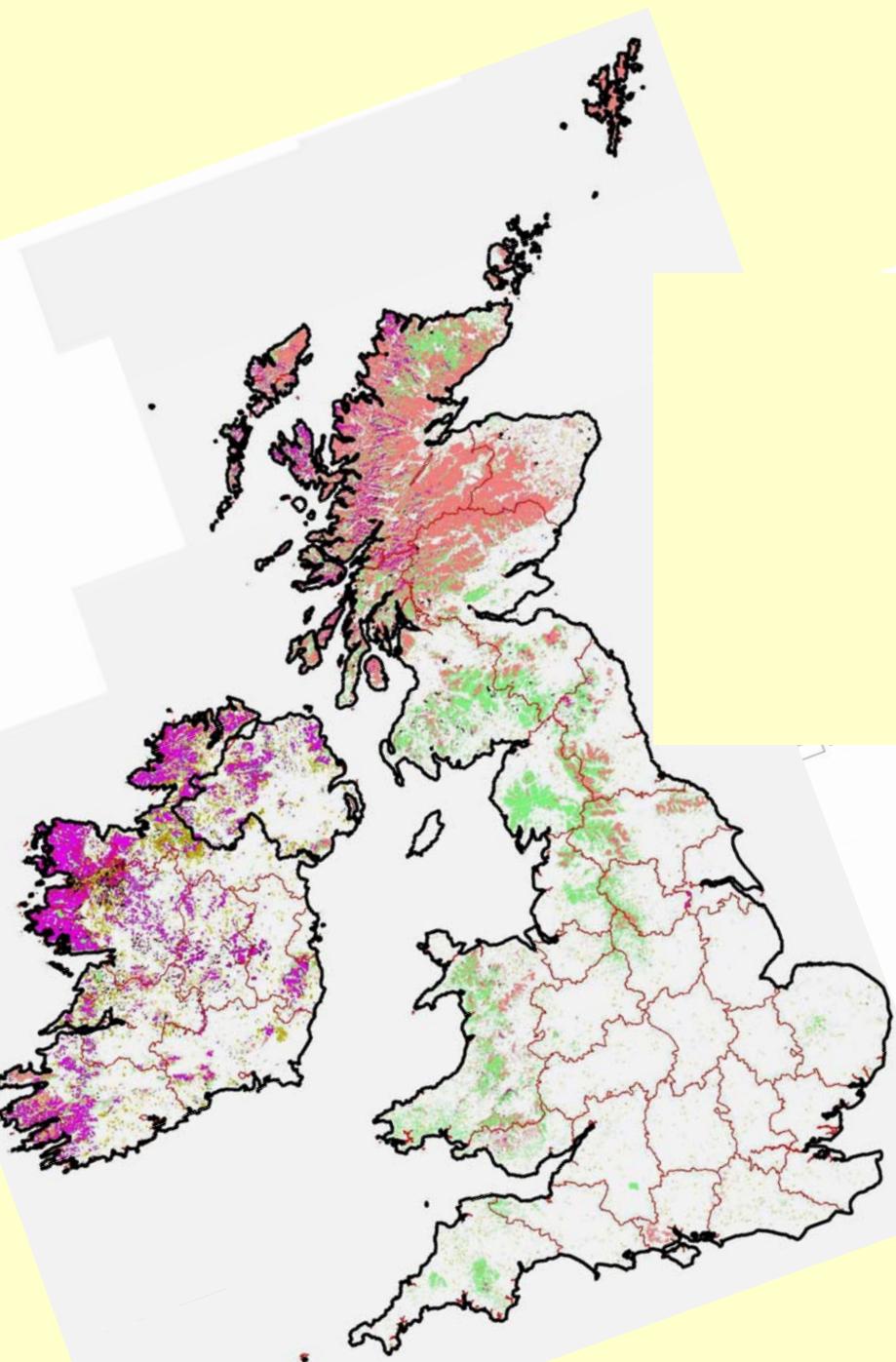
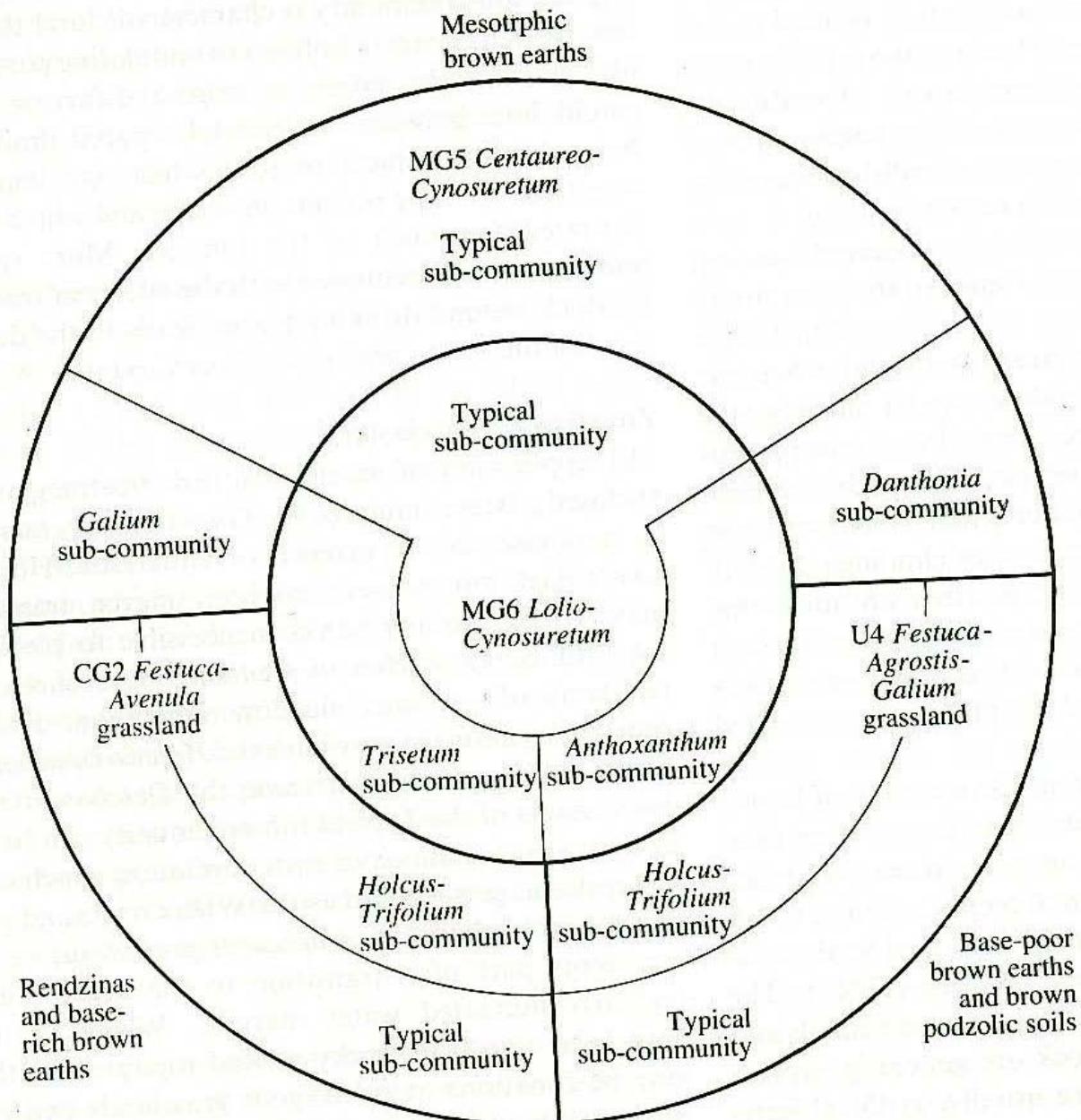


Figure 6. Mesotrophic pastures and meadows in relation to treatment.

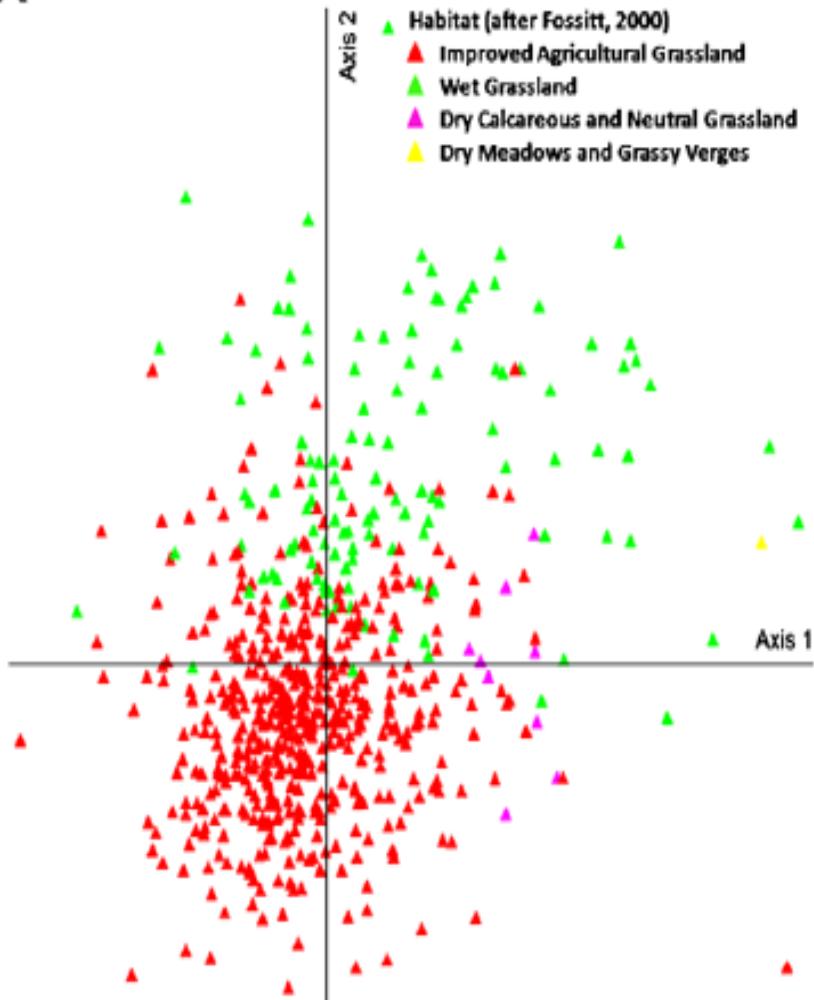
ARRHENATHERION	CYNOSURION	LOLIO- PLANTAGINION
MG1 <i>Arrhenatheretum elatioris</i> grassland	MG5 <i>Centaureo-Cynosuretum</i> grassland	MG6 <i>Lolio-Cynosuretum</i> grassland
Mown once or twice annually for amenity, ungrazed and unmanured	Mown annually for hay and autumn- and winter-grazed, manured by stock	Grazed through the year, chemically fertilised and often resown
		Sown swards, chemically fertilised and grazed through the year or cut for silage or amenity

Figure 9. Convergence and loss of diversity among grasslands with continuing agricultural improvement.

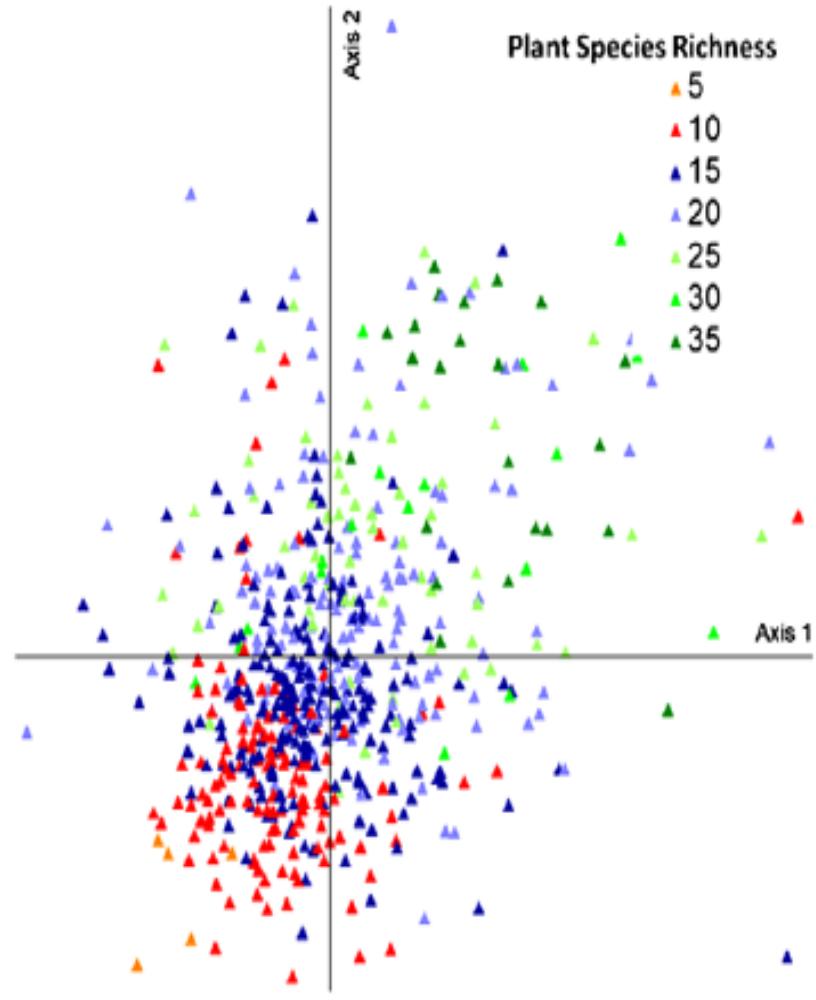


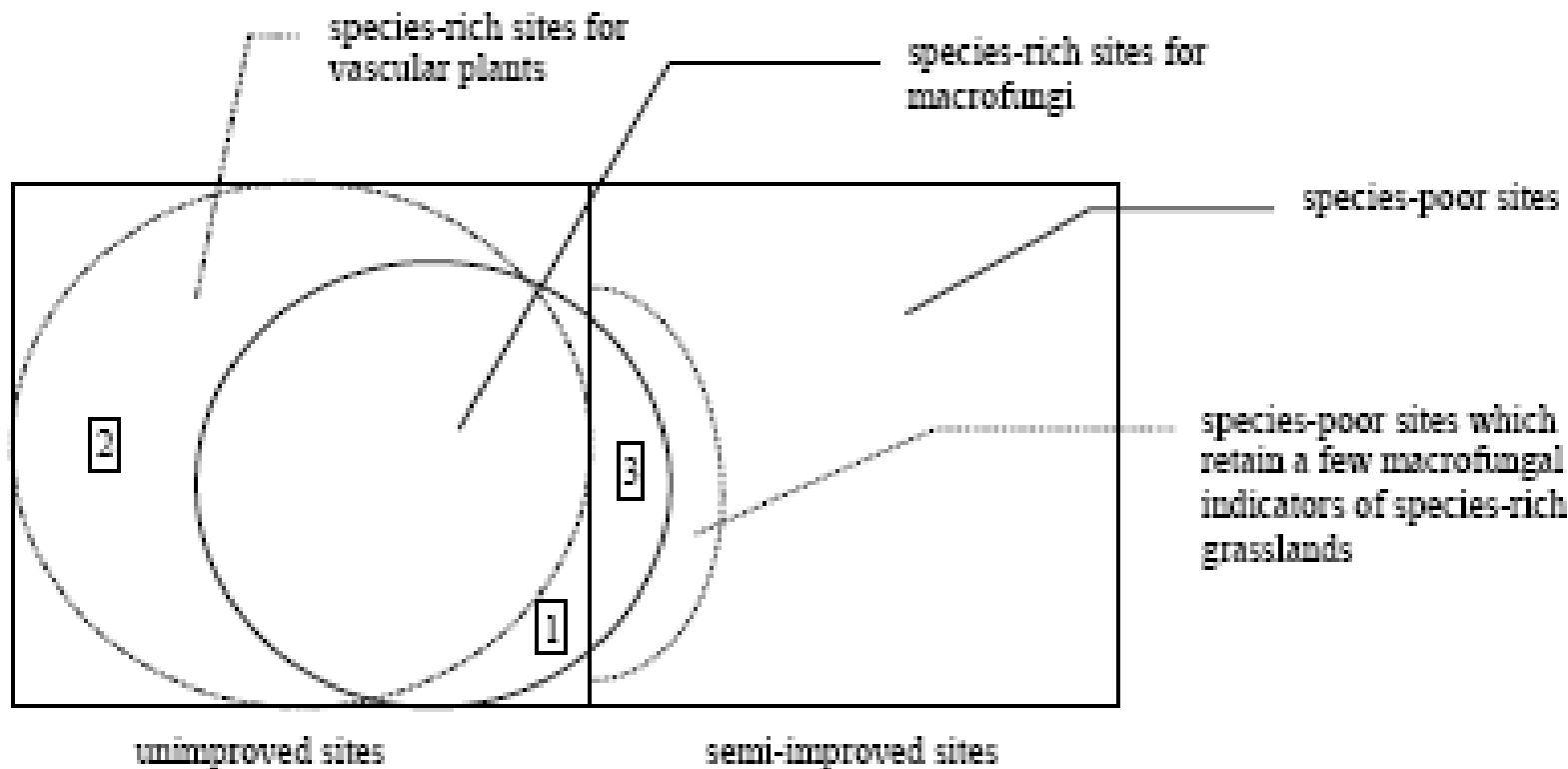
# Weakness of broad habitat definitions?

A



B



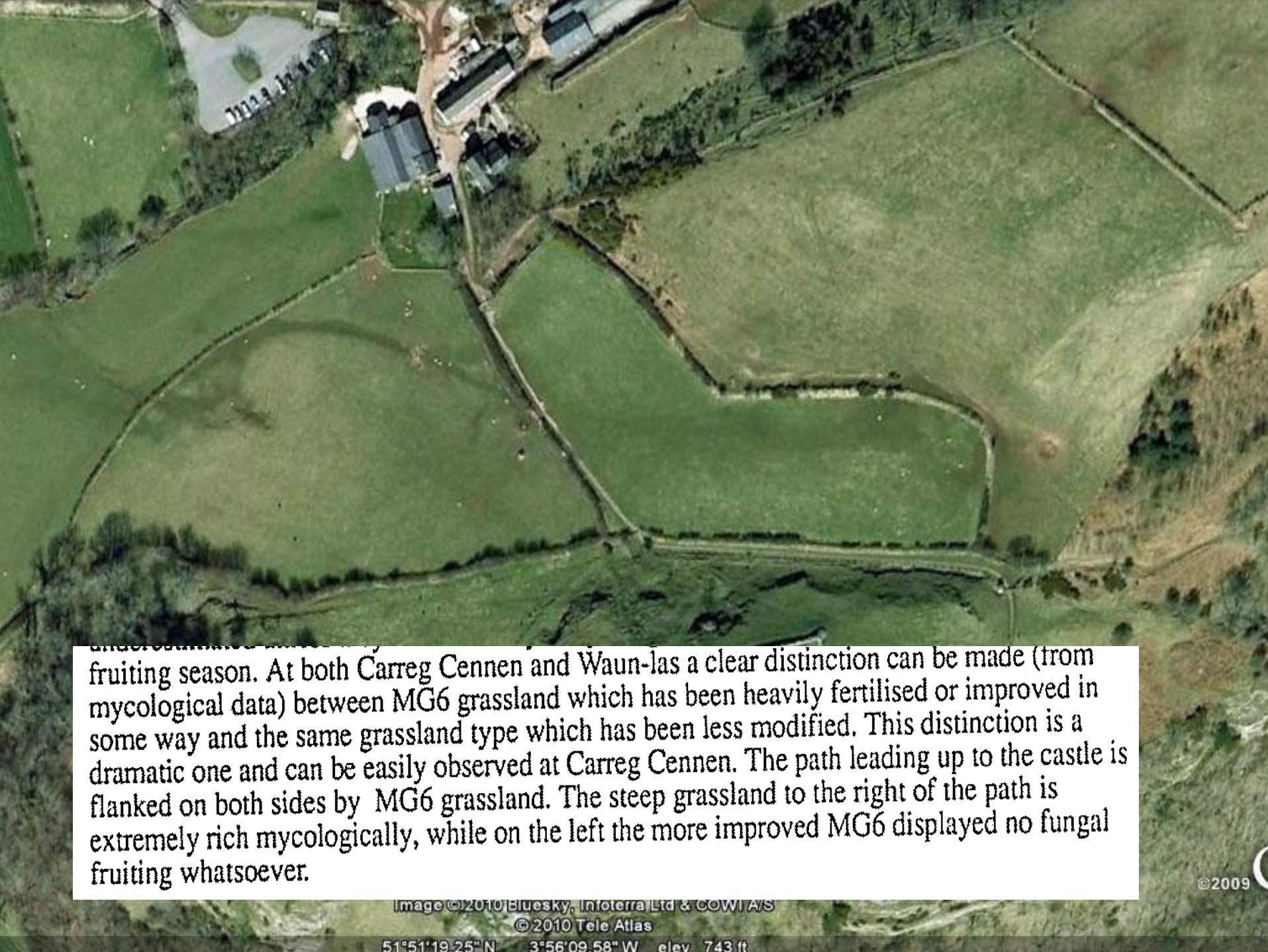


**Figure 4.5:** A diagrammatic representation of the relationship between rich wasscap-grassland sites, nutrient status and species-rich sites for vascular plants (see section 4.5.4). Area 1: unimproved sites which are species-rich for macrofungi but species-poor for vascular plants. Area 2: unimproved sites which are species-rich for vascular plants but species-poor for macrofungi. Area 3: semi-improved sites which have lost much of their vascular plant species richness but remain quite species-rich for macrofungi.



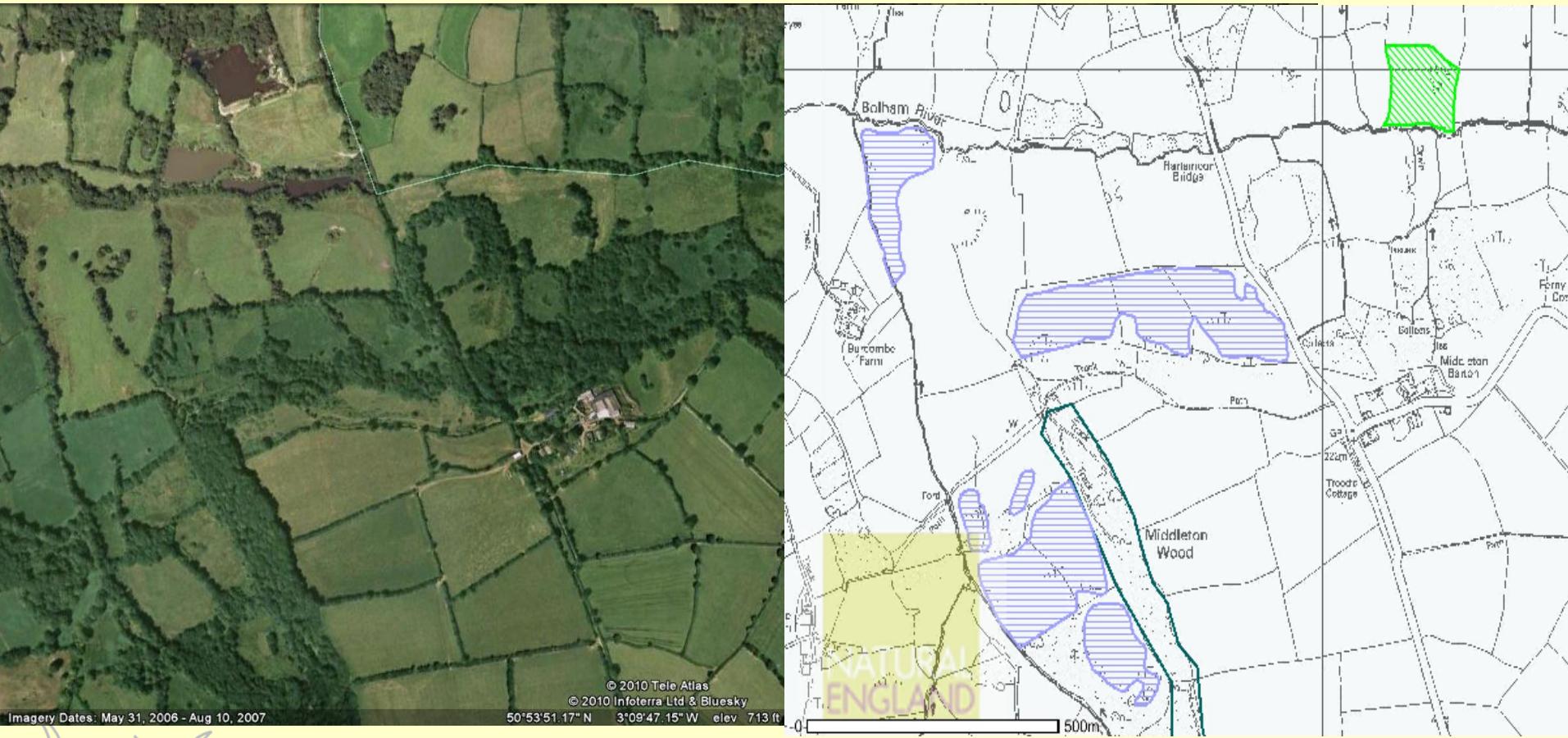
	MG1	MG5	MG6	MG7
Higher plants (NVC)				
Waxcap fungi				



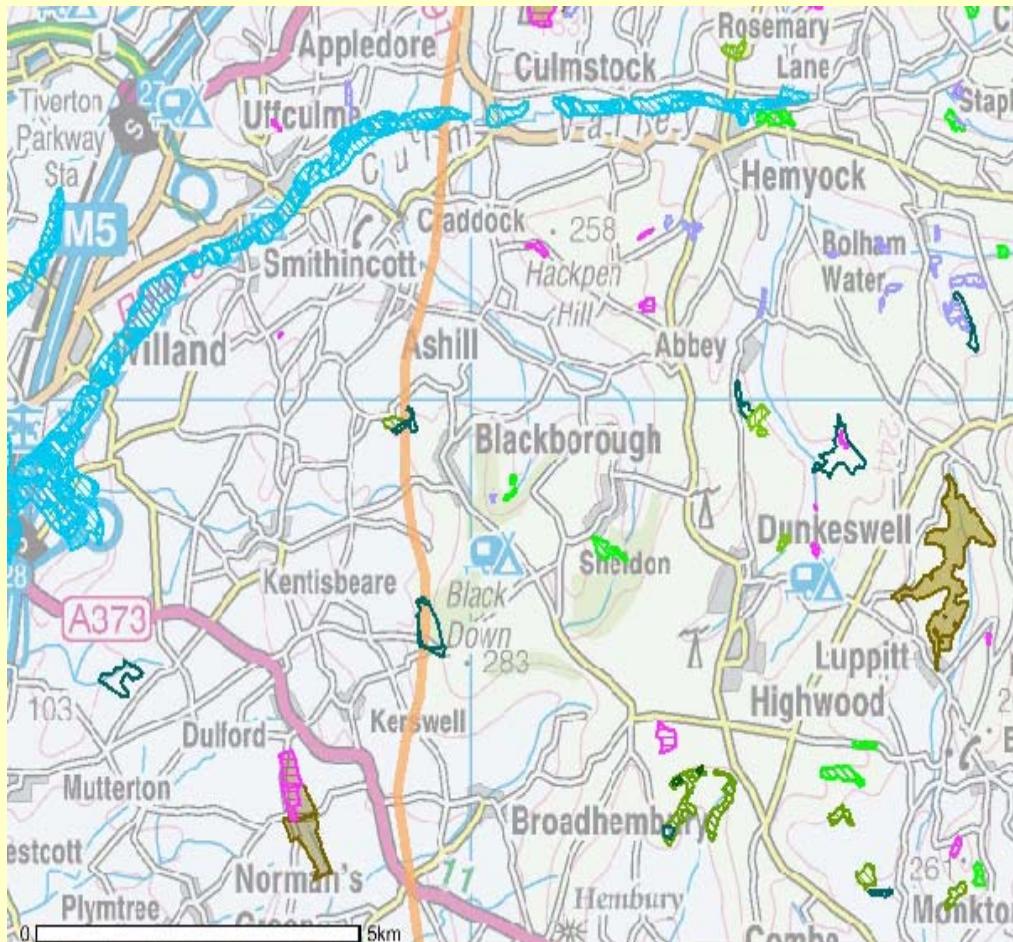


fruiting season. At both Carreg Cennen and Waun-las a clear distinction can be made (from mycological data) between MG6 grassland which has been heavily fertilised or improved in some way and the same grassland type which has been less modified. This distinction is a dramatic one and can be easily observed at Carreg Cennen. The path leading up to the castle is flanked on both sides by MG6 grassland. The steep grassland to the right of the path is extremely rich mycologically, while on the left the more improved MG6 displayed no fungal fruiting whatsoever.

# Targeting priorities, but ignoring their context?



# Landscape, systems approach missing

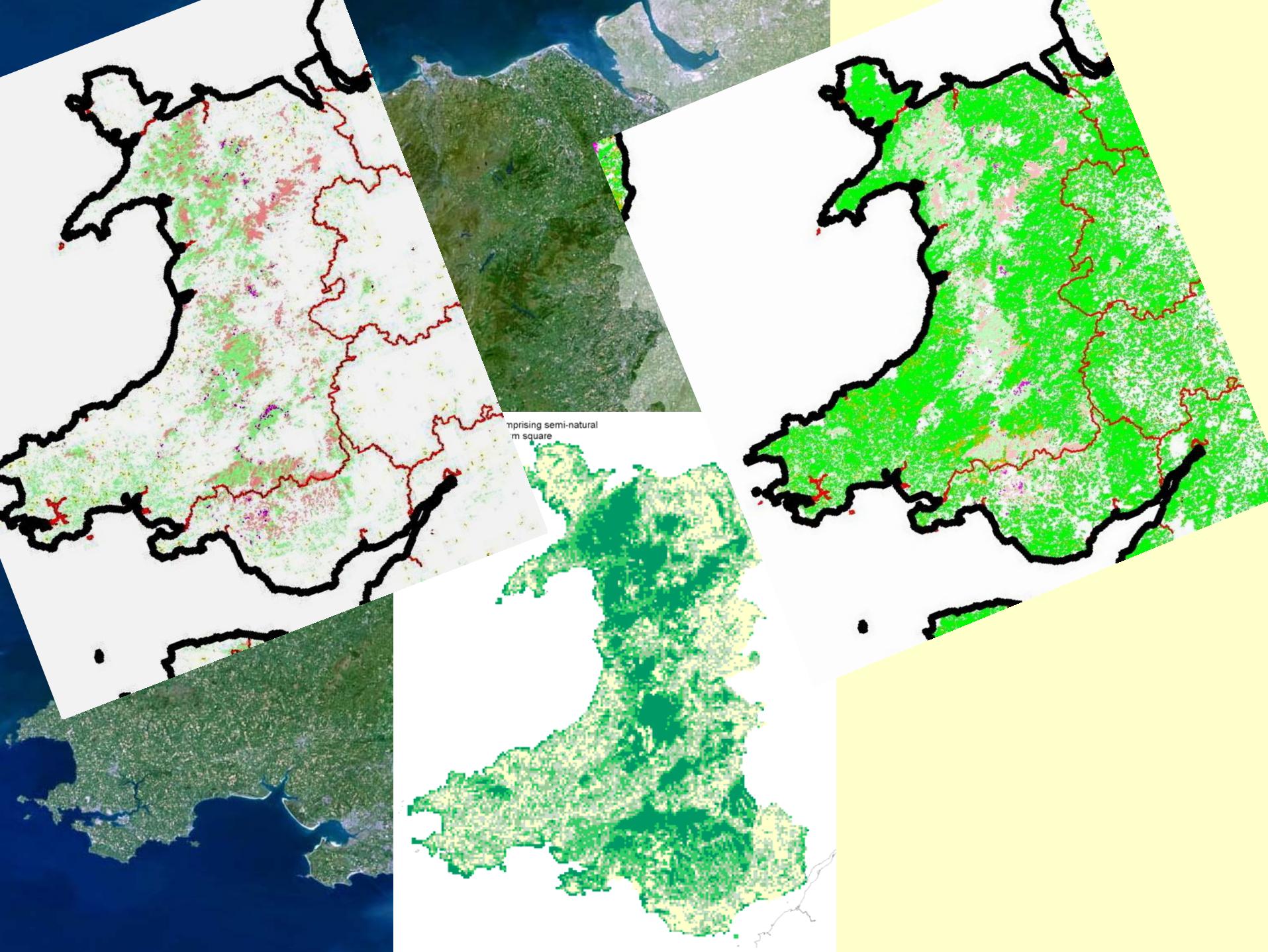


## Challenge:

### Broadening the scope of 'semi-natural' (and HNV)?

- VERY significant question in the UK (and for large parts of more marginal lowland NW Europe?)
- Ecologists recognise the significance of 'semi-improved' grasslands BUT
  - Not a priority
  - Not transmitted to other policy makers
  - Not really recognised in support measures
- Matters partly because it is the 'matrix' for 'high priority' habitats in these zones, providing the rationale and context for the agricultural system





# Summary

- Need clear ecologically-sound approach to nature value of farmland, including both characteristics of the habitat and its context in the wider landscape
- Need coherence with EIA Directive; Renewable Energy Directive
- Ideally should have greater coherence with CAP protection for permanent grassland
- Need clarity about scope of action re. *farming/farmland*



# Summary

- What does that mean for NON-farm grasslands?
- Need to identify significance of HNV farmland in the farm economy – is there a HNV farming system? Is it about parcels or farms?
- Need then to identify and address economic and non-economic drivers/motivations, which will differ according to these factors
- (Need, for example to look at the ‘small farm’ issue)

