

# **Public money for public goods.**

**Steve Peel, Independent eco-agronomist**



# Public goods

- (*Not* food or fibre)

Maintaining or restoring:

- Landscape and historic environment
- Public access
- Clean air, clean water
- Flood mitigation
- Carbon storage/ sequestration
- Biodiversity





- **Target 7**  
By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

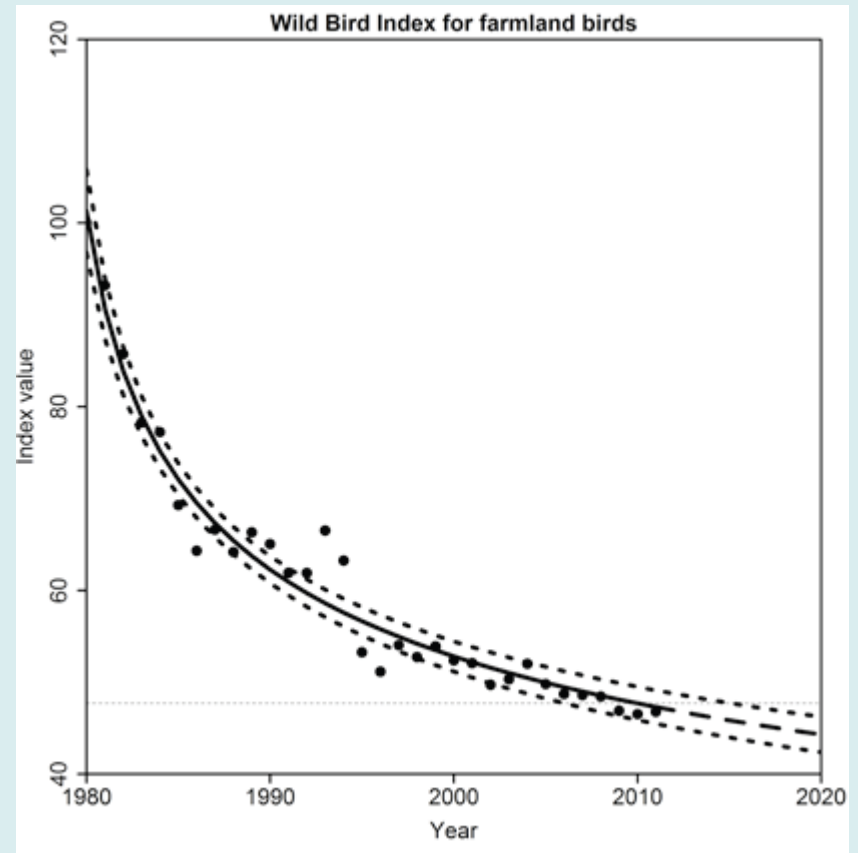


How are we doing?

# **CBD Technical Series No. 78** PROGRESS TOWARDS THE AICHI BIODIVERSITY TARGETS

Target 7 includes widespread, mobile species as indicators of farmland biodiversity.

Statistical extrapolation of the Wild Bird Index for European farmland birds to 2020.

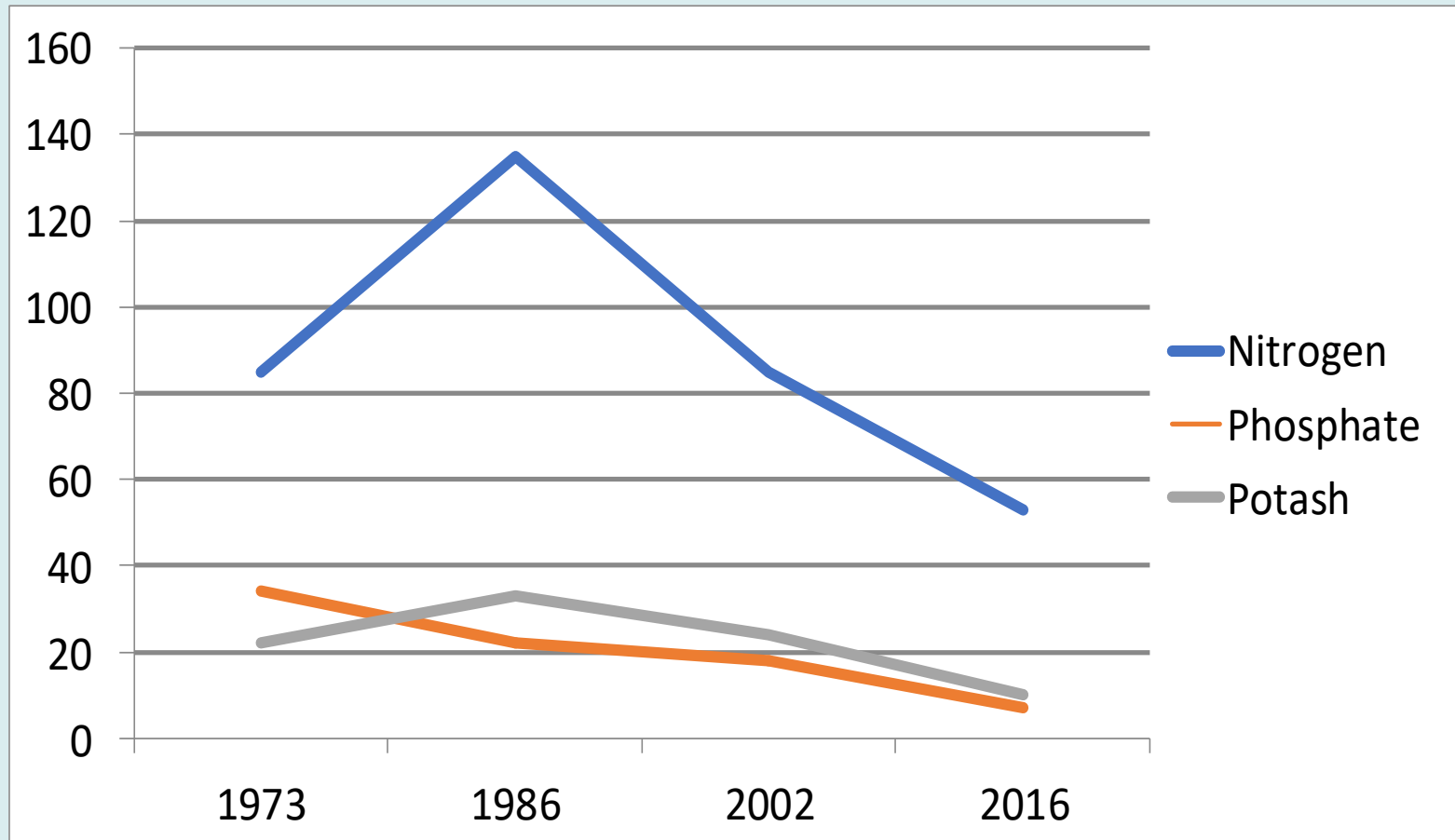


What hope?  
isn't most grassland intensively managed?



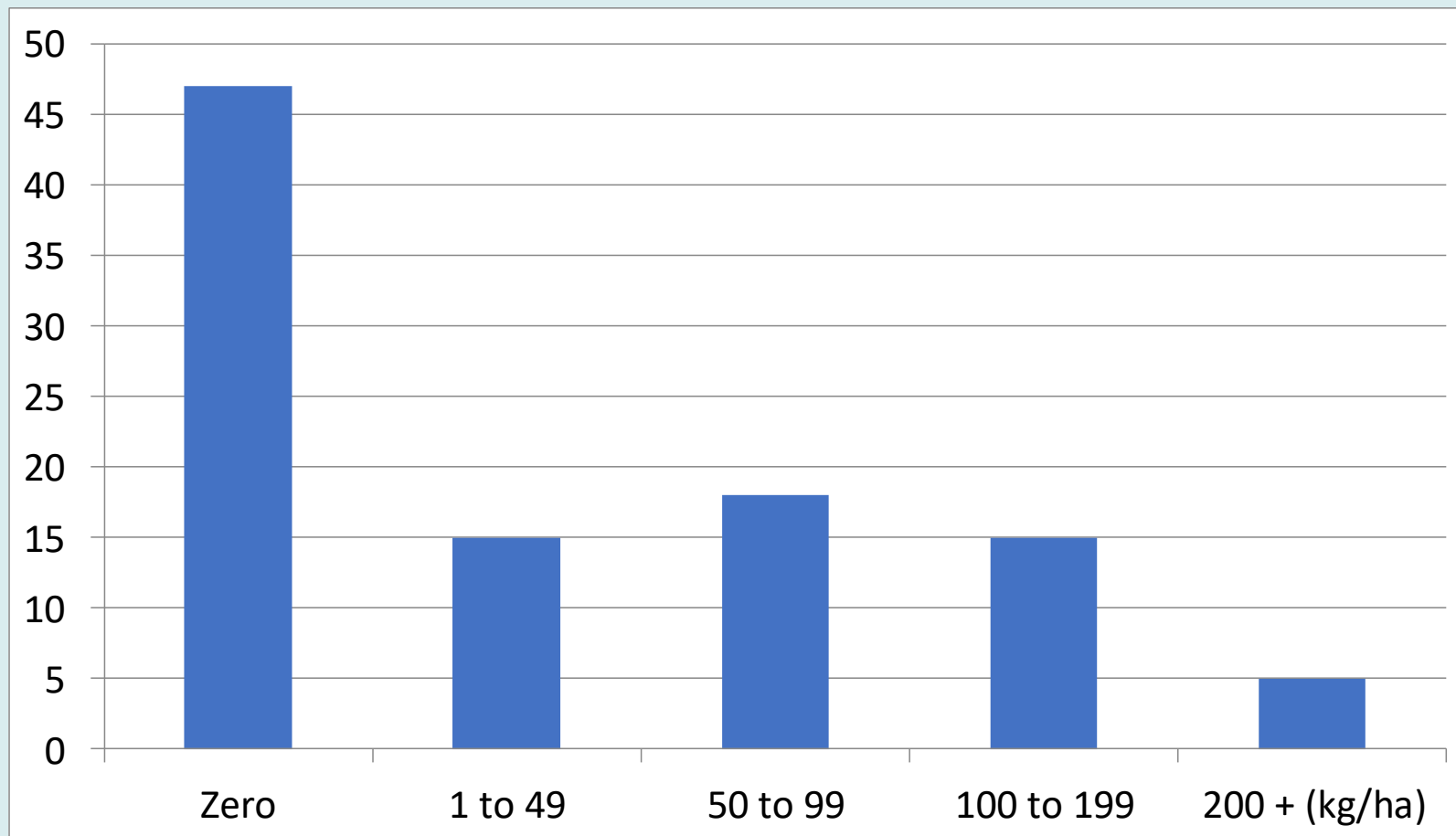
# Fertiliser (kg/ha) on grassland in England & Wales, 1973-2016.

(British Survey of Fertiliser Practice 2016)



# Grassland area (%) by fertiliser N application rate (kg/ha) England and Wales

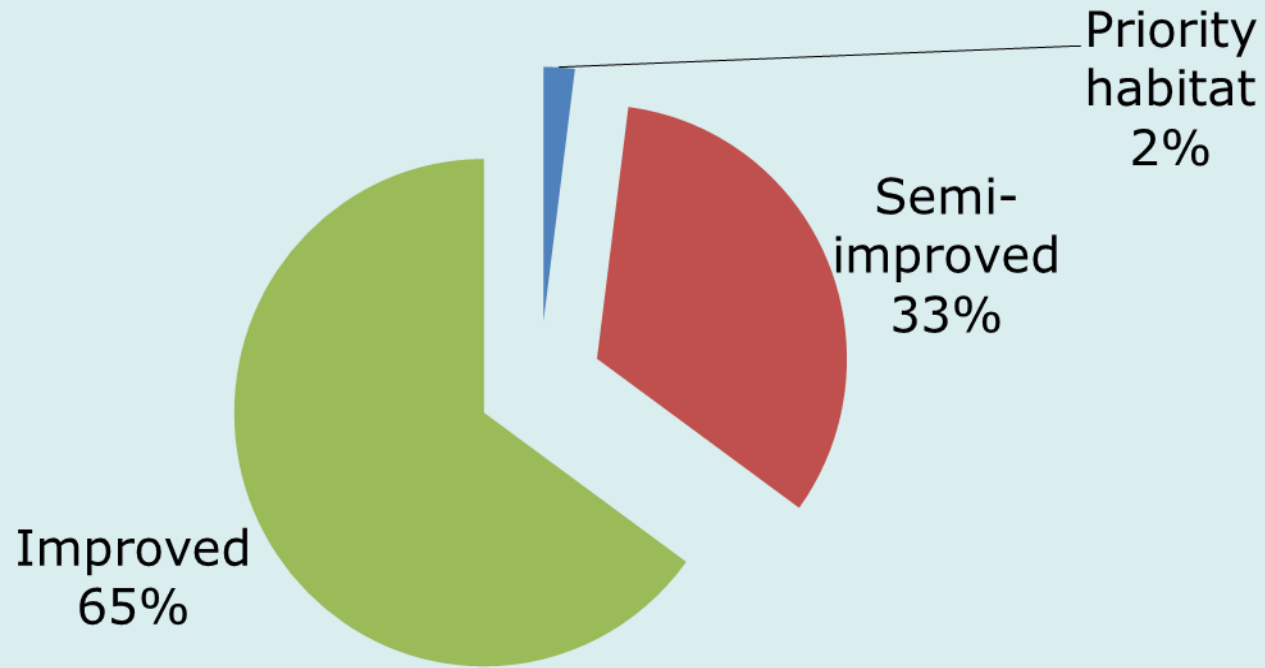
(British Survey of Fertiliser Practice 2016)





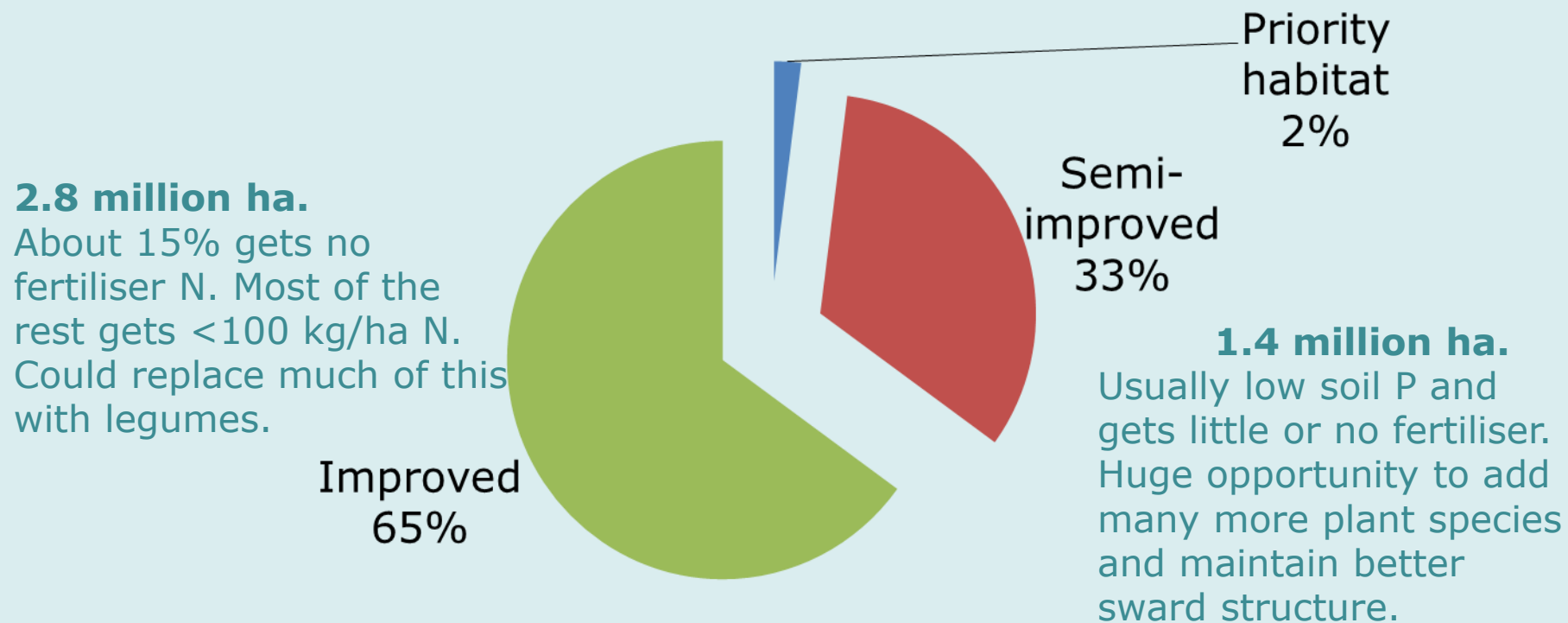
Most grassland has low inputs, so it has plenty of plant species?

## Botanical classification of grassland in England.



Sources: UK National Ecosystem Assessment 2011; Countryside Survey 2009

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## Can we deliver Aichi target 7 ?

- Yes but not with 'business as usual'..
- .. and scientists and advisers could play a part by focusing on species-poor grassland and wider farmland.

# Diversify low-input grassland



High intake



High intake



High minerals,  
good roots





Then..

.. don't spray them out





Sow leys with a range of grasses, legumes and herbs, and allow some flowering. BD5208



Legumes & herbs can also improve soil structure



Increase structural heterogeneity on some swards:  
at least 20% >10cm tall  
at least 20% <10cm tall

do not top

Project BD5207





Forego 2<sup>nd</sup> cut silage on at least 0.5ha and  
allow to seed over winter.

Project BD1455





Landscape corridor: can locate to also  
reduce run-off



Fence off  
awkward  
corners

# Key points

- The UK, and most countries, have committed to conserving biodiversity on farmland.
- Progress rather poor for species which need resources beyond Priority Habitat.
- How to meet international commitments? In part by scientists and advisers understanding profitable livestock systems and how biodiversity can be incorporated into them.
- Huge opportunities – most grassland already has low inputs, but few species.
- More diverse swards, based on legumes, could maintain current productivity, benefit soil structure and improve resilience to a changing climate.











