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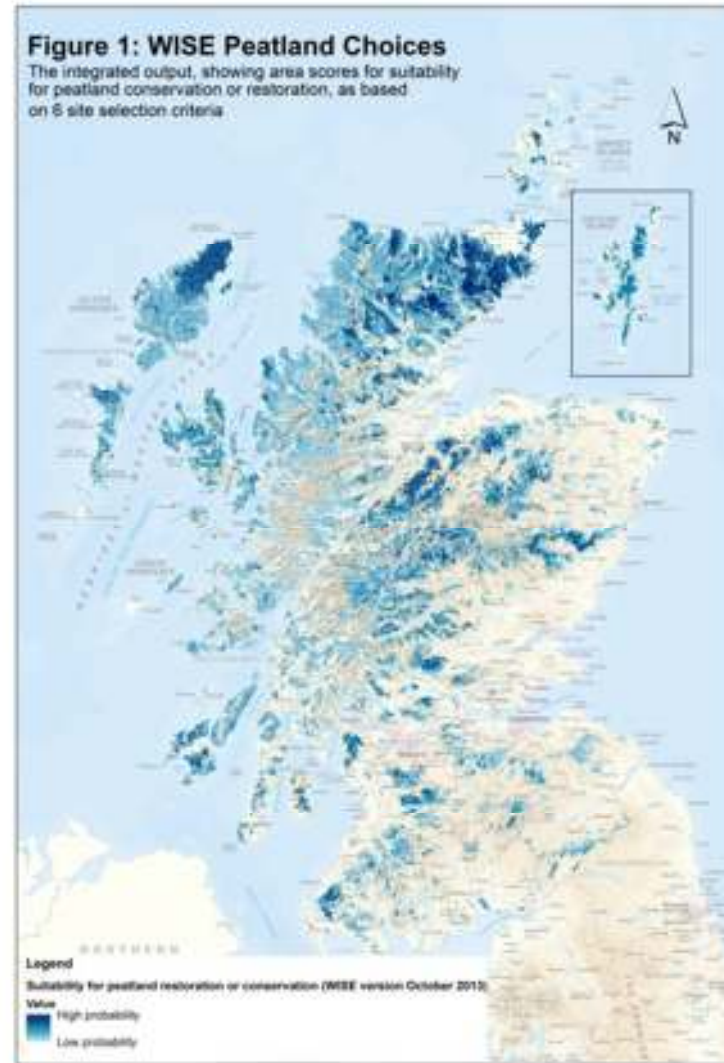
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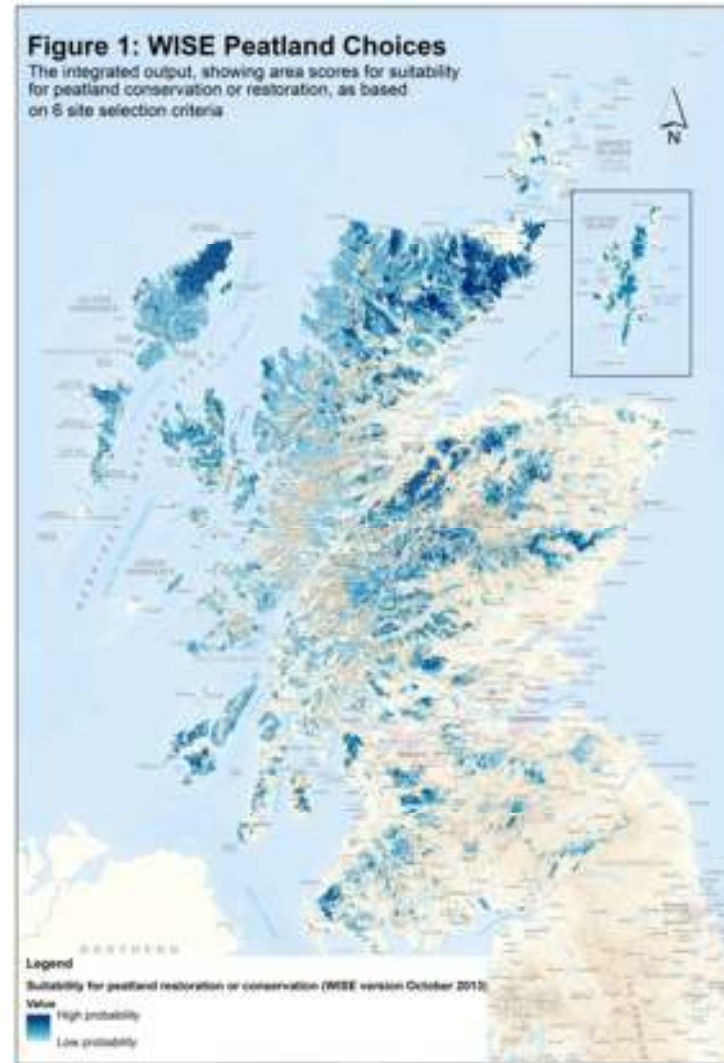
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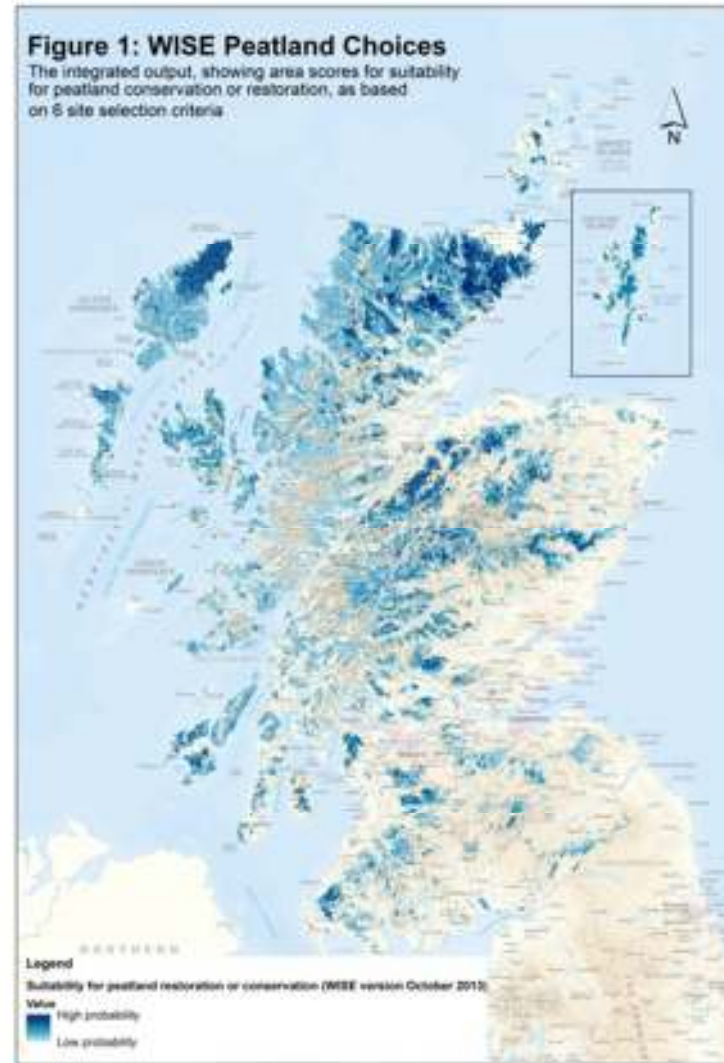
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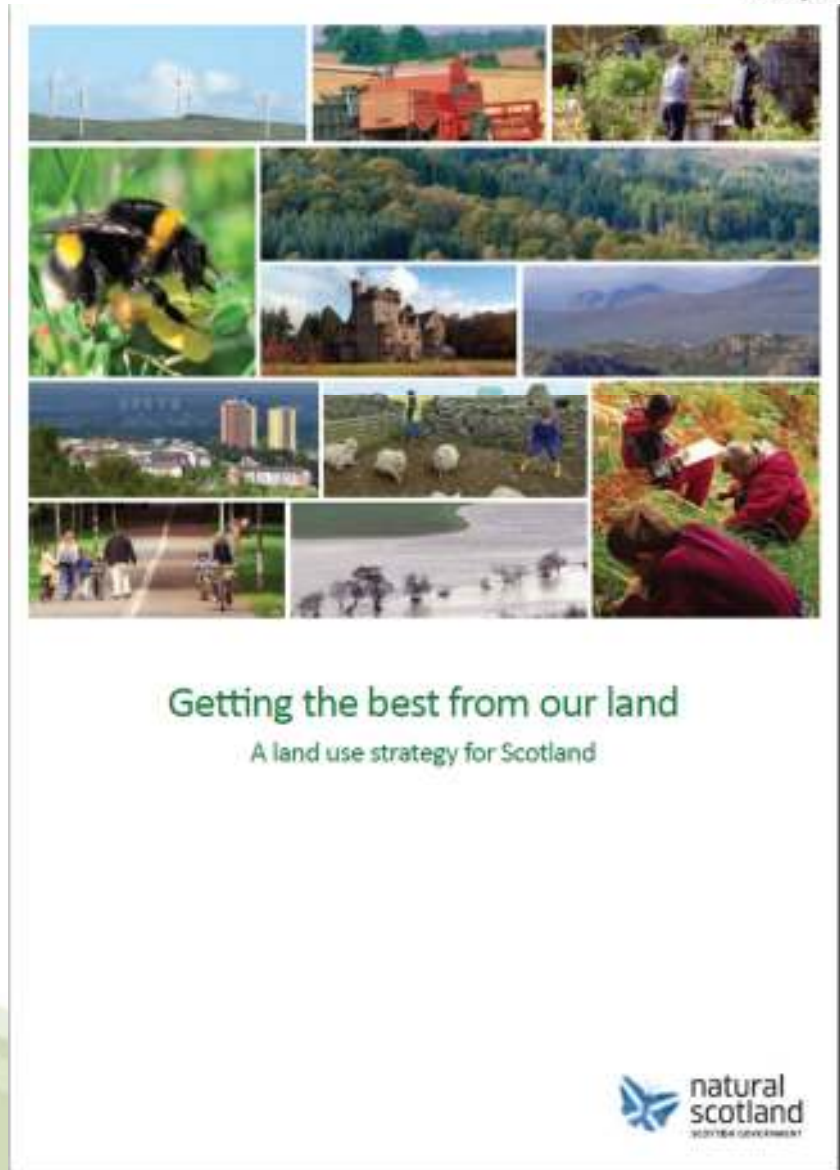
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# The Scottish Soil Framework: what next?



- Currently unclear but proposal to integrate the soils agenda into the Scottish Land Use Strategy
- Part of the Climate Change (Scotland) Act 2009
- Explicit recognition of the role that land use and soils play in climate change mitigation. Comprises:
  - 10 principals
  - 13 proposals



# Land Use Strategy: Proposal 7



- The Scottish Government (SG) will “identify more closely which types of land are best for tree planting in the context of other land-based objectives...”
  - Recognition that some woodlands were planted on inappropriate sites in the past
- Trees being planted with the objective of carbon sequestration being one of the principal drivers
- SG established a Woodland Expansion Advisory Group to provide advice on this proposal
- A study was commissioned to inform the group’s work:
  - ▶ To determine the impact of various constraints on the availability of land for woodland expansion
  - ▶ To identify the types of land most appropriate for woodland expansion after consideration of the above



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**Implicit recognition of soil functions in the process**



# Identified three basic land types



- Phase 1 - land that is predominantly not available for woodland expansion
- Phase 2 - land that is affected by national designations and policies which impose varying degrees of constraint on woodland expansion
- Phase 3 – to characterise the land that is not included in the first two categories and which is therefore most likely to have potential for woodland expansion
  - ▶ And to indicate in a very broad sense what this means for woodland



# Phase 1 - land that is predominantly not available for woodland expansion



- To include:
  - Current woodland
  - Land biophysically and biologically unsuitable for planting
  - Built up land
  - Prime agricultural land (LCA classes 1 – 3.1)
  - Areas of peat deeper than 0.5 metres
- ▶ Whilst recognising that there will be small scale woodland opportunities in urban areas and on prime agricultural land

# Land unsuited to new woodland



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**Soils more valuable for  
'providing valued  
habitats & sustaining  
biodiversity'**



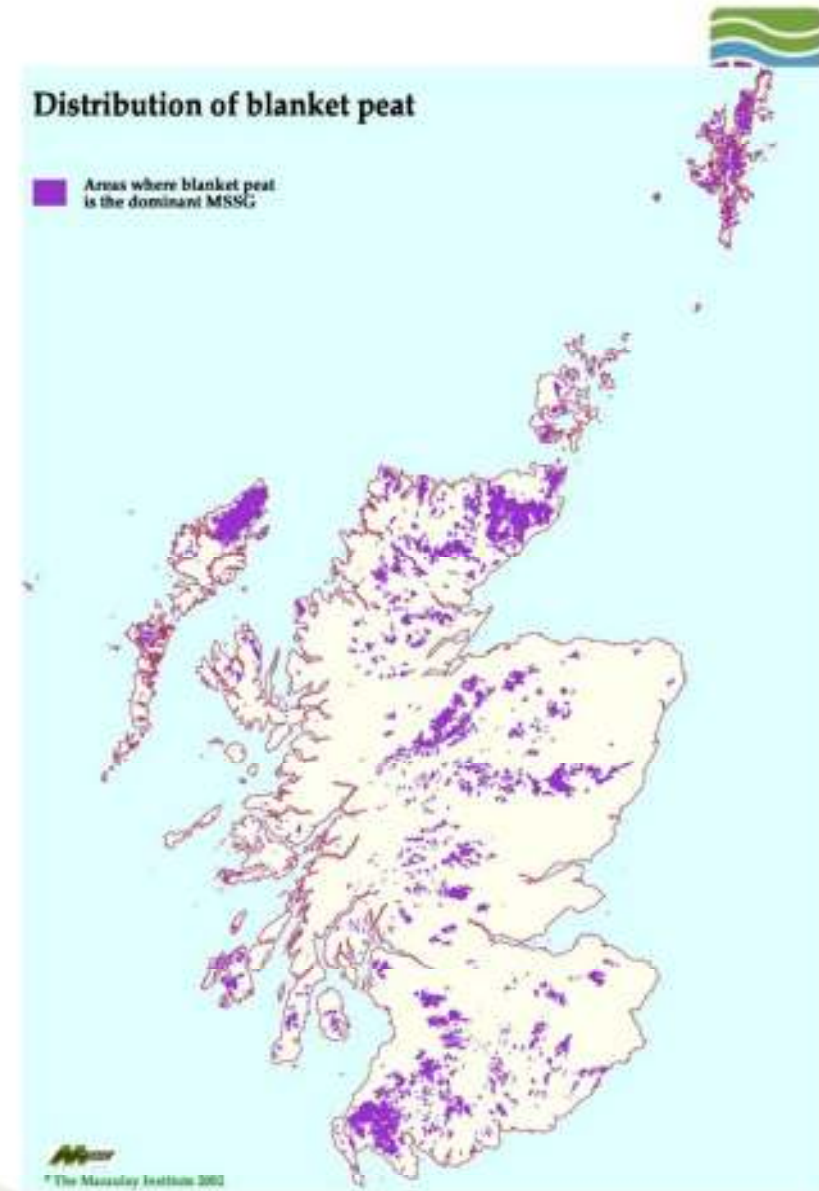
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  - Carbon storage
  - Biodiversity
- Large areas now being restored to their original state and function



# High quality agricultural land

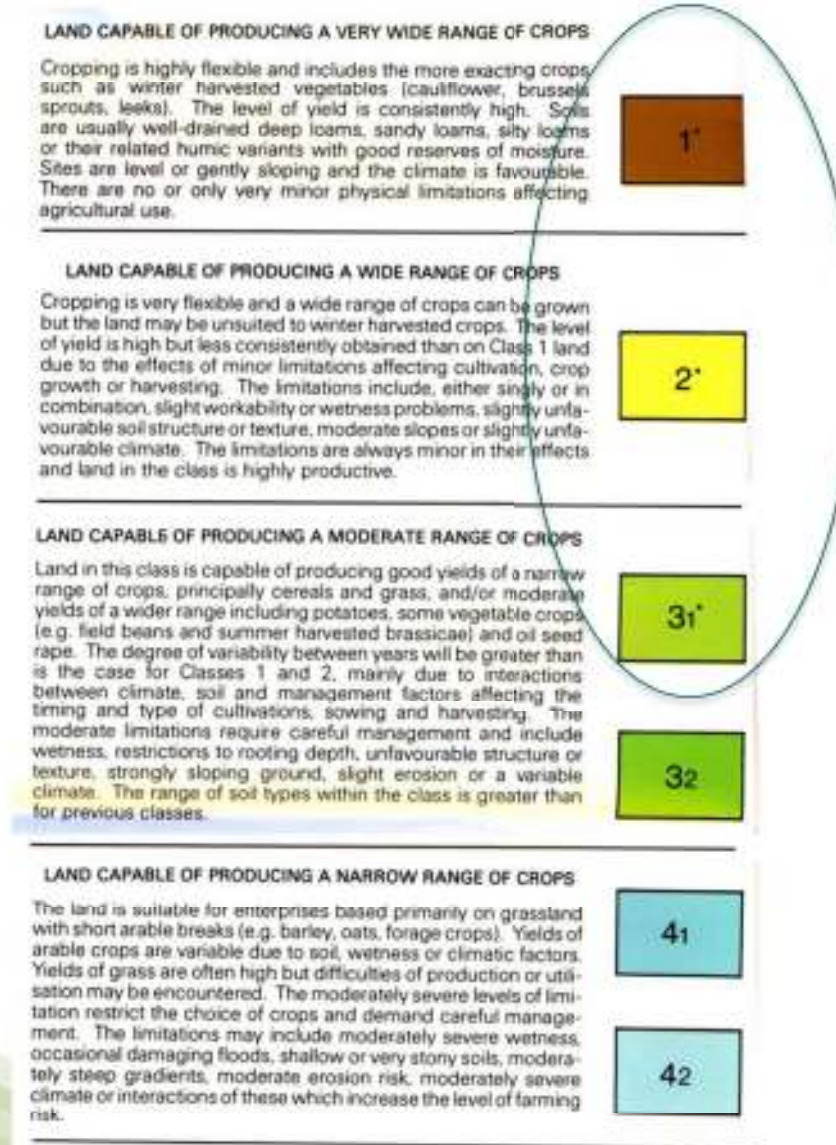
- Based on the Land Capability for Agriculture (LCA) Classification
  - To rank land according to the extent that biophysical properties of the land impose restrictions on its agriculture use
  - Biophysical properties – soil, climate, relief and vegetation
  - Agricultural use – potential productivity and cropping flexibility
  - Based on published guidelines to ensure consistency between users
- **Recognition that the biomass function (food production) should take precedence**

# The Classification

A seven class system; four classes are subdivided into divisions

Classes 1-4 comprises land suitable to arable cropping

Classes 5-7 comprises land suited only to improved grassland and rough grazings



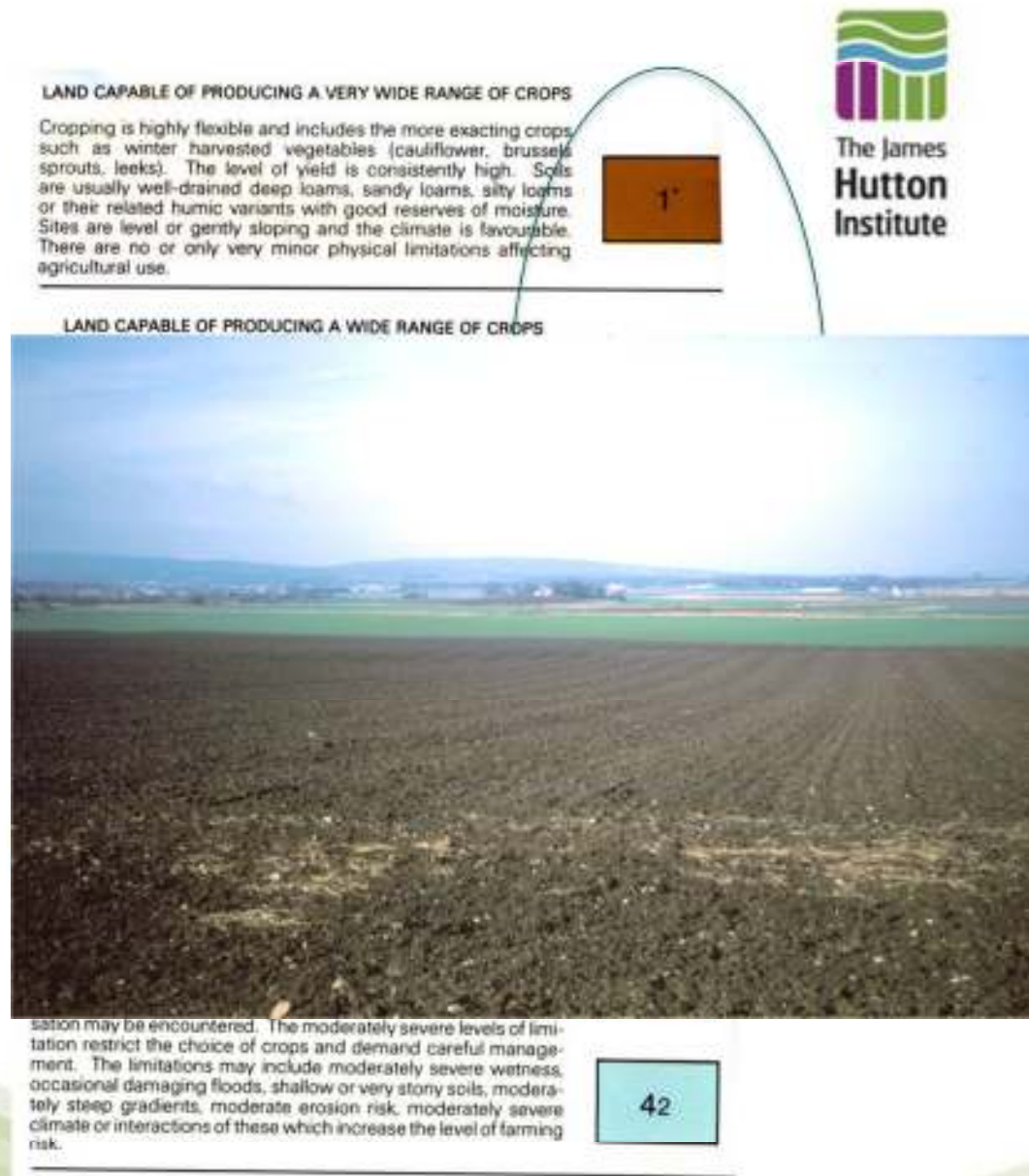


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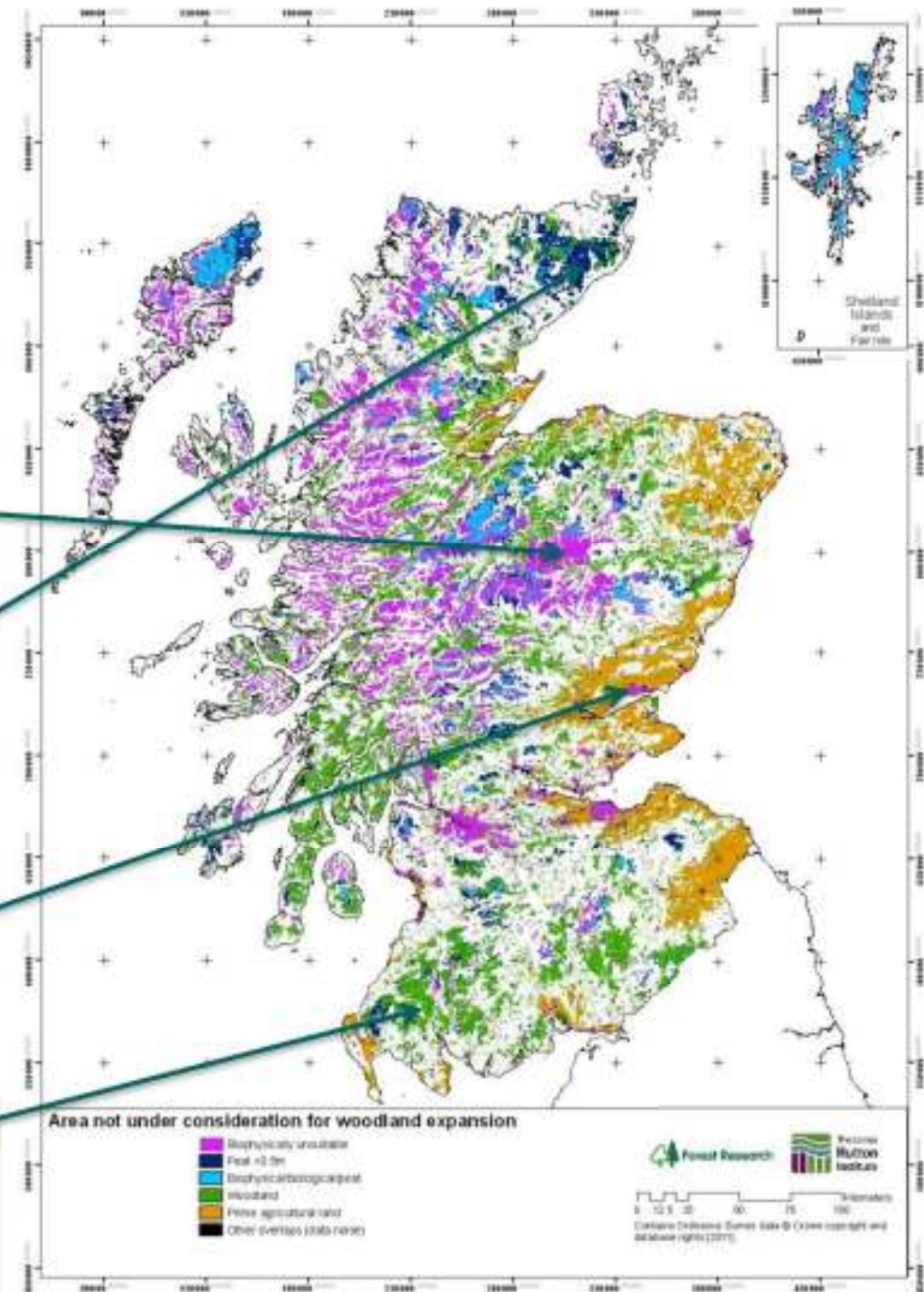
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So by recognising soil functions, land most appropriate for woodland expansion is identified

- biophysically unsuitable primarily in the Highlands
- peat > 50 cm deep in Caithness and Sutherland for example
- prime agricultural land on the low ground in the east
- recognisable pattern of current woodland



# Phase 1 results



Constraint	Area (hectares)
Current woodland extent	1 385 600
Biophysical & biological constraints	1 233 900
Prime agricultural land	566 500
Peat	657 100
<b>Total</b>	<b>3 585 400</b>

# Phase 1 results

**Almost 3.6 million ha  
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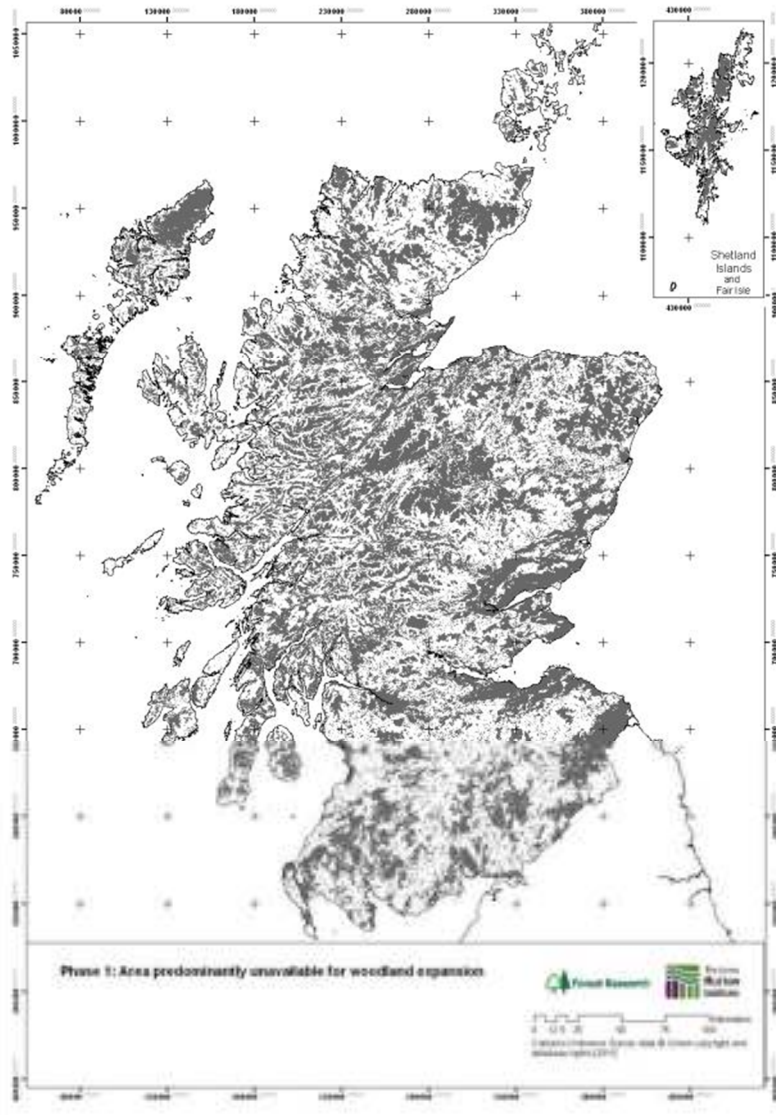
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**15% due to current  
policy – prime land  
and peat**

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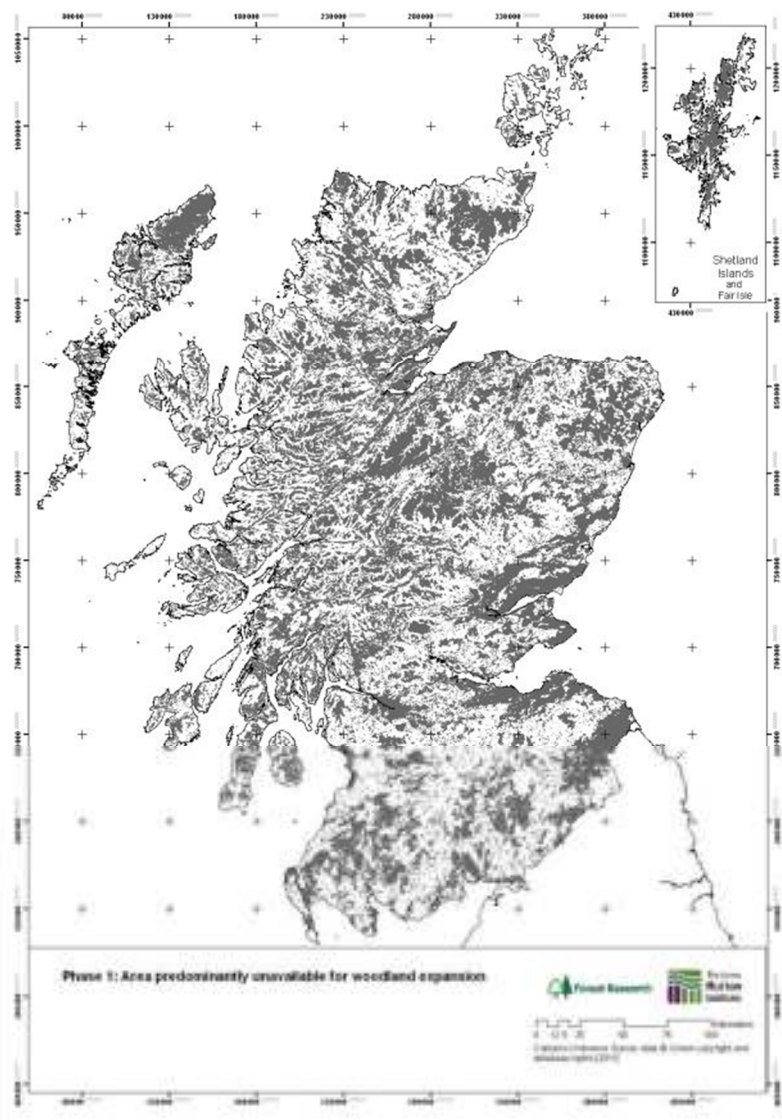


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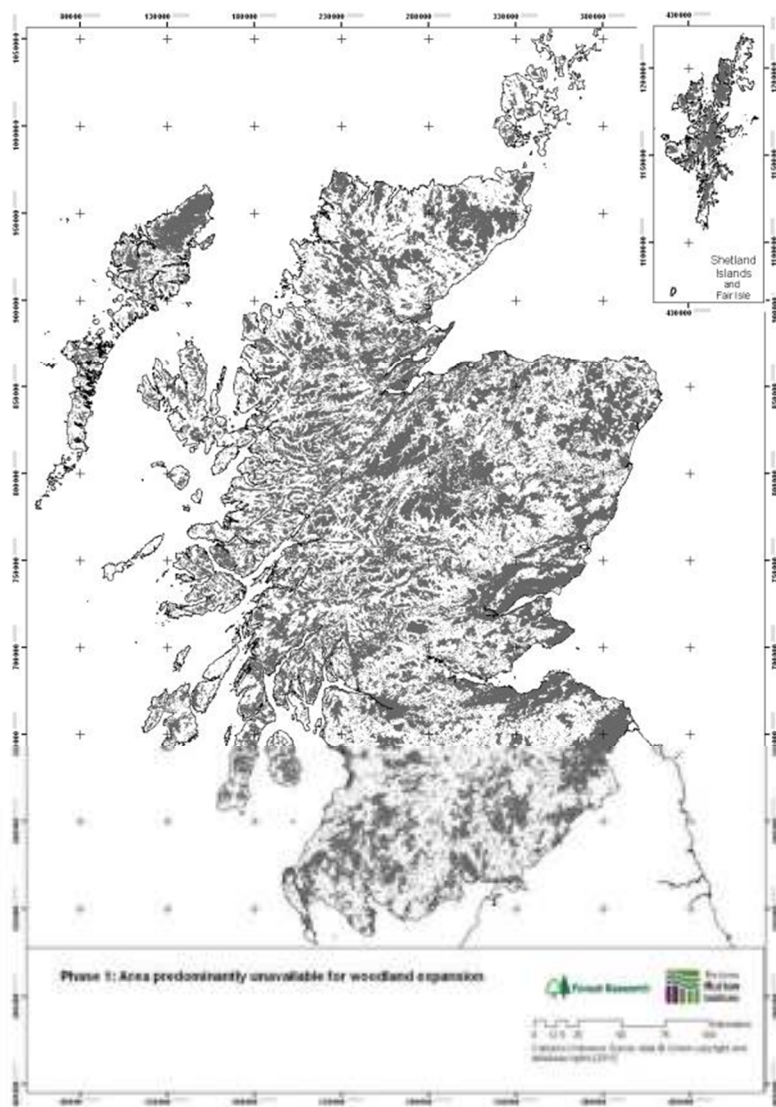


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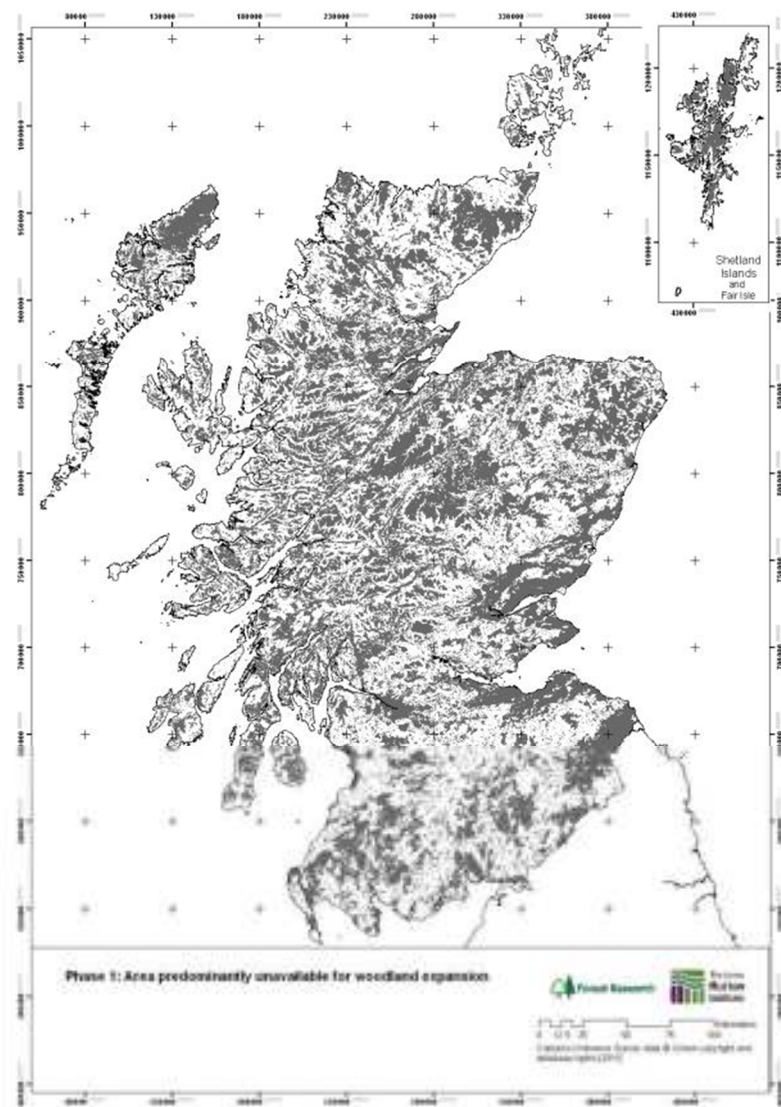
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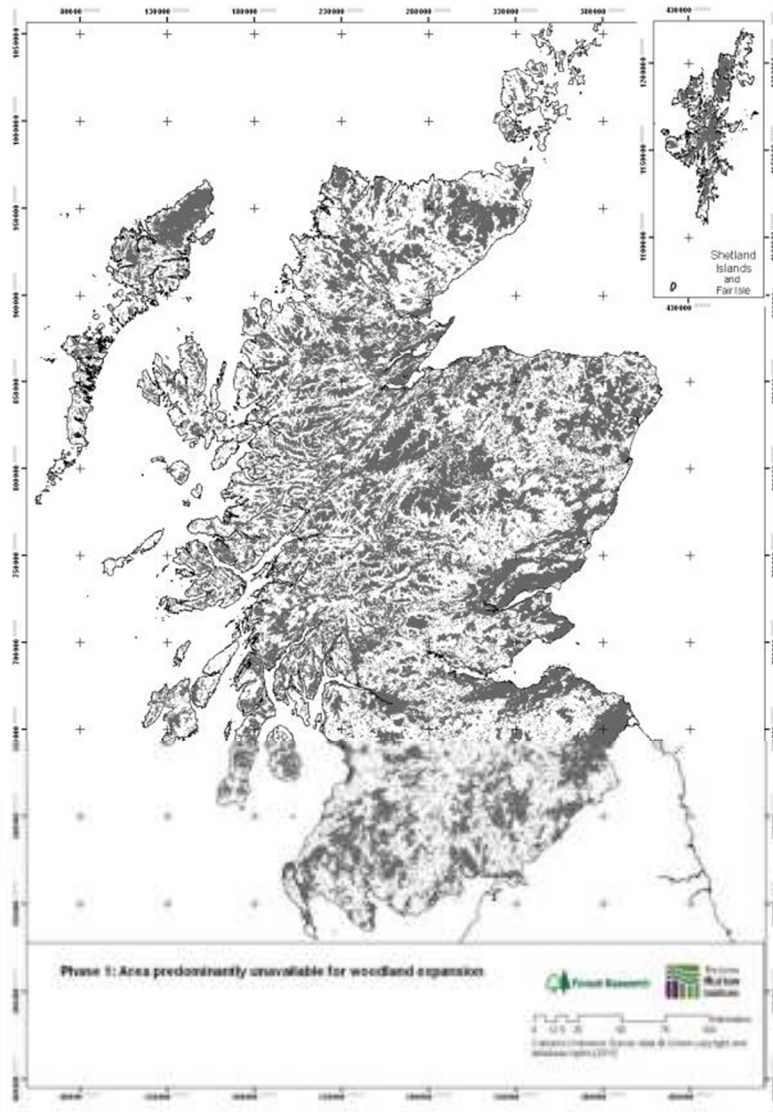
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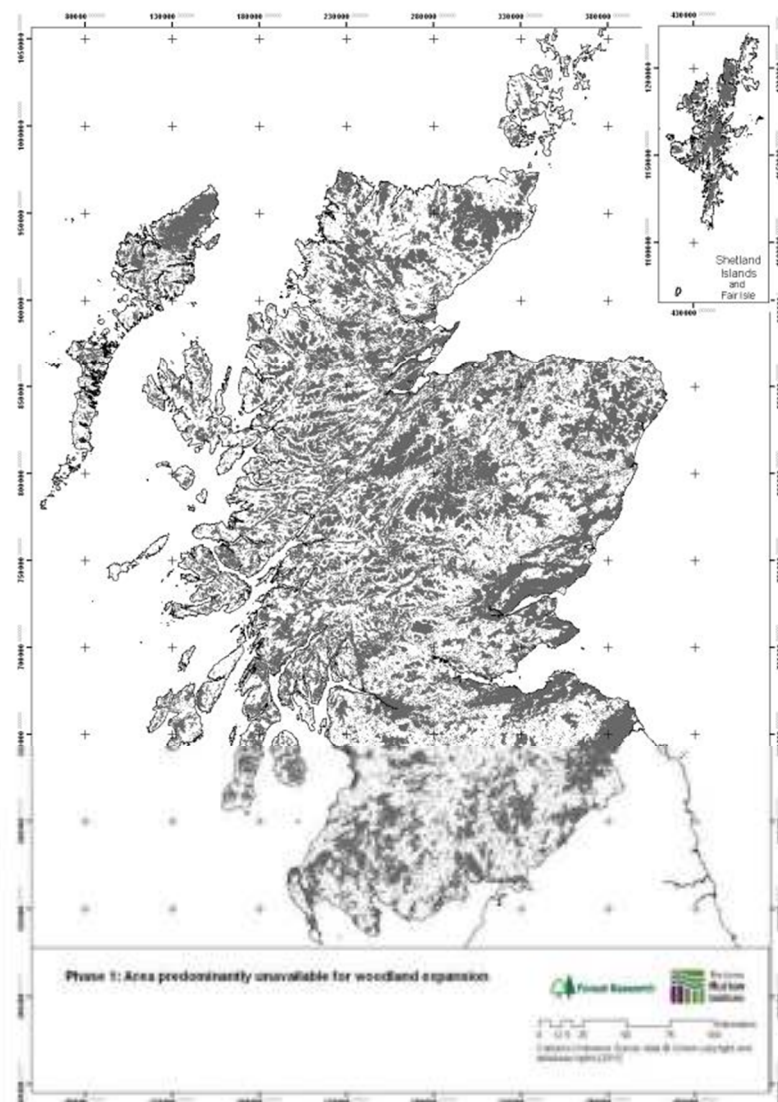
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Heritage sites

**Recognition that the biodiversity and cultural functions of soil are important**



**Approximately 1.6 m hectares (20% of Scotland) is in a designated site and not in Phase 1**

**But some opportunities for woodland expansion exist on some sites where woodland is a key feature of the landscape.**



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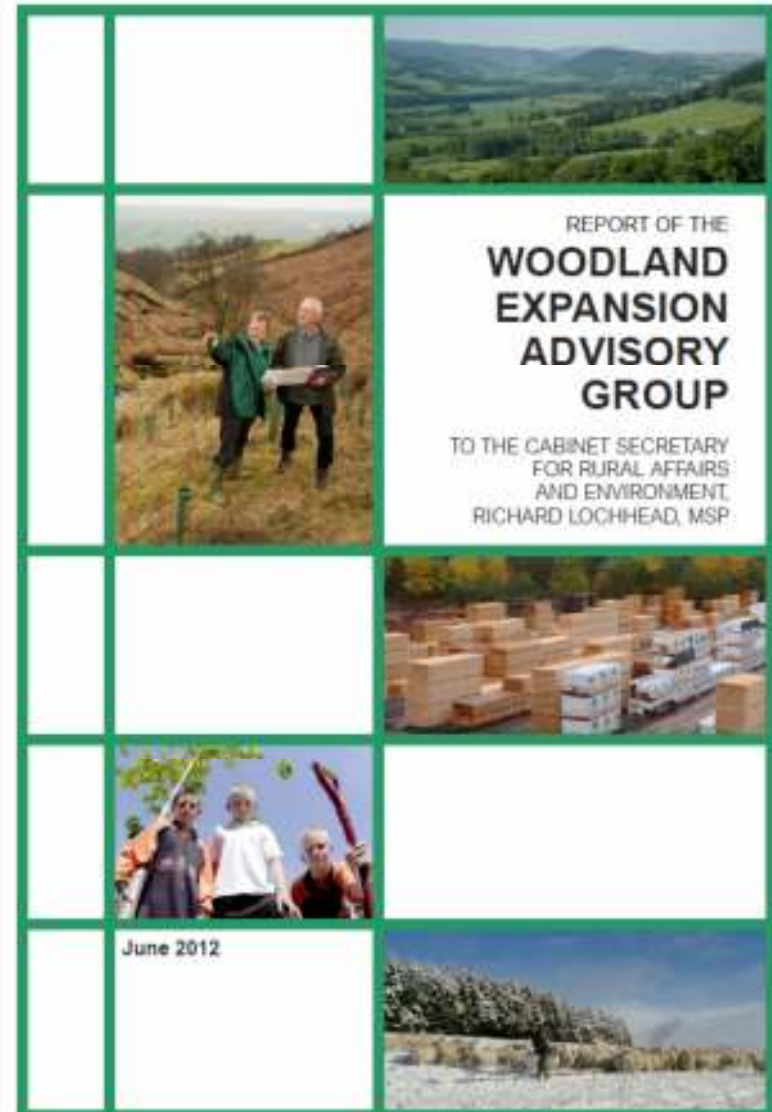
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**Agriculture and woodland tend to be separate land uses in Scotland with relatively little integration**

# How was the work used?

- It established a key landmark in the Group's discussions
  - All parties agreed in principle that the overall findings were robust
  - And provided a way forward for more detailed discussions
  - 25% target cover by 2050 was dropped and replaced by shorter term woodland expansion targets
  - Recommended a more integrated approach between farming and forestry
- But a lot of negotiation between different stakeholders is still required at national and local levels



# Concluding remarks



- The Scottish Soil Framework (SSF) is the first explicit political recognition that 'Scotland's soils are one of the Nation's greatest assets'
  - Such recognition cannot be underrated
- The Framework has raised the status of soils in other policy areas of Government
- The Framework prompted a number of outreach activities that has helped raise awareness with the general public
- The importance of soil management runs through both SSF and the Land Use Strategy
  - From the intensive arable sector to the peatlands of upland Scotland
  - Driven by concerns on the impacts that inappropriate management has on climate change and water quality

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  - From the intensive arable sector to the peatlands of upland Scotland
  - Driven by concerns on the impacts that inappropriate management has on climate change and water quality
- Does this demonstrate that soil should be at the heart of environmental regulation and protection and not on the fringes?

# Acknowledgements



Thank you to the Scottish Government for financial and other support over a number of years





**And lastly, in 2022, visit Scotland**

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**SEE YOU IN 2022**

We will be hosting the  
2022 World Congress of Soil Science  
in Glasgow, Scotland.



**BRITISH  
SOCIETY  
OF SOIL  
SCIENCE**



SCOTTISH EXHIBITION & CONFERENCE CENTRE

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MAKE  
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