



SEFARI

LEADING IDEAS  
FOR BETTER LIVES



SRUC

# Scotland's Land: One resource, many uses

**Steven Thomson**

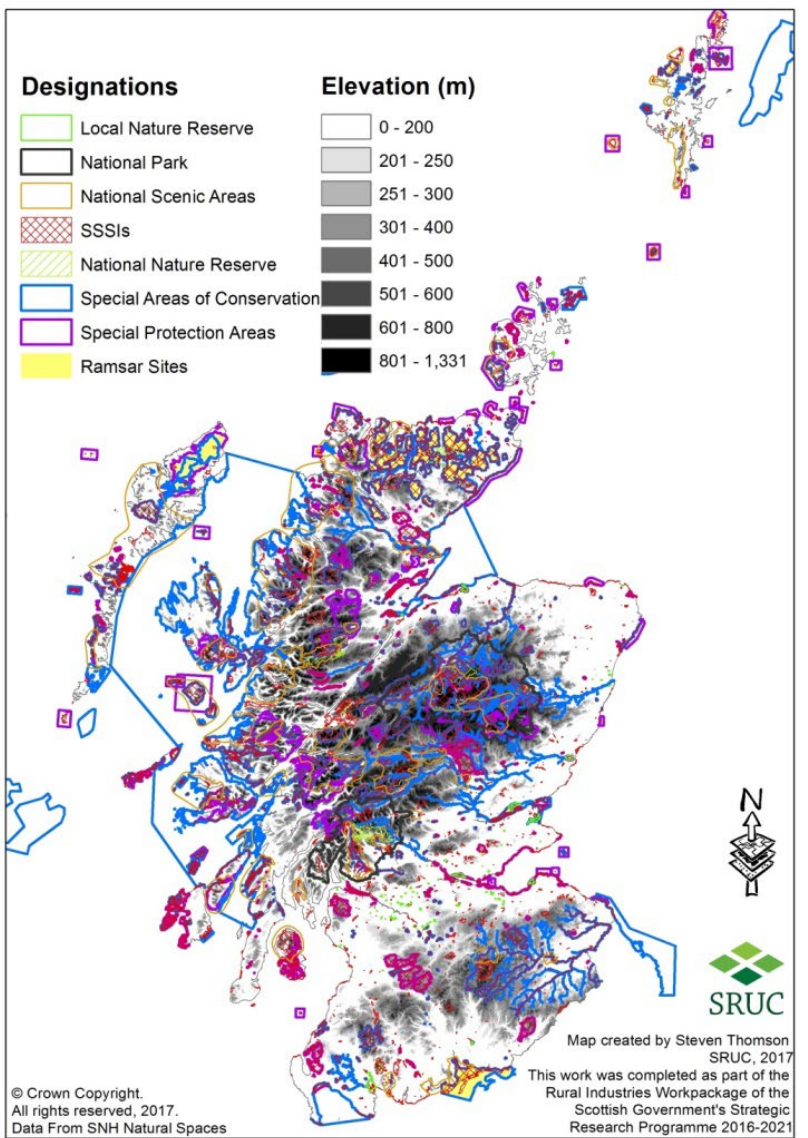
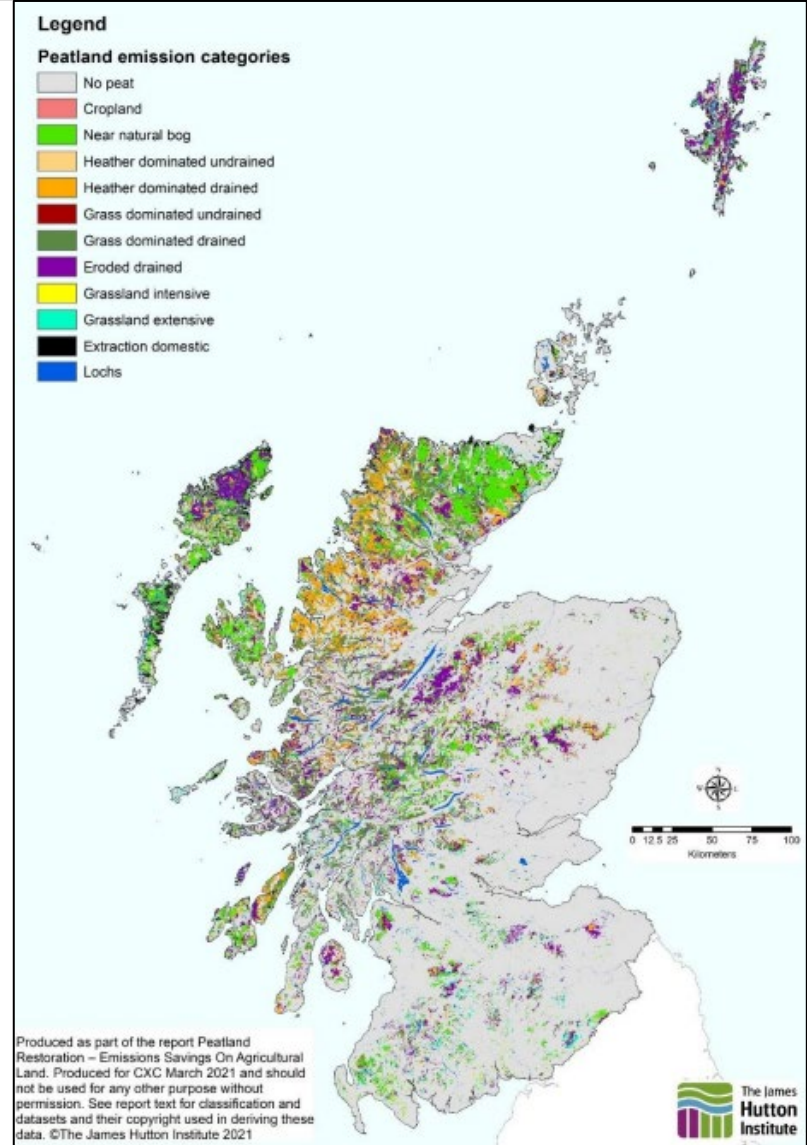
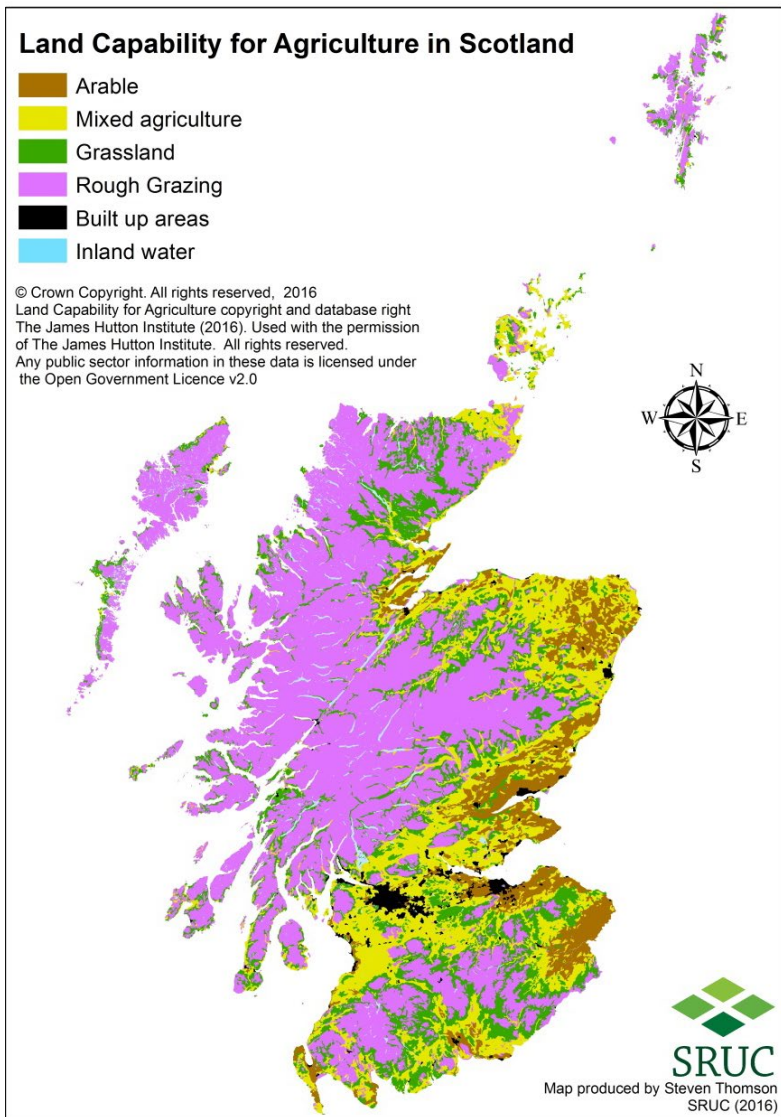
Professor of Agricultural Economics  
and Policy

SEFARI Gateway Knowledge Broker

Just Transition Commissioner

Scotland's Futures Forum, Scottish  
Parliament 30<sup>th</sup> October 2023

# What land?



# Land use – economic impacts

Figure 37: Average expenditure to all habitats (except built-up areas) in Scotland fell between 2018 and 2019. Average expenditure per visit (£) to Scotland's habitats, 2011 to 2019

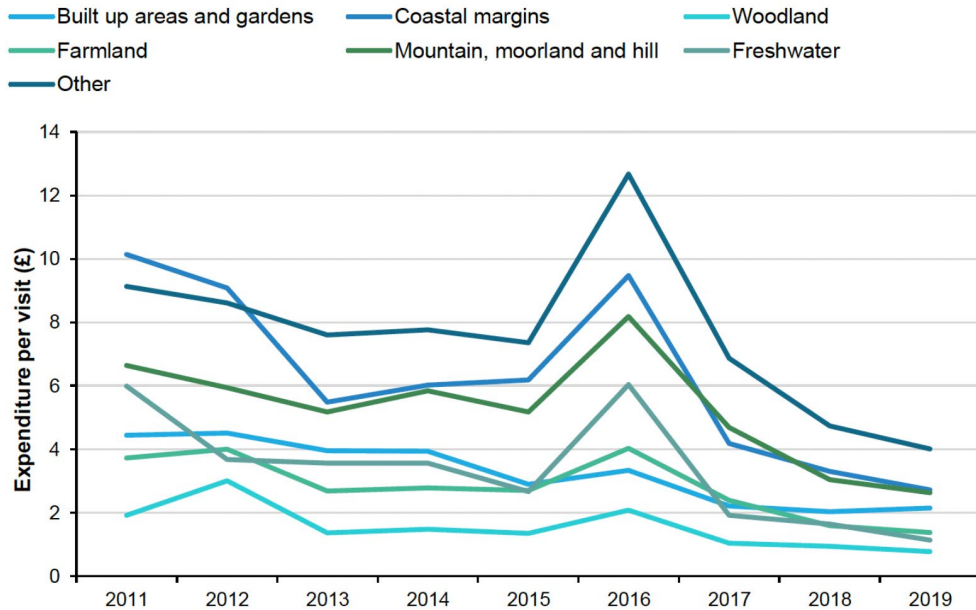
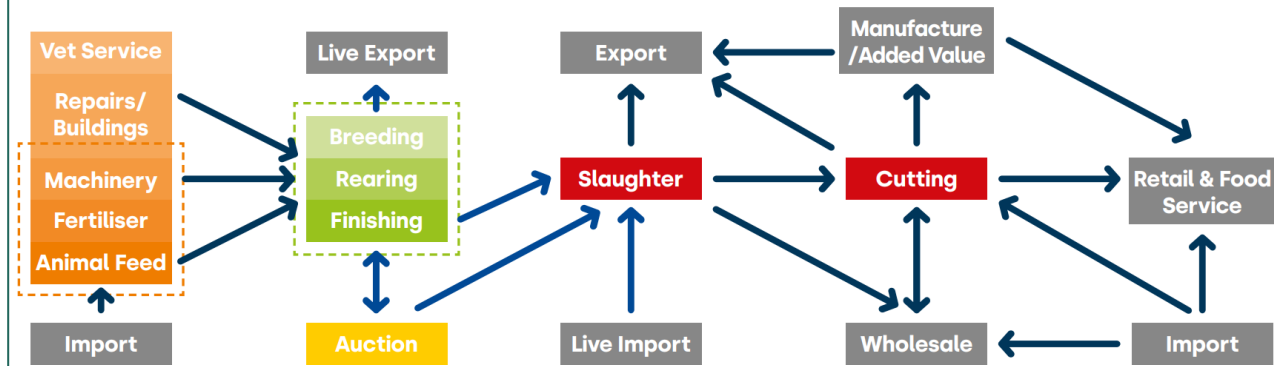


Table 7: Numbers of FTEs associated with the non-timber outputs from the forestry sector in Scotland

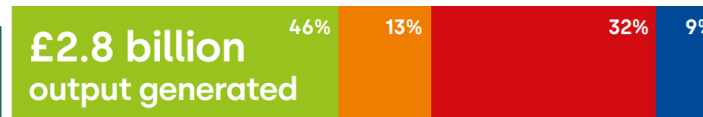
Sector	FTEs	Source and date
Recreation and tourism (forest-related)	17,900	TNS (2006a,b,c) <sup>49</sup> , CJC Consulting (2006) <sup>50</sup>
Game (direct, indirect and induced)	5,216	PACEC (2006) survey
Non-timber forest products	3,395	Omnibus Survey 2006
<b>TOTAL</b>	<b>26,511</b>	

## Red Meat Sector

### SUPPLY CHAIN



### ECONOMIC IMPACT\*



■ On-farm ■ Core Supplies ■ Meat Processors ■ Other Supplies



#### ON-FARM

- 31,200 workforce
- £1.3bn output at £41k per worker
- £504m GVA at £16k per worker



#### CORE SUPPLIES

- 2,000 workforce
- £361m output at £179k per worker
- £98m GVA at £49k per worker



#### MEAT PROCESSORS

- 3,880 workforce
- £885m output at £228k per worker
- £119m GVA at £31k per worker



#### OTHER SUPPLIES

- 2,200 workforce
- £252 output at £114k per worker
- £118m GVA at £53k per worker

# Economic impacts

Density of Grouse Butts Weighted by Burn Percentage

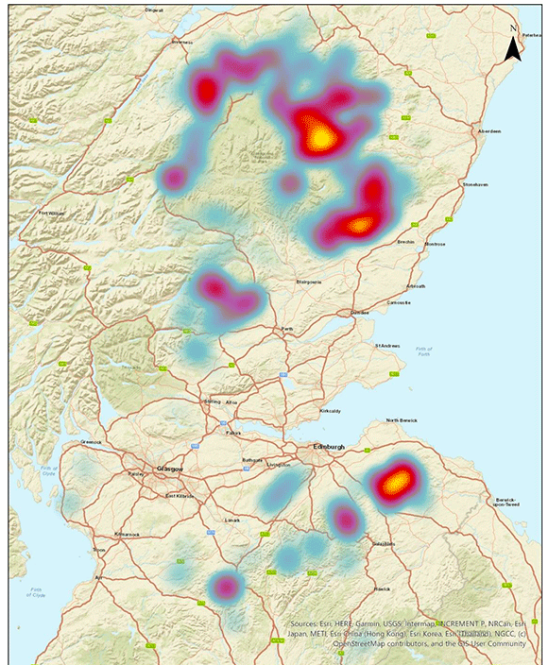
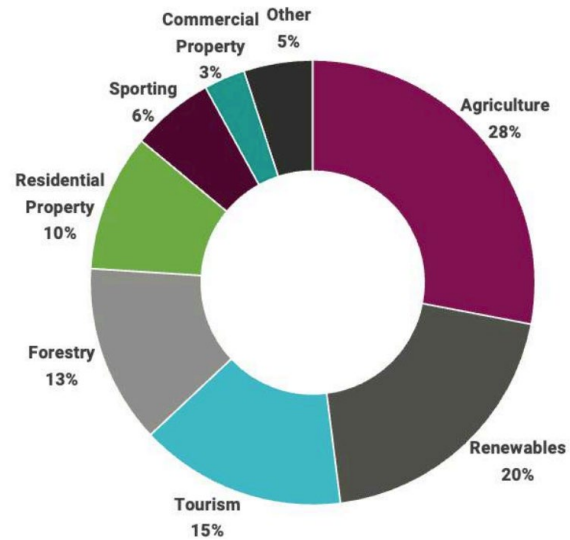


Figure 4-1: Estate Income by Source, 2021



Source: BIGGAR Economics survey

Table 4-6: Land Use of Rural Estates

Land Use	2022	2014
Agriculture	92%	n/a*
Residential property	89%	79%
Conservation	79%	32%
Sports and recreation	78%	78%
Forestry	72%	65%
Renewables	70%	32%
Tourism (inc. retail, heritage, food and drink).	62%	66%
Commercial property	72%	30%

Source: BIGGAR Economic survey and Hindle et al (2014), \*Data not comparable across surveys.

The Contribution of Rural Estates to Scotland's Wellbeing Economy

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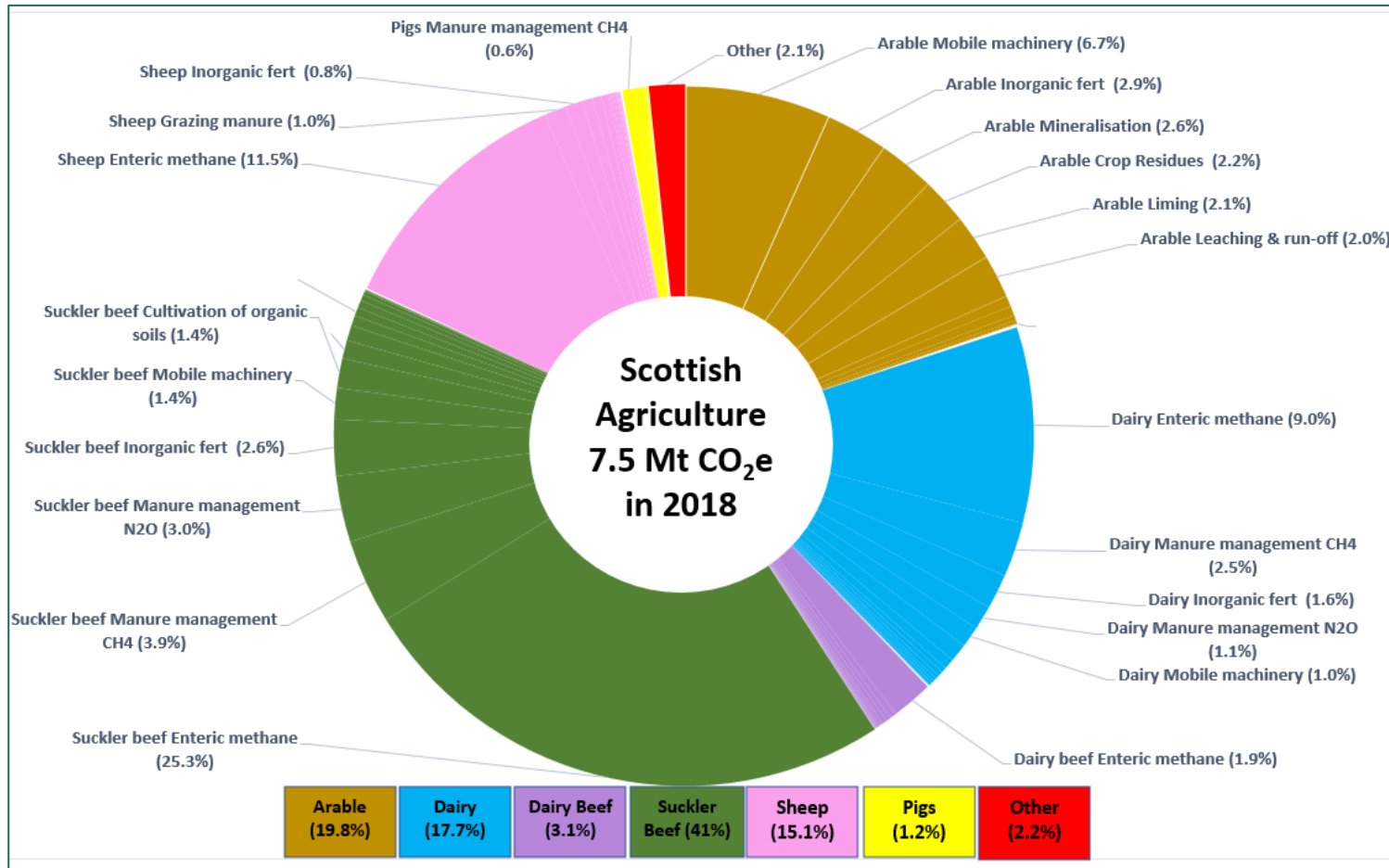


Table 2: Direct, indirect and induced output, GVA and FTE employment supported by Scotland's renewable energy sector, 2020\*

Impact	Output (£m)	GVA (£m)	FTE employment
Direct	3,060	1,270	8,450
Indirect	1,440	630	8,800
Induced	1,120	680	9,900
<b>Total</b>	<b>5,620</b>	<b>2,580</b>	<b>27,150</b>

\*Figures rounded. Columns may not sum due to rounding.

# Environmental Impacts?



## Headlines



### Average 15% decline in species' abundance

For 407 terrestrial and freshwater species, abundance across Scotland has fallen by 15%, on average, since 1994.



### Average 15% increase in the distributions of invertebrate species

Distributions of 2,149 invertebrates increased by 15% on average since 1970. This was driven by climate change and large average increases in the distributions of aquatic insect species that support freshwater nutrient cycling.



### Strong decreases in plant and lichen distributions

Since 1970, the distributions of 47% of flowering plants, 62% of bryophytes (mosses and liverworts) and 57% of lichens have decreased, compared to 27, 25 and 34% of flowering plants, bryophytes and lichens respectively, that have increased in distribution.



### 49% decline in average abundance of Scottish seabirds

The abundance of 11 seabird species in Scotland has fallen by 49% on average since 1986. These results pre-date the current outbreak of Highly Pathogenic Avian Influenza.



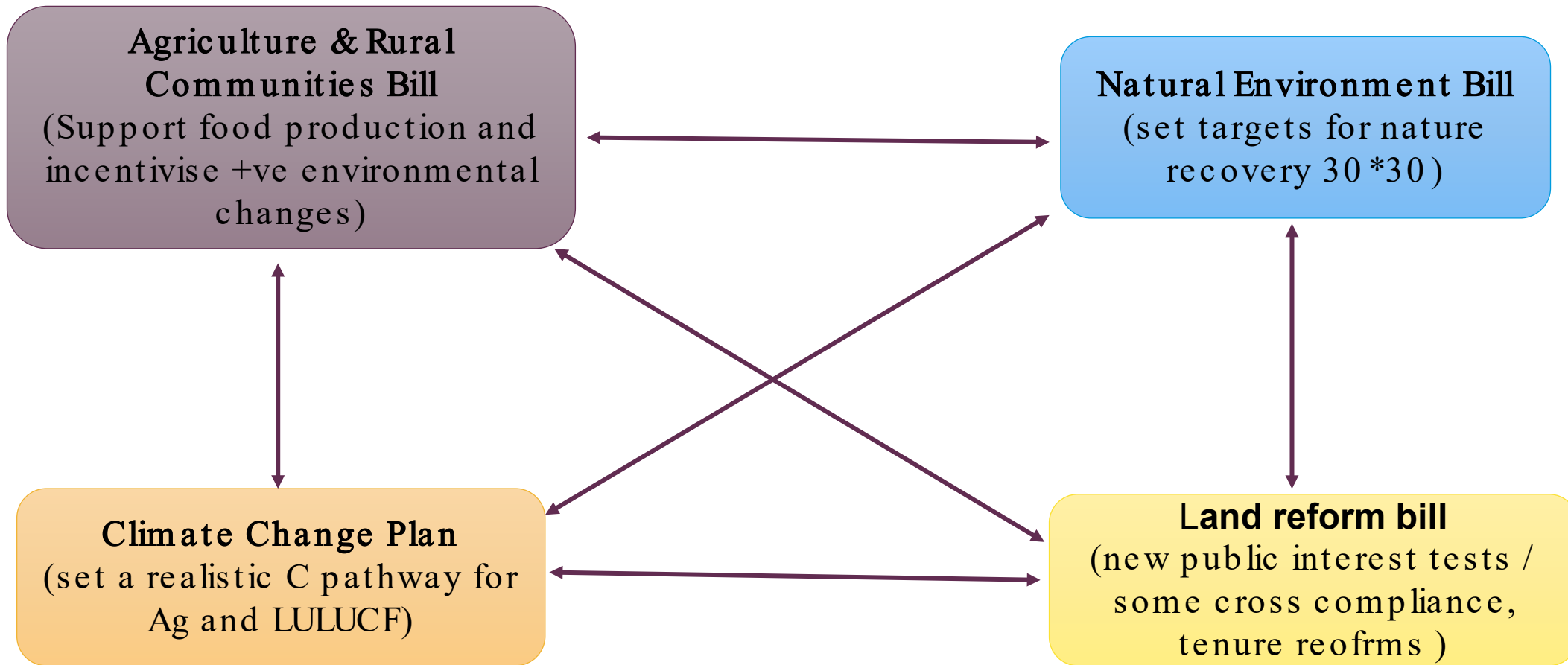
### 11% of species are threatened

Of 7,508 species in Scotland that have been assessed using IUCN Red List criteria, 11% have been classified as threatened with extinction from Great Britain.

Grayling, Paul Sawyer (rspb-images.com); Fulmar, Richard Carlyon (rspb-images.com); Emerald Moth, Phil Formby / WTML; Capercaillie, Ben Andrew (rspb-images.com); Norwegian specklebelly, Andy Acton

LULUCF now a net  source, not a sink

# Need for Policy Coherence



**Land use is already multifunctional – legislation should be designed improve national outcomes – in a Just Transition**

# Budgets sit with Agriculture & Forestry

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- **Agriculture Bill** – lacks detail (secondary legislation) or budget allocations
- **Climate Change Plan** – realistic pathways for Agriculture and LULUCF are important. Global v local emissions. Agriculture support will need strong conditionality attached. Squeezed middle with regards woodland creation.
- **Land reform bill** – the setting of public interest tests? Links to agricultural support cross compliance? Peatland restoration obligations?
- **Natural Environment Bill** – 30 \*30 timeline will be tight. Need to link to agriculture conditionality (similar to EU GAEC 8) and forestry planting consents

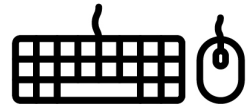
**The status quo no longer has any status**

# Acknowledgements

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Contact:



[steven.thomson@sruc.ac.uk](mailto:steven.thomson@sruc.ac.uk)



[@StevenGThomson](https://twitter.com/StevenGThomson)

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