

# How and where should Scotland restore and expand the woodlands we need for biodiversity?

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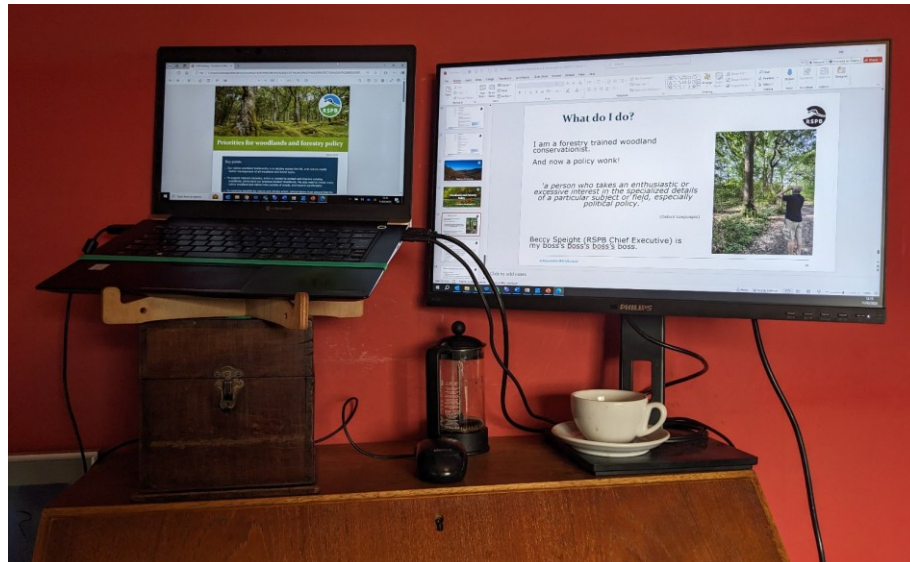
# Who I am, what I do.



I am a forestry trained woodland conservationist.

Former forestry academic, now a policy wonk!

*Wonk: 'a person who takes an enthusiastic or excessive interest in the specialized details of a particular subject or field, especially political policy.'* (Oxford Languages)



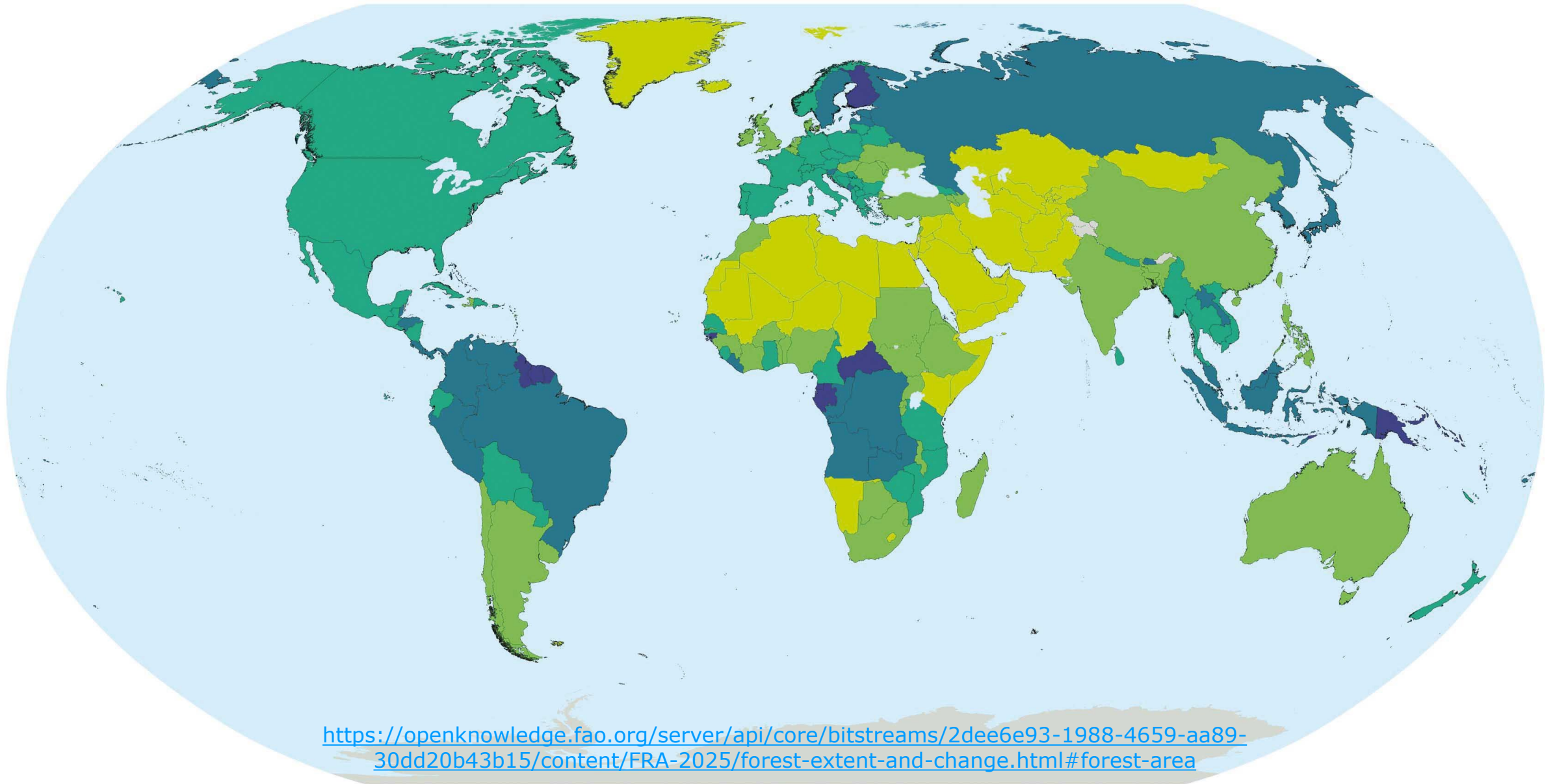
# The Trees, Woods and Forests Pub Quiz



## 1. What percentage of Scotland is covered by woodland/forest?

- a. 9%
- b. 19% Scotland has **19%** woodland cover
- c. 29%
- d. 39%
- e. 49%

[https://cdn.forestresearch.gov.uk/2025/09/FS2025\\_Ch1-68d4f71b97f6f.pdf](https://cdn.forestresearch.gov.uk/2025/09/FS2025_Ch1-68d4f71b97f6f.pdf)



Proportion of land forested (%): 0-10 11-30 31-50 51-70 71-100 No data

# The Trees, Woods and Forests Pub Quiz



## 2. Is Scotland self-sufficient in food?

- a. Yes
- b. Probably
- c. Probably not
- d. No
- e. Don't know

Scotland is **probably** self-sufficient in indigenous food (the food it can grow itself), but **probably not** overall.

<https://link.springer.com/article/10.1186/s40066-024-00486-0>

# The Trees, Woods and Forests Pub Quiz



**Table 1** Self-sufficiency ratio of major food commodities in Scotland (percentages)

Year	Wheat	Barley	Oats	Potatoes	Poultry	Lamb	Beef	Pork	Dairy	Eggs
2003	103.5	148.6	304.3	131.2	95.6	91.9	123.5	35.8	118.4	75.7
2004	108.4	156.0	211.3	126.0	98.6	101.1	136.3	36.6	115.6	75.7
2005	103.3	133.8	232.1	121.1	96.1	91.1	140.6	34.8	111.1	78.2
2006	116.5	152.5	233.7	141.6	83.6	95.1	148.1	35.5	111.7	76.0
2007	117.5	147.9	199.9	136.7	82.6	80.3	140.6	35.9	106.6	78.1
2008	118.8	160.1	202.1	134.0	77.3	101.3	157.4	36.1	107.7	74.6
2009	97.1	138.5	244.7	138.8	79.3	100.3	138.2	28.5	106.0	87.8
2010	111.7	133.0	177.4	133.7	74.8	100.8	157.9	27.9	101.6	86.0
2011	126.8	154.7	228.4	130.5	87.8	124.5	148.2	31.8	110.6	107.8
2012	98.9	164.1	203.6	100.6	71.2	86.7	129.2	26.2	106.0	89.3
2013	103.2	157.6	323.8	123.6	86.3	108.0	146.5	15.5	107.3	95.9
2014	134.0	149.1	226.8	127.0	73.9	107.8	149.7	15.3	123.3	113.7
2015	119.4	144.2	243.0	114.7	64.4	116.6	154.1	16.5	108.9	110.5
2016	100.0	224.2	214.0	122.8	62.6	81.2	140.1	14.7	102.4	129.0
2017	92.5	211.2	173.7	130.8	85.6	102.5	165.3	15.2	129.3	146.0
2018	65.2	180.5	149.3	128.4	65.4	100.2	147.2	19.9	115.5	155.7
2019	110.7	268.2	216.2	130.5	67.3	108.5	163.5	20.9	119.4	149.9
Mean	107.5	166.1	222.6	127.8	79.5	99.9	146.3	26.3	111.8	101.8
Standard deviation	15.5	36.1	42.9	9.7	11.4	11.7	11.4	8.8	7.5	28.2
Coefficient of variation	14.5	21.7	19.3	7.6	14.3	11.7	7.8	33.5	6.7	27.7

Own computation based on Scottish government data and Family Food statistics

Rathnayaka et al. *Agriculture & Food Security* (2020) 13:41  
<https://doi.org/10.1186/s40066-020-00486-0> Agriculture & Food Security

**RESEARCH** Open Access

**Assessing Scotland's self-sufficiency of major food commodities**

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**Abstract**  
**Background:** Analysis of food self-sufficiency at the regional level helps to better understand its dependency on, and vulnerability to, the food system. Moreover, achieving food self-sufficiency has gained prominence in the present policy agenda to increase resilience to adverse events and lower food resource footprint. Using a novel method, we estimated the food balance sheets of Scotland, the second largest region in the United Kingdom, and assessed the self-sufficiency of major food commodities for the first time.  
**Methods:** Data from 2003 to 2019 were obtained from Economic Reports on Scottish Agriculture and the Department for Environment, Food and Rural Affairs (DEFRA) Family Food statistics. Food import and export data are not readily available for Scotland. Therefore, we developed a consumption-based approach to estimate the net trade values of each commodity. We also assessed the contribution of domestic production toward nutrient security.  
**Results:** According to our estimates, Scotland is a net exporter of beef, exporting an average of 51.1 thousand tons per year. It is also a net exporter of cereal (wheat, barley, oats) and potatoes, although this was not always the case between 2003 and 2019. Scotland has a strong level of self-sufficiency in cereals, potatoes, lamb, beef, dairy, and eggs. However, there is room for improvement in achieving self-sufficiency in poultry and pork, where the self-sufficiency ratio is relatively low. Our analysis of nutrient security indicates that wheat and dairy sourced from Scotland play crucial roles in the food supply chain, markedly influencing total energy, dietary protein, and primary dietary fat sources.  
**Conclusions:** Our assessment can serve as a foundation for evidence-based decision-making in Scotland's agricultural and food policy. It offers insights into where investments and support may be needed to enhance domestic production and promote a resilient and sustainable food system. Estimated self-sufficiency ratios provide a more accurate assessment of the extent of food localization in Scotland. The method we developed in this study has the potential to be a valuable tool for future research studies, allowing for the estimation of regional-level food self-sufficiency even when trade data and food balance sheets are unavailable.  
**Keywords:** Food systems, Food balance sheets, Self-sufficiency, Sustainability

**Introduction**  
The regional food system framework has received a lot of attention recently from food advocates, planners, supply chain participants, and legislators as a workable blueprint for how we might best feed ourselves [1–5]. A region can be defined by political or administrative boundaries such as a county, state, or environmental protection agency (EPA) region [1, 5].

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<https://link.springer.com/article/10.1186/s40066-020-00486-0>

# The Trees, Woods and Forests Pub Quiz



## 3. How dependent is Scotland on imported wood?

- a. 0% Scotland produces at least as much wood as it uses, < **0%**
- b. 20%
- c. 40%
- d. 60%
- e. 80%

<https://www.parliament.scot/chamber-and-committees/official-report/search-what-was-said-in-parliament/meeting-of-parliament-09-11-2022?meeting=13975&iob=126642>

# The Trees, Woods and Forests Pub Quiz



*'The UK as a whole is the world's second-largest importer of sawn timber and timber products. As much as 80 per cent of demand is being met by imported timber, which comes mostly from the European Union. **Each year in Scotland, we sustainably harvest around 7 million cubic metres of timber from our forests, which is roughly the same volume of timber as we use.'***

Mairi McAllan, Forestry Minister, Scottish Government,  
Forestry (Contribution to Net Zero) debate,  
9<sup>th</sup> November 2022.

<https://www.parliament.scot/chamber-and-committees/official-report/search-what-was-said-in-parliament/meeting-of-parliament-09-11-2022?meeting=13975&iob=126642>

# The Trees, Woods and Forests Pub Quiz



## 4. How dependent will Scotland be on imported wood in future?

- a. 0% Scotland should produce more wood than it uses, i.e. < **0%**
- b. 20%
- c. 40%
- d. 60%
- e. 80%

<https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory/how-our-woodlands-might-change-over-time-nfi-forecast-reports/#softwood>

# The Trees, Woods and Forests Pub Quiz



**Table 3.** 50-year forecast of softwood availability; average annual volumes

Forecast period	GB PFE	Private sector		Total
	Volume (000 m <sup>3</sup> obs)	Volume (000 m <sup>3</sup> obs)	SE%	Volume (000 m <sup>3</sup> obs)
<b>Scotland</b>				
2027–31	4,008	8,097	7	<b>12,105</b>
2032–36	3,501	10,195	7	<b>13,696</b>
2037–41	2,845	9,862	7	<b>12,707</b>
2042–46	2,458	7,033	7	<b>9,491</b>
2047–51	2,724	5,078	7	<b>7,802</b>
2052–56	2,764	5,436	6	<b>8,199</b>
2057–61	2,687	6,173	5	<b>8,860</b>
2062–66	2,471	9,129	4	<b>11,600</b>
2067–71	2,047	5,674	5	<b>7,721</b>
2072–76	1,799	6,297	4	<b>8,096</b>

<https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory/how-our-woodlands-might-change-over-time-nfi-forecast-reports/#softwood>

# The Trees, Woods and Forests Pub Quiz



## 5. What percentage of Scotland is covered by native woodland?

- a. 3%
- b. 6%     Scotland has **6%** native woodland cover
- c. 9%
- d. 12%
- e. 15%

<https://digitalpublications.parliament.scot/ResearchBriefings/Report/2021/8/19/fd352596-863e-4e0f-9a5e-84af26856d74-1#8ada7f35-9a82-4b27-b49c-f71def059aa8.dita>

# The Trees, Woods and Forests Pub Quiz



*'The area of Scottish native woodland (woodland where over 50% of the canopy is composed of native species such as birch, rowan, hazel, oak, scots pine, juniper, alder, willow, and ash) amounts to **32% of the total woodland area.**'*

<https://digitalpublications.parliament.scot/ResearchBriefings/Report/2021/8/19/fd352596-863e-4e0f-9a5e-84af26856d74-1#8ada7f35-9a82-4b27-b49c-f71def059aa8.dita>

# The Trees, Woods and Forests Pub Quiz



## 6. Should we use Scotland or UK data?

Forestry is devolved.

*'the people of Scotland have returned the largest pro-independence majority ever elected to the Scottish Parliament; believes this majority affirms a clear mandate that decisions about Scotland's future are best taken in Scotland and that mandate must be respected; **calls on the UK Government to make a Section 30 order under the Scotland Act 1998 to devolve the powers to the Scottish Parliament to hold a referendum on Scottish independence'***

John Swinney, First Minister,  
Independence Referendum  
26<sup>th</sup> May 2026

<https://www.parliament.scot/chamber-and-committees/official-report/search-what-was-said-in-parliament/meeting-of-parliament-26-05-2026?meeting=20161&iob=222904>

# The Trees, Woods and Forests Pub Quiz



## **7. How and where should we restore and expand the woodlands we need for biodiversity?**

1. Marginal land for agriculture.
2. Buffer zones around Ancient Woodlands (and to connect them).
3. Caledonian pinewood.
4. Scotland's rainforest.
5. All of the above.

# The Trees, Woods and Forests Pub Quiz



## 7. So, what do we want (ScotLink, including RSPB)?

*'Ring-fence at least **50% of forestry grants to support native woodland restoration and expansion** through measures like sustainable herbivore management to support the return of nature-rich woodlands across the nation. At least **9,000ha of new native woodland should be created annually until 2045** with natural colonisation as the default woodland establishment approach in buffer zones around Ancient Woodlands.'*

<https://www.scotlink.org/wp-content/uploads/2025/04/LINK-Manifesto-Digital-Artwork.pdf>

# The Trees, Woods and Forests Pub Quiz



## 8. What else do we want (ScotLink, including RSPB)?

*'Improve the impact of productive forestry by ring-fencing a further **25% of forestry grants to initiate a sustained transition to more resilient, nature-friendly forestry design and management practices.** Taking steps to increase the diversity of trees grown and the proportion of commercial forestry kept under continuous cover would make a significant contribution to the richness and resilience of biodiversity supported in Scotland's economically productive forests.'*

<https://www.scotlink.org/wp-content/uploads/2025/04/LINK-Manifesto-Digital-Artwork.pdf>

# How and where should Scotland restore and expand the woodlands we need for biodiversity?



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