Natural capital account

2024/25

Contents

Foreword from the Chief Executive

Forests are among England's greatest assets: living landscapes that sustain life, enrich communities, and shape our future. At Forestry England, we manage forests as places of beauty and biodiversity, and also as vital systems that sustainably produce timber, deliver clean air, store water, lock away carbon, and provide spaces for millions to connect with nature. Every tree, every path, and every habitat plays a part in creating benefits that reach far beyond the forest edge.

This year's natural capital account shows the scale of that contribution. The total natural capital asset value of the forests in our care has grown to £99.9 billion, continuing a long-term trend of increasing benefits to society and the environment. These forests welcomed 313 million visits, including 161 million active visits, helping people stay healthy and connected.. They removed 1.3 million kilograms of harmful particles from the air, stored 78 million cubic metres of water, and embodied 1.07 million tonnes of carbon in harvested timber. We also produced 6.7 million plants and delivered over a million cubic metres of sustainable timber, supporting homes, businesses, and jobs.

The monetary value of these benefits is equally impressive - £2 billion in total benefits to society, including £906 million in recreation, £661 million in avoided healthcare costs, and £266 million in carbon removal. One of the most significant changes this year is in air quality regulation, which has roughly doubled to £105 million following an update to the UKCEH air quality model—an improvement that makes a real difference to people's lives.

As with previous reports, this account has been prepared to the British Standards Institute's Natural Capital Accounting standard and independently audited, ensuring that the evidence we share is robust and trusted. These insights help us make better decisions and demonstrate the true value of the forests we care for.

Behind these numbers is the expertise and dedication of our teams, partners, and volunteers who work tirelessly to protect and enhance these landscapes. The societal benefits of managing and caring for forests far outweigh the costs, and this report shows how Forestry England is delivering on its promise: to grow the natural capital value of forests for wildlife to flourish, for people to enjoy, and for business to thrive. As we look ahead, our commitment remains clear: to protect, restore, and enhance these landscapes so they continue to deliver benefits for generations to come.

Mike Seddon,
Chief Executive

Our natural capital account on a page

Report highlights

£99.9 billion
Total natural capital asset value of the nation's forests

1.07 million tonnes
of carbon embodied in harvested timber

161.4 million active visits
to the nation's forests

1 million tonnes
of minerals produced

6.7 million plants
produced

Physical flows

313 million
visits

78 million
cubic metres of water stored

1.5 million
cubic metres of sustainable timber yield forecast*

1.3 million kilograms
of particulate matter removed from the atmosphere

* The forecast used in the account is an increment forecast, which estimates the annual volume of timber growth (in cubic metres) across the nation's forests, prior to adjusting for natural losses or removals through forest operations.

Monetary flows

Delivered total benefits to society worth
£2b

Provided benefits to society worth
£266m
in removing CO_2 from the atmosphere

£45m
in prevented flooding

£577,189
in mineral sales

Provided recreational benefits to society worth
£906m

Provided physical health benefits amounting to
£661m
in avoided medical costs

Provided air quality regulation benefits to society worth
£105m
through removal of particulate matter from the air

Asset register

Overall standing timber volume is
38 million m³

Coniferous standing timber volume
28 million m³

Broadleaf standing timber volume
10 million m³

47 million tonnes
of CO_2 (carbon dioxide equivalent) now stored within living biomass

254,200 ha
of land managed

15,266 ha
woodland in urban areas

51,784 ha
area native woodland

Asset register

The asset register is an inventory of the status of the natural capital assets that make up the nation's forests, including evidence of their extent, condition, and spatial configuration. Other forms of capital (e.g. car parks) that may influence natural capital benefits are also included.

Value change	Key
Increase (>3%)	↑
Minimal change	↔
Decrease (>3%)	↓

Impact of change	Key
Planned or positive	
Minimal impact	
Unplannned or negative	
No available data	

Indicator			Baseline year (2013/14)	Reporting Year (2024/25)	Trend	% change	Units
Ecological communities and species							
Extent	**Broad and priority habitat area**		**Full list of priority habitat areas given in S1.1**				**ha**
	Broad habitat area	Woodland area	207,876	203,618	↔	-2.0%	
		Grassland area	12,748	17,208	↑	35.0%	
		Mountain, moors and heathlands area	28,564	29,581	↑	3.6%	
		Enclosed farmland	724	1,718	↑	137.3%	
		Freshwater	265	329	↑	24.0%	
		Urban area	742	823	↑	10.9%	
		Coastal margins area	17	23	↑	35.3%	
		Other	-	900	-	-	
		Total area	250,936	254,200	↔	0.9%	
	Priority habitat area	Broadleaved, mixed and yew woodland	22,757	22,603	↔	-0.7%	ha
		Lowland dry acid grassland and lowland heath	14,628	14,865	↔	1.6%	
		Other priority grassland	522	898	↑	72.0%	
		Lowland raised bog	782	833	↑	6.5%	
		Blanket bog	6,793	6,877	↔	1.2%	
		Upland heathland	6,881	6,992	↔	1.6%	
		Other	364	542	↑	48.8%	
		Total area	52,727	53,610	↔	1.7%	
	Woodland area[a]	Plantation	164,199	148,635	↓	-9.5%	
		Native	38,890	51,784	↑	33.2%	
		Non-intervention	13,275	13,582	↔	2.3%	
		Wood pasture	735	736	↔	0.1%	
	Total land area holdings	Freehold	198,883	204,506	↔	2.8%	
		Leasehold	53,341	48,330	↓	-9.4%	
		Other (land not owned)	-	1,364	-	-	
		Total area	252,223	254,200	↔	0.2%	
	Total Agricultural land area holdings		3,284	6,735	↑	105.1%	

Notes:

a. From 2024/25 onwards, the area of plantation and semi-natural woodland reflects a revised methodology following changes to the calculation of Semi-Natural Scores introduced in April 2024. As a result, year-on-year comparisons with 2023/24 and earlier figures may show step-changes due to the updated method rather than changes on the ground.

Indicator			Baseline year (2013/14)	Reporting Year (2024/25)	Trend	% change	Units
Ecological communities and species							
Extent	Area land under statutory designations	SSSI	68,192	68,266	↔	0.1%	ha
		AONB	29,832	29,575	↔	-0.9%	
		SAM	969	999	↑	3.1%	
		National Parks	85,230	85,200	↔	0.0%	
		Total area (designations overlap so no additive)	147,982	147,774	↔	-0.1%	
	Area of open habitat[a]		43,060	49,677	↑	15.4%	
	PAWs--area by semi-naturalness score	1 (over 80 % native)	9,066	16,177	↑	78.4%	
		2 (between 50 to 80 % native)	3,372	4,305	↑	27.7%	
		3 (between 20 to 50 % native)	5,336	6,390	↑	19.8%	
		4 (under 20 % native)	25,775	14,905	↓	-42.2%	
		0 (no trees)	981	939	↑	-4.3%	
		Total area	44,531	42,716	↓	-4.1%	
	Ancient semi natural woodland--area by semi-naturalness score	1 (over 80 % native)	21,840	29,508	↑	35.1%	
		2 (between 50 to 80 % native)	4,077	5,201	↑	27.6%	
		3 (between 20 to 50 % native)	5,910	6,996	↑	18.4%	
		4 (under 20 % native)	27,272	15,548	↓	-43.0%	
		0 (no trees)	1,698	1,646	↑	-3.1%	
		Total area	60,797	58,889	↓	-3.1%	
Condition	Condition of SSSIs	% in favourable condition	35.6	36.72	↑	3.1%	%
		% in unfavourable recovering condition	63.9	55.72	↓	-12.8%	
		% in unfavourable no change or declining condition	0.5	4.60	↑	820.0%	
		% part destroyed or destroyed condition	-	2.96	↔	0.0%	
	Woodland Ecological Calculator Index	Deadwood volume (native woodland)	6.0%	-	-	-	% ha favour-able
		Vertical structure (native woodland)	42.0%	-	-	-	
		Ground flora (native woodland)	9.0%	-	-	-	
		Veteran trees (native woodland)	0.0%	-	-	-	
		Nativeness of occupancy (native woodland)	89.0%	-	-	-	
		Invasive species (native woodland)	95.0%	-	-	-	
		Tree pests and diseases (native woodland)	89.0%	-	-	-	
		Herbivores/grazing pressure (native woodland)	49.0%	-	-	-	
		Regeneration at component group level (native woodland)	20.0%	-	-	-	
		Number of native tree/shrub species (native woodland)	46.0%	-	-	-	
		Age distribution of tree species (native woodland)	18.0%	-	-	-	
		Proportion of Open Space (native woodland)	5.0%	-	-	-	
		Proportion of woodland/open habitat (native woodland)	76.0%	-	-	-	

Indicator			Baseline year (2013/14)	Reporting Year (2024/25)	Trend	% change	Units
Ecological communities and species							
		Size of woodland parcel (native woodland)	97.0%	-	-	-	
		Regeneration at population level (native woodland)	41.0%	-	-	-	
		Overall ecological condition score (native woodland)	18.0%	-	-	-	
		Overall ecological condition score (non-native woodland)	0.5%	-	-	-	
Condition	Trees of interest	Total	6922	6922	↔	0.0%	% ha favour-able
		Notable	562	562	↔	0.0%	
		Ancient	1,271	1,271	↔	0.0%	
		Veteran	5,089	5,089	↔	0.0%	
	Wildlife management	Fallow	3,347	5,311	↑	58.7%	
		Muntjac	2,228	4,805	↑	115.7%	
		Red	544	643	↑	18.2%	
		Roe	4,967	6,428	↑	29.4%	
		Sika	301	350	↑	16.3%	
		Boar	196	238	↑	21.4%	
		Chinese Water Deer	-	68	↑	n/a	
		Total	11,583	17,843	↑	54.0%	
	Carbon stock in...	...living biomass	11,391	12,756	↑	12.0%	thousand metric tonnes
	CO_2e stock in...	...living biomass	41,766	46,771	↑	12.0%	
		...deadwood and litter	12,232	-	-	-	
		...soils	142,630	-	-	-	
	Biomass stock...	...total above and below ground	22,781	25,512	↑	12.0%	thousand metric tonnes oven-dry weight
		...above ground	17,785	19,926	↑	12.0%	
		...below ground	4,997	5,585	↑	11.8%	
	Standing timber volume (overbark standing)	Coniferous	26,148	27,817	↑	6.4%	thousand m3
		Broadleaved	8,147	10,166	↑	24.8%	
Location of nation's forest by ONS land classifi-cation		Rural town and fringe	27,954	28,127	↔	0.6%	ha
		Rural village and dispersed	206,223	207,480	↔	0.6%	
		Urban city and town	16,517	16,259	↔	-1.6%	
		Urban conurbation	2,201	1,968	↓	-10.6%	
		Total	252,895	253,833	↔	0.4%	

Indictor		Baseline year (2013/14)	Reporting Year (2024/25)	Trend	% change	Units
Woodland Accessibility						
Percentage of people in 'Priority Places' close to accessible woodland in the nation's forests		9	7.5	↓	-16.7%	%
Percentage of people within 10 km (about 6 miles) of the nation's forests		49.1	48.4	↔	-1.4%	
Percentage of people within a 15/30/60-minute drive of the accessible nations' forests:	15 minutes	40.3	37.5	↓	-6.9%	
	30 minutes	85.8	84.1	↔	-2.0%	
	60 minutes	99.9	99.9	↔	0.0%	
Soil						
Area of woodland on deep peat soils	Yield Class > 6	16,405	15,739	↓	-4.1%	ha
	Yield Class ≤ 6	3,118	2,653	↓	-14.9%	
Area of woodland on shallow peat soils and peaty pockets	Yield Class > 6	45,737	44,553	↔	-2.6%	
	Yield Class ≤ 6	7,164	6,943	↓	-3.1%	
Air						
Area of woodland in areas of differing air quality	Urban	15,433	15,266	↔	-1.1%	ha
	Peri-urban	25,152	25,220	↔	0.3%	
	Rural	160,141	157,535	↔	-1.6%	
	Total	200,727	198,021	↔	-1.3%	
Other forms of capital						
Area of land by accessibility status	CRoW Access	150,430	150,201	↔	-0.2%	ha
	Other accessibility based on deeds	86,228	86,808	↔	0.7%	
Km of published recreational routes across the estate	Walking	1,095	1,288	↑	17.6%	km
	Cycling	1,303	1,280	↔	-1.8%	
	Other (e.g. equestrian, rally)	497	1,263	↑	154.1%	
	Total	2,895	3,832	↑	32.4%	
Trees of notable interest						
Ancient trees	Ancient trees	460	492	↑	7.0%	number of trees
	Vetran trees	4,043	4,308	↑	6.6%	
	Total	4,503	4,800	↑	6.6%	
Active Forests Programme						
Total visitors		865,618	4,528,069	↑	423.1%	%
Gender of visitors[b]	Female	479,892	2,605,570	↑	442.9%	number of visitors
	Male	383,834	1,906,637	↑	396.7%	
	Other	1,892	15,862	↑	738.4%	
Activities[c]	Cycling	247,134	1,771,842	↑	617.0%	number of visitors
	Running	174,181	387,994	↑	122.8%	
	Walking	207,719	2,222,705	↑	970.1%	
	Other	236,584	177,158	↓	-25.1%	

Notes:

a. The open habitat area baseline has been updated since the last accounts as the methodology for calculating it has changed since it was first calculated.

b. This baseline is for 2018-19. This figure is an estimate based on total survey responses across all years of programme being averaged across all activities and forest sites.

c. Number of visits for cycling and walking have been adjusted down to account for introducing counters at many forest sites that likely capture visits not associated with the Active Forests programme. Numbers presented are considered a conservative estimate.

Risk register

Forestry England's approach to risk management is proactive, structured, and embedded across all levels of the organisation. In line with the BSI standard, risks to natural capital assets and delivering ecosystem services are identified and included in the accounts. These risks are assessed and managed through a robust governance framework which includes local risk registers, and a cross-functional risk management group, with oversight by the Executive Team and Board.

This register summarises key risks to natural capital identified and outlines mitigation measures in place to manage them.

Risk	Mitigation measures
Climate change and extreme weather	Increasing storms, floods, droughts and wildfires disrupt forest growth and visitor access. Forestry England is applying its Forest Resilience Strategy, investing in resilient seeds at Lobslack, and using research tools like the drought resilience index to guide planning.
Pests and diseases	Tree health is threatened by rising pest and disease outbreaks. Continuous monitoring, research partnerships, and use of a core species list help maintain resilience, supported by FSC and PEFC certification.
Health and safety	Forestry operations carry risks of injury and illness. The Look Out and Look After programme strengthens safety culture through training, improved PPE access and proactive incident management.
Valuation and model uncertainty	Forest and biological asset valuations are sensitive to market changes. Regular professional valuations, annual indexation and published sensitivity analyses help manage this risk.
Workforce capacity and capability	Recruitment and retention challenges risk delaying key projects. Forestry England is using a new recruitment system, training programmes and succession planning to maintain capability.

Physical flow account

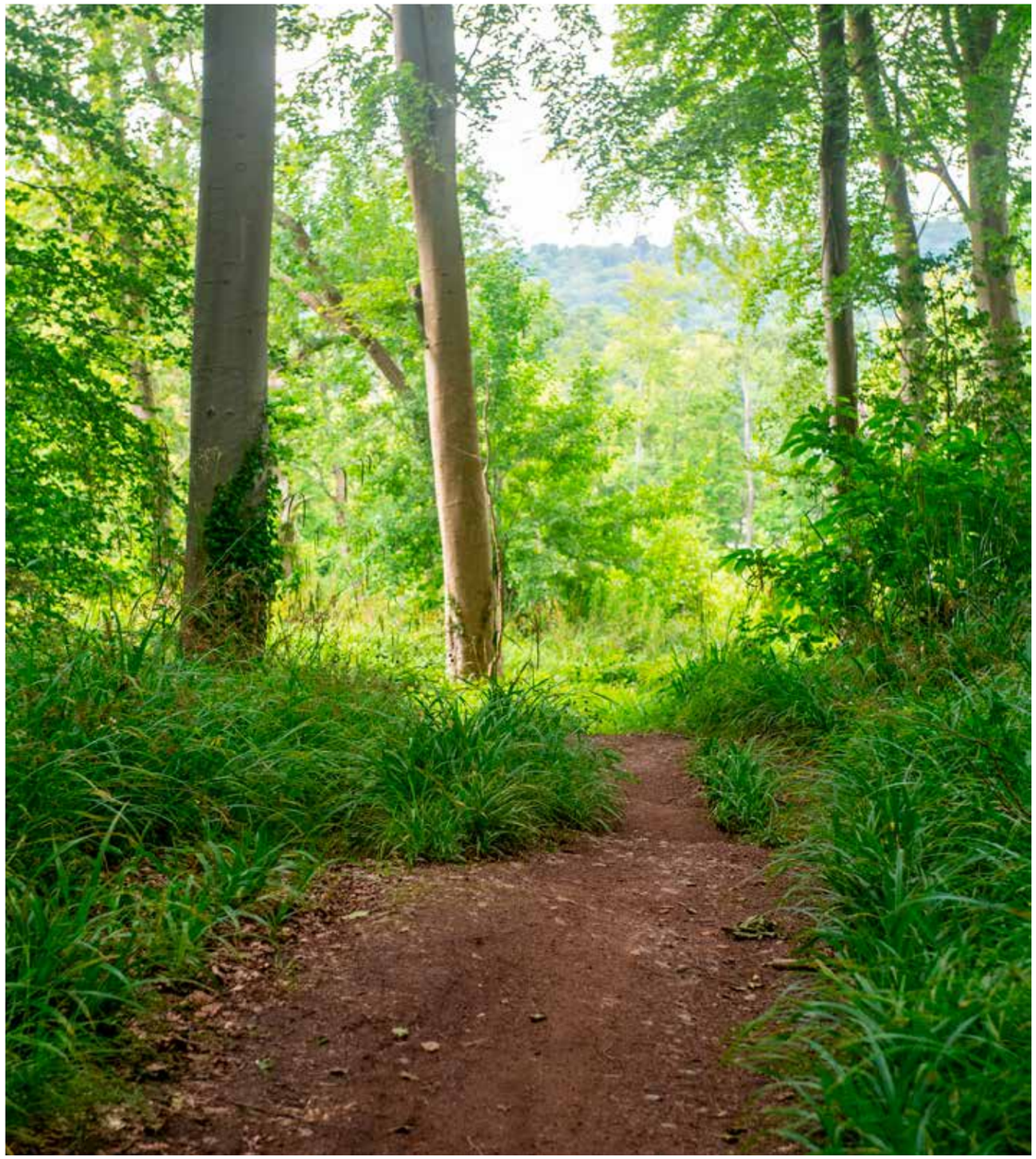
This schedule reports the flow of annual natural capital benefits that are produced on the nation's forests in the baseline year and the reporting year. This includes production by Forestry England itself, contractors and tenants. It is relevant to report all these aspects because total (annual) production relates to Forestry England management decisions.

Spatial accounting unit by natural capital benefit	Indicator	Units	Baseline year	Reporting year
			2013/14	2024/25
Timber provision				
Woodland	Total nation's forests timber production	m^3/yr	1,520,129	1,456,754
Climate regulation[a]				
Woodland	Carbon sequestered / (emitted)	tCO_2/yr	1,645,657	894,267
Bogs			(11,663)	(11,882)
Grassland				
Heathland				
Woodland on Deep Peat Soils			(88,569)	(83,438)
Woodland	Carbon embodied in environmental goods (timber)[b]	tCO_2/yr	1,037,176	1,072,094
Flood mitigation				
Woodland	Total volume of water stored	m^3/yr	78,334,513	78,334,513
Air quality				
Woodland	Volume of PM2.5 removed	kg	1,289,984	1,289,984
Recreation				
Whole estate	Visits to nation's forests[c]	visits/yr	BL 2016/17165,000,000	313,480,895
	Visitors to nation's forests[c]	visitors/yr	BL 2016/17 108,000,000	118,327,718
	Volunteers	hours/yr	201,337	195,959
Plant and seed supply				
Whole estate	Plant production number	number/yr	14,961,000	6,707,540
	Seed production weight	kg/yr	–	–
Food provision				
Whole estate	Wild game carcass numbers	number/yr	11,586	16,078
	Livestock production from tenant farmers	number/yr	7,309	6,283
	Crop production from tenant farmers	kg/yr	381	597
Minerals				
Whole estate	Mineral production volume	tonnes/yr	1,295,850	1,023,741
Physical health				
Whole estate	Active visits to nation's forests	visits/yr	84,975,000	161,442,661

Notes:

a. All GHG emissions are grossed out by expressing them all in terms of the same 'language': Carbon Dioxide Equivalents. Bogs on the nation's forests, for example, are net emitters of GHGs in the form of methane, nitrous oxide and carbon dioxide, depending on condition. Nation's forests bogs are assumed to be 75% near natural and 25% modified.

b. Carbon embodied in environmental goods does not represent a release of carbon to the atmosphere. It represents carbon locked up in harvested timber, which leaves the estate for commercial uses in the reporting year. It does not include non timber biomass (such as brash and roots), which is left on site after felling. This flow is of a slightly different nature to the other flows in the accounts, as it does not take into account what that subsequent use is, and in order to avoid double counting alongside the carbon sequestered figure, does not contribute to the monetary account or the balance sheet



Monetary flow account

This schedule collates the estimated total annual value (£) of natural capital benefits that are produced from the nation's forests in both the baseline year and the reporting year. These values are calculated after the deduction of production costs (but not maintenance costs, which cannot be attributed to individual beneftis but are netted off the gross value of assets in the balance sheet).

Spatial accounting unit by natural capital benefit	Indicator	Units	Baseline year	Reporting year
			2013/14	2024/25
Timber provision				
Woodland	Net asset value for timber produced	£/yr	£11,007,230	£1,289,471
Climate regulation				
Woodland	Carbon sequestration value	£/yr	£129,931,585	£265,020,160
Bogs			£(920,811)	£(3,521,355)
Grassland			–	–
Heathland			–	–
Woodland on Deep Peat Soils			£(6,992,924)	£(24,727,343)
Flood mitigation				
Woodland	Flood mitigation value	£/yr	£43,427,493	£43,427,493
Air quality				
Woodland	Air quality regulation	£/ha	£52,031,874	£104,534,376
Recreation				
Whole estate	Net asset value for recreation	£/yr	£468,363,727	£906,406,808
	Value to Forestry England	£/yr	£(13,431,315)	£(8,947,988)
	Public Value	£/yr	£481,795,043	£915,354,796
	Volunteers	£/yr		
Plant and seed supply[b]				
Whole estate	Plant and seed revenues	£/yr	£3,091,288	£1,119,739
Food provision				
Whole estate	Wild game carcass value[c]	£/yr	£12,677	£(864,359)
	Livestock production value	£/yr	–	–
	Crop production value	£/yr	–	–
Minerals[d]				
Whole estate	Mineral sales value	£/yr	£925,504	£577,189
Physical health				
Whole estate	Avoided medical treatment costs	£/yr	£347,900,789	£660,971,217
Total annual value of ecosystem services delivered		£/yr	£1,517,142,160	£1,954,233,399

Notes:

a. The monetary account reports the value to the reporting entity (private value from rents) and to wider society (external value from the direct consumption of benefits only). It does not include the indirect or 'downstream' value to farmers and aggregates/timber contractors from the sale of their produce. This is because these sales are based on decisions outside of the control of Forestry England and exist further along the value chain). Values reported above are the sum of annual private and external value.

b. Our plant and seed sales are counted as a benefit to society as the actual value of plants and seeds is much higher than their sale value when they are sold at cost of production.

c. Although the number of wild carcasses has increased against baseline, the huge decline in wild boar value from £2.50 in October 2017 to £0.75 in November 2017, as well changes in Forestry England venison contracts, has meant the revenues to Forestry England have fallen sharply alongside an increase in the cost of production. Wild game income is a by product of culling for forest management purposes, rather than done primarily for profit.

d. AWAITING A.E. INPUT for decline in minerals sales value vs smaller change in tonnage of production – coal extraction down 75% so may be due to that.

Produced at 31-03-2025	Asset values baseline year	Private value[c]				
		Baselined	Cumulative gains/losses[e]	Additionsf/ disposals[g]	Revaluations/ adjustments[h]	Reporting year (2024/25)
		PV £m				
Net assets values (gross + production costs)						
Timber	2013/14	272	(450)	-	213	35
Food	2013/14	1	(27)	-	-	(26)
Plant & seeds	2013/14	-	-	-	-	-
Carbon sequestered	2013/14	-	-	-	-	-
Mitigation of floods	2021/22	-	-	-	-	-
Air quality regulation	2021/22	-	-	-	-	-
Recreation and public access[i]	2013/14	(418)	139	-	-	(279)
Minerals	2013/14	5	-	-	(1)	4
Physical health	2013/14	-	-	-	-	-
Total net asset values		**(140)**	**(338)**	**-**	**212**	**(266)**
Natural capital maintenance costs						
Government payment for ecosystem services funding[j]		**625**	**1,340**	**-**	**-**	**1,965**
Maintenance costs[l]		**(585)**	**(643)**	**-**	**-**	**(1,228)**
Total natural capital maintenance costs		**40**	**697**	**-**	**-**	**737**
Total net natural capital assets value		**(100)**	**359**	**-**	**212**	**471**

External value[c]				
Baselined	Cumulative gains/losses[e]	Additionsf/ disposals[g]	Revaluations/ adjustments[h]	Reporting year (2024/25)
PV £m				
-	-	-	-	-
-	-	-	-	-
20	-	-	-	20
9,000	325	-	10,543	19,868
1,349	-	-	-	1,349
1,400	-	-	1,386	2,786
14,970	13,471	-	-	28,441
-	-	-	-	-
25,842	23,255	-	-	49,097
52,581	**37,051**	**-**	**11,929**	**101,561**
(625)	(1,340)	-	-	(1,965)
(59)	(13)	-	-	(72)
(684)	**(1,353)**	**-**	**-**	**(2,037)**
51,897	**35,698**	**-**	**11,929**	**99,524**

Total value				
Baselined	Cumulative gains/losses[e]	Additionsf/ disposals[g]	Revaluations/ adjustments[h]	Reporting year (2024/25)
PV £m				
272	(450)	-	213	35
1	(27)	-	-	(26)
20	-	-	-	20
9,000	325	-	10,543	19,868
1,349	-	-	-	1,349
1,400	-	-	1,386	2,786
14,552	13,610	-	-	28,162
5	-	-	(1)	4
25,842	23,255	-	-	49,097
52,441	**36,713**	**-**	**12,141**	**101,295**
-	-	-	-	-
(644)	(656)	-	-	(1,300)
(644)	**(656)**	**-**	**-**	**(1,300)**
51,797	**36,057**	**-**	**12,141**	**99,995**

Natural capital asset value summary

This is a breakdown of the balance sheet, reporting asset values into perpetuity for each natural capital benefit. It draws together the headline values reported under each of the monetary account schedules and the maintenance cost schedule.

The balance sheet only represents those parts of the natural capital value of the nation's forests that can currently be both measured in quantity, and where that quantity of physical benefit flow can be given a monetary value. This excludes many of the benefits we know our land provides, for example flood mitigation or improvement of air quality. So the values in this balance sheet are highly conservative estimates of the net natural capital asset value.

Notes:

a. All values in 24/25 prices £m in present value terms, rounded to the nearest £1m.

b. Present values are calculated as discounted flow of annual value in perpetuity. A 3% discount rate is used. Annual values are forecast over 50 years and from year 51 to perpetuity it is assumed that the annual value is constant (i.e. a constant flow assumption).

c. Private value of assets is to Forestry England, external value of assets is to the rest of society.

d. The baseline value represents the value of assets at the baseline date (31 March 2014 where possible, if otherwise the baseline year is noted in the asset register).

e. Cumulative gains/losses show the net change in asset values (compared to the baseline date). The change is normally due to a change in the condition of the assets, either through natural improvement/deterioration or through management intervention.

f. Additions show the increase in asset values associated with the acquisition, realisation or discovery of new assets since the baseline date.

g. Disposals disclose the reduction in asset values associated with the disposal or extraction (for non-renewable resources) of natural assets.

h. Revaluations and adjustments calculate the asset value changes arising from changes in external factors and key assumptions (e.g. market prices).

i. Baseline data 2015-16 when nation's forests started regular surveying for visitor numbers. The methodology is still being refined and so there are some amends to the baseline and current year data in line with this. The increase in value is driven by an increase in visitor numbers, e.g. both our survey data of all visitors to the nation's forests, and the visitor counting we undertake at some of our more popular visitor destinations, has recorded an increase in visits year on year of about 20%.

j. Payment from central government for the provision of Ecosystem Services.

k. Total gross asset values are for the reporting year (2024/25) and are calculated after the deduction of production costs (i.e. value of benefits minus costs of production) as reported in the monetary account. This is shown as a flow of private benefit into nation's forests, but the same value is repeated as a cost to society in the external value flows.

l. Maintenance costs include the cost of all legal obligations and other activities necessary to preserve the long term output of the natural assets at the benefit levels assumed in the asset values section of the balance sheet.

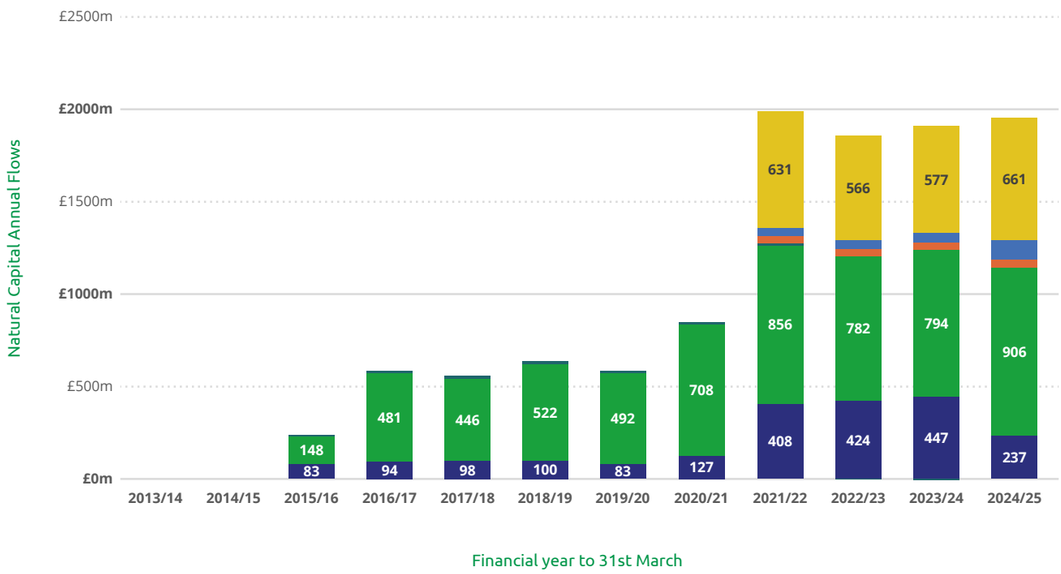
Natural capital through the years

Breakdown by year of ecosystem services delivered, monetary value (£ billions)

For over a decade, Forestry England's natural capital account has been central to evidence-based decision-making. They enable us to quantify and communicate the full value of the nation's forests for people, nature, and the economy, helping shape priorities, track progress, and demonstrate the benefits of sustainable management. As we deliver our strategic plan, Growing the future, these accounts guide action on climate and nature, enhance public wellbeing, and support a thriving green economy. They are ensuring the forests we care for today continue to flourish for generations to come.

Since publishing our first account in 2013/14, we've expanded the range of ecosystem services measured, providing a richer and more comprehensive picture of the forests' contribution to society. Over this period, the estimated natural capital value has grown from £17.8 billion in 2013/14 to £99.9 billion in 2024/25, a rise driven primarily by the inclusion and improved valuation of services such as physical health benefits, air quality regulation, and carbon sequestration.

The charts illustrate how both **net present value** (long-term cumulative worth) and **annual flows** (yearly benefits) have evolved, reflecting advances in measurement and the growing recognition of forests' role in public health, climate regulation, and sustainable resource provision.



Natural capital income statement

This reporting statement discloses the value of the positive and negative impacts of Forestry England's operations on natural capital over the reporting year.

Positive impacts are reported as enhancements and negative impacts as deteriorations.

This statement includes only Scope 1 impacts, that is impacts on any natural capital due to the organisations own operations. In future years the scope will be expanded to scope 2 impacts, which includes impacts on natural capital through the organisation's entire value chain (both supply chain and consumer impacts).

	2024/25		
For the 12 months to 31-03-2025	**Private Value £m/yr**	**External Value £m/yr**	**Total Value £m/yr**
Scope 1			
Enhancements to Natural Capital			
Timber produced	1		1
Food produced[a]	(1)		(1)
Carbon sequestration in all habitats		265	265
Air pollution removal by woodland		105	105
Recreation provision[b]	(9)	915	906
Physical health benefits		661	661
Water storage		43	43
Plant & Seed Supply		1	1
Total enhancements	**(9)**	**1,990**	**1,982**
Deteriorations to Natural Capital (own operations)			
GHG emissions from all habitats[c]		(28)	(28)
GHG emissions from own energy use (whole enterprise)[d]			-
Total deteriorations	**-**	**(28)**	**(28)**
Net contribution to natural capital (A+B)	**- 9**	**1,962**	**1,954**

Notes:

a. Negative as costs of production exceed the gross benfit value.

b. Negative as costs of production exceed the gross benfit value.

c. Show GHG emitted in the year (as per workbook).

d. Include current year GHG emissions when available (valued at BEIS non-traded value).

Annex A: natural capital accounting

For the third time, this account has been produced following the brand new British Standards Institute Standard for Natural Capital Accounting, 2021 BS 8632:2021.

This year has followed the same overall process, with Eftec appointed as auditors for this annual account.

Confirm our NCA purpose statement

↓

Stakeholder analysis

- Who needs to be involved?
- Stakeholder needs identified.
- Engagement plan developed.

↓

Scoping exercise

- What does the NCA need to include in terms of balance sheet & income statement for both scopes 1 & 2?

↓

Materiality assessment

- Which benefits are delivered on a scale that is material to people or businesses? To what degree?

Confirm scope decisions

- Decision to include both balance sheet and income statement for scopes 1 & 2 as an aspiration, although due to availability of data, this will take time to implement fully.

↓

Data gathering

- Pulling the relevant quantity data and value data from various internal and external systems.
- Working with partners to identify new benefits for inclusion and valuation.

↓

Quality assurance

- Ensuring the quality of data collected and its correct use in calculations.

See pages 14–27 of BS 8632:2021, 'Natural Capital Accounting for Organizations — Specification' for a detailed breakdown of this process, with each step explained in detail. Page 14 of the Specification in particular lays out each of these individual elements in broad outline.

Annex B: materiality statement

This schedule summarises the scope of the natural capital for the account boundary using an asset-service matrix. Where habitats are natural capital assets. Cells shaded green reflect material and relevant service provision.

Description	Key
Not included	0
Partially included	1
Included	2
Data unavailable or no method	-
Significant	

		Natural capital assets			
Ecosystem service	**Private & public benefits**	Freshwater	Grassland	Mountain, moorland and heath	Woodland
Provisioning	Food provision	-	2	2	2
Provisioning	Fishing (commercial)	-	-	-	-
Provisioning	Timber	-	-	-	2
Provisioning	Fibre and materials	-	-	0	2
Provisioning	Water supply	-	-	-	-
Provisioning	Renewable energy	0	-	-	0
Provisioning	Minerals	-	-	-	2
Regulating	Carbon sequestration	0	0	1	2
Regulating	Air quality regulation	-	-	-	2
Regulating	Flood risk management	-	-	0	2
Cultural	Recreation	1	1	1	1
Cultural	Education	0	0	0	0
Cultural	Volunteering	1	1	1	1
Bundled	Water quality	0	0	0	0
Bundled	Property value	0	0	0	0
Bundled	Biodiversity	1	1	1	1
Cultural	Mental health	0	0	0	0
Cultural	Physical health	2	2	2	2

Annex C: maintenance cost schedule

This table summarises the costs involved in maintaining and enhancing the quality of the nation's forests' natural capital assets. We've grouped these costs into five key categories to highlight the proportional differences between them and show where investment is focused.

Across all levels of our organisation, we continually review decision-making to ensure resources are directed effectively. This is achieved by prioritising investment in sustaining and improving the assets themselves and strengthening their capacity to deliver increasing benefits to society.

	2013/14	2024/25
Forest regeneration and maintenance	£11,160,569.67	£11,079,051.76
Habitat and species management	£3,821,704.34	£11,393,635.52
Infrastructure	£2,841,512.36	£12,832,095.51
Community and learning	£1,772,842.31	£4,204,803.56
Volunteering	£2,011,356.63	£2,455,131.97
Total	£21,607,985.31	£41,964,718.32

Annex D: detailed natural capital balance sheet

Summary of major outcomes, present value 50 years (£m).
It is populated from the reporting schedule R1.2.

	2024/25		
Produced at 31-03-2025	**Private Value PV £m**	**External Value PV £m**	**Total Value PV £m**
Asset values (monetised)			
Timber	1,465	-	1,465
Food	25	-	25
Plant & Seeds	-	20	20
Carbon Sequestered	-	19,868	19,868
Flood Risk Mitigated	-	1,349	1,349
Air Quality Regulated	-	2,786	2,786
Recreation and Public Access	906	28,441	29,347
Minerals	4	-	4
Physical Health	-	49,097	49,097
Total gross asset value	**2,400**	**101,561**	**103,961**
Asset values (non-monetised)			
Other material unquantified benefits			
Liabilities			
Production costs			
Timber	(1,430)	-	(1,430)
Food	(51)	-	(51)
Plant & Seeds	-	-	-
Carbon Sequestered	-	-	-
Mitigation of floods	-	-	-
Air quality regulation	-	-	-
Recreation and Public Access	(1,185)	-	(1,185)
Minerals	-	-	-
Physical Health	-	-	-
Natural capital maintenance costs			
Government Payment for Ecosystem Services Funding	1,965	(1,965)	-
Maintenance Costs	**(1,228)**	**(72)**	**(1,300)**
Total gross liabilities	**(1,929)**	**(2,037)**	**(3,966)**
Net natural capital asset value (monetised)	471	99,524	99,995

	2024/25		
Produced at 31-03-2025	**Private Value PV £m**	**External Value PV £m**	**Total Value PV £m**
Net Benefits			
Timber	35	-	35
Food	(26)	-	(26)
Plant & Seeds	-	20	20
Carbon Sequestered	-	19,868	19,868
Flood Risk Mitigated	-	1,349	1,349
Air Quality Regulated	-	2,786	2,786
Recreation and Public Access	(279)	28,441	28,162
Minerals	4	-	4
Physical Health	-	49,097	49,097
Net asset value (monetised)	**(266)**	**101,561**	**101,295**
Maintenance liabilities	(1,228)	(72)	(1,300)
Net natural capital asset value (monetised)	**(1,494)**	**101,489**	**99,995**

Notes:

A substantial proportion of carbon sequestered in woodland is transferred as embedded carbon on sale of timber. This value reflects the expected proportion of future carbon sequestration that will be transferred to consumers. The profile of decay into atmospheric carbon will depend upon consumer use. The expected profile of decay of this embedded carbon could be modelled and shown graphically overtime as an “Off FE Balance Sheet” stock.

Audit trail and references

Below is a breakdown of the ecosystem services included within this natural capital account, alongside a brief explanation of where the data and values come from. NCA information, values and quantities are drawn from a wide range of internal and external sources. All of these methods are under review and will be refined/revised as needed in future.

Timber

Our timber data is based on production forecasts developed by Forest Research's Inventory, Forecasting and Operational Support (IFOS) team. Ultimately, the raw inventory data is sourced from the Forestry England Geographic Informations System database, 'ForesterWeb' which is used to estimate timber production (thinning and felling) in m^3 overbark standing, within the reporting period. Monetary values are taken from direct production and standing sales figures that also feed into Forestry England's annual report and accounts.

Food

The quantity of food produced and its monetary value and costs are recorded in our internal Wildlife Management System. These accounts show both the overall quantity of food produced (based on number of carcasses sold) and the net financial income of our wildlife management programme. Carcasses are sold and valued at market price, and so this benefit is subject to potentially quite large variations in per kilo prices of boar and venison.

Plant & seeds

Forestry England's Plant and Seed Supply (PSS) team provide the NCA with an estimate of what quantity and weight of seeds and plants are produced by our nurseries. Monetary values within the NCA are calculated based on revenues from the sale of our seeds and plants, which are then subject to an assumed margin of external value (14.46% for the reporting year) based on PSS analysis.

Carbon sequestered

Like the timber data, our carbon sequestration figures come from Forest Research's National Forest Inventory team. This time they use Forestry England's forest plans to forecast 'net volume increments' (the volume of tree growth in m^3). This is then converted into tonnes of CO_2 in the accounts, based on sequestration models developed by Forest Research. The value per tonne of sequestered CO_2 is updated each year for inflation and forecast into future flows. This value is taken directly from government guidance on the non-trade value of carbon, the Department for Business, Energy & Industrial Strategy's (BEIS) 'Valuation of energy use and greenhouse gas'.

Mitigation of flooding

The valuation for flood mitigation draws on the Forest Research report, 'Revised valuation of flood regulation services of existing forest cover to inform natural capital accounts.' (2023). Using the values within this report, we applied the same discount rate as to the other services to estimate the value over 50 years based on 2022 prices.

Air quality regulation

Air quality benefit arises from the ability of different types of vegetation to remove pollutants from the air. This benefit is estimated for the amount of PM2.5 removed by woodland. Jones et al. (2017) modelled this benefit for the UK national accounts reflecting the variety of different levels of PM2.5 concentration, types and extent of vegetation and density of human population across the country. An update to this study has produced estimates of PM2.5 removal per hectare of woodland by local authority. The economic value of this service is estimated through the resulting avoided healthcare cost at local authority level (eftec and CEH, 2019).

Recreation and public access

Forestry England's NCA recreation figures are sourced from quarterly surveys conducted with Kantar (previously Kantar TNS) – a demographically representative sample of the English population fills in a series of questions asking them to estimate how many woodland visits they have made to the nation's forests over the previous three months. This data is then input into statistical models (also developed by Kantar), which give us annual estimates for how many recreational visits we have.

We then apply a per recreational visit value, which is updated annually for inflation. The original value is taken from 'The Social and Environmental Benefits of Forests in Great Britain' (2003).

Minerals

Mineral production information is sourced directly from internal Forestry England databases – our civil engineering function collate estimates for mineral and aggregate volumes extracted within each calendar year. Monetary values are also collated by the same team, based primarily on rents from mineral and aggregate extraction.

Physical health

In addition to improving the general welfare of visitors, if people are active during their visits, recreation can also have measurable physical health benefits. White et al. (2016) estimate that 51.5% of recreation visits are 'active', where an 'active visit' is defined as those who met recommended daily physical activity guidelines either fully, or partially, during visits.

The benefit is valued as the health benefits of active recreation (in terms of improvements in Quality Adjusted Life Years – QALYs) and the economic value of health improvement (in terms of the avoided health cost due to improvement in QALY). Beale et al. (2007) analysed Health Survey for England data, estimating that 30 minutes a week of moderate-intense physical exercise, if undertaken 52 weeks a year, would be associated with 0.0106768 QALYs per individual per year. Beale et al. (2007) assume this relationship between physical activity and QALYs is both cumulative and linear.

Claxton et al. (2015) estimate a cost effectiveness threshold of a QALY to be roughly £12,900/QALY in 2008 prices. This figure is used as a proxy for health costs, reflecting the avoided health costs when QALY is improved by one unit. Based on this information, the avoided health cost is estimated as £3.71 in 2022 prices. The monetary unit value is assumed to remain constant over time.

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Butterfly Conservation

British Trust for Ornithology

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