

Wye Valley Area of Outstanding Natural Beauty (AONB)

DRAFT State of the AONB Report 2020

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Introduction

In order to assess habitat and landscape change, we first need to collate and understand the baseline data that already exists. This report is a comprehensive look at current data and statistics where it exists for the Wye Valley AONB.

Being a cross border AONB, there are differences in what, and the way in which data is collated and disseminated. The result of this is some data being available only for one country or the other and a full picture across the protected landscape not being available. The source and scope of data analysed is defined in this report.

This state of the AONB report is an appendix of the statutory Wye Valley AONB Management Plan (2020-25) and considers the variety of habitats, land use and features across the AONB, establishing where the information available allows their extent, condition and their context within the wider landscape.

Wye Valley AONB

The Wye Valley AONB is 32,735 ha in size. It is the only cross border Protected Landscape 20,864 ha of which is in England and 11,871 ha in Wales. This is equivalent to 0.16% of the total land mass of England, and 0.57% of the total land mass of Wales. 14,996 ha (45.8%) of the AONB is in the County of Herefordshire, 11,871 ha (36.3%) in Monmouthshire, and 5,868 ha (17.9%) in Gloucestershire.

Priority Habitats analysis

UK BAP priority habitats cover a wide range of semi-natural habitat types, and were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP).

As a result of devolution, and new country-level and international drivers and requirements, much of the work previously carried out by the UK BAP is now focused at a country-level rather than a UK-level, and the UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK list of priority habitats, however, remains an important reference source and has been used to help draw up statutory lists of priority habitats in England, Scotland, Wales and Northern Ireland, as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England).

There are 28 Priority Habitats identified in England (* mapped as Priority Habitat but considered non priority habitat). 10 of these habitats are found in the Wye Valley AONB.

- Coastal and Floodplain grazing marsh
- Deciduous Woodland
- Good quality semi improved grassland*
- Lowland Calcareous Grassland
- Lowland Dry Acid Grassland
- Lowland Heathland
- Lowland Meadows
- Mudflats
- Purple Moor Grass and Rush Pasture
- Traditional Orchards

3,903.07 ha of the English Wye Valley AONB are mapped as Priority Habitats. Included in this national data set are the habitats Good Quality Semi Improved Grassland, Fragmented Heath and Grass Moorland which are all non-priority habitat (*), and 'no main habitat but additional habitat present' where candidate habitats remain but no main habitat can be identified (**).

The 3,903.07 ha in the English part of the Wye Valley AONB equates to 18.71% of the land area.

The most widespread Priority Habitat is Deciduous Woodland of which there are 2,945.92 ha in the Wye Valley AONB. This equates to 14.12% of the land area. Comparing this to 5.54% of the land area of England being Deciduous Woodland gives a good indication of the importance of the Wye Valley for this particular priority habitat. The Wye Valley AONB (England) contains 0.4% of the English Deciduous Woodland resource in only 0.16% of the land. In 2013 Deciduous Woodland accounted for 39% of total priority habitat resource in England.

Priority Habitats not found in the Wye Valley AONB (**habitats identified in bold are priority habitats in both England and Wales**) are **Blanket Bog, Calaminarian Grassland, Coastal Saltmarsh, Coastal sand dunes, Coastal vegetated shingle, Fragmented heath***, **Grass moorland ***, **Limestone pavement, Lowland fens, Lowland raised bog, Maritime cliff and slope, Mountain heath and willow scrub, Reedbeds, Saline lagoons, Upland Calcareous Grassland, Upland flushes, fens and swamps, Upland hay meadows, and Upland heathland.**

Habitat (<i>this table relates to England only, but habitats identified as priority in Wales also are in bold</i>)	England (ha)	WVAONB (ha)	WVAONB % resource	Resource ENG coverage	AONB coverage
Coastal and Floodplain grazing marsh	219,918.33	5.03	0.002%	1.654%	0.02%
Deciduous Woodland (NB – specific woodland types priority in Wales)	736,623.40	2945.92	0.400%	5.541%	14.12%
Good quality semi improved grassland*	74,275.68	174.54	0.235%	0.559%	0.84%
Lowland Calcareous Grassland	62,942.80	3.25	0.005%	0.473%	0.02%
Lowland Dry Acid Grassland	15,560.16	1.49	0.010%	0.117%	0.01%
Lowland Heathland	57,073.04	11.13	0.020%	0.429%	0.05%
Lowland Meadows	22,179.89	122.46	0.552%	0.167%	0.59%
Mudflats	65,035.53	29.95	0.046%	0.489%	0.14%
No main habitat but additional habitat present**	204,370.22	451.48	0.221%	1.537%	2.16%
Purple Moor Grass and Rush Pasture	9,857.94	3.77	0.038%	0.074%	0.02%
Traditional Orchards	16,053.86	154.05	0.960%	0.121%	0.74%
	2,091,163.91	3903.07	0.187%		18.71%

Wales Priority Habitat data

The Wye Valley AONB Unit are not supplied with comparable Priority Habitat data for Wales. Environment (Wales) Act 2016 Section 7 lists the 'habitats of principle importance for the purpose of maintaining and enhancing biodiversity in relation to Wales'. The list is the same as the list previously under section 42 of the NERC Act and is under review. The list of habitats is extensive and similar to the England list, with the following additions, Wood pasture & parkland; Upland Oak Woodland; Lowland beech and yew woodland; upland mixed ash woodland; wet woodland; lowland mixed deciduous woodland (**NB – England Priority habitat is Deciduous Woodland**); hedgerows; arable field margins; rivers; oligotrophic and dystrophic lakes; ponds; mestrophic lakes; eutrophic standing waters; aquifer-fed natural fluctuating water bodies; inland rock outcrops and scree habitats; open mosaic on previously developed land; intertidal boulder communities; sabellaria alvelata reefs; estuarine rocky habitats; intertidal mudflats (**presumed to be the same as England priority habitat Mudflats**); seagrass beds; sheltered muddy gravels; peat and clay exposures; tidal swept channels; fragile sponge and anthozoan communities on sbutidal rocky habitats; carbonate reefs; subtidal sands and gravels; subtidal mixed muddy sediments; mud habitats in deep water; musculus discors beds; blue mussel beds; horse mussel beds; maerl beds.

No GIS layer showing Welsh Priority Habitats has been found, but a GIS table has been found showing Orchards in Wales, as well as a Glastir Woodland Creation sensitive habitats layer which identifies the location of some priority habitats. From these data sources the following has been derived.

Orchards

The Natural Resources Wales report Traditional Orchard Habitat Inventory of Wales establishes there are 1,037.3ha of traditional orchard in Wales (including marginal sites), of which 452.4ha are found in Monmouthshire. In the Monmouthshire part of the AONB there are 63.7ha of Orchard . This data shows us that the Wye Valley AONB (Wales only) has 6.1% of the nations traditional orchards in only 0.57% of the land area.

Sensitive Habitats

Through the sensitive habitat data, we can analyse the priority habitats in the table below. It can be seen that whilst the Wye Valley AONB contains a number of the Wales priority habitats, other than traditional orchards, there are only small pockets of the national resource. It is established elsewhere in this report that the AONB landscape is made up of a high proportion of woodland, particularly in the southern half, but it has not been possible to map the specific deciduous woodland types which are listed in the Welsh Priority Habitats (other than wet woodland listed below). It is however known the Wye Valley AONB contains fine examples of lowland beech and yew woodland, wood pasture and parkland, as well a mosaic of other woodland types containing oak and ash amongst other important species.

habitat	Wales (ha)	WVAONB (ha)	WVAONB % resource	Resource WAL coverage	AONB coverage
Blanket Bog or Lowland Raised Bog	272.95	1.85	0.678%	0.013%	0.016%
Wet Woodland (scrub component)	487.87	0.19	0.039%	0.024%	0.002%
Wet Woodland	149.78	5.57	3.719%	0.007%	0.047%
Purple Moor Grass and Rush Pastures	29,201.12	13.48	0.046%	1.415%	0.114%
Mosaic of BAP habitats	2,380.83	3.6	0.151%	0.115%	0.03%
May support Lowland Meadows	1,597.41	10.75	0.673%	0.077%	0.091%
Maritime Cliff and Slopes	3,501.58	0.48	0.014%	0.17%	0.004%
Lowland Meadows	1,273.64	24.37	1.913%	0.062%	0.205%
Lowland Heathland	14,741.57	4.42	0.03%	0.714%	0.037%
Lowland Fens and Reedbeds	6,803.06	14.1	0.207%	0.33%	0.119%
Lowland Dry Acid Grassland	33,271.02	4.63	0.014%	1.612%	0.039%
Lowland Calcareous Grassland	1,018.36	1.67	0.164%	0.049%	0.014%
Inland Rock Outcrop and Scree habitats	1,811.51	0.05	0.003%	0.088%	0.000%
	96,510.7	85.16	0.088%		0.717%

Priority Habitats in SSSIs

Of the 3,903.07 ha of Priority Habitat in the English AONB, 999.11 ha is within designated Sites of Special Scientific Interest (SSSI) and 625.05 ha is on land within a Higher Level Stewardship agreement but outside SSSI. The remaining 2,278.92 ha has no designation or land management agreement, the vast majority of this (1,982.18 ha) is Deciduous Woodland. These statistics indicate that 41.6% of these Priority Habitats have a level of protection and / or existing Environmental Stewardship Agreements over them.

Table showing Priority Habitats in SSSIs, and in Environmental Stewardship.

habitat	WVAONB total	In SSSI	In Higher Tier / HLS Outside SSSI	Outside SSSI Not in Higher Tier / HLS
Coastal and Floodplain grazing marsh	5.03			5.03
Deciduous Woodland	2945.92	836.29	127.45	1,982.18
Good quality semi improved grassland	174.54	0.77	153.14	20.63
Lowland Calcareous Grassland	3.25	0.12	2.33	0.80
Lowland Dry Acid Grassland	1.49		1.45	0.04
Lowland Heathland	11.13		10.97	0.16
Lowland Meadows	122.46	6.06	74.22	42.18
Mudflats	29.95	29.44		0.51
No main habitat but additional habitat present	451.48	126.33	225.77	99.38
Purple Moor Grass and Rush Pasture	3.77		3.50	0.27
Traditional Orchards	154.05	0.10	26.22	127.74
	3903.07	999.11	625.05	2,278.92

Of the 999.11 ha of Priority Habitat in SSSIs, the table below indicates that 721.43 ha (72.21%) of this is considered to be in favorable condition. 216.46 ha (21.67%) is in Unfavorable recovering condition. The remaining 61.21 ha (6.13%), almost entirely Deciduous Woodland habitat, is in either Unfavorable no change or Unfavorable declining condition. These statistics indicated that a very high percentage of priority habitat in SSSIs are in good condition. Habitat outside SSSI is not monitored for condition status, but if we take the monitored sites as a representative cross section of all habitats, we could suggest that over 90% of the Priority Habitat in the English Part of the Wye Valley AONB is in good or moving towards good condition. This equates to over 3,500 ha of habitat, or approximately 0.17% of the National Resource.

	Favourable	Unfavourable recovering	Unfavourable no change	Unfavourable declining
Deciduous Woodland	570.85	204.26	42.54	18.65
Good Quality Semi Improved Grassland*	0.26	0.51		
Lowland Calcareous Grassland	0.12			
Lowland Meadows	0.76	5.30		

Mudflats	29.42	0.01		
No main habitat but additional habitat present**	120.00	6.30		0.02
Traditional Orchard	0.01	0.09		
Total	721.43 (72.21%)	216.46 (21.67%)	42.54 (4.26%)	18.67 (1.87%)

Table xx SSSI Priority Habitat condition

AONB Network picture

The total land area of AONBs in England is 1,915,135 ha, which equates to 14.4% of the country. AONBs contain 512,533.75 ha of Priority Habitat, which equates to 26.76% of the total resource. Only 15.73% of England is considered to be Priority Habitat. This indicates that, as may be expected, AONBs are strongholds for the nation's highest priority habitats. By way of example, 22.7% of deciduous woodland, 25.77% of Good Quality Semi-Improved Grassland*, 31.01% of Lowland Heathland, 32.12% of Lowland Calcareous Grassland, 39.01% of Blanket Bog, 64.17% of Maritime Cliff and Slope and 65.44% of Upland Heathland is found in AONBs.

The 34 AONBs in England contain a wide variety of important habitats and as each landscape is different, so the important and key habitats as different. The Wye Valley AONB, being a lowland and primarily inland landscape, contains few examples of coastal or upland priority habitats. By analysing priority habitats across the AONB network, we can though identify where the Wye Valley AONB can play an important role in both the conservation and enhancement of particular habitats.

The Wye Valley AONBs 20,864 ha of land equates to 1.09% of the total covered by AONBs in England. The three Priority Habitats where the Wye Valleys percentage of the resource across AONBs is greater than its percentage of total AONB land are Deciduous Woodland (1.76% of the AONB resource), Traditional Orchards (6.56% of the AONB resource) and Lowland Meadows (3.06% of the AONB resource). These habitats are all identified in the AONB Management Plan as Special Qualities. All AONBs play an important role in the conservation and enhancement of valuable habitats. The statistics back up the special nature of the Wye Valley AONBs Deciduous Woodland, Traditional Orchards and Lowland Meadows.

Farming statistics analysis (source MEOPL data)

Between 2010 and 2016, the number of holdings in the English part of the Wye Valley AONB has increased slightly from 226 to 232, but the farmed area has decreased by just under 500 ha. The hectares of land rented has overall decreased slightly and the area of land owned increased by just over 400 ha. The statistics show that although the number of land holdings decreased in 2013, the amount of both rented and owned land increased. Although the number of land holdings increased in 2016, the statistics show us that the amount of land controlled by those holdings, both rented and owned, decreased.

	Farmed area		Rented land	Owned land
	Holdings	Area (ha)	Area (ha)	Area (ha)
2010	226	13777	4416 (32.1%)	9145 (66.4%)
2013	220	15446	5855 (37.9%)	10049 (65.1%)
2016	232	13290	4399 (33.1%)	9553 (71.9%)

Fig. xx Land holdings

Statistics for land use show that there has been a significant decrease in the amount of permanent grassland in the English part of the AONB, decreasing from 41% of farmed area to 31.7%. Small increases in temporary grass and rough grazing can be seen, with a more significant rise in the amount of woodland on farmed land of 2.8%, from

3.8% to 6.6%. This equates to 343ha increase from 2010 to 2016. The largest single land use increase in the crops & bare fallow land, rising by 4.8% over 6 years to over half of all farmed land (50.6%)

	LAND USE					
	Crops & bare fallow	Temp grass	Permanent grass	Rough grazing (sole right)	Woodland	All other land
	Area (ha)	Area (ha)	Area (ha)	Area (ha)	Area (ha)	Area (ha)
2010	6306 (45.8%)	986 (7.2%)	5651 (41%)	100 (0.7%)	527 (3.8%)	206 (1.5%)
2013	8006 (51.8%)	1134 (7.3%)	5105 (33.1%)	54 (0.4%)	957 (6.2%)	190 (1.2%)
2016	6719 (50.6%)	1115 (8.4%)	4217 (31.7%)	163 (1.2%)	870 (6.6%)	205 (1.5%)

Fig. xx Land use

Data relating to farm size over the same period show increases in the numbers of farms of less than 20 hectares in size, and a general decrease in the number of farms over 20 hectares in size. Farms of less than 20 hectares in size were 40.7% of all holdings in 2010; by 2016 47% of holdings were under 20 ha. At the largest end of the scale, 18.1% of holdings were over 100 ha in size in 2010, compared to 13.4% in 2016.

Year	Farm Size in hectares (number of farms)				
	< 5	5 < 20	20 < 50	50 < 100	> = 100
2010	22 (9.7%)	70 (31%)	46 (20.4%)	47 (20.8%)	41 (18.1%)
2013	28 (12.7%)	64 (29.1%)	37 (16.8%)	50 (22.7%)	41 (18.6%)
2016	25 (10.8%)	84 (36.2%)	42 (18.1%)	50 (21.6%)	31 (13.4%)

Fig. xx Farm size

Farm labour data indicates that numbers of full time farmers remained static between 2010 and 2016, but there was a slight decrease in part-time farm workers from 197 to 185. The numbers of casual workers increase from 325 in 2010 to 493 in 2013, but then decreased significantly to only 180 in 2016. This demonstrates the seasonal and unpredictable nature of casual work. The numbers of people employed full time and part time by farms follows a similar trend, increasing from 2010 to 2013, before decreasing significantly in 2016. The statistics all show that there are fewer people working in agriculture in the Wye Valley AONB in 2016 than in 2010, which reflects the national trend.

	LABOUR							
	Farmers full time	Farmers part time	Managers full time	Managers part time	Casual workers	Total labour	Employees Full Time	Employees Part Time
2010	175	197			325	872	100	56
2013	173	195			493	1060	103	66
2016	175	189	16	8	180	707	84	54

Fig. xx Farmer labour

The Wye Valley AONB is a mixed farming landscape with no great tradition in pig farming. The amount of pigs farmed across the English side of the AONB rose between 2010 and 2016 from 1,752 animals to 2,503, a significant increase of 751 or a 42% increase from 2010 levels.

Sheep farming is a more common activity across the AONB, however in the same time period the total number of sheep farmed fell, despite a small increase in 2013, from 27,627 to 23,419. This represents a reduction in sheep numbers of 4208, or 15.2% fewer than 2010 levels.

	PIGS	SHEEP			

	Total pigs	Breeding Ewes	Lambs under 1yr	Other sheep	Total sheep
2010	1752	13522	13213	892	27627
2013	1833	14262	13011	778	28051
2016	2503	11313	11484	621	23419

Cattle numbers in the AONB also decreased between 2010 and 2016 by 1,005 animals in total, or 13.9% of 2010 numbers.

Dairy herds in the English AONB dropped about one quarter between 2010 and 2013, but levelled off in 2016. Beef herds have reduced gradually over the same time period, dropping by just over 20% from 2010 levels. Calf numbers show a similar decrease.

CATTLE					
	Dairy herd	Beef herd	Calves <1yr	Other Cattle	Total Cattle
2010	817	1471	2454	2484	7226
2013	614	1302	2064	2698	6678
2016	625	1169	1994	2433	6221

The largest changes can be seen in poultry numbers on the English side of the AONB. In 2010 there was a total of almost 1.5million poultry in the English side of the Wye Valley AONB, more than any other AONB in England, despite the Wye Valleys relatively small size. The level dropped hugely by over 60% in the three years to 2016, to 576,155 birds. Numbers have continued to fall dramatically and by 2016 there were 173,971 poultry, just 11.7% of 2010 levels. This level of decrease, although from a very high number is 2010, appears to be greater in the Wye Valley AONB than elsewhere in the country; 8 other AONBs had a higher number of poultry in 2016.

POULTRY			
	Total Fowl	Other Poultry	Total Poultry
2010	1,448,311	34,018	1,482,329
2013	532,665	43,490	576,155
2016	160,578	13,393	173,971

A continuation of this trend in animal numbers over the coming years has the potential to have a significant impact on the farmed landscape in the AONB.

Agricultural Agreements in the AONB

MEOP data provided by Natural England in 2020 provides a snap shot of live stewardship agreements in the Wye Valley AONB (England only). There are 42 agreements live covering 1,848.68ha. This is broken down into the following:

Higher Level Stewardship: 6 agreements (4 Herefordshire, 2 Gloucestershire) covering 145.29ha

Entry Level Plus Higher Level Stewardship: 31 agreements (17 Herefordshire, 14 Gloucestershire) covering 1,285.03ha

Organic Entry Level plus Higher Level Stewardship: 5 agreements (4 Herefordshire, 1 Gloucestershire) covering 418.36ha.

Data for previous years has not been sought, but these figures can be used to analyse trends in future reports.

Veteran Trees

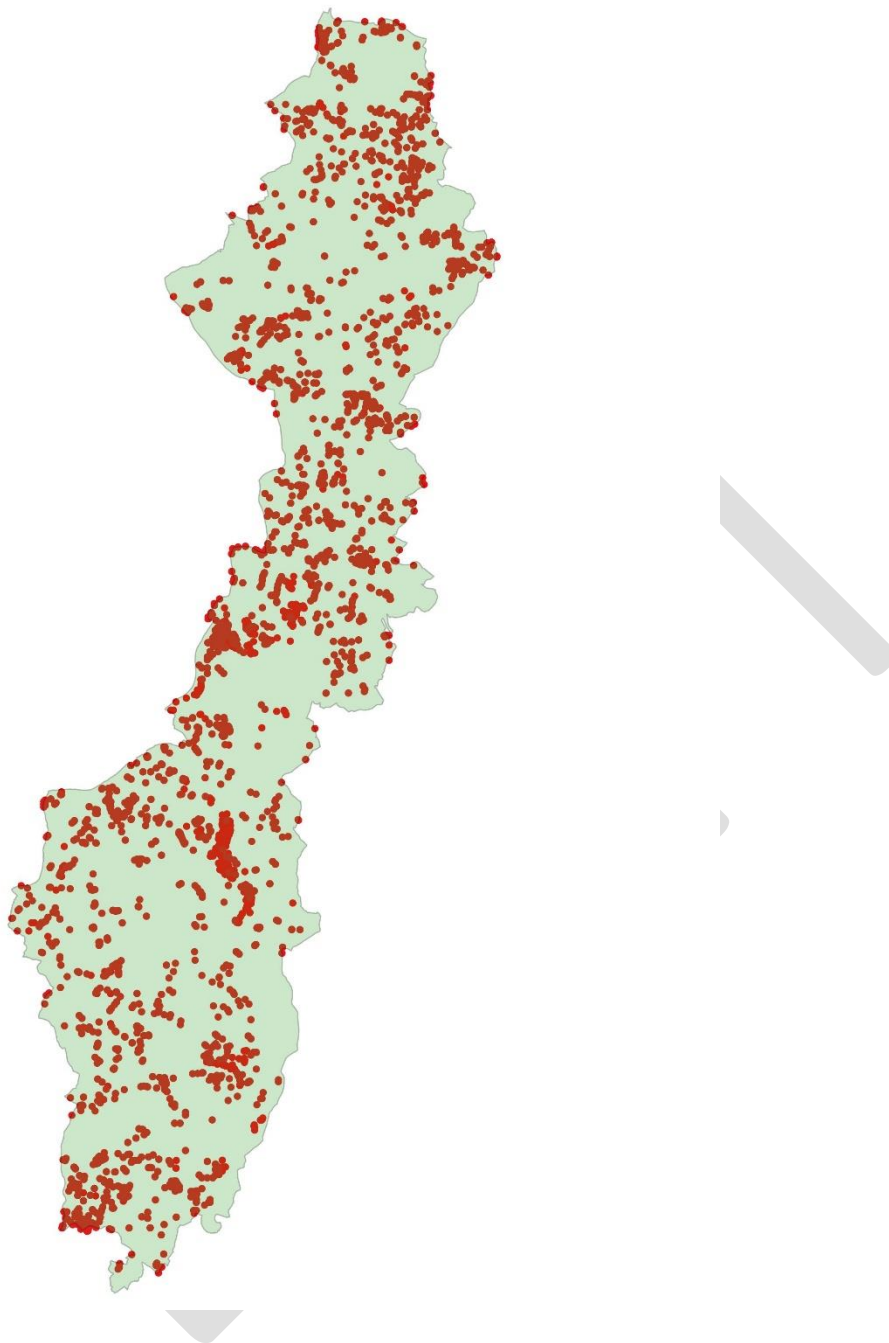


Figure xx Recorded Veteran Tree locations

The AONB have a number of different data sets for Veteran Trees, which are amalgamated on figure xx above. AONB surveys carried out by volunteers and ecological survey trainees from 2005 to 2007 recorded 2,273 trees in and directly adjacent to the AONB, the breakdown of species can be seen in figure xx below. Parkland data (date unknown) also records 201 trees in the Herefordshire Part of the AONB, and Woodland Trust records derived from a number of projects and individuals including some (but not all) AONB records, show 2,346 trees across the AONB. All three surveys were undertaken in isolation and have all added to the record of veteran trees. Each survey has picked up new records, but it is certain that some records are duplicated by more than one survey, and difficult to tell which ones without revisiting each record on the ground. For this reason, we can say that at the time of surveying there were at least 2,350 veteran trees in the Wye Valley AONB.

Species	number	%	Recorded variations
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oak	1,075	47.3%	common oak (91), English Oak (1), pedunculate oak (287), sessile oak (119), Turkey oak (2)
beech	243	10.7%	common beech (2), copper beech (9)
ash	160	7%	common ash (2)
lime	133	5.9%	common lime (6), large leaved lime (2), broad leaved lime (4), small leaved lime (58)
willow	129	5.7%	Crack Willow (32), Cricket Bat Willow (1), White Willow (3), Goat Willow (6)
redwood	68	3%	coast redwood (1), Wellingtonia (41), giant sequoia (24), sequoia (1)
sweet chestnut	59	2.6%	
sycamore	57	2.5%	
maple	53	2.3%	field maple (51), norway maple (1)
horse chestnut	52	2.3%	
yew	45	2%	english yew (1)
unknown	37	1.6%	
poplar	27	1.2%	Black Poplar (16), hybrid black poplar (1), White poplar (1), lombardy poplar (1)
alder	21	0.9%	
cherry	16	0.7%	wild cherry (9)
hawthorn	16	0.7%	
cedar	14	0.6%	atlas cedar (1), cedar of lebanon (7), western red cedar (3)
birch	13	0.6%	silver birch (11)
london plane	10	0.4%	
hazel	8	0.4%	
apple sp	7	0.3%	crab apple (2), wild crab apple (1)
pine	6	0.3%	corsican pine (2), Monterey Pine (1), Scots pine (1)
elm	5	0.2%	Wych elm (2)
holly	5	0.2%	
hornbeam	3	0.1%	
pear	3	0.1%	wild pear (1)
walnut	3	0.1%	
cypress	1		
elder	1		
Mullberry	1		
Robina	1		
Tulip	1		
	2,273		

Figure xx Wye Valley AONB Veteran Tree Survey data

Species	number	%	Recorded variations
oak	960	40.9%	pedunculate oak (378), sessile oak (133), holm oak (1), turkey oak (3), hybrid sessile and english oak (5)
beech	333	14.2%	common beech (11), copper or purple beech (17)
lime	251	10.7%	small leaved lime (126), large leaved lime (4), commono lime (17), broad leaved lime var. lubra (1)
ash	185	7.9%	Common Ash (3)
willow	96	4.1%	goat willow or sallow (3), crack willow (21), cricket bat willow (1), white willow (4)

yew	65	2.8%	Irish yew (1), common yew (41)
sycamore	57	2.4%	verigated sycamore (1)
redwood	55	2.3%	giant sequoia (54), coast redwood (1)
sweet chestnut	52	2.2%	
horse chestnut	39	1.7%	red horse chestnut (2)
maple	39	1.7%	Norway maple (1), field maple (36)
unknown	33	1.4%	
poplar	20	0.9%	wild black poplar (14), lombardy poplar (1)
whitebeam	19	0.8%	symonds yat whitebeam (1), herefordshire whitebeam (1), evans whitebeam (1), doward whitebeam (1), common whitebeam (4), wild service tree (4)
birch	16	0.7%	silver birch (8), downy birch (5)
cheery	16	0.7%	wild cherry (14)
Hazel	16	0.7%	
alder	15	0.6%	alder buckthorn (1)
cedar	15	0.6%	atlas cedar (1), Cedar of Lebanon (7), western red cedar (3)
london plane	10	0.4%	
pine	9	0.4%	scots pine (2), maritime pine (1), monterey pine (1), corsican pine (3)
hawthorn	8	0.3%	common hawthorn (3)
pear	7	0.3%	common pear (1), wild pear (2)
elm	6	0.3%	wych elm (3)
holly	5	0.2%	
apple	4	0.2%	crab apple (3)
hornbeam	3	0.1%	common hornbean (1)
walnut	3	0.1%	
false acacia	2	0.1%	
mullberry	2	0.1%	black mulberry (1)
tulip tree	2	0.1%	
cypress	1		
european larch	1		
spruse	1		
	2,346		

Figure xx Woodland Trust Veteran Tree Survey data

species	number	%	Recorded variations
oak	105	52.2%	pedunculate oak (64), evergreen oak (1), sessile oak (22), turkey oak (2)
beech	16	8%	
unknown	12	6%	
elm	8	4%	English elm (4)
horse chestnut	8	4%	
pine	8	4%	scots pine (7)
sweet chestnut	8	4%	
ash	7	3.5%	
cedar of lebannon	6	3%	
willow	6	3%	
london plane	4	2%	

sycamore	4	2%	
pear	2	1%	
conifer	1	0.5%	
downy birch	1	0.5%	
european larch	1	0.5%	
lime	1	0.5%	
spanish chestnut	1	0.5%	
wellingtonia	1	0.5%	
whitebeam	1	0.5%	
	201		

Figure xx Parkland data

All three sets of statistics paint a similar picture. Oak species make up more than 40% of veteran trees in the AONB. Beech species are second most populous in all surveys. Lime, Ash and Willow species are all found in good numbers, contributing around 20%. These figures help to highlight the importance of Ash to the landscape of the Wye Valley AONB, with at least 185 individual veteran Ash being recorded. The impact of ash-dieback has the potential to be great on this important feature of our landscape and ecology. A variety of species have been suggested as a replacement for Ash, but none can play host to as many species.

Both Small and Large Leaved Lime are on the IUCN red list, on which they are noted as being of least concern but with decreasing populations. The number of recorded veteran lime in the Wye Valley AONB is therefore significant and needs to be safeguarded, along with younger specimens to help safeguard the future of the tree species.

It is interesting to note a number of more unusual species in veteran tree statistics, indicating their presence in the landscape, although not in large quantities, for a substantial length of time. More than 50 sycamore, and nearly 70 redwood species have been recorded. The location of these species can be isolated to show location if required, and you would expect to find more exotic, non-native species associated with urban settings, gardens and designed parkland.

Woodland Data

The National Forest Inventory 2018 establishes the Wye Valley AONB contains 9,002.3ha of woodland, which equates to 27.5% of the land area. This is a slight increase from 27.35% in 2010.

The most recent National Forest Inventory figures are from 2018 which establishes there are just over 9002 ha of woodland across the whole AONB, equating to 27.5%. These show the breakdown of woodland types as being 5,594.6 ha broadleaved, 1,994.2 ha conifer, 523.3 ha mixed woodland, 263 ha Young Trees and the remaining 627.3 ha made up of a combination of felled, coppice, bare ground, grassland, ground prep, shrubs, young trees, urban and assumed woodland. This can be seen tabulated in figure xx below and mapped in figure xxx.

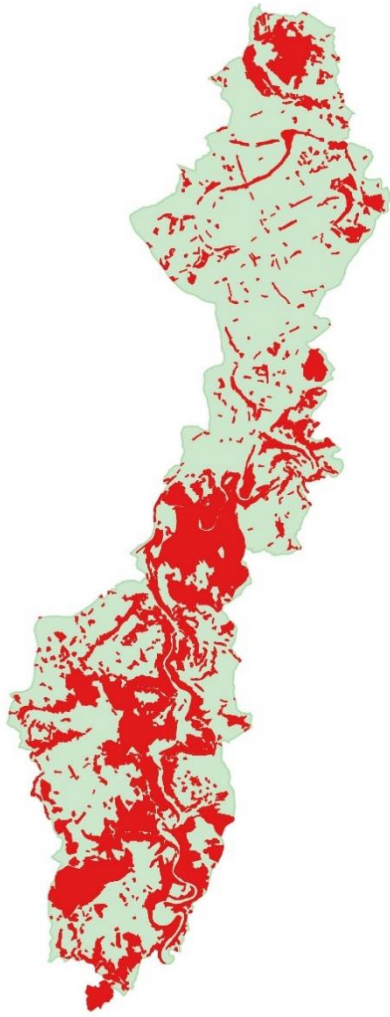


Fig xx Wye Valley AONB Woodlands (source National Forest Inventory 2018)

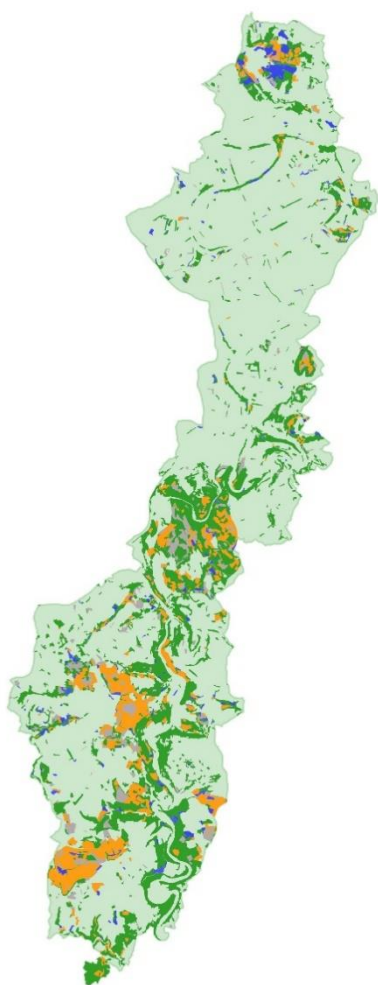


Fig xxxx – woodland in the AONB by type in 2018

Broadleaved woodland = green / Conifer woodland = yellow / Mixed woodland = blue / Other woodland = grey

National Forest Inventory woodland has been recorded in the same way on gis layers since 2011, which when cut to the AONB boundary provides us with useful data on both the total amount of woodland in the AONB but also the breakdown of woodland type. National datasets have been cut manually to the AONB boundary, meaning there may be slight variances in the size of woodland blocks which cross the AONB boundary and have needed to be split individually for each year; this may account for any small variances in annual figures. This can be seen in the table below (note: no statistics found for 2016)

Year	Woodland Type					Total
	Broadleaved	Conifer	Mixed	Young Trees	Other*	
2011	5,584.9	2,168.5	521.2	225.1	454.3	8,954.0
2012	5,589.0	2,168.5	522.0	250.7	430.1	8,960.3
2013	5,592.0	2,166.2	526.2	257.7	436.9	8,979.1
2014	5,596.3	2,152.7	532.7	257.7	455.9	8,995.3
2015	5,604.3	2,142.8	525.5	257.7	457.1	8,987.4
2016						0.0
2017	5,608.7	2,117.4	525.4	257.7	494.1	9,003.3
2018	5,594.6	1,994.2	523.3	263.0	627.3	9,002.4

Fig xxxxxx - Wye Valley AONB woodland (source National forest Inventory gis layers)

It can be seen from the data that over the 7 year period the amount of woodland in the AONB has increase by approximately 45ha. There has been a minimal increase in deciduous woodland cover over approximately 10ha. Mixed woodland cover has remained almost unchanged. Changes in woodland composition can be seen when looking at conifer woodland, young trees and 'other' woodland. Coniferous woodland has reduced in amount by over 170ha and been replaced by the small deciduous woodland increase along with the amount of young tree woodland cover rising by nearly 40ha and other woodland categories rising by over 160ha. It can be assumed the change in composition is as a result of coniferous woodland felling and being replaced by new planting, natural regeneration and 'open space' woodland.

Woodland cover in the AONB is high and the increase only slight since 2010, which makes demonstrating it graphically difficult. Figure xx below shows how the amount of woodland cover has increased from 2011 to 2018.

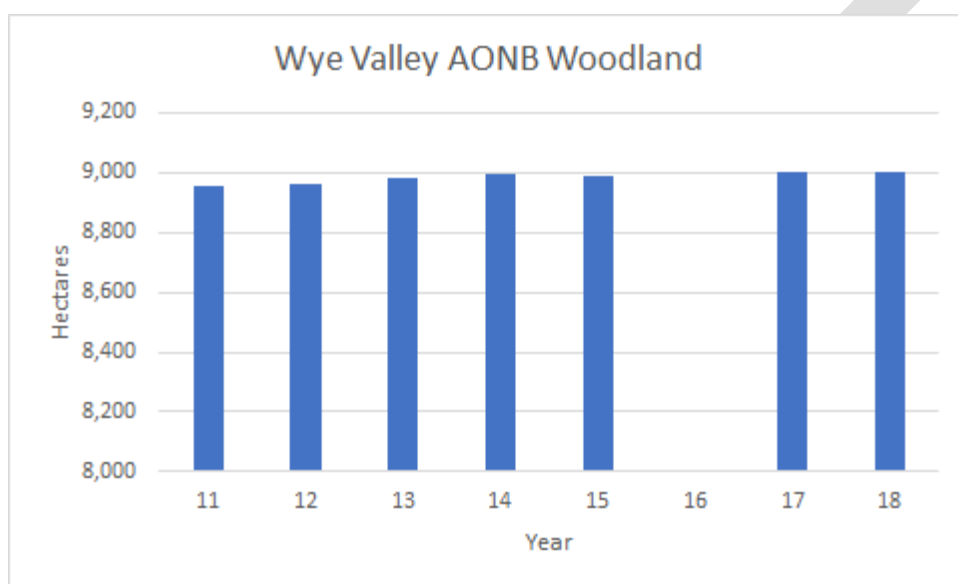


Fig xxxxx – Wye Valley AONB woodland cover (source National Forest Inventory 2018)

The following tables show the breakdown of woodland type across the AONB according the National Forest Inventory maps from 2011.

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,584.9	62.4%	17.1%
Coniferous	2,168.5	24.2%	6.6%
Mixed	521.2	5.8%	1.6%
Young Trees	225.1	2.5%	0.8%
Other woodland types	454.3	5.1%	1.4%
TOTAL	8,954.0		27.35%

Fig xxxxx- Wye Valley AONB woodland 2011 (National Forest Inventory)

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,589.0	62.4%	17.1%
Coniferous	2,168.5	24.2%	6.6%
Mixed	522.0	5.8%	1.6%
Young Trees	250.7	2.8%	0.8%
Other woodland types	430.1	4.8%	1.3%

TOTAL	8,960.3		27.37%
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Fig xxxxx- Wye Valley AONB woodland 2012 (National Forest Inventory)

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,592.0	62.3%	17.1%
Coniferous	2,166.2	24.1%	6.6%
Mixed	526.2	5.9%	1.6%
Young Trees	257.7	2.9%	0.8%
Other woodland types	436.9	4.9%	1.3%
TOTAL	8,979.1		27.43%

Fig xxxxx- Wye Valley AONB woodland 2013 (National Forest Inventory)

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,596.3	62.2%	17.1%
Coniferous	2,152.7	23.9%	6.6%
Mixed	532.7	5.9%	1.6%
Young Trees	257.7	2.9%	0.8%
Other woodland types	455.9	5.1%	1.4%
TOTAL	8,995.3		27.5%

Fig xxxxx- Wye Valley AONB woodland 2014 (National Forest Inventory)

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,604.3	62.4%	17.1%
Coniferous	2,142.8	23.8%	6.5%
Mixed	525.5	5.8%	1.6%
Young Trees	257.7	2.9%	0.8%
Other woodland types	457.1	5.1%	1.4%
TOTAL	8,987.4		27.46%

Fig xxxxx- Wye Valley AONB woodland 2015 (National Forest Inventory)

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,608.7	62.3%	17.1%
Coniferous	2,117.4	23.5%	6.5%
Mixed	525.4	5.8%	1.6%
Young Trees	257.7	2.9%	0.8%
Other woodland types	494.1	5.5%	1.5%
TOTAL	9,003.3		27.5%

Fig xxxxx- Wye Valley AONB woodland 2017 (National Forest Inventory)

Woodland Type	AONB resource (ha)	% of woodland resource	% of AONB
Broadleaved	5,594.6	62.2%	17.1%
Coniferous	1,994.2	22.2%	6.1%
Mixed	523.3	5.8%	1.6%
Young Trees	263	2.9%	0.8%
Other woodland types	627.3	7%	1.9%
TOTAL	9,002.4		27.5%

Fig xxxx – Wye Valley AONB woodland 2018 (National Forest Inventory)

The tables above show a gradual increase in woodland cover across the AONB from 27.35% in 2010 to 27.5% in 2014 and constant level since. Broadleaved woodland consistently covers 17.1% of the AONB. Conifer woodland has fallen gradually from 6.6% of the protected landscape to 6.1% in 2018.

The Forestry Commission's *Creating New Woodland: Woodland Carbon Code (2017)* publication establishes that "A new native woodland can capture 300-400 tonnes of CO₂ equivalent per hectare by year 50. By year 100, it can capture 400-600 CO₂ equivalent per hectare". The approximately 10ha increase in broadleaved woodland cover, assuming it will be managed over the next 50 and 100 years, could capture 4,000 tonnes of CO₂ equivalent by 2070 and 6,000 tonnes by 2120. Using a carbon offsetting calculator as a guide, this is equivalent to a 645 single passenger return economy class flights from Cardiff to Sydney by 2070 (at 6.2 t CO₂ per return trip), or 1 trip per month (calculations made using carbon offset calculator at www.myclimate.org). Assuming the full 45 ha increase in woodland cover is accounted for by native broadleaved planting and natural regeneration, the carbon offset of this increase in woodland cover is equivalent to up to 18,000 tonnes of carbon by 2070, or a return flight from Cardiff to Sydney every 16 days.

Woodland in Active Management

Forestry Commission England record levels of woodland in active management. In March 2020 the Forestry Commission England Managed Woodland Headline Performance Indicator showed that in the Wye Valley AONB there were 3,389ha of woodland in active management and 1,164ha of woodland currently unmanaged. This indicates that 74% of woodland in the English part of the AONB is considered to be in active management. This compares to 59% of woodlands across England being actively managed (source: Forestry Commission Key Performance Indicators report for 2019-20).

Traditional Orchards

Analysis of the most recent 2020 gis data download for Orchards shows there are 158.9ha of Orchard in the English part of the AONB and 63.7ha of Orchard on the Welsh side of the border. This figure for England differs slightly from the 154.05 given as part of the MEOPL Priority Habitat data in 2017.

Within the Monmouthshire part of the AONB there are 63.7ha of Traditional Orchards. The Natural Resources Wales report Traditional Orchard Habitat Inventory of Wales establishes there are 1,037.3ha of traditional orchard in Wales (including marginal sites), of which 452.4ha are found in Monmouthshire. This data shows us that the Wye Valley AONB (Wales only) has 6.1% of the nations traditional orchards in only 0.57% of the land area.

The data shows us there are 222.6ha for Orchards across the whole AONB, equivalent to 0.68% of the landscape.

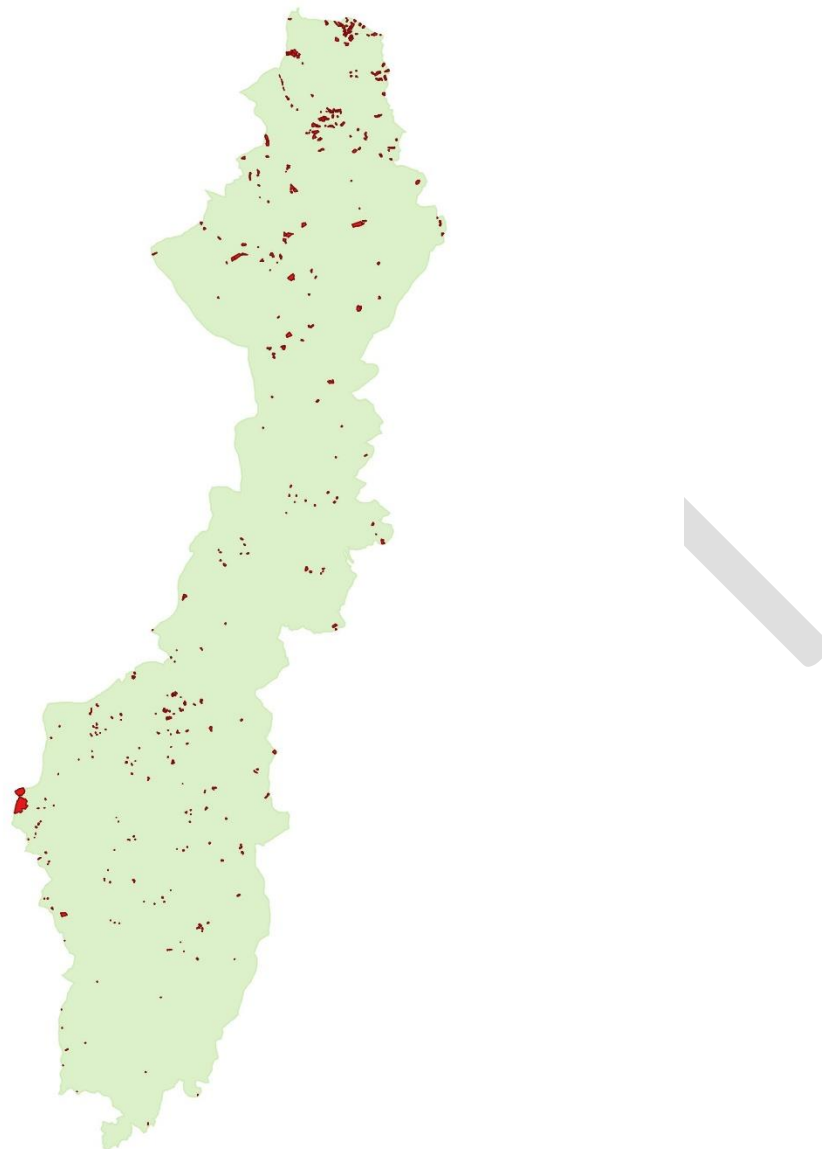


Fig xxxx – Orchards Wye Valley AONB

This orchard data can be added to the Priority Woodland data to give a representation of tree cover across the AONB.

	Woodland cover 2018	Orchard cover 2020	Total tree cover	% AONB cover
Total (ha)	9002.4	222.6	9227	28.19%

Designated Habitat data

Local Nature Reserves

There are 3 Local Nature Reserves (LNR) in the Wye Valley AONB, covering a total of 125.2 hectares (0.38% of the AONB). The LNRs can be seen in figure xxx below. Coppet Hill is the Wye Valley AONBs largest LNR at just under 100ha. In England there are 1,367 LNRs of which Coppet Hill is the 71st largest. Coppet Hill LNR covers 0.23% of the English part of the Wye Valley AONB.

Across Wales there is 6,187.3ha of land designated as LNR. Cleddon Bog covers 15ha making it 0.24% of the Wales total.

LNR	Size (ha)	% National Resource	% AONB
Coppet Hill	95.9	0.23	0.29
Cleddon Bog	15	0.03	0.05
Broadmoor Common	14.3	0.24	0.04

Fig xxxx – Wye Valley AONB Local Nature Reserves

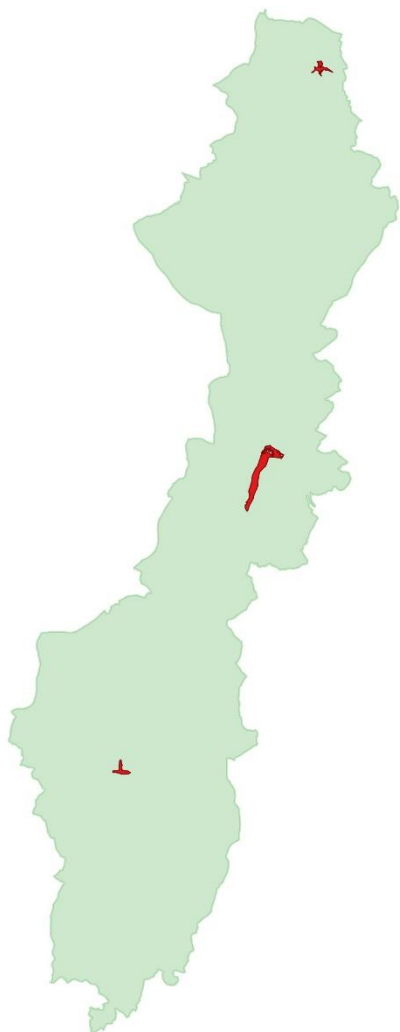


Fig xxxx – Wye Valley AONB Local Nature Reserves

Special Areas of Conservation (SACs)

There are 3 Special Areas of Conservation (SAC) in the Wye Valley AONB (see figure xxxx below), all 3 of which are cross border, covering land in both England and Wales.

SAC Name	Size (ha)	England (ha)	Wales (ha)	% of AONB
Wye Valley Woodlands SAC	972.01	389.05	582.96	2.97%
River Wye SAC	644.53	471.09	173.44	1.97%
Wye Valley and Forest of Dean Bat SAC	0.76	0.004	0.75	0.002%
TOTAL	1,617.3	860.14	757.15	4.94%

Fig xxx – Wye Valley AONB Special Areas of Conservation

Across England and Wales there is a total of 7,436,636ha of SAC making the Wye Valley SACs only a small percentage (0.02%) of the national total. However, the national figure is heavily skewed by large marine SACs such as the Southern North Sea (3,698,885ha) and the Bristol Channel Approaches SAC (585,129ha), meaning it is difficult to draw any conclusions as to the Wye Valley AONBs contribution to the national picture.

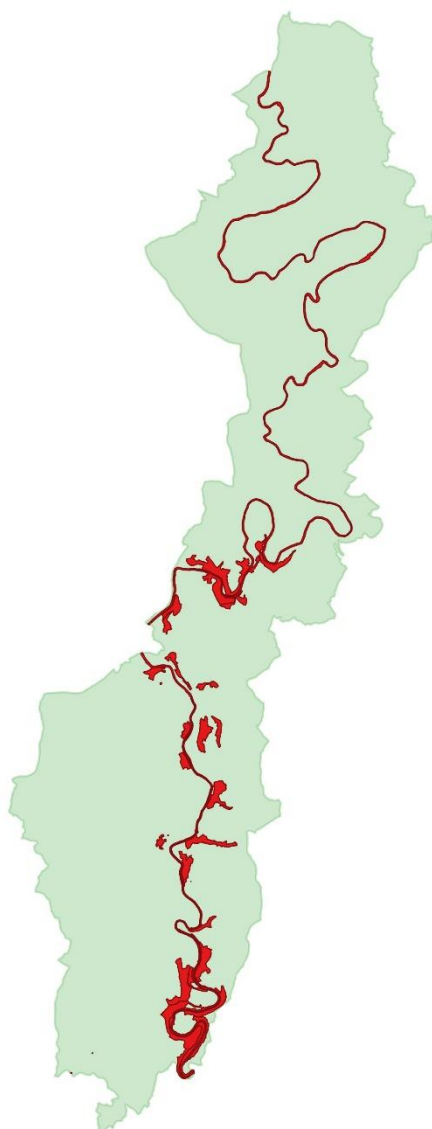


Fig xxx – Wye Valley AONB Special Areas of Conservation

Sites of Special Scientific Interest (SSSIs)

Across the Wye Valley AONB there are 47 Sites of Special Scientific Interest (SSSI), cover a total of 2,295.68 ha, or 7.01% of the Protected Landscape. The largest of these SSSI is the River Wye which cover 663.31 ha, and represents 28.89% of all SSSIs in the AONB.

Information relating the SSSIs in England is readily available and can be analysed. The England Wales border confuses and complicates analysis as there are cross border designations. The River Wye SSSI and Lower Wye Gorge designations are both cross border, some of the Lower Wye Gorge SSSI being included in both the Natural England and Natural Resources Wales gis dataset. This confusion and complication can be attributed to any variations in figures relating to both the amount of SSSIs in each country and the breakdown of condition.

There are 26 SSSIs in England; their size habitat type and condition can be seen in the table below. The difference in SSSI area in the table below (derived from gis dataset) and condition data above (source MEOP data) can be attributed to the cross border SSSIs and different approaches to their analysis.

SSSI name	SSSI area	Habitat	Broad habitat	condition
Sylvan House Barn	0.00	Biological	Built up areas and gardens	Favourable
Wilton Bluff, Ross-on-Wye	0.28	Geological	Earth heritage	Favourable
Scutterdine Quarry	0.98	Geological	Earth heritage	Unfavourable – Declining
Coughton Wood and Marsh	1.13	Biological	Broadleaved, mixed and yew woodland - lowland	Unfavourable – Recovering
Great Doward	1.55	Biological	Calcareous grassland - lowland	Unfavourable - Recovering
Slade Brook	3.65	Geological	Earth heritage	Favourable
Capler Wood	5.97	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Woodshuts Wood	8.74	Biological	Broadleaved, mixed and yew woodland - lowland	Unfavourable - Recovering
Dingle Wood	9.63	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Brooks Head Grove	11.50	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Common Hill	12.91	Biological	Broadleaved, mixed and yew woodlands – lowland Calcareous Grassland - Lowland	3.12 ha Favourable 6.56 ha Unfavourable – Recovering 3.23 ha Unfavourable - Declining
Swanpool Wood and Furnace Grove	14.09	Biological	Broadleaved, mixed and yew woodland - lowland	Unfavourable - Declining
Park Wood	15.19	Biological	Broadleaved, mixed and yew woodland - lowland	Unfavourable – Recovering
Sharpnage Wood	18.97	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Astridge Wood	19.46	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Birch Wood	24.33	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Lea & Pagets Woods	28.82	Biological	Broadleaved, mixed and yew woodland - lowland	1.97 ha Favourable 25.28 ha Unfavourable – Recovering 1.58 ha Unfavourable Declining

Cherry Hill Wood	39.37	Biological	Broadleaved, mixed and yew woodland - lowland	5.76 ha Unfavourable – Recovering 33.61 ha Unfavourable - Declining
Highbury Wood	46.74	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Bigsweir Woods	48.66	Biological	Broadleaved, mixed and yew woodland - lowland	5.81 ha Favourable 42.85 ha Unfavourable – No change
Lower Wye Gorge	66.45	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Shorn Cliff and Caswell Woods	68.65	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
The Hudnalls	98.54	Biological	Broadleaved, mixed and yew woodland - lowland	Favourable
Upper Wye Gorge	252.74	Mixed	Broadleaved, mixed and yew woodland – lowland Earth Heritage	74.33 ha Favourable 178.41 ha Unfavourable - Recovering
Haugh Wood	353.77	Mixed	Broadleaved, mixed and yew woodland – lowland Earth Heritage	Favourable
River Wye	617.15	Biological	Rivers and Streams	114.92 ha Favourable 502.23 ha Unfavourable - Recovering
	1640.56			

Fig xxxx – SSSIs in England (source Natural England SSSI gis layer)

Analysis of the table above shows that on the English side of the AONB there are 931.45 ha (56.78%) of SSSIs in Favorable condition, 612.82 (37.35%) in unfavorable recovering, 42.85 ha (2.61%) in unfavorable no change and 53.48 ha (3.26%) in unfavorable declining.

Each SSSI is classified as either Geological or Biological (or mixed if SSSI designation contains both). There are 3 solely Geological SSSIs in the English AONB, covering 4.91 ha (0.3% of SSSI total area), 3.93 ha in favorable condition (80.04%) and 0.98 ha in unfavorable – declining (19.96%).

21 SSSIs are Biological covering a total of 1,029.13 ha (62.73% of SSSI total area), with 463.32 ha in favorable condition (45.02%), 470.8 ha in unfavorable – recovering condition (45.75%), 42.85 ha in unfavorable no change (4.16%) and 53.48 ha in unfavorable – declining condition (5.2%).

2 SSSIs, the Upper Wye Gorge and Haugh Wood SSSIs are classified as mixed habitat, both geological and biological, and cover a total of 606.52 ha (36.97% of SSSI total area). 428.11 ha are in favorable (70.58%) and 178.41 ha in unfavorable – recovering condition (29.42%).

SSSI habitat in the Wye Valley AONB is then split down further into Broadleaved, mixed and yew woodland –lowland, Calcareous Grassland – Lowland, Rivers and Streams, Earth Heritage, and Built up areas and gardens. The table below shows the condition of each of these more specific habitat types. (NB – SSSIs of mixed habitat have been counted as both biological and geological, counting the area twice)

Habitat	Broad Habitat	SSSI area (ha)	Condition							
			Favorable		Unfavorable - recovering		Unfavorable – no change		Unfavorable - declining	
			ha	%	ha	%	ha	%	ha	%

Biological	Built up areas and gardens		0.00	100						
Biological	Calcareous grassland - lowland	14.45	3.12	21.59	8.11	56.12			3.22	22.29
Biological	Rivers and Streams	488.47	81.88	16.76	406.59	83.24				
Biological	Broadleaved, mixed and yew woodlands - lowland	1,145.66	809.25	70.64	241.07	21.04	42.85	3.74	52.20	4.58
Geological	Earth Heritage	611.43	432.04	70.67	178.41	29.18			0.98	0.16

The table above indicates that over 70% of both Broadleaved, mixed and yew woodland, and Earth heritage (100% of Built up areas and gardens, but the land coverage is negligible) sites are in favorable condition. More than 50% of Calcareous grassland – lowland land is unfavorable – recovering and of greater concern more than 20% are unfavorable – declining. The statistics show that this broad habitat type is in the poorest condition. The large majority (83.24%) of River and stream SSSI sites are in unfavorable – recovering condition, indicating an increase in the overall condition of this habitat type.

In Wales there are 22 Sites of Special Scientific Interest (SSSI) covering 655.12ha, which can be seen listed below in figure xxx. The condition of Welsh SSSIs is currently unknown.

SSSI name	ha
Mwyngloddfa Mynydd-Bach	0.18
Barbadoes Hill Meadows	3.48
Blackcliff - Wyndcliff	122.45
Caer Llan Wood	5.53
Cleddon Bog	14.98
Cleddon Shoots Woodland	11.18
Croes Robert Wood	18.61
Fiddlers Elbow	44.75
Gaer Wood, Llangoven	14.39
Graig Wood	14.86
Harper's Grove - LORD'S GROVE	23.5
LIVOX WOOD	20.22
LLWYN Y CELYN WETLAND	10.42
LOWER HAEL WOOD	18.45
MAES-YR-UCHAF WOOD	2.3
PARK HOUSE WOOD	8.72
PENARTH BROOK WOODLANDS	4.46
PENTWYN FARM GRASSLANDS, PENALLT	7.59
PIERCE, ALCOVE AND PIERCEFIELD WOODS	78.66
UPPER WYE GORGE	54.97
WYE VALLEY LESSER HORSESHOE BAT SITE	0.58
RIVER WYE (LOWER WYE) / AFON GWY (GWY ISAF)	174.84
	655.12

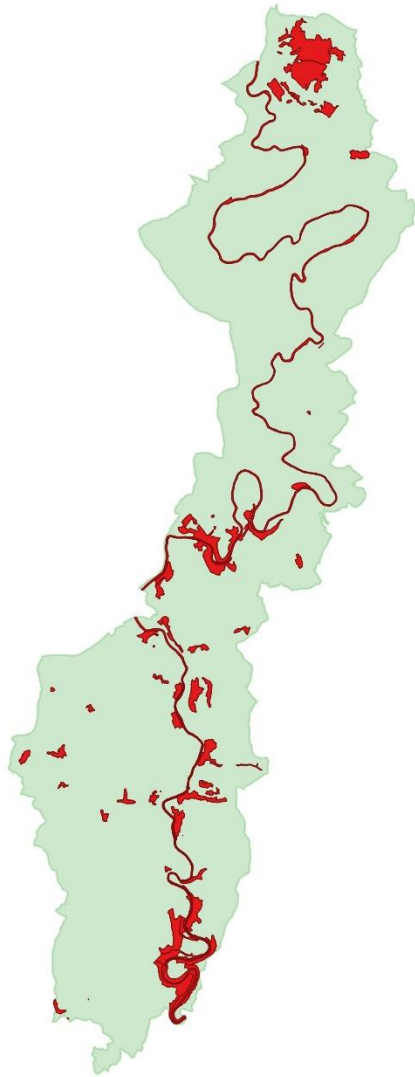
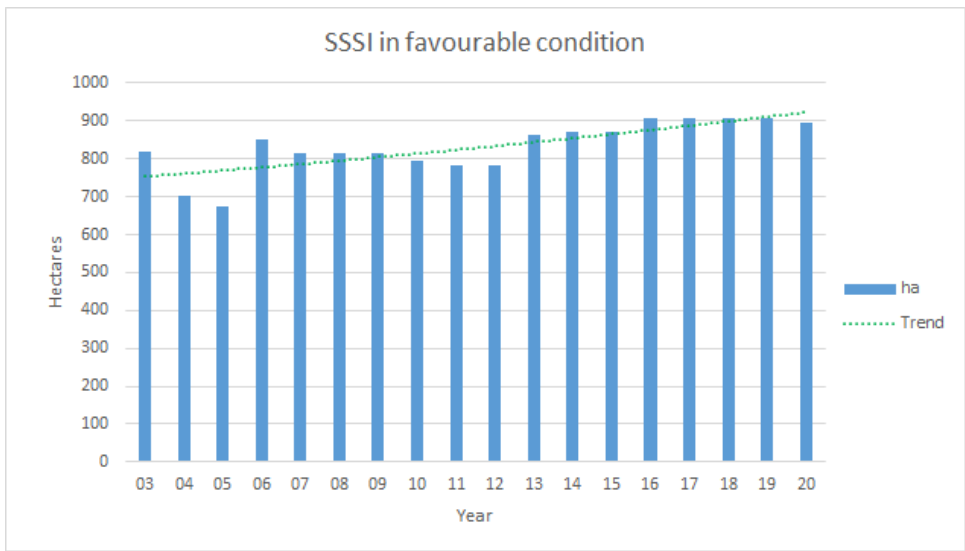


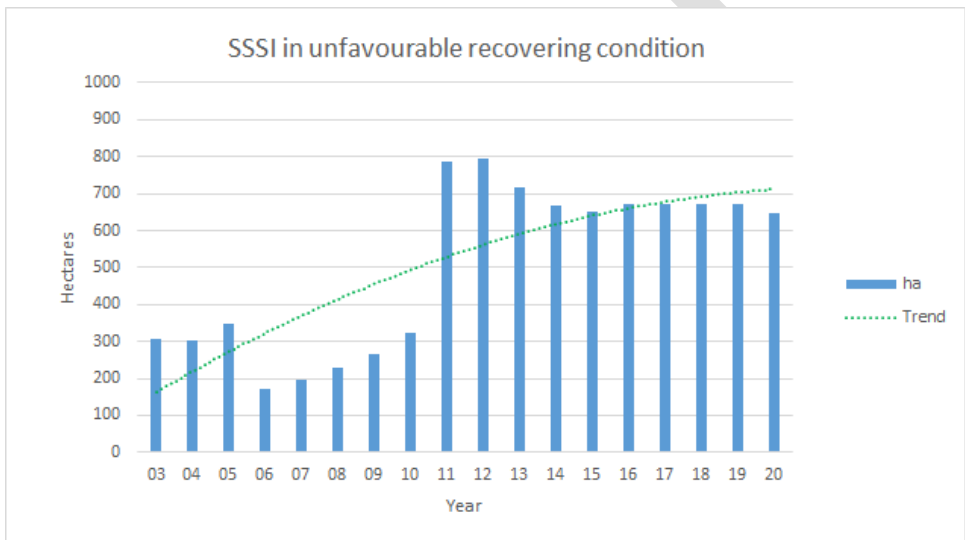
Fig xxx – Wye Valley AONB Sites of Special Scientific Interest

SSSI condition (England)

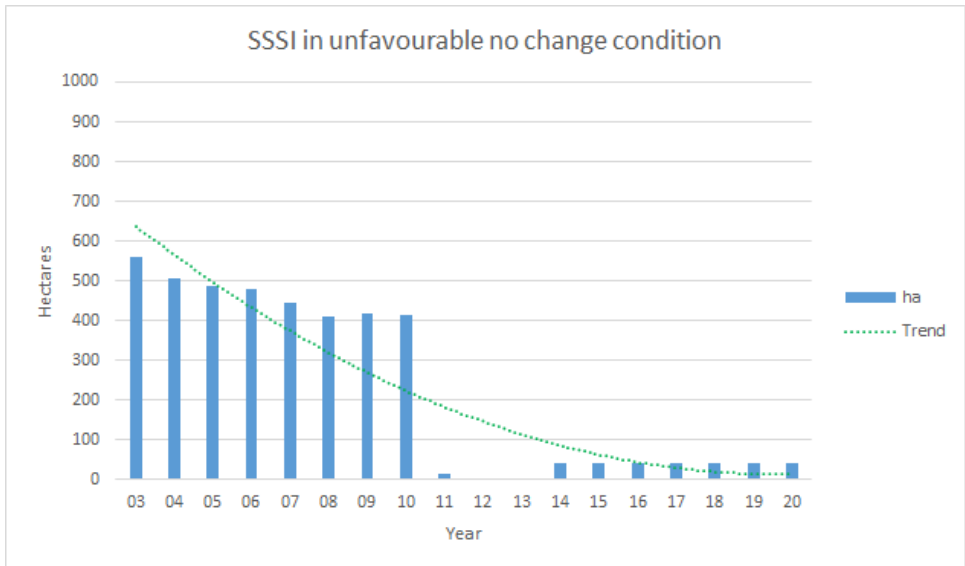
Analysis of Natural England’s data on the condition of SSSIs in the Wye Valley (England) shows that since 2003 the hectareage of SSSIs in Favorable condition has risen gradually. Despite a small drop in hectareage of SSSI in favourable condition in 2020, the trend over the range of data still shows a gradual increase in condition since 2003 (see fig xxxx).



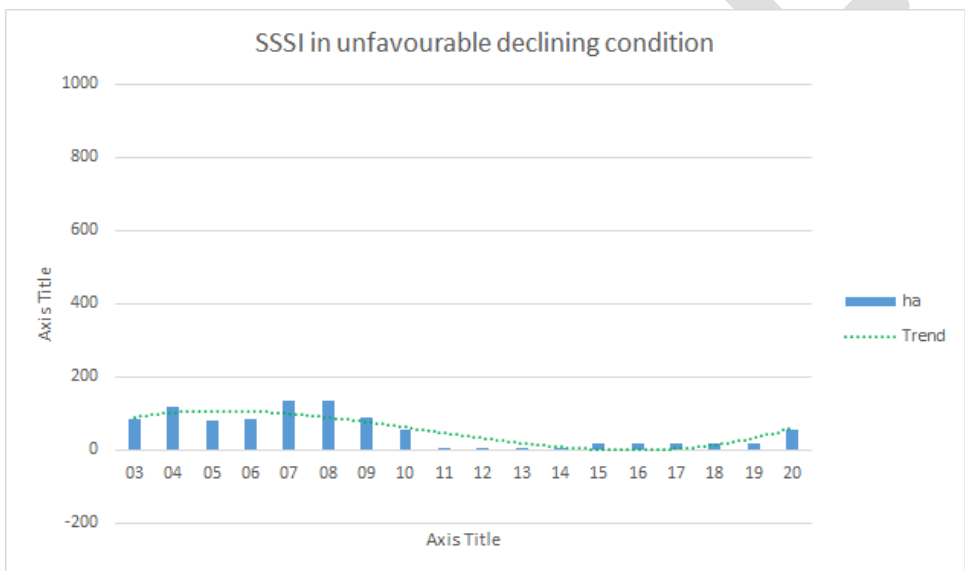
The percentage of SSSI in Unfavourable Recovering condition rose dramatically until 2010 but has since dropped off slightly (see fig xxxx). This trend has continued in 2020 with another small decrease, however the area of SSSI in unfavourable recovering condition is still more than double that between 2003 and 2010 resulting in the ongoing trend still being upwards.



This pattern of improvement in SSSI condition since 2003 is also replicated when looking at SSSI in Unfavourable No Change. A gradual reduction in hectares from 2003 to 2010, followed by a sharp drop and a levelling off at very low level (see fig xxxx).



The percentage of habitat in Unfavourable Declining condition has also shown a decrease over the 15-year period to only 1.16% in 2019, however an increase was recorded in 2020 resulting in a recent upward trend. The amount of SSSI in poor condition is still lower than in any of the 8 years between 2003 and 2010, but has shown a steady increase since. It must be noted though that the low hectareage in comparison to other SSSI condition status' accentuates only small difference in annual figures.



	Favourable		unfavourable recovering		unfavourable no change		unfavourable declining		Total ha
	ha	%	ha	%	ha	%	ha	%	
2003	818	46.29%	307	17.37%	559	31.64%	83	4.70%	1767
2004	703	43.13%	304	18.65%	506	31.04%	117	7.18%	1630
2005	676	42.54%	347	21.84%	486	30.59%	80	5.03%	1589
2006	853	53.68%	173	10.89%	479	30.14%	84	5.29%	1589
2007	816	51.35%	196	12.33%	444	27.94%	133	8.37%	1589
2008	816	51.39%	229	14.42%	411	25.88%	132	8.31%	1588
2009	814	51.32%	267	16.83%	416	26.23%	89	5.61%	1586
2010	794	50.06%	324	20.43%	415	26.17%	53	3.34%	1586
2011	781	49.24%	787	49.62%	13	0.82%	5	0.32%	1586

2012	781	49.24%	796	50.19%	4	0.25%	5	0.32%	1586
2013	865	54.54%	716	45.15%		0.00%	5	0.32%	1586
2014	872	54.98%	666	41.99%	43	2.71%	5	0.32%	1586
2015	872	54.98%	652	41.11%	43	2.71%	19	1.20%	1586
2016	907	55.34%	670	40.88%	43	2.62%	19	1.16%	1639
2017	907	55.34%	670	40.88%	43	2.62%	19	1.16%	1639
2018	907	55.34%	670	40.88%	43	2.62%	19	1.16%	1639
2019	907	55.34%	670	40.88%	43	2.62%	19	1.16%	1639
2020	895	54.61%	648	39.54%	43	2.62%	53	3.23%	1639

Local wildlife sites

Local Wildlife Sites are sites considered to be of 'substantive nature conservation value'. It is a non-statutory designation for areas identified and selected by local wildlife conservation groups and authorities, for their nature conservation value. They are known by different names locally such as Sites of Importance for Nature Conservation (SINCs), Sites of Nature Conservation Importance (SNICs) and County Wildlife Sites, and play an important role in conserving natural heritage.

There are 685 Local Wildlife Sites in Herefordshire, 53 of which are in the AONB (2009 data); approximately 850 Key Wildlife Sites in Gloucestershire, 35 of which are in the AONB covering 535.19ha (2009 data); 715 Sites of Importance for Nature Conservation in Monmouthshire, of which 245 are in the AONB (2014 data). Local Wildlife Sites cover just over 11% of the AONB, making them a significant resource of important habitat.

It should be noted that there is some cross over between Local Wildlife Sites and SSSIs, with some land being designated as both.

	Number of sites	Total Hectares	% of county within AONB	% of AONB
Gloucestershire	35	535.19	9.12%	1.6%
Monmouthshire	245	1,130.4	9.52%	3.45%
Herefordshire	53	1,976.54	13.18%	6.04%
Total	333	3,642.13		11.13%

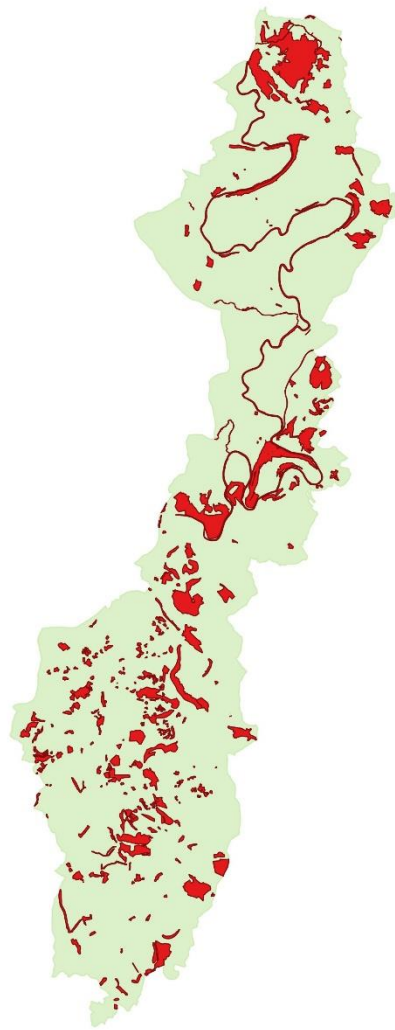


Fig xx. Local Wildlife Sites in the AONB

Listed Buildings

There are 765 (up from 761 in 2018, additional 4 Grade 2 listings) listed building in the English part of the AONB (2020), and 201 in Wales (2019). 966 in Total.

24 Grade 1 listed buildings represents 2.5% of all listings. 66 grade 2* is 6.8%. The remaining 876 buildings are grade 2, equal to 90.7% of listings.

	Grade		
	1	2*	2
England	20	40	705
Wales	4	26	171

Scheduled Monuments

Within the AONB there are a total of 125 Scheduled Ancient Monuments (SAMs). On the English side of the border there are 81, and 44 in Wales 44 (2018/2019 data). The time period of SAMs in Wales and the location of all SAMs can be seen in the table and map below.

	Number
Prehistoric	8
Roman	2
Early Medieval	1
Medieval	16
Post Medieval / Modern	17
TOTAL	44

Fig xxxx Time period of Scheduled Ancient Monuments in Wales

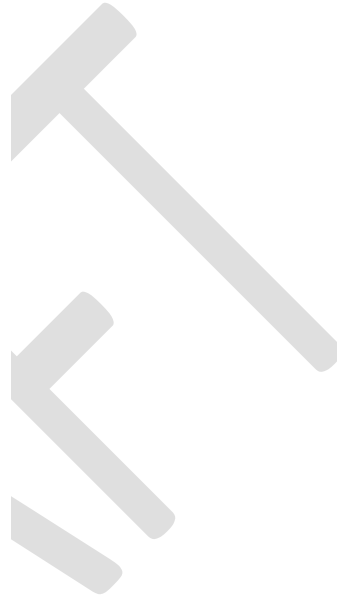
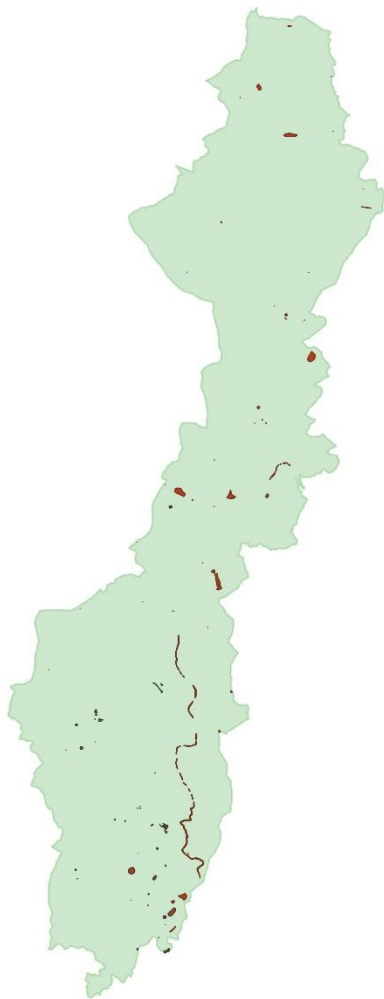


Fig xx. Schedules Ancient Monuments in the AONB

Conservation Areas

There are 21 conservation areas in the AONB, 9 in Monmouthshire, 6 in Gloucestershire and 6 in Herefordshire. Of these 15 are wholly within the AONB and 6 part outside. 1 other Conservation area (Clearwell) abuts the AONB. Figure xx below shows their location.

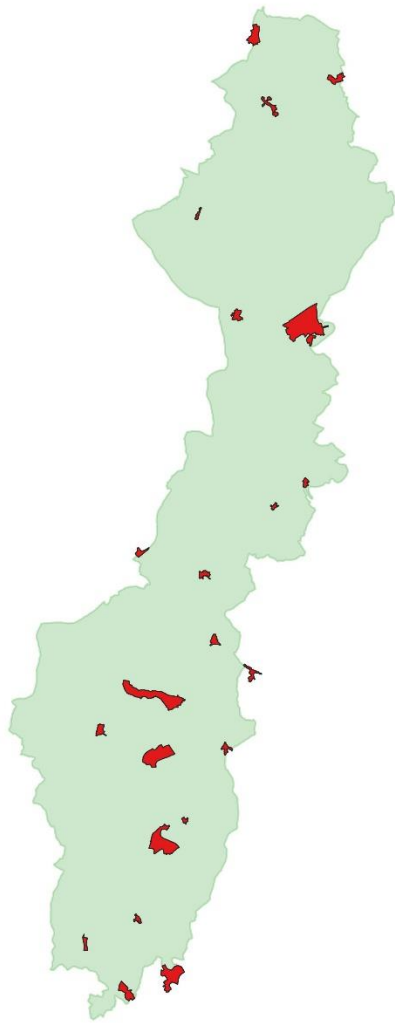


Fig xx. Conservation Areas in the AONB

Heritage at Risk (source: MEOPL / Historic England Heritage at Risk Register)

The Heritage at Risk register (England) from 2019 establishes that there are 13 listings in the English part of the AONB which are considered to be 'at risk'. This represents a reduction in at risk listings from 15 identified in 2017. These can be seen in the table below. The figure for Wales is unknown.

6 of the at risk features are listed buildings (down from 8 in 2017), representing 0.8% of listed buildings (down from 0.9% in 2017). 6 at risk features are Scheduled Monuments, representing nearly 7.5% of SAMs in the English AONB. 1 at risk feature is in a Conservation Area. The only grade 1 listed building identified at risk in 2017 is no longer on the register. Of the listed buildings at risk 4 are grade 2* (10% of grade 2* listed buildings in the English AONB, down from 12.5% in 2017), and 2 are grade 2 (0.3% of grade 2 listed buildings in the English AONB). It is a worrying statistic that a larger percentage of listed buildings at risk are those with a greater significance and protection, but it is encouraging that fewer listings are considered at risk than 2 years previously.

		Grade	
Offa's Dyke: section in Chapelhouse Wood, 240 metres west of the Recreation Ground	Scheduled Monument		Archaeology
Offa's Dyke: section in Lippets Grove, 680 metres WSW of Beeches Farm	Scheduled Monument		Archaeology

Offa's Dyke: section in Passage Grove, 660 metres west of Sheepcot	Scheduled Monument		Archaeology
Moated site 360m north of Joanshill Farm	Scheduled Monument		Archaeology
Offa's Dyke: section in Caswell Wood, 280 metres west of Beeches Farm	Scheduled Monument		Archaeology
Offa's Dyke: section in Worgan's Wood, 800 metres west of Chase Farm	Scheduled Monument		Archaeology
Church of St Andrew and St Mary, How Caple	Listed Building	2*	Place of worship
Church of St Dubricius, Hentland	Listed Building	2*	Place of worship
Church of St Michael, Brampton Abbots	Listed Building	2*	Place of worship
Outbuilding east of Marstow Court (formerly listed as the Granary at Marstow)	Listed Building	2*	Building or structure
Church of St Saviour, Redbrook	Listed Building	2	Place of worship
Church of St Matthew, Marstow	Listed Building	2	Place of worship
Ross-on-Wye	Conservation Area		Conservation area

Figure xx Heritage at Risk

Welsh Historic Landscapes

To recognise the value of historic landscapes, and to raise awareness of their importance, Cadw, in partnership with the Countryside Council for Wales (now called Natural Resources Wales) and the International Council on Monuments and Sites (ICOMOS UK) has compiled a non-statutory Register of 58 landscapes of outstanding or special historic interest in Wales. One of these is the Lower Wye Valley. A visual representation of the are recognised as a historic landscape in below.

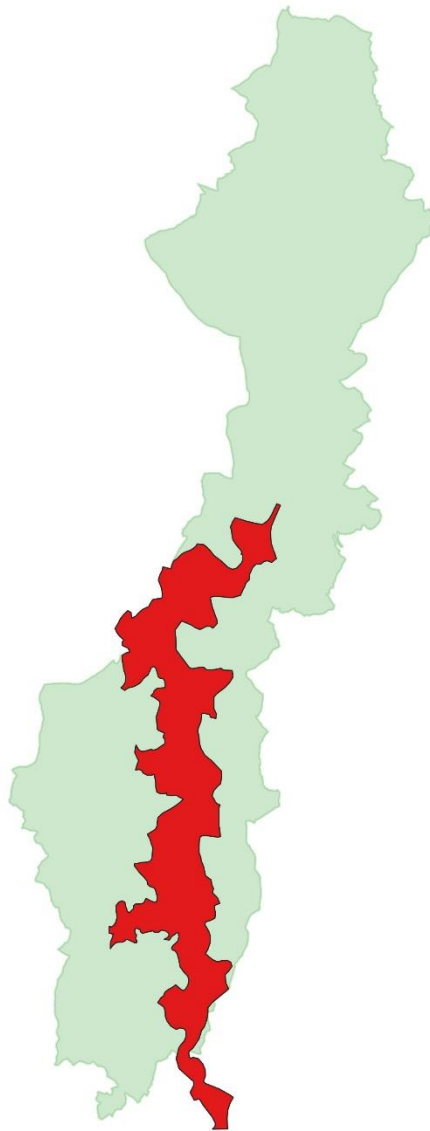


Fig xx. Map showing the Welsh Historic Landscape of the Lower Wye Valley

Historic Parks and Gardens

There are 11 registered Historic Parks and Gardens across the AONB, 2 in Herefordshire and 9 in Monmouthshire. Piercefield Park is the only Grade 1 listing, one of 36 grade 1 listings in Wales and 5 in Monmouthshire. There are 5 each graded 2 and 2*. The location of registered parks and gardens is represented visually in figure xx below.

Name	County	Grade
Piercefield Park	Monmouthshire	1
The Argoed	Monmouthshire	2
Itton Court	Monmouthshire	2
The Kymin	Monmouthshire	2
Chepstow Park	Monmouthshire	2
Sufton Court	Herefordshire	2
High Glanau	Monmouthshire	2*
Mounton House	Monmouthshire	2*

Troy House	Monmouthshire	2*
Wyndcliffe Court	Monmouthshire	2*
Hill Court	Herefordshire	2*

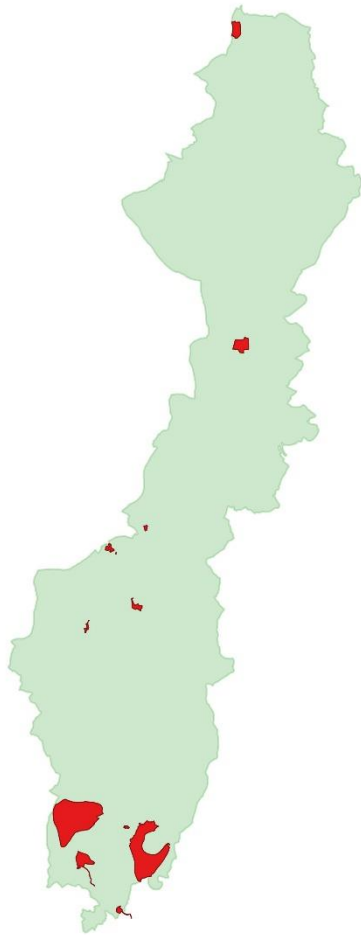


Fig xx. Map showing Registered Parks and Gardens in the AONB

Landownership

The majority of land in the AONB is in private ownership. There is however a significant amount of land publicly owned. The Public Forest Estate, owned by Natural Resources Wales and Forestry England covers 5,002.7 ha of land across the AONB (1,969.87 ha in England and 3,035.39 ha in Wales), equivalent to 15.28% of the Protected Landscape (see fig xxx below).

Other significant landholdings include 278.2ha of Woodland Trust sites, 11.84ha of National Trust across their 2 areas of always open land in the AONB at The Kymin and Poors Acre, along with numerous sites owned and managed by Herefordshire, Gloucestershire and Gwent Wildlife Trusts.

It is estimated more than 17% of the AONB is therefore in the ownership and management of organisations who have a remit for and/or interest in management for the benefit of wildlife, habitat and landscape.

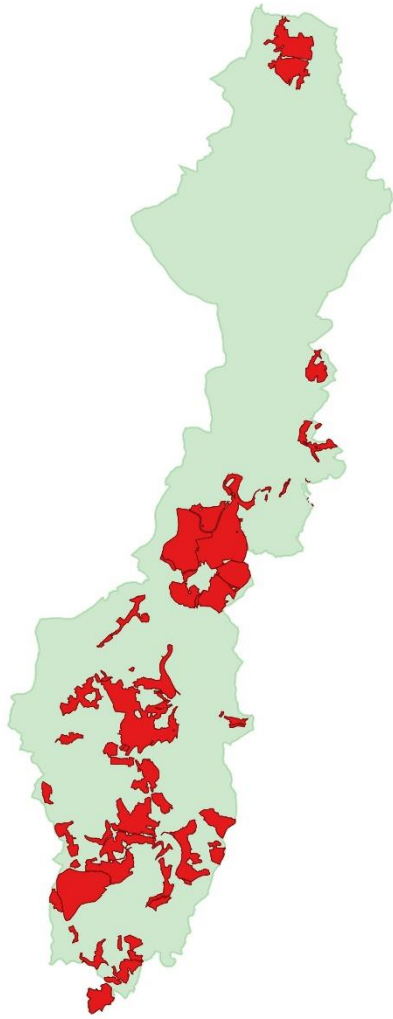


Fig xx. Public Forest estate in the Wye Valley AONB

Small Commons

Registered Common Land covers 455 ha across the AONB, 1.4% of the landscape. 46 ha of this is in Wales and 409 ha in England. The largest examples of which are Coppet Hill, Broadmoor Common, Moor Meadow, Staunton Meend, Cleddon Bog, The Hudnalls and woodland near Coed Ithel weir.

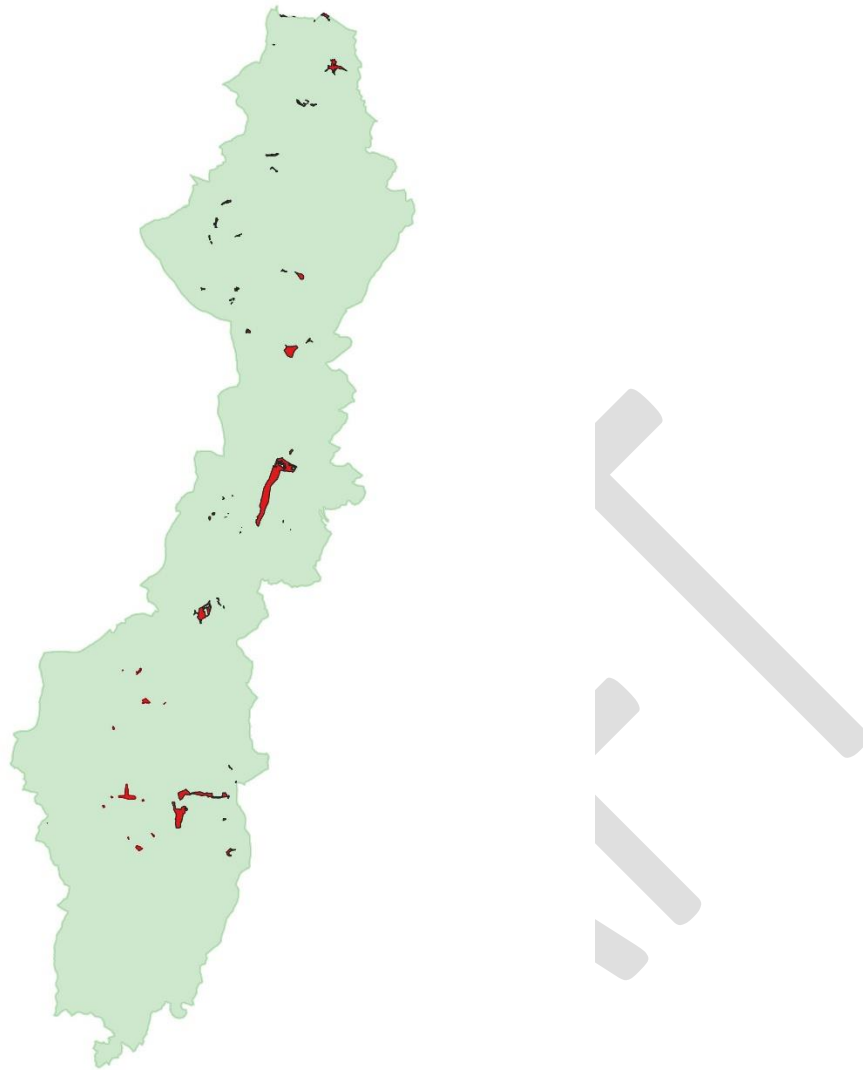


Fig xxx Registered Common Land in the Wye Valley AONB

Access Land

The Countryside and Rights of Way Act (2000) gave rights of access on foot to land mapped as mountain, moor, heath and down, and all land over 500m in height. Also included is all registered common land and land dedicated by the landowner. In the Wye Valley there is very little land mapped as access land based on the habitat type, but there are significant areas of land either dedicated by the landowner or areas of registered common. The total amount of access land across the whole AONB is 5,641.99 ha, which equates to 17.24% of the protected landscape over which people have a right of access on foot.

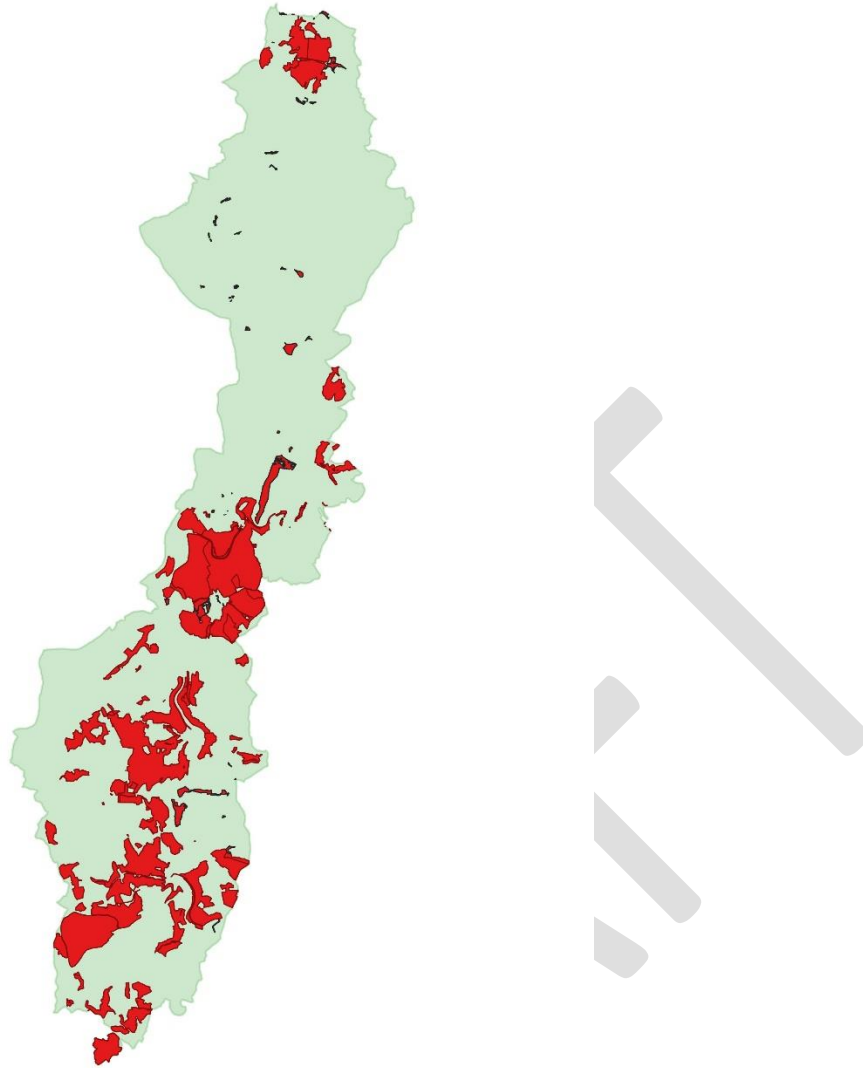


Fig xxx CROW Access Land in the Wye Valley AONB

Promoted Routes

The two primary promoted walking routes in the AONB are the Wye Valley Walk and Offa's Dyke National Trail. The Wye Valley Walk travels for 74.93km / 46.56 miles within the AONB, Offa's Dyke Path covering 23.4km / 14.54 miles. Both routes are at their most southern ends within the AONB, the Wye Valley Walk starting/ending within the AONB at Chepstow. Offa's Dyke paths starts/finishes at Sedbury cliffs above the river Severn.

The Wye Valley Walk can be seen represented by a blue line in fig xxx below; Offa's Dyke National Trail depicted in red.

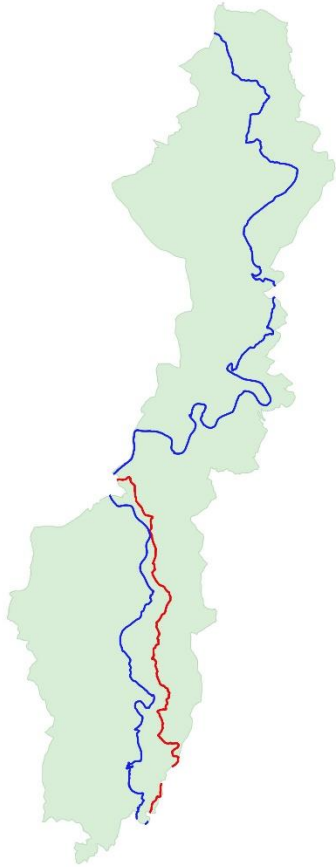


Fig xxxxx Wye Valley Walk and Offa's Dyke National Trail

Welsh Language

According to the most recent census data in 2011, in Monmouthshire 8,780 (an increase from 7,688 in 2001) were considered able to speak Welsh and 79,829 not able to speak Welsh. This equates to 9.9% of the population of Monmouthshire being able to speak Welsh; the national average is 19%. There are only five Local Authorities with fewer Welsh speakers, Blaunau Gwent being the lowest at 7.8%. The highest percentage of people able to speak Welsh is Gwynedd at 65.4% (statswales.gov.wales).

There are only 3 Welsh Electoral Wards almost entirely within the AONB, Wyesham, Trellech United and St Arvans.

	Welsh Ability Level % of population (2011)					
	Speak, read and write	Speak and read, but cannot write	Speak, but can't read or write	Can understand spoken only	Other combination of skills	No skills
Trellech United	6.9%	0.5%	2.0%	1.9%	1.2%	87.5%
St Arvans	6.1%	0.8%	1.5%	2.0%	1.7%	88%
Wyesham	7.3%	0.5%	1.8%	2.5%	2.2%	85.8%

Bearing in mind the comparison above of Monmouthshire in the context of the rest of Wales, analysing Census data for the whole of Monmouthshire County for 2001 and 2011 provides the opportunity to look at changes in Welsh language use at a local level. Fig xxx below shows a general increase in the numbers able to speak Welsh across

Monmouthshire. All age ranges upto 65 show an increase in Welsh language ability; there is however a drop in the number of people able to speak Welsh in Monmouthshire over the age of 65.

	2001	2011	
Age range	% of population able to speak Welsh		Increase / Decrease – number of people
All ages (+3)	9.3%	9.9%	+1,092
Age 3-4	7.3%	18.2%	+204
Age 5-15	40.6%	42%	-164
Age 16-19	11.7%	21.9%	+547
Age 20-44	3.2%	4.7%	+312
Age 45-64	3.2%	3.3%	+155
Age 65-74	3.3%	2.8%	+15
Age 75+	2.9%	2.6%	+23

All ages (+3)				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	7,688	74,663	82,351	9.3%
2011	8,780	78,829	88,609	9.9%

Age 3-4				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	146	1,854	2000	7.3%
2011	350	1,573	1923	18.2%

Age 5-15				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	5,036	7,367	12,403	40.6%
2011	4,872	6,734	11,606	42%

Age 16-19				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	457	3,450	3,907	11.7%
2011	1,004	3,574	4,578	21.9%

Age 20-44				
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	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	825	24,562	25,387	3.2%
2011	1,137	22,964	24,101	4.7%

Age 45-65				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	750	22,657	23,407	3.2%
2011	905	26,453	27,358	3.3%

Age 65-74				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	266	7,824	8,090	3.3%
2011	281	9,789	10,070	2.8%

Age 75+				
	Able to speak Welsh	Not Able to speak Welsh	Total Population	% population able to speak Welsh
2001	208	6,949	7,157	2.9%
2011	231	8,742	8,973	2.6%

Railway Heritage

There is no standard gauge railway line in the AONB remaining in use. There is however a significant railway heritage which can be seen throughout the AONB. Fig xxx below shows the extent of former railway lines in the AONB and the location of former stations and halts.



Fig xxxxx Wye Valley AONB former railway line and station/halt locations

A number of different lines passed through the AONB. The Hereford, Ross & Gloucester railway passed through the AONB between Holme Lacy and Ross for 12.5km. Stations at Ballingham, Fawley and Backney Halt were all situated in the AONB. Much of the railway heritage in the town of Ross-on-Wye sits directly adjacent to the AONB, including the site of the railway station and Town and Country Trail which runs on the old track bed directly adjacent to the AONB boundary for much of its length.

17.3km of the Ross & Monmouth railway line pass through the AONB, passing Walford halt, Kerne Bridge, Lydbrook Junction, Symonds Yat and Hadnock Halt stations. Much of the length of the track bed between Hadnock and Lydbrook now has public access in the form of the Peregrine Path and Wye Valley Walk. The Severn & Wye Railway met the Ross & Monmouth at Stowfield near Lydbrook, 2.27km of which are in the AONB. This line included the Lower Lydbrook Viaduct which passed high over Lower Lydbrook before its removal in 1966, and Lower Lydbrook station.

The Wye Valley railway ran from Monmouth to Chepstow predominantly following the river down the valley. 17.8km of its 24km length are in the AONB, including 7 former station sites named Redbrook on Wye, Penallt Halt,

Whitebrook Halt, St Briavels, Llandogo Halt, Brockweir Halt, and Tintern. Tintern Old Station Country Park is now one of the foremost locations to explore the Wye Valleys railway heritage.

Short branches came off the Wye Valley line serving Tintern Quarry and Tintern Wireworks which includes the railway bridge in Tintern village. The Coleford Railway also joined with the Wye Valley line just north of Redbrook village, travelling for 5.1km in the AONB and including a station at Newland. The Monmouth Railway, also known as the Monmouth Tranroad, was a horse-drawn plateway which ran from Coleford to Monmouth. This became dormant in the 1870s and was replaced by the Coleford Railway using some of the Tranroads route. The Tramroad incline bridge still passes over the road out of Redbrook.

Four former railway bridges in the AONB remain, a further 5 river crossings no longer exist although abutments can still be seen at some crossing points. The railways would have passed through 8 separate tunnels in the AONB (the Wye Valley Line enters/leaves the AONB underground south of Tintern).

Ecosystem Services analysis

DRAFT