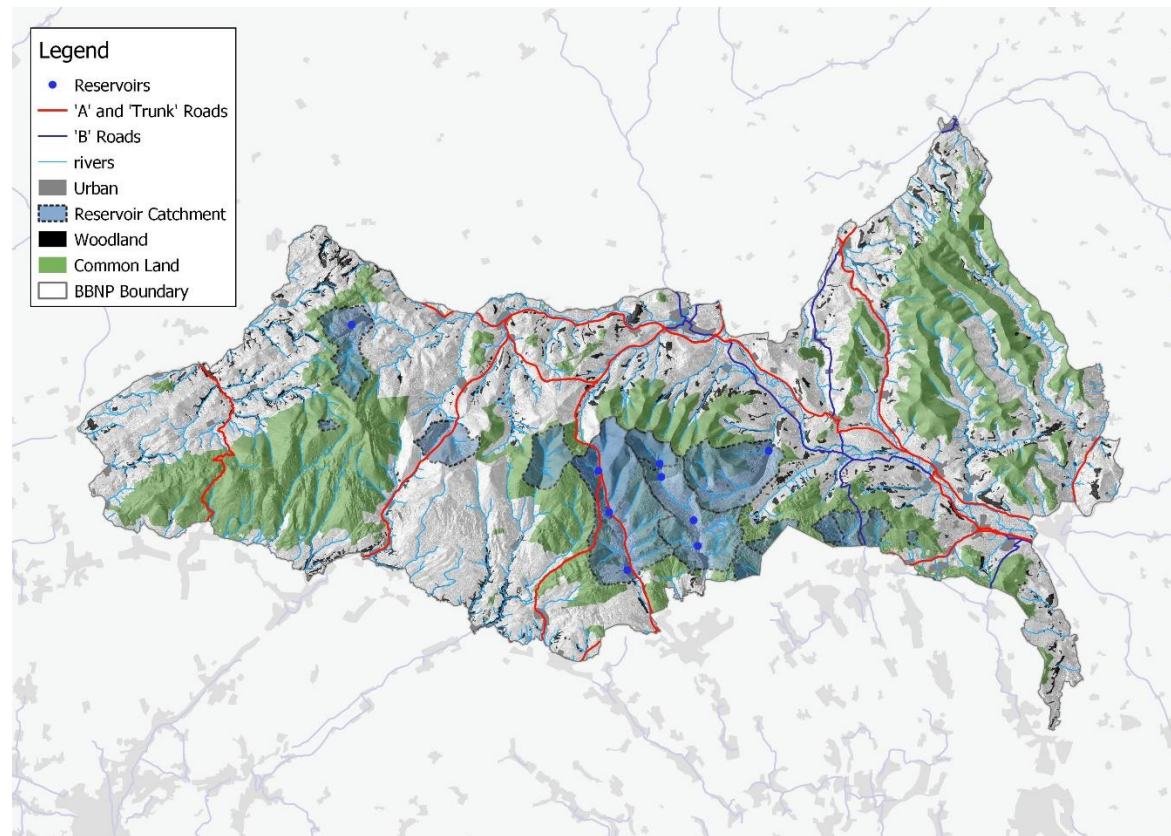


Brecon Beacons National Park Authority

State of the Park Report 2020



SoPR 2020 INDICATORS	
Chapter 1 - Nature and Climate	
1	Condition of Geological SSSIs
2	Condition of Biological SSSIs
3	Natura 2000
4	Water Quality
5	Flood Risk
6	River Discharge
7	Air Quality
8	Condition of Soils/Peat
9	Priority Habitats and Species – Woodland and Ancient Semi-Natural Woodland
10	Breeding/Nesting Birds
11	Bats
12	Invasive Non-Native Species
Chapter 2 - Culture and Heritage	
13	Rights of Way
14	Upland Erosion on Paths
15	Welsh Language
16	Cultural Events
17	Historic Environment Scheduled Ancient Monuments
18	Historic Environment Listed Buildings
Chapter 3 - People and the Economy	
19	Tourism Spend
20	Population
21	Housing
22	Vacancy Rates
23	Welsh Index of Multiple Deprivation



Contents

Figures.....	5
Introduction.....	7
Headline Summary.....	9
Chapter 1 – Nature and Climate.....	19
Introduction.....	19
Indicator 1 - Condition of Geological SSSIs.....	22
Indicator 2 - Condition of Biological SSSIs.....	23
Indicator 3 - Natura 2000 sites.....	24
Indicator 4 – Water Quality.....	25
Indicator 5 – Flood Risk.....	27
Indicator 6 - River Discharge.....	28
Indicator 7 - Air Quality.....	29
Indicator 8 – Condition of Soils/Peat.....	30
Indicator 9 – Priority habitats and species – Woodland and Ancient Semi-Natural Woodland.....	32
Indicator 10 - Breeding/Nesting Birds.....	34
Indicator 11 – Bats.....	38
Indicator 12 - Invasive Non-Native Species.....	40
Chapter 2 – Culture and Heritage.....	44
Introduction.....	44
Indicator 13 - Rights of Way.....	45
Indicator 14 - Upland Erosion.....	47
Indicator 15 – Welsh Language.....	47
Indicator 16 – Cultural Events.....	49
Indicator 17 - Scheduled Ancient Monuments.....	51
Indicator 18 - Listed Buildings.....	52
Chapter 3 – People and the Economy.....	53
Introduction.....	53
Indicator 19 - Tourism Spend.....	56
Indicator 20 - Population.....	57
Indicator 21 - Housing.....	63
Indicator 22 – Town Centre Vacancy Rates.....	66
Indicator 23 – Welsh Index of Multiple Deprivation.....	67
Appendices.....	71

Appendix 1- Indicator Comparison Table.....	72
Appendix 2 – Bat Maternity Roost.....	74
Appendix 3 - Gaseous Ammonia.....	76
Appendix 4 – Natura 2000 Sites and Condition of Features	78
Appendix 5 – Natura 2000 Sites and Condition of Features (NRW 2020)	81
Appendix 6 - Chemical Status of Water Bodies	82
Appendix 7 - Ecological Status of Water Bodies	83
Appendix 8 - Overall Waterbody Status.....	84
Appendix 9 - Water Body Status	85
Appendix 10 - 23-year trend species data for 1995-2018.....	88
Appendix 11 - Welsh Language Skills Comparison (Source: Census 2011 Welsh Index of Multiple Deprivation).....	90
Appendix 12 – Employment/Unemployment.....	92

Figures

Figure 1 Condition of SSSI Sites between 2014 and 2017	22
Figure 2 Condition of Geological SSSI features	22
Figure 3 Condition of Biological SSSI features.....	23
Figure 4 Status of SAC Features within the Park (Area in Ha).....	25
Figure 5 Flooding and Welsh Government TAN 15 map.....	27
Figure 6 Flood Risk in Ha.....	28
Figure 7 Annual Average Flow Rate of the River Usk.....	29
Figure 8 NO2 Air Quality Exposure Indicators	30
Figure 9 National Parks - Total Peatland - Area (Ha) (NRW 2020).....	31
Figure 10 Distribution of Peat.....	32
Figure 11 Woodland habitat area figures (2014 NRW Phase I Data)	33
Figure 12 Ancient Woodland.....	34
Figure 13 Farmland Species	35
Figure 14 Upland Species	36
Figure 15 Woodland Species.....	36
Figure 16 Urban, Wetland and Other Species	37
Figure 17 Wales bat species population trends summary table	39
Figure 18 Invasive Non-Native Species.....	41
Figure 19 Number of species and number of records of INNS recorded in the National Park within the last twenty years (Data from the Local Records Centre for Powys & BBNP-BIS)	42
Figure 20 Top 10 INNS by number of records in the Brecon Beacons National Park (Data from the Local Records Centre for Powys & BBNP, correct at 14/02/20).....	43
Figure 21 Change in Number of INNS Records	43
Figure 22 Registered area of farmed land in the park.....	45
Figure 23 Rights of way ‘Easy to Use’	46
Figure 24 Rights of way ‘Open’	46
Figure 25 Welsh Language Skills (Source: Census 2011)	48
Figure 26 No. of Local Events Held	49
Figure 27 Historic Environment Features in the Park.....	50
Figure 28 Scheduled Ancient Monuments.....	51
Figure 29 Listed Buildings and Buildings at Risk	52
Figure 30 Tourism spend by sector of expenditure (STEAM data 2017)	56
Figure 31 Guests staying in YHA hostel in the Brecon Beacons.....	57
Figure 32 Population of Wales’ National Parks (Source: Stats Wales, 2018).....	58
Figure 33 National Park Population Projections (Source: Stats Wales 2017)	59
Figure 34 Percentage of Residents per age group (Data Source: Stats Wales).....	60
Figure 35 Household Projections (Source: Welsh Government 2017)	61
Figure 36 Household type projections 2014 – 2029 (Source: Welsh Government 2017)	61
Figure 37 Average Household Size Predictions.....	62
Figure 38 Affordable Housing Need in the Park.....	63
Figure 39 National Park House Prices (Source Lloyds data on house prices and affordability (2018))	64
Figure 40 Affordability Ratio (Source Lloyds data on house prices and affordability (2018))	64

Figure 41 House Completions in the National Park (Source: Joint Housing Land Availability Studies) 65

Figure 42 Houses built on large housing sites 2015-2019 65

Figure 43 Annual Vacancy Rates (1 Monitoring Period = 1 Year) 66

Figure 44 Welsh Index of Multiple Deprivation (Source: Welsh Government WIMD)..... 67

Introduction

1. The Brecon Beacons National Park Authority has prepared this State of the Park Report (SoPR) to inform the management planning process. It is important to identify the key issues that are affecting (both positively and negatively) the achievement of park purposes and duty. The purposes and duty, identified in the Environment Act (1995), are as follows:

Purposes:

- 1 *Conserve and enhance the natural beauty, wildlife and cultural heritage*
- 2 *Promote opportunities for the understanding and enjoyment of the special qualities of national parks by the public*

Duty:

Seek to foster the economic and social well-being of local communities within the national parks

2. The report is informed by data held by a variety of organisations, stakeholder involvement and a review of baseline information. Preparation of the SoPR is also the essential first step in the Strategic Environmental Assessment (SEA) of the Management Plan.
3. The National Park boundary is not consistent with boundaries of organisations from whom we rely on for much of our data, such as Local Authorities and Natural Resources Wales (NRW). Therefore, getting meaningful data which has been cut to fit within the park boundary can be a challenge. Consequently, the SoPR will remain under review and areas that we believe we would benefit from additional data have been identified.
4. The indicators, and others as data becomes available, will be monitored against best available baseline data for the Park's Special Qualities and updated on a regular basis.
5. The indicators provide a snapshot of the present state of the Park and, where possible, signal trends over time against best available baseline data from the 2006 and 2014 SoPR reports and other sources.
6. The report must be read subject to caveats, which are identified where relevant, due to limited data availability. However, a picture does begin to emerge of the National Park as it is today, against which future changes can be measured.
7. Interpretation, judgement, policy development and planning activity to tackle the complex issues that emerge from this report fall under the scope of the Management Plan. Appendix I provides a table of indicators from 2006, 2014 and 2020 and a list of indicators that we would like to use but a data gap exists.
8. This edition of the SoPR supersedes the 2006 SoPR and 2014 SoPR.

Background

9. This report is being published at a time of exceptional environmental and political challenge at national and global scale. There is robust evidence and a rapidly growing public consciousness about the threat to humanity, both from climate change and the decline in nature's abundance, diversity and connectedness.
10. It is important that we use best available evidence about the current condition of the Park, where possible tracking trends from previous State of the Park Reports, in order to inform the development of policies, plans and actions that will be set out in the

Management Plan. In compiling and assessing the information in this report we are conscious that we still do not have all the evidence we would like to continue to work with the Park's communities and partners in order to fill known data gaps and achieve deeper understandings. We have given clear indications throughout where we feel we need to bring more focus and insight in the future.

11. The report has been organised by three broad chapters that reflect the purposes and duty in the original designation of this special protected area whilst acknowledging the complex relationships and interdependencies between people, nature and landscape. These are:

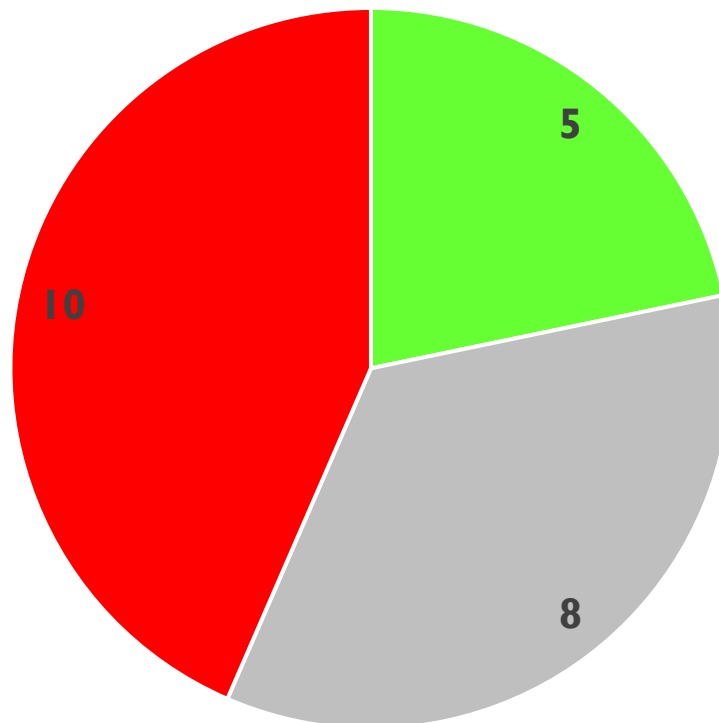
Nature and Climate

Culture and Heritage

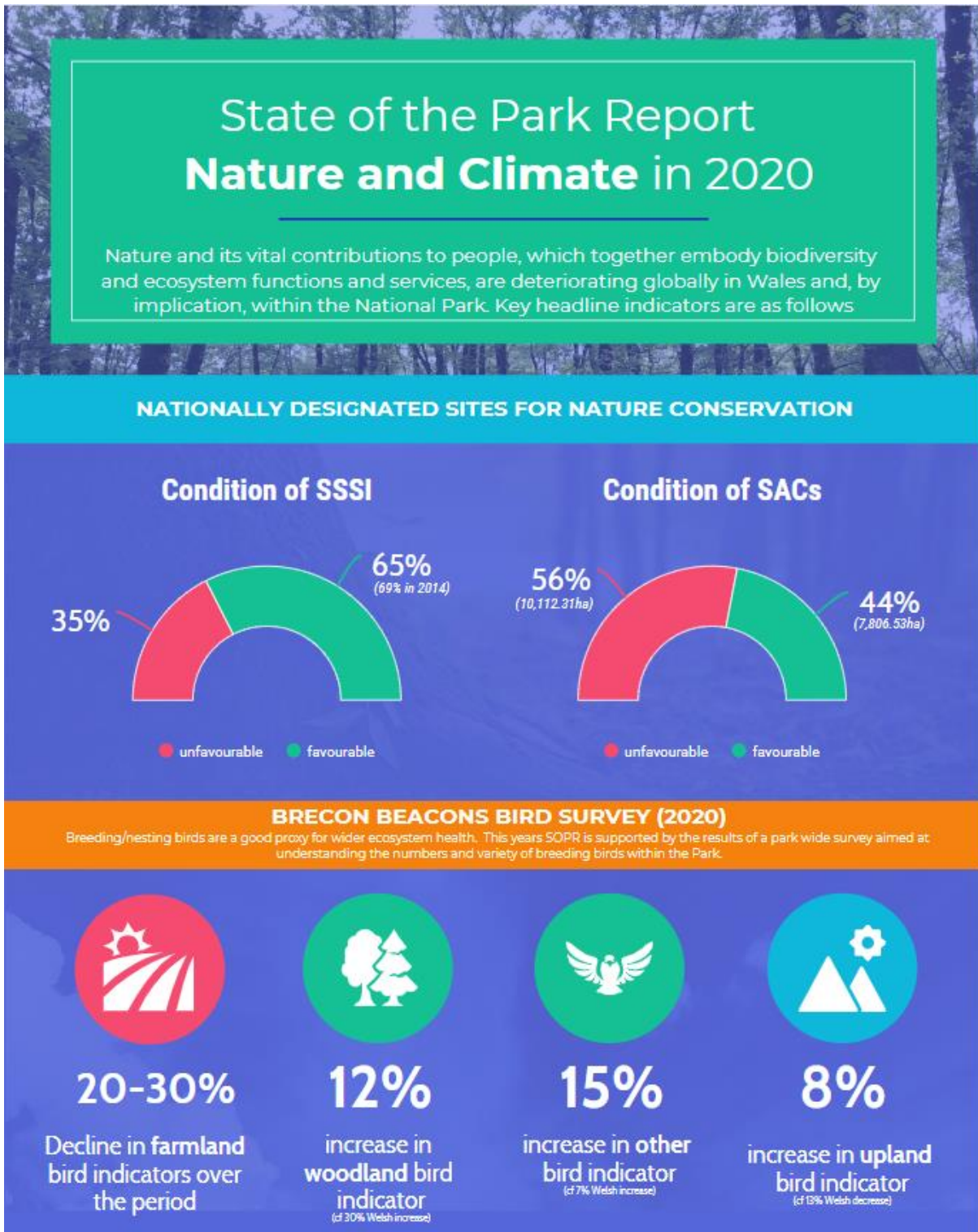
People and the Economy

Headline Summary

- **5 of 23** indicators show positive (**GREEN**) trends against baseline.
- **8 of 23** indicators show no clear (**GREY**) trend against baseline.
- **10 of 23** indicators show negative (**RED**) trend against baseline data.



Chapter I - Nature and Climate (Headline Summary)



Annual average flow rate for the **River Usk** trend data not available



anecdotal evidence exists of increase in seasonal low flows (ie Spring/Summer) which exacerbate effect of Phosphate induced algal blooms

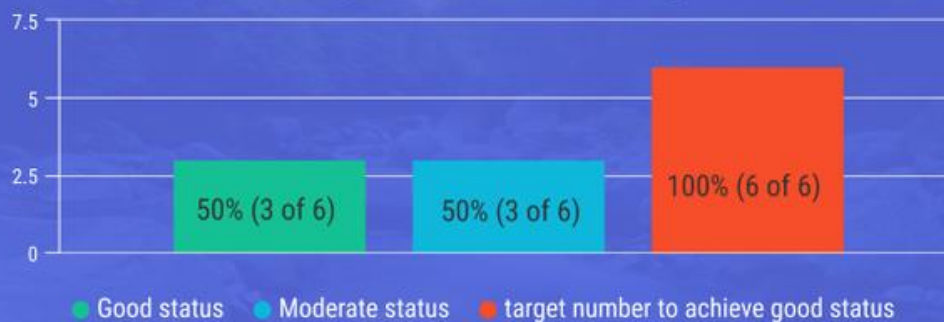
Air Quality indicators are limited to Unitary Authority level data



NO2 air quality exposure indicators in all 7 Local Authority areas within the park demonstrate an improvement in air quality from 2009-2017.

WATER FRAMEWORK DIRECTIVE

Status of designated water bodies against WFD



BRECON BEACONS BIRD SURVEY (2020)

23 year trend species data 1995-2018



50%

- 8 red listed species declined by >50% in the Brecon Beacons,

of which 4 are associated with farmland, 3 with upland habitat and 1 with urban habitat



25%

- 12 amber listed species declined by >25% in the Brecon Beacons



Indicator 1 - Geological SSSIs (Condition of geological features) - GREEN

30% (2006), 91 (2014) and 88% (2017) in favourable condition shows a significant improving trend 2007-2014 with marginal decline 2014-2017.

51% (2006), 3% (2014), and 3% (2017) in unfavourable condition shows an improving trend 2007-2014 and stable trend 2014-2017.

Indicator 2 - Biological SSSIs (Condition of biological features) - RED

29% (2006), 55% (2014) and 54% (2017) in favourable condition shows a significant improving trend 2007-2014 with marginal decline 2014-2017.

55% (2006), 33% (2014) and 34% (2017) in unfavourable condition shows a significant improving trend 2007-2014 with marginal decline 2014-2017.

65% (51) of SSSIs are in favourable condition, compared with 69% (53) in 2014, and the overall condition of SSSIs shows a declining trend.

34% of SSSIs are in unfavourable condition and only 10% of SSSIs are under appropriate management.

Indicator 3 - Natura 2000 (SACs) - RED

44% (7,806.53ha) of SAC features are in favourable condition and 56% (10,112.31ha) are in unfavourable condition.

Indicator 4- Water Quality - RED

50% (3 of 6) designated waterbodies achieved WFD 'good status', whereas 50% (3 of 6) only achieved 'moderate' status. WFD signatories are required to achieve good ecological status or better for all designated waterbodies by 2027.

Indicator 5 - Flood Risk - GREY

A map of the Welsh Government TAN 15 flood zones and the area of the Park in hectares that falls within the C2 flood zone is provided. This figure informs policy decision making, however, it is subject to various changes such as our understanding of flood defence infrastructure and climate change. Therefore regular monitoring will need to be undertaken. SoPR (2014) provided information on flooding taken from the census 2011. The SoPR will not be updated with like for like data until the next census is published after 2021.

Indicator 6 - River Discharge - GREY

No obvious long-term trend in annual average flow rate of River Usk from available data, but anecdotal evidence exists of increase in seasonal low flows (i.e. spring/summer) which exacerbate effect of Phosphate induced algal blooms.

Indicator 7 - Air Quality - GREY

NO₂ air quality exposure indicators in all 7 Local Authority areas within the park demonstrate an improvement in air quality from 2009-2017. However, there is an adverse data trend for emissions of gaseous ammonia which shows a steep increase post 2013.

Indicator 8 - Condition of soils/peat - GREY

Data provided contains information from NRW in relation to the amount of different types of soil in all three National Parks in Wales. On its own it does not provide long-term trend data though it will provide a useful baseline for future reports.

Indicator 9 - Priority habitats and species -- Woodland and Ancient and Semi-Ancient Woodland - GREY

The Park is sparsely wooded, reflecting a history of human exploitation of formerly wooded areas for agriculture, timber, other wood fibre and fuel. Approximately 16.5% of the Park (22,243.81 ha) supports woodland or commercial forest plantations. Of this, just under 6% of the Park (8043.62 ha) is semi-natural broadleaved woodland or mixed woodland, including planted mixed woodland. Together with soil and peatland conservation and restoration, increasing woodland cover and wood pasture is a proven means of mitigating the release of greenhouse gas emissions (GHG) and locking up atmospheric carbon dioxide (CO₂). However, tree planting must not be to the detriment of important existing habitats and should be based on the right tree in the right place for the right reason.

Ancient woodlands provide a home for many different species in the Park and have been included as a subset of native broadleaved woodland.

Indicator 10 - Breeding/Nesting Birds - RED

Breeding/nesting birds are a good proxy for wider ecosystem health.

The Brecon Beacons farmland bird indicator (Figure 13) shows declines of 20-30% over the BBS period, in accord with national as well as the pattern for farmland birds in Wales. The woodland indicator (Figure 15) shows an increase (12% in Brecon Beacons cf. 30% in Wales) and the 'other birds' indicator (Figure 16) broadly stable (15% increase in the Brecon Beacons cf. 7% increase in the corresponding Wales trend). The upland indicator (Figure 14) is the exception as there is a slight increase in the Brecon Beacons trend (8%), whereas the Welsh trend slightly declines by 13%.

23-year trend species data for 1995-2018 (Annex 10) shows:

- 8 red listed species declined by >50% in the Brecon Beacons, of which 4 are associated with farmland, 3 with upland habitat and 1 with urban habitat; and
- 12 amber listed species declined by >25% in the Brecon Beacons.

Indicator 11 – Bats - GREY

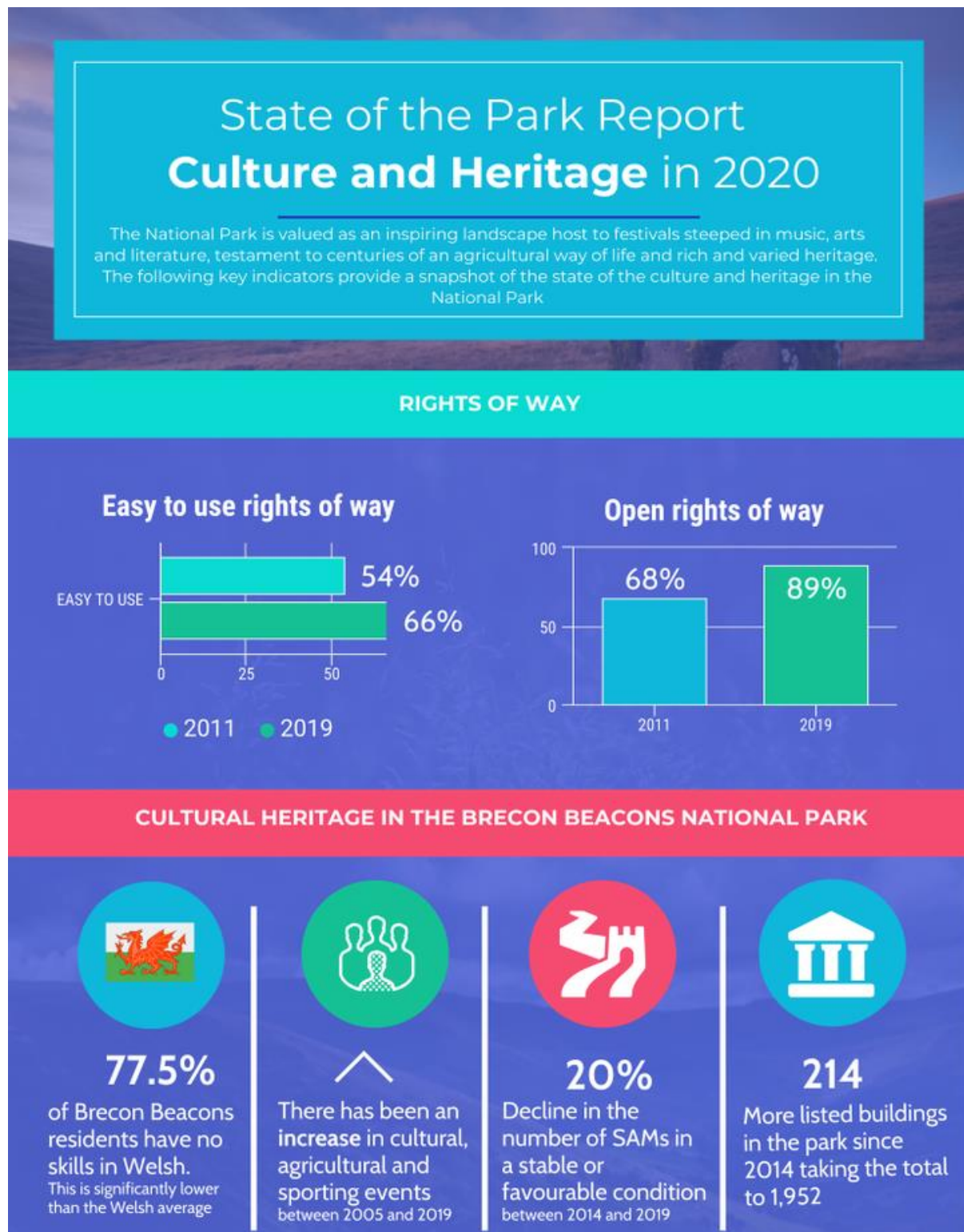
Bats can be a useful indicator for wider environmental health. However, to get statistically robust data a minimum number of monitoring sites is required. While there is no clear message yet, data from the Annual Report for the National Bat Monitoring Programme (2019) has been provided (Wales level)¹ with a comparison against the UK data. At the moment there are not sufficient monitoring sites in Wales for either summer or winter roosts and reports rely on both summer and winter counts to derive trends.

Indicator 12 – Invasive Non-Native Species (INNS) - GREY

INNS is a complex indicator which is difficult to break down into a single measure. However, increases have been recorded in Japanese Knotweed, Himalayan Balsam and Giant Hogweed, though it should be noted that there has also been an increase in recorder effort.

¹ <https://www.bats.org.uk/our-work/national-bat-monitoring-programme/reports/nbmp-annual-report>

Chapter 2 - Culture and Heritage (Headline Summary)



Indicator 13 – Rights of Way - GREEN

There has been a significant increase from 54% to 66% in the 'easy to use' rights of way between 2010/2011 and 2018-2019, and the percentage of 'open rights of way' within the Park has increased from 68% to 89% between 2011/12 and 2018/19.

Indicator 14 - Upland Erosion - GREY

Awaiting data.

Indicator 15 – Welsh Language - RED

Brecon Beacons has poor Welsh language skills relative to other Welsh National Parks (77.5% of Brecon beacons residents have no skills in Welsh) and compared with Wales as a whole, Brecon Beacons also performs badly.

Indicator 16 – Cultural Events - GREEN

The number of outdoor/sporting events, cultural and food events and agricultural shows increased across all three categories between 2005 and 2019.

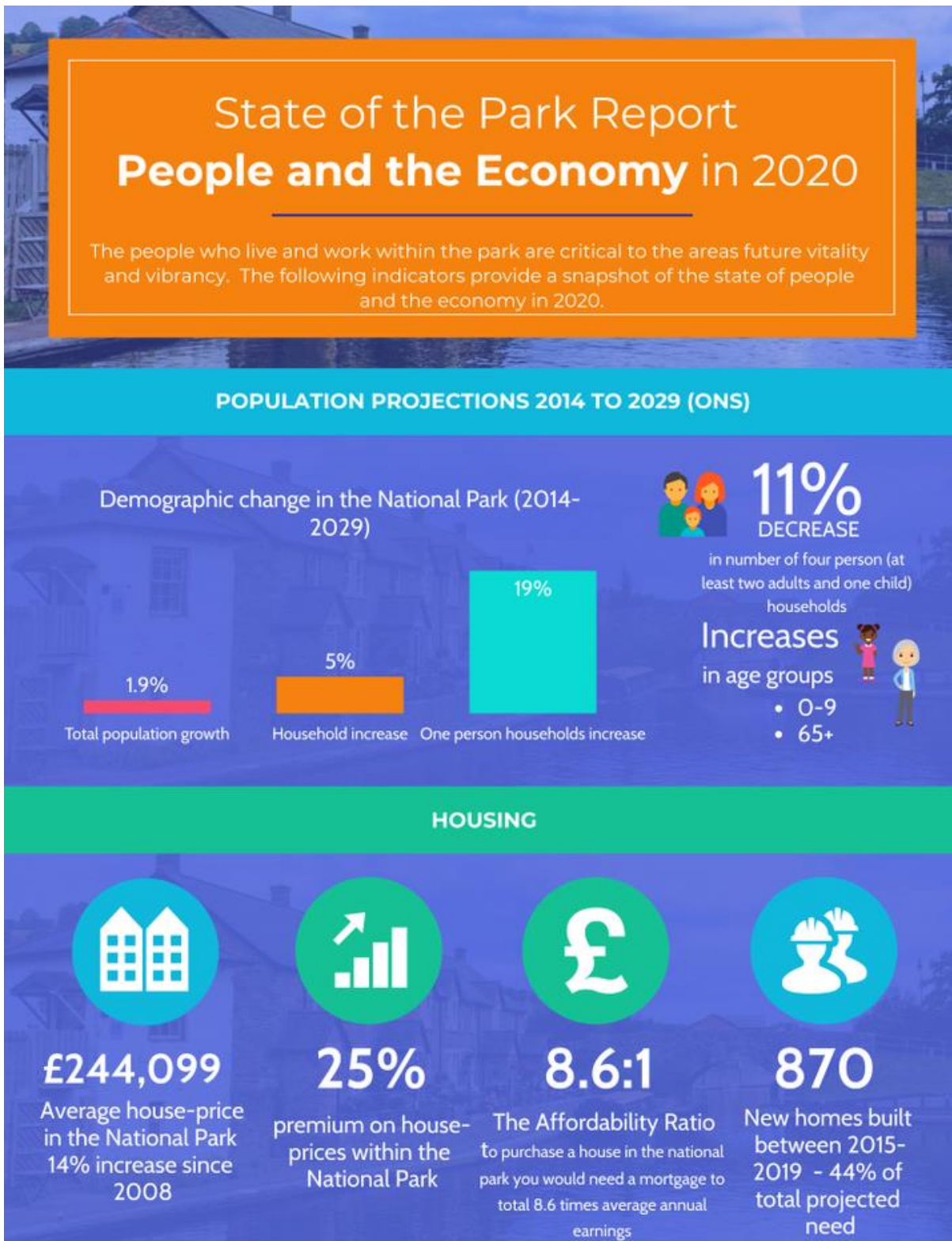
Indicator 17 – SAMs - RED

The overall number of SAMs in the Park has increased by 33% (90) between 2005 and 2019, but the percentage of SAMs in a stable or favourable condition has deteriorated by 20% between 2014 and 2019. It is not clear why there was such a decrease in condition and further work is required to understand what can be done to prevent further deterioration.

Indicator 18 – Listed Buildings - GREEN

The number of Listed Buildings in the Park increased by 241 between 2005 (total 1,711) and 2019 (total 1,952), the number of Listed Buildings at risk decreased by 62 between 2005 and 2014, and there were zero Listed Buildings at Risk in 2019.

Chapter 3 - People and the Economy (Headline Summary)



RETAIL CENTRES

Vacancy rates within Primary Key Settlement of Brecon



Average vacancy rates all other retail centres



1%

Increase in average vacancy rates across retail centres in the park

Retail health is an important indicator for local economies within the Park. We have seen vacancy rates increase on average across the park. Brecon the largest and most diverse retail centre has a retail vacancy rate commensurate with Welsh national average at 11%.

WELSH INDEX OF MULTIPLE DEPRIVATION (WIMD)

The WIMD is the official measure of deprivation in Wales.



Three of the eight separate domains (Income, Health and physical environment) indicate positive trends between 2008 and 2014 in the Brecon Beacons National Park,



Five of the eight separate domains (Employment, Education, Access to Services, Housing and Community Safety) indicate negative trends between 2008 and 2014 in the Brecon Beacons National Park,

Indicator 19 – Tourism Spend – GREEN

Tourism spend figures show year-on-year continuous increase in the value of tourism to the local economy of the Brecon Beacons National Park between 2006 and 2017.

Indicator 20 – Population - RED

Brecon Beacons is the only Welsh National Park due to experience an increase in population (1.9%) between 2014 and 2029 before falling back. The percentage of the population aged 0-19 years has increased between 2011 and 2017, but so has the percentage aged 65+. Welsh Government projections indicate:

- an increase in the number of households in the Brecon Beacons National Park by 900 (5%) between 2014 and 2029;
- numbers of one-person households is set to increase by 890 households (19%) by 2029, making it the most common household type; and
- four-person households (at least two adults and one child) are projected to decrease by 140 households (11%) by 2029.

This is an important indicator for the state of the park as it is likely to be associated with an ageing demographic and reduction in families living and working within the Park.

Indicator 21 – Housing - RED

The average house price across the Brecon Beacons National Park in 2018 was £244,099, an increase of 14% in the last ten years. House prices are on average 25% higher than elsewhere locally, outside the National Park. The price to earnings ratio, also known as the affordability ratio, for the Brecon Beacons National Park is 8.6 (i.e. on average house prices are 8.6 times higher than average incomes). This compares with an average across Wales of 5.73.

The total number of house completions, on both large and small sites, between 2015 and 2019 was 870 houses compared with a LDP target to build 1,592 by the end of 2019.

Indicator 22 – Town Centre Vacancy Rates - RED

Figures of annual vacancy rates for 4 towns in the National Park (Brecon, Crickhowell, Hay on Wye and Talgarth) show that Brecon has the highest vacancy rate and Hay on Wye consistently has the lowest/joint lowest vacancy rate. Overall, vacancy rates within the National park are lower than the 10.3% national average in 2019. However, all of the centres are showing increased vacancy rates year on year from the third monitoring period, with the exception of Talgarth. All of the retail centres are at levels which call for action in the LDP.

Indicator 23 – Welsh Index of Multiple Deprivation - RED

The Welsh Index of Multiple Deprivation (WIMD) is the official measure of deprivation for small areas in Wales. Five of the eight separate domains (Employment, Education, Access to Services, Housing and Community Safety) indicate negative trends between 2008 and 2014 in the Brecon Beacons National Park, whereas just three domains (Income, Health and Physical Environment) indicate positive trends.

Chapter I – Nature and Climate

Introduction

12. Nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating globally², in Wales³ and, by implication, within the National Park. This is exacerbated by the adverse effects of climate change. Whilst we extract and exploit more from nature, this undermines nature itself and the natural world's ability to recover from disturbance. The natural world is now declining faster than at any time in human history. Changes in land use, direct exploitation, climate change, pollution and Invasive Non-Native Species are the strongest causes of nature's collapse.
13. Special Areas of Conservation (otherwise known as Natura 2000 sites), National Nature Reserves and Sites of Special Scientific Interest are the most important wildlife sites in the Park. SSSIs occupy approximately 19% of the Park area, yet only 10% of SSSIs in the Park are under appropriate management⁴ and 34% are in unfavourable condition.
14. While the largest losses to biodiversity are known to have endured outside of the designated sites network, in the wider countryside⁵, in the absence of evidence to the contrary, it is likely that the condition of SSSIs reflects the state of the rest of the Park's habitats and species. Therefore, it is assumed that most of the Park's habitats and species are in an unfavourable condition. Their rate of recovery depends upon the rate and effectiveness of positive human interventions (and non-intervention).
15. A State of Nature Report will be developed within the Nature Recovery Action Plan⁶ for the Brecon Beacons National Park. Additionally, the condition of designated sites (SSSIs, Special Areas of Conservation), the non-designated Local Wildlife Sites and Sites of Importance for Nature Conservation, ancient semi-natural woodland and planted ancient woodland sites, and the changing status and distribution of the Park's bat populations, farmland, wetland, wintering and breeding birds, will provide a composite, though not complete picture of the changing state of nature. Changing ecological diversity, species richness and presence and extent of indicator species, in particular bats and birds, but also (in future) key insect groups, and the extent and distribution of Invasive Non-Native Species (INNS), will be used to assess the rate at which the Park's nature recovers in response to objectives set and actions taken.
16. Specific gaps are identified in the introduction to each chapter. We will continue to seek to address these gaps in data in a variety of ways:
 - Area Statements
 - Stakeholder Engagement
 - NRAP (2019)
 - Landscape Character Assessment
 - Census Data

² IPBES Global Assessment Report on Biodiversity and Ecosystem Services 2019

³ State of Nature 2019 / <https://www.bbc.co.uk/news/uk-wales-49884132>

⁴ Natural Resources Wales (NRW)

⁵ SoNaRR 2016

⁶ <https://www.beacons-npa.gov.uk/environment/nature-recovery-action-plan/>

- Local Authority data
 - Dwr Cymru Welsh Water Mega Catchment Project
 - Vital Signs Monitoring Project
17. Area Statements, a requirement of the Environment (Wales) Act 2016, identify the public bodies (including National Park Authorities) which may help address the priorities, risks and opportunities for sustainable management of natural resources in their areas, as identified in State of Natural Resources (SoNaRR) reports. There is therefore a reasonable expectation of data sharing through the s62 Duty⁷ of certain bodies and persons to have regard to the purposes of NPAs.
18. Vital Signs Monitoring Project is an innovative new monitoring programme to be applied to the Brecon Beacons National Park. This will aim not only to revolutionise the way that UK National Parks are monitored but will also provide targeted information relating to the impacts of climate change, land management practices, and people in the Park, its nature and biodiversity. This monitoring strategy will be linked to the Brecon Beacons Local Nature Partnership Nature Recovery Plan. Vital Signs will help to inform future policies relating to nature and biodiversity within Wales, and how natural capital assets are enhanced and managed in the future.
19. Such gaps in data within Chapter I include:
- Bat Maternity Roost – Data provided from the A465 HOV2 assessment (See Appendix 2). While this is located within the park it is limited to very specific areas and only collected at a fixed point in time.
 - Gaseous Ammonia – potentially useful indicator but lack of data collection point within the park area - see Appendix 3
 - Annual water abstraction (Awaiting data from NRW)
 - Flood risk – not just map but with interpretation and figures on affected settlements/developments, NRW data on warnings, incidents, etc.
 - Carbon levels
 - Energy supply and consumption
 - Renewable energy installations
 - Rainfall
 - Snow cover/days – met office
 - Greenhouse gas emissions
20. The following indicators have therefore been identified for use within Chapter I of the State of the Park Report 2020:

SoPR 2020 INDICATORS	
Chapter I - Nature and Climate	
1	Condition of Geological SSSIs
2	Condition of Biological SSSIs
3	Natura 2000
4	Water Quality

⁷ Environment Act 1995

5	Flood risk
6	River discharge
7	Air quality
8	Condition of soils/peat
9	Priority habitats and species – Woodland and Ancient Semi-Natural Woodland
10	Breeding/Nesting Birds
11	Bats
12	Invasive Non-Native Species

Site of Special Scientific Interest (SSSI)

21. A Site of Special Scientific Interest (SSSI) is a formal conservation designation for either geological or biological importance. They are highly protected to safeguard the range, quality and variety of habitats, species and geological features in all parts of Wales. They are the cornerstones of conservation work, protecting the core of our natural heritage. SSSIs are the most important sites for Wales' natural heritage and provide a useful indicator for the state of natural health in the park.
22. In 2017 there were a total of 78 SSSIs either locally, wholly or partly in the National Park. Figure 1 shows a comparison of the condition of each of the SSSI sites between 2014 and 2017⁸. The number of sites that are in favourable condition decreased by two, while the number of sites that are in unfavourable condition increased by two.
23. Within these 78 SSSIs there are 197 features, of which 163 are biological and 34 are geological. Indicators 1 and 2 discuss these further.
24. Indicator 3 identifies the condition of SAC features within the Park. All SACs are by definition also SSSIs and therefore the condition of SAC features is considered as a subset of SSSIs with a relevant % to demonstrate favourable/unfavourable condition.

⁸ NRW Rapid Review of the Park

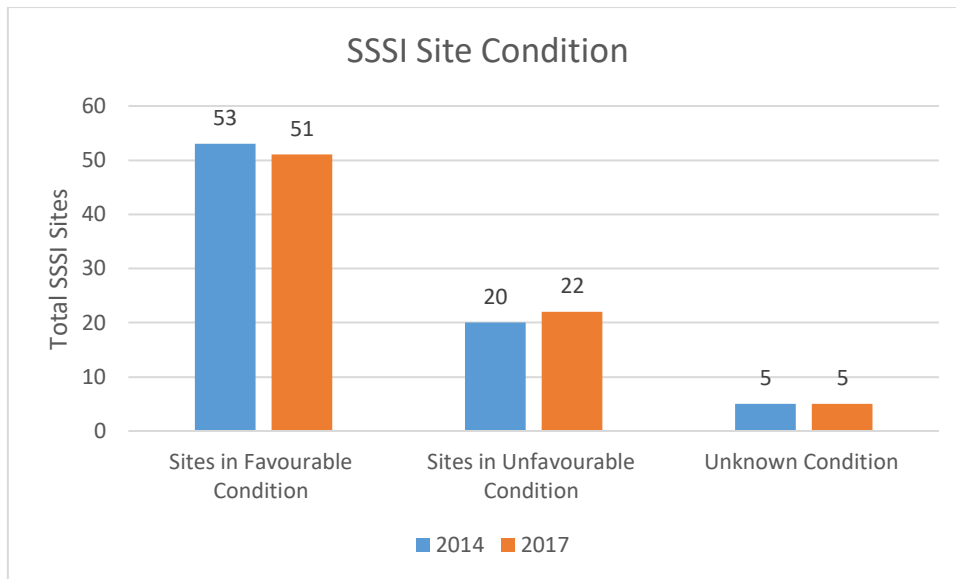


Figure 1 Condition of SSSI Sites between 2014 and 2017

Indicator I - Condition of Geological SSSIs

25. Favourable geological condition at individual sites can be summarised across all sites to provide an indication of how close sites are to Favourable Conservation Status. This is when:

- condition data on the exposures concerned indicate that they are maintained on a long-term basis as a viable contribution to the Park's geological resource
- the availability of each geological example is neither being reduced nor is likely to be reduced for the foreseeable future
- there is, and will probably continue to be, a sufficiently large range of such examples on a long-term basis

26. Of the 197 SSSI features, 34 features are designated for their geological importance.

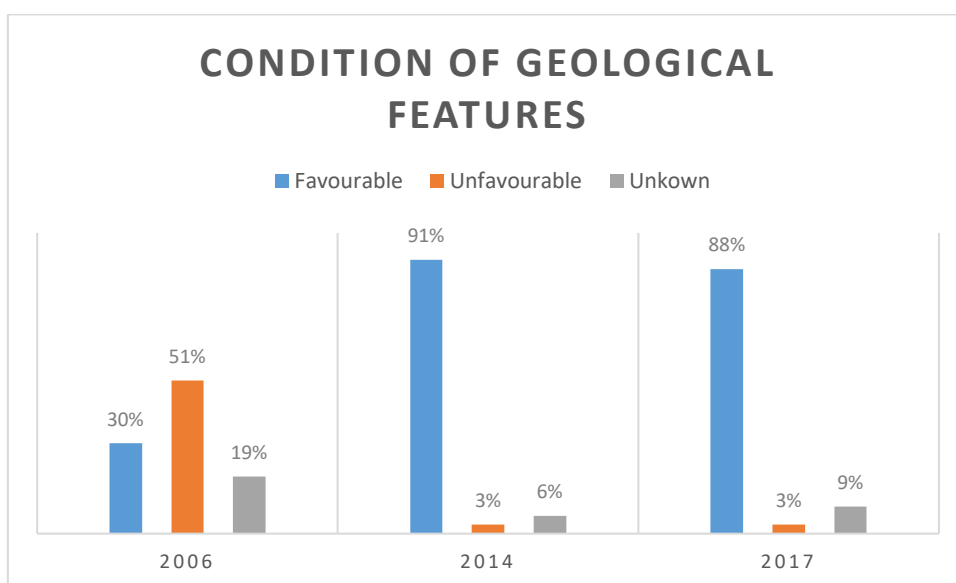


Figure 2 Condition of Geological SSSI features

27. Figure 2 shows that in 2017, of the 34 features, 88% (30) were in favourable condition, 3% (1) were in unfavourable condition, and 9% (3) were unknown. The same 34 features were looked at in 2014 when 91% (31) features were in favourable condition, 3% (1) was as in unfavourable condition, and 6% (2) were unknown.
28. This shows that the condition of SSSIs in the park are fairly stable, with the same number and percentage in unfavourable condition, one less in favourable condition, and one more whereby the condition is unknown. This could be seen as a positive, in which no SSSIs are worsening in condition, however as the same number are in unfavourable condition and the % of features in favourable condition has declined, this highlights that the state of geological SSSI features in the Park did not improve between 2014 and 2017.
29. However, the longer-term trend is more positive because when compared to the 2006 figures, the state of geological features has improved. In 2006 there were 37 different features of geological importance reported within the Park. Of these, 30% (11) were in favourable condition, 51% (19) were in unfavourable condition, and 19% (7) were unknown.

Indicator 2 - Condition of Biological SSSIs

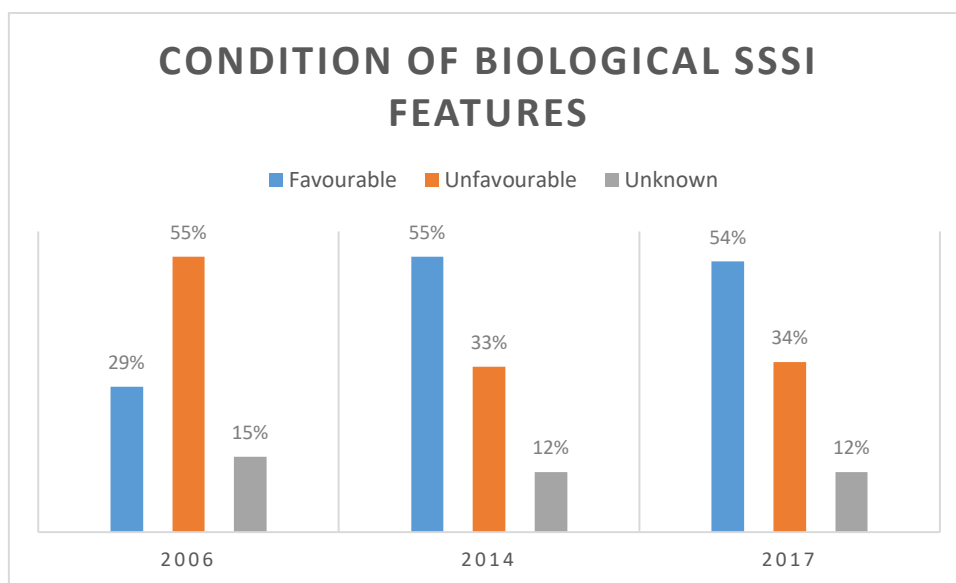


Figure 3 Condition of Biological SSSI features

30. Of the 197 SSSI features, 163 are designated for their biological importance.
31. Figure 3 shows that in 2017 54% (88) were in favourable condition, 34% (55) were in unfavourable condition and 12% (20) were unknown.
32. In comparison, in 2014, 55% (90) were in favourable condition, 33% (54) were in unfavourable condition, and 12% (19) were unknown.
33. In 2006, there were 82 features of biological importance in the National Park. Of these 29% (24) were in favourable condition, 55% (45) were in unfavourable condition, 1% (1) was partially destroyed and 15% (12) were unknown.

34. These figures highlight:
- There are significantly more SSSI features in 2017 compared to 2006
 - There are a higher percentage of features in favourable condition in 2017 compared to 2006
 - There is a lower percentage of SSSI features in an unfavourable condition compared to 2006
 - There is a higher number of features in unfavourable condition in 2017 compared to 2006 (due to the overall increase in the number of features)
35. When comparisons are made between the 2014 and 2017 figures which have been obtained using the same number of biological features, the condition of SSSIs has deteriorated slightly, with fewer features being in a favourable condition in 2017 compared to 2014, and a higher number and percentage being in an unfavourable condition in 2017 compared to 2014.
36. If we were to use the data of 2006 as a baseline against the most recent data recorded in 2017/2018 it could be assumed that the state of the Park in relation to the condition on SSSIs is good, or average. However, that is not an appropriate conclusion to draw. 34% of sites are in unfavourable condition and only 10% of sites are under appropriate management. Furthermore, between 2014 and 2017 there has been a decline in the condition of SSSIs which is something that will have to be carefully managed in future to ensure the condition of these designated sites does not deteriorate.

Indicator 3 - Natura 2000 sites

37. Natura 2000 is a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right. It stretches across all 28 EU countries, both on land and at sea. The aim of the network is to ensure the long-term survival of Europe's most valuable and threatened species and habitats, listed under both the Birds Directive and the Habitats Directive.⁹
38. The National Park Authority has prepared a Habitat Regulation Assessment¹⁰ (HRA) for the Local Development Plan (LDP) which assesses European sites within (or partially within) the park boundary and also a 15km buffer. The following sites were chosen:
- Blaen Cynon Special Area of Conservation (SAC)
 - Brecon Beacons SAC
 - Coed Y Cerrig SAC
 - Coedydd Nedd a Mellte SAC
 - Cwm Cadlan SAC
 - Cym Clydach Woodlands SAC
 - Llangorse Lake/ Lyn Syfaddan SAC
 - River Usk SAC
 - River Wye SAC
 - Sugar Loaf Woodlands SAC
 - Usk Bat Sites SAC

⁹ https://ec.europa.eu/environment/nature/natura2000/index_en.htm

¹⁰ HRA - <https://api.beacons-mpa.gov.uk/ldp/download?doc=685771>

- Aberbargoed Grasslands SAC
 - Cernydd Carmel SAC
 - Cwm Doeithe Mynydd Mallaen SAC
 - Drostre Bank SAC
 - Mynydd Eppynt SAC
 - Rhos Goch SAC
 - River Tywi SAC
39. A table identifying Natura 2000 sites and condition of features can be seen at Appendix 4. It is taken from Appendix 2 of the HRA (2019) for the LDP. It identifies the condition of each of the designated features of the sites which are to be assessed. This will provide a useful baseline for assessment of the features of each site in future reports.
40. Appendix 5 provides SAC Features in the Park and condition data provided by NRW (2020).
41. NRW have previously undertaken condition reports, some dating back to March 2010, though it should be acknowledged that they do not undertake an assessment of the condition of sites anymore.
42. Figure 4: SAC Features in the Park and Condition shows that the majority of SAC features in the Park are in an unfavourable condition. Of the 17,918.85ha of SAC features in the Park, 7,806.53ha (44%) are in favourable condition and 10,112.31ha (56%) are in unfavourable condition.

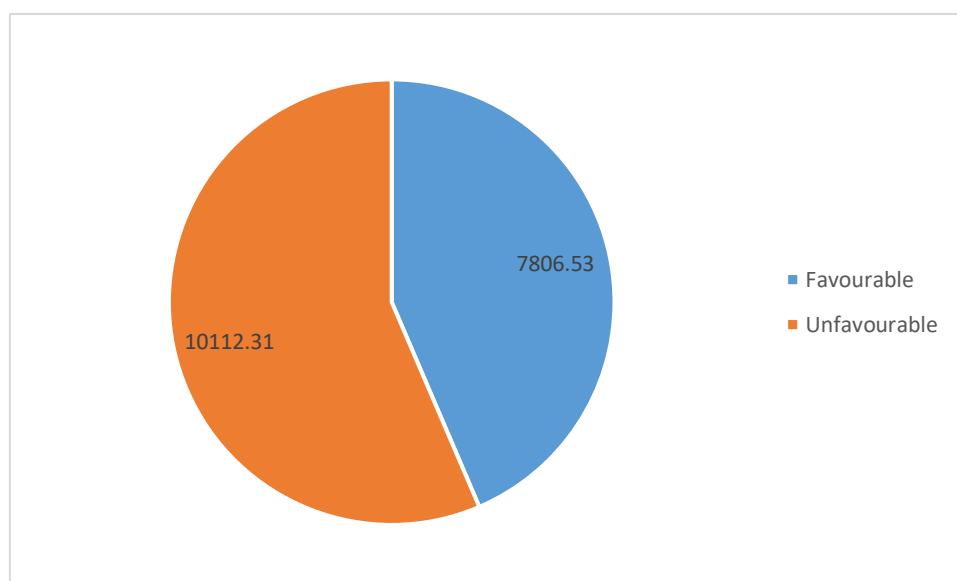


Figure 4 Status of SAC Features within the Park (Area in Ha)

Indicator 4 – Water Quality

43. The Water Framework Directive (WFD) establishes a framework for the protection, improvement and sustainable use of surface water bodies (rivers, streams, brooks, lake, estuaries, canals and coastal waters) and groundwater bodies. Its purpose is to prevent deterioration and improve the status of aquatic ecosystems, promote

sustainable water use, reduce pollution of groundwater and contribute to mitigating the effects of floods and droughts.

44. Water body status is measured in accordance with the WFD which requires a wide range of physical, chemical and biological factors to be recorded. The annual classification of surface waterbodies, groundwater and coastal waterbodies categorises their condition as high, good, moderate, poor or bad. This status is affected directly and indirectly by land use including agriculture, forestry, water abstraction, industry and built development. WFD signatories in the UK are required to achieve good ecological status or better by 2027.
45. The WFD came into effect in December 2000, and as of 1 April 2014, Natural Resources Wales (NRW) became the competent Authority for implementing the Directive.
46. Water body status is assessed against over 30 different indicators and grouped into either chemical or ecological status, which when combined provide the overall status of a water body.
47. Appendix 6 shows the chemical status of 6 water bodies in the National Park and Appendix 7 shows their ecological status, followed by their overall condition (the two tables combined at Appendix 8). A critical issue for the park is that the Llynfi and Llangors Lake Special Area of Conservation (SAC), hydrologically connected to the River Wye SAC, is the only current Nitrate Vulnerable Zone (NVZ) in the park yet the data focuses more on the Rivers Usk and River Tywi.
48. The biological quality elements and hydromorphological quality elements that are measured when assessing water status can be found in Appendix 9.
49. Most of the water bodies surveyed by NRW were not assessed until 2013. Between the years 2009 (baseline) 2012 the water bodies were not assessed. Between the years 2013 – 2015 all water bodies were of 'Good' chemical status, with all of them achieving 'High' status by 2017. All water bodies had declined to 'Good' status by 2018.
50. When compared to the baseline of 2009, two of the water bodies have improved from moderate to good, two have remained the same (one stayed as good, one stayed as moderate), and one has declined from good to moderate.
51. The overall status of surface waters is determined by the lower value of a water body's ecological and chemical status, so if one reading is good and the other is moderate then the overall status would be moderate. To achieve the overall aim of good surface water status, the Directive requires that surface waters be of at least good ecological status and good chemical status. |
52. 3 out of the 6 water bodies surveyed within the park achieved an overall status of good. The other 3 water bodies only achieved moderate status. There has therefore been an improvement since the baseline data of 2009, where only 2 waterbodies achieved good status. However, there has not been an improvement since 2017, with no waterbodies improving.

Indicator 5 – Flood Risk

53. There are three types of flooding: coastal/tidal flooding, river flooding and surface water flooding through excess rainfall.¹¹
54. Welsh Government Technical Advice Note 15 on Flooding (TAN 15) includes Development Advice Maps that define three development advice zones as follows:
- Zone A: Considered to be at little or no risk of fluvial or tidal/coastal flooding.
 - Zone B: Areas known to have been flooded in the past evidenced by sedimentary deposits.
 - Zone C: Based on extreme flood outline, equal to or greater than 0.1% (river, tidal or coastal) (ie: greater than 1 in 1,000 chance of flooding in any one year).
55. Zone C is divided into C1 and C2.
- C1 is areas of the floodplain which are developed and served by significant infrastructure, including flood defences.
 - C2 is Areas of the floodplain without significant flood defence infrastructure.
56. Figure 5 below (TAN 15 map), shows the extent of Zone A, B and C within the Park (dark blue). It includes reservoirs and their catchments, rivers and urban areas.¹²

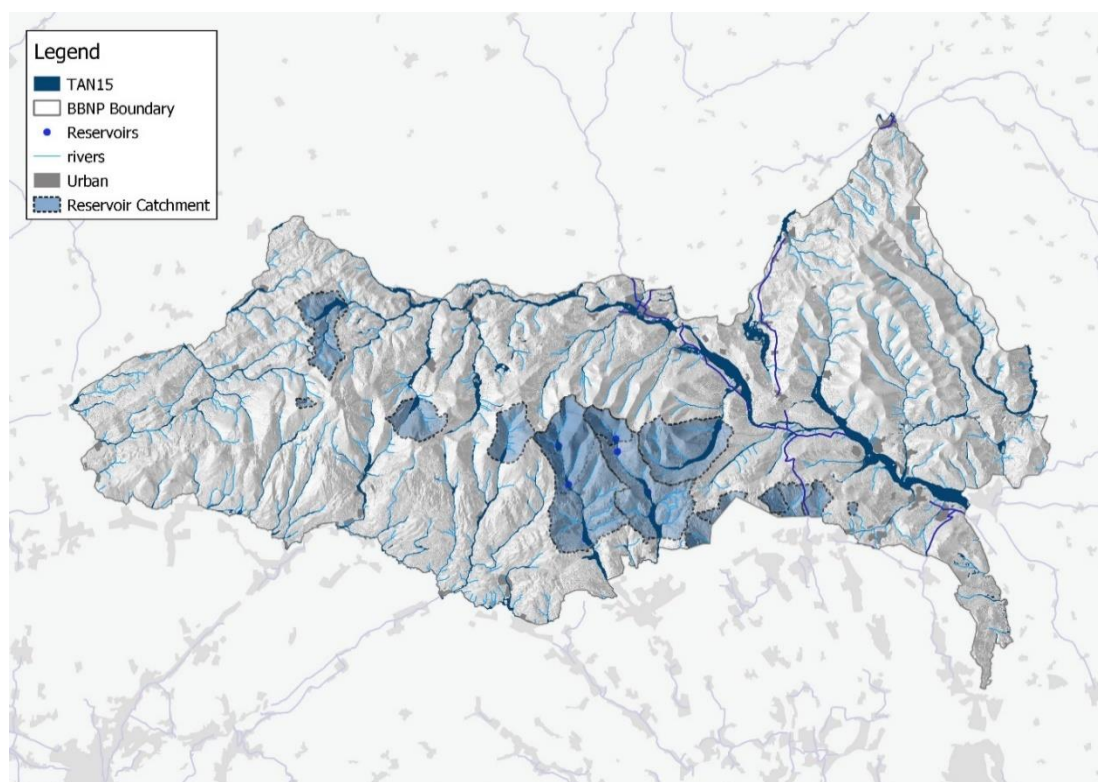


Figure 5 Flooding and Welsh Government TAN 15 map

¹¹ <https://www.assembly.wales/NAfW%20Documents/qg11-0030.pdf%20-%2020102011/qg11-0030-English.pdf>

¹² NRW is set to release a new dataset 'Flood Risk Assessment Wales' which will, for the first time, build climate change assumptions into Wales' flood risk assessment modelling. The dataset will be released later in 2020, alongside publication of the Welsh Government's update of Technical Advice Note 15: Development and Flood Risk.

57. Figure 6 below identifies the area of the Park in hectares that falls within the C2 flood zone. Monitored over time, this figure will provide a useful indicator because it informs decision making with regard to acceptable locations of development. Proposed development in this area requires a flood consequences assessment to be provided.
58. Understanding the information requires an understanding of flood defence infrastructure, which will change over time. It should be noted that the C2 area at risk is also likely to change over time in response to climate change. There currently exist various predictions of between 30%-35% increase in winter rainfall over the next 50 years¹³.
59. The previous SoPR (2014) provided information on flooding taken from the census 2011. This will not be updated with like for like data until the next census is published after 2021. The data in the table below has been provided by NRW in March 2020.

NATIONAL PARK NAME	COUNT	AREA (Ha)
Brecon Beacons	38	5322.48
Pembrokeshire Coast	145	5357.59
Snowdonia	289	18415.00

Figure 6 Flood Risk in Ha

Indicator 6 - River Discharge

60. Annual and seasonal discharge reflects rainfall patterns and rivers' vulnerability to seasonal changes (drought and deluge), with knock-on consequences for riverine and riparian ecology and availability for abstraction.
61. NRW measure river discharge levels by collecting data from various monitoring stations located along rivers throughout Wales. There are a number of monitoring stations located in the National Park.

¹³ <https://www.theguardian.com/environment/2020/feb/23/uk-flood-defence-plans-inadequate-warn-scientists>

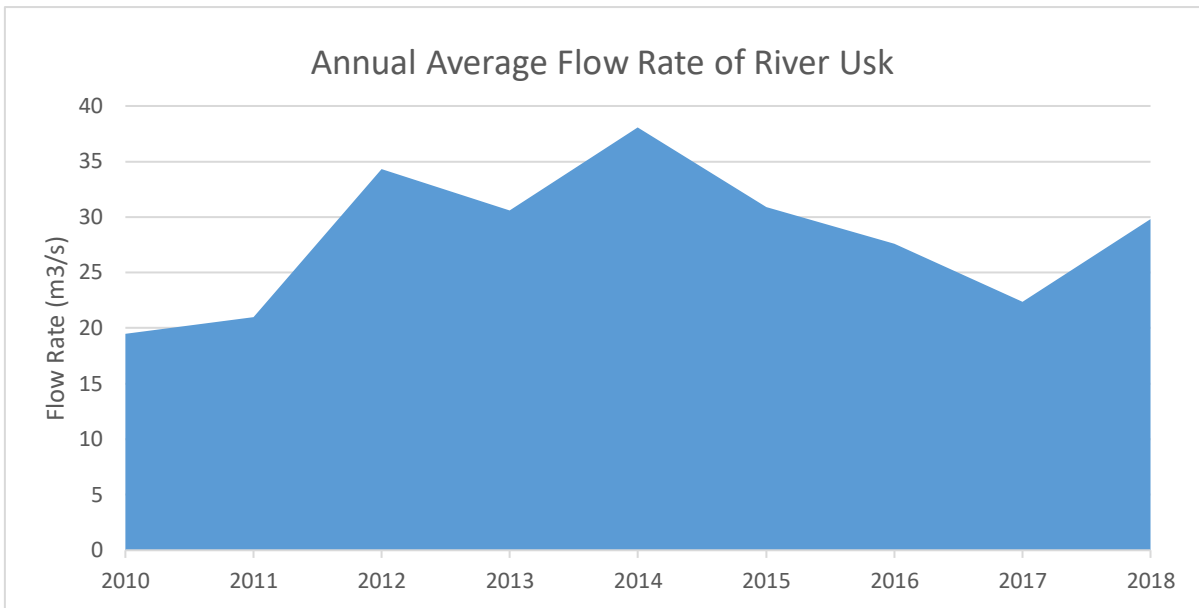


Figure 7 Annual Average Flow Rate of the River Usk

- 62. Figure 7 shows the annual average flow rate of the river Usk 2010 – 2018. The graph highlights that the flow rate fluctuates year on year, with the lowest flow rate from this period being recorded in 2010 at 19.48 m³/s, and the peak flow rate in 2014 at 38.07 m³/s. Although the river discharge levels fluctuate year on year, last year (2018) saw an increase from the previous year.
- 63. Monitoring river discharge levels is important because of the potential impacts on other indicators identified in this report such as water quality and biodiversity. The flow rate of the river can determine what kind of organisms can live in the river, and it can affect the amount of silt and sediment carried along the river.
- 64. Monitoring river discharge levels also provides a good indicator of the state of the park in the broader context of climate change.

Indicator 7 - Air Quality

- 65. Figure 8 below shows the atmospheric NO₂ air quality exposure indicators for Wales, and the 7 Local Authorities which make up the National Park. Unfortunately, data on air quality exposure indicators has not been collected specifically for the National Park area, only for the 7 individual Local Authorities the make up the National Park.

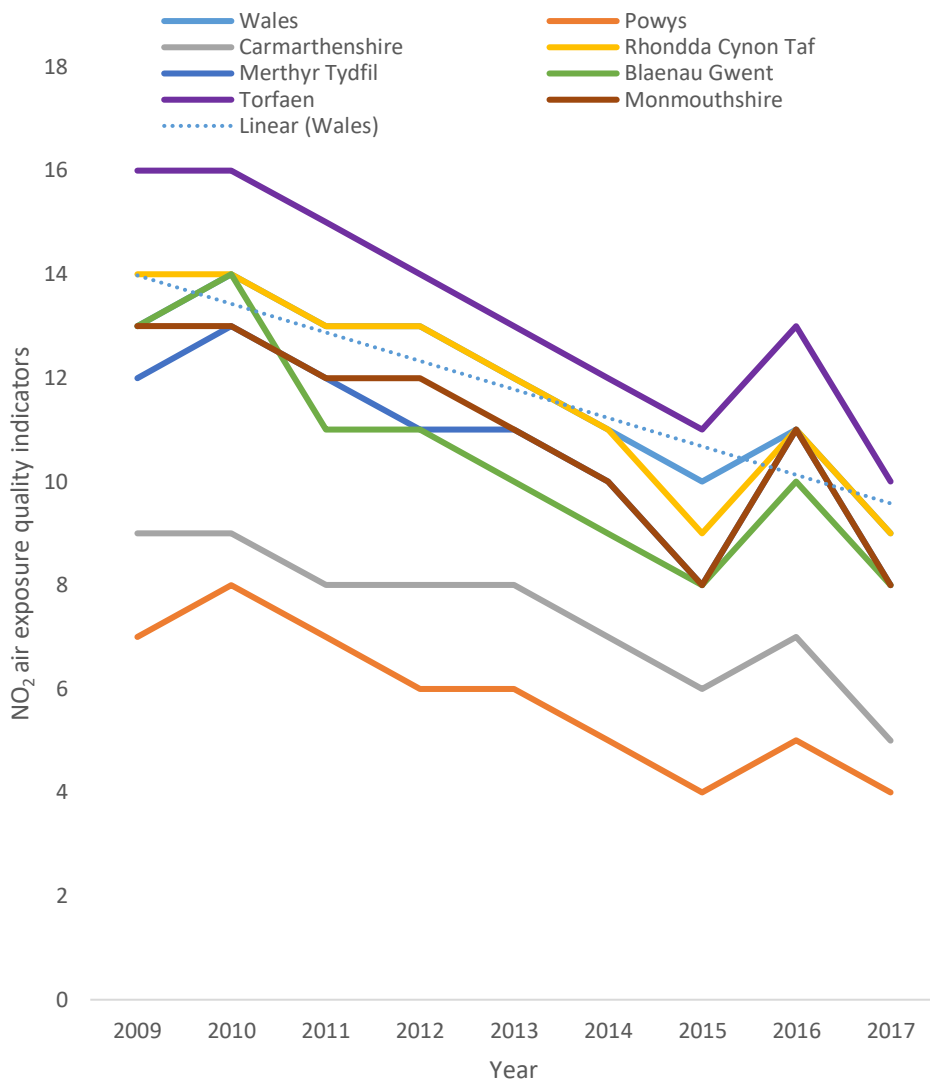


Figure 8 NO2 Air Quality Exposure Indicators

66. Figure 8 highlights that air quality exposure indicators in all 7 Local Authority areas as well as Wales as a whole, have decreased from 2009 - 2017, indicating an improvement in air quality. The 2 Local Authorities which make up the largest area of the Park, Powys and Carmarthenshire (accounting for approximately 66.1% and 16.7% of the Park area respectively), are significantly lower than the other Unitary Authorities.
67. Whilst the NO2 data shows a positive trend, Appendix 3 demonstrates an adverse data trend for emissions of gaseous ammonia which shows a steep increase post 2013.

Indicator 8 – Condition of Soils/Peat

68. Like sunlight and water, soils are fundamental to all life on earth. Without the action of detritivores and microbes working with the elements to break down mineral, plant

and animal matter, soils are not formed, nutrients are not recycled, and life does not continue. Soils in good condition store nutrients and minerals (natural fertiliser), gases, water, and soil biodiversity, including invertebrates, microbes, and fungi. The symbiotic relationship between healthy soils and the plant kingdom underpins all terrestrial food webs and life cycles. Soils in good condition provide ecosystem services, such as clean water for abstraction and water retention to ameliorate flooding. Soil erosion, compaction, grazing pressure and diffuse pollution from farmland are significant issues in the Brecon Beacons National Park, which adversely affect all of these benefits.

69. Figure 9 shows the distribution of deep peat in the Park. Deep peat refers to a peat depth of greater than 40cm. It incorporates a variety of different types of peat, including blanket bog, valley mire and basin mire. Peatlands hold more carbon than any other habitat type and support important plant and animal communities, and so ensuring they are in good condition is essential to mitigate the impacts of climate change and recover nature. Peatlands in good condition absorb carbon dioxide from the air and store it underground. However, if they are in poor condition the peat erodes, oxidises and decomposes, releasing carbon into the air. Therefore, the distribution and condition of peat is an essential indicator to monitor as it can significantly affect carbon levels and the state of nature in the National Park.
70. This is the first State of the Park Report that has included an indicator on the condition and distribution of peat, and there is therefore no comparative data. Schemes such as the 'Mawndiroedd Cymru' ('Wales' Peatlands') project, which is a joint scheme between the Snowdonia National Park Authority, the Brecon Beacons National Park Authority, the National Trust, Wildlife Trusts and NRW aim to protect, maintain and improve some of Wales' most important peatlands to help bring Welsh peatland habitats into sustainable management. The next edition of this report may be able to monitor how successful this project has been. The data table below contains information provided by NRW in relation to the amount of different types of soil in all three National Parks in Wales and will provide a useful baseline for future reports.

NATIONAL PARK NAME	SOIL TYPE				
	Deep peaty soil	Modified deep peaty soil	Shallow peaty soil	Soil with peaty pockets	Grand Total
Brecon Beacons	4397.61	2881.27	37668.73	13902.35	58849.95
Pembrokeshire Coast	297.56	84.22	6365.23	1864.43	8611.45
Snowdonia	33959.59	4436.23	71708.10	9290.93	119394.86
Grand Total	38654.76	7401.72	115742.06	25057.71	186856.25

Figure 9 National Parks - Total Peatland - Area (Ha) (NRW 2020)

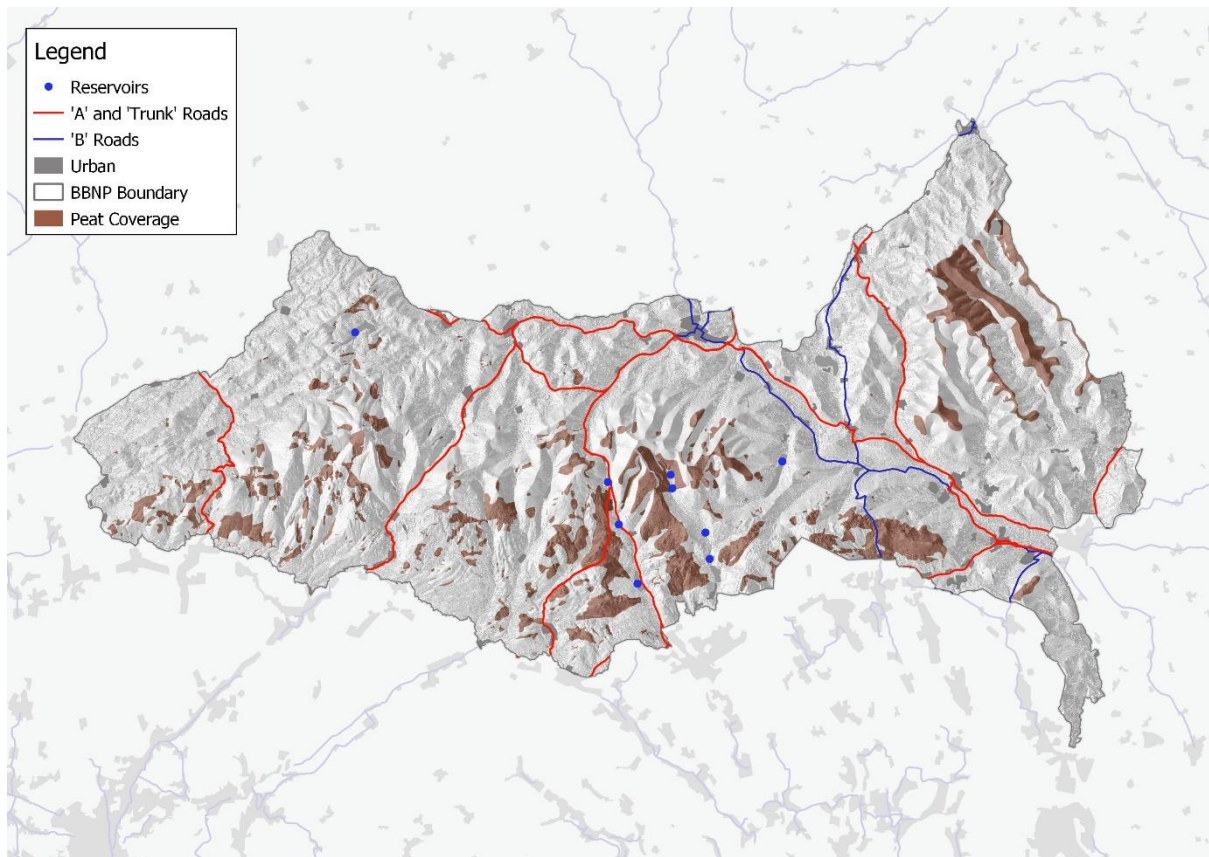


Figure 10 Distribution of Peat

Indicator 9 – Priority habitats and species – Woodland and Ancient Semi-Natural Woodland

71. Approximately 16.5% of the Park (22,243.81 ha) supports woodland or commercial forest plantations. Of this, just under 6% of the Park (8043.62 ha) is semi-natural broadleaved woodland or mixed woodland, including planted mixed woodland.
72. The Biodiversity Information Service provided updated habitat area figures using 2014 NRW Phase I info. The relevant woodland information is extracted and provided in figure 11 below.

Habitat		Overall area from 2014 phase 1	
Code	Description	hectares	acres
WOODLAND			
A.1.1.1	semi- natural broadleaved woodland	7781.34	19219.92
A.1.1.2	plantation broadleaved woodland	76.19	188.18
A.1.2.2	plantation coniferous woodland	10576.65	26124.33
A.1.3.1	semi-natural mixed woodland	0.06	0.16
A.1.3.2	plantation mixed woodland	262.22	647.69
A.2.1	Coniferous semi-natural	2678.23	6615.23
A.4	Recently-felled woodland	37.40	92.38
A.4.1	Recently-felled woodland Broad-leaved	2.10	5.18
A.4.2	Recently-felled woodland Coniferous	828.30	2045.91
A.4.3	Recently-felled woodland Mixed	1.31	3.24
(A) Total woodland		22243.81	54942.21

Figure 11 Woodland habitat area figures (2014 NRW Phase 1 Data)

73. Ancient woodlands have many unique features with undisturbed soils rich in nutrients and continuity of woodland cover since pre-1600. As such, they provide a home for many different species including fungi, insects, microbes, small mammals, birds and amphibians. Certain species are only found in ancient woodland, and they are home to more threatened species than any other habitat.
74. The Brecon Beacons National Park is not very heavily wooded. There is around 95,000ha of ancient woodland in Wales, 6,900ha (7%) of which is found in the National Park.
75. The 2006 state of the Park report recorded 7,725ha of ancient woodland, suggesting that there has been a loss of ancient woodland of 825ha or 10.7%. It is not clear where this data has come from therefore we cannot use it as a baseline and should be read for information purposes only.

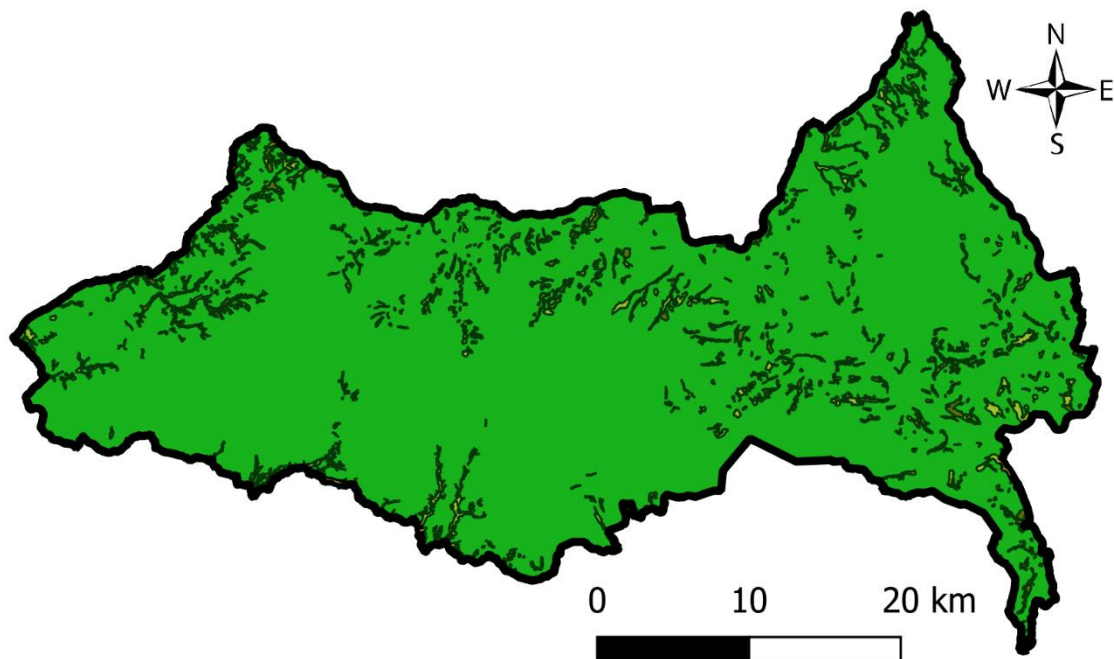


Figure 12 Ancient Woodland

Indicator 10 - Breeding/Nesting Birds

76. Birds are powerful indicators of environmental health¹⁴. Many birds sit at or near the top of terrestrial and marine food chains and understanding the drivers and impacts on their populations gives us an insight into the status of other wildlife. The State of Birds in Wales 2018¹⁵ report includes measures of the importance of Wales in supporting the UK breeding populations of Chough (76%), Pied Flycatcher (69%), Redstart (47%) and Honey Buzzard (47%) as well as significant proportions of the UK wintering populations of coastal species such as Common Scoter and Guillemot as well as rarer winter visitors such as Brambling and Great Grey Shrike.
77. Data in relation to state of terrestrial wild bird populations in and around the Brecon Beacons National Park (10km buffer zone around the Park boundary) has been produced by the British Trust for Ornithology (BTO) (June 2020)¹⁶. Figure 13 below shows farmland bird unsmoothed trend for Wales and the Brecon Beacons region from 1994 to 2018 for the same 11 indicator bird species. Table I within the report shows species habitat designations included in the indicator and Appendix I of the

¹⁴ British Trust for Ornithology <https://www.bto.org/research-data.../state-birds-wales/2018/state-birds-wales-2018>

¹⁵ As above

¹⁶ https://beaconsnpagovuk-my.sharepoint.com/:b:/g/personal/matthews_breconbeacons_org/EcJlbhmEfWlBtL6p-17tzHABSSm0lwPCYgPW5iWfvKBjIQ?e=S3E4vg

report shows indicator values. The data shows declines of 20-30% over the survey period.

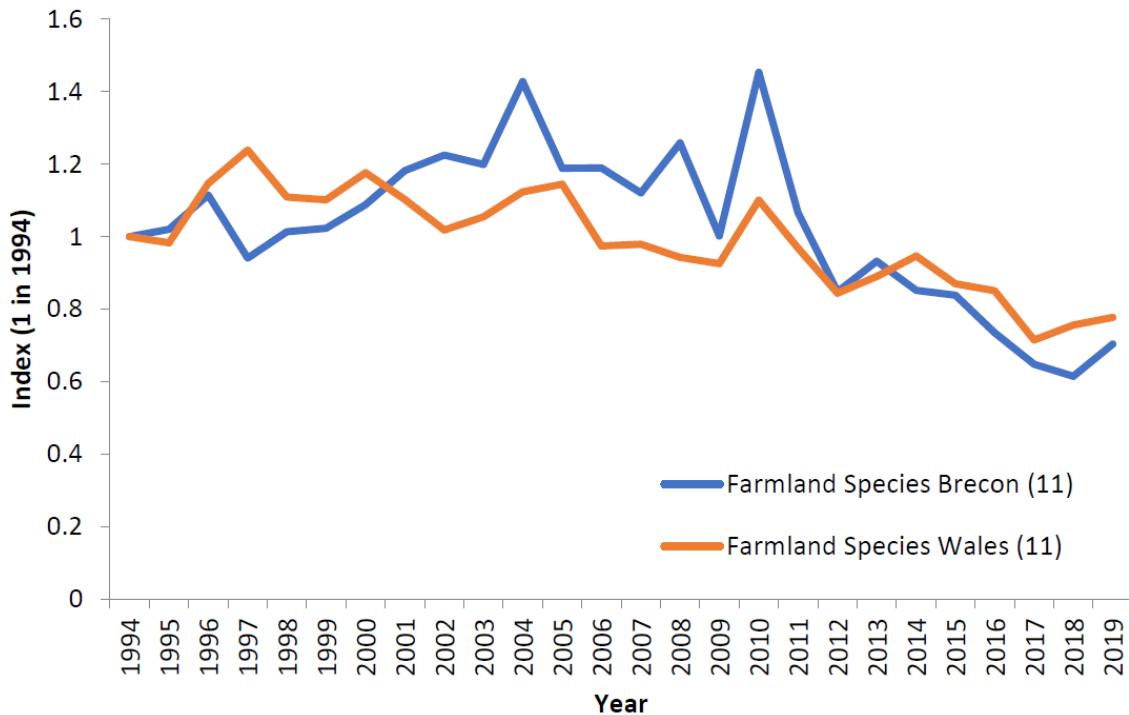


Figure 13 Farmland Species

78. Figure 14 below shows upland bird unsmoothed trend for Wales and the Brecon Beacons region from 1994 to 2018 for the same 8 indicator bird species. Table I of the report shows species habitat designations included in the indicator and Appendix I of the report shows indicator values. The data shows a slight increase in the Brecon Beacons trend (8%), whereas the Welsh trend slightly declines by 13%.

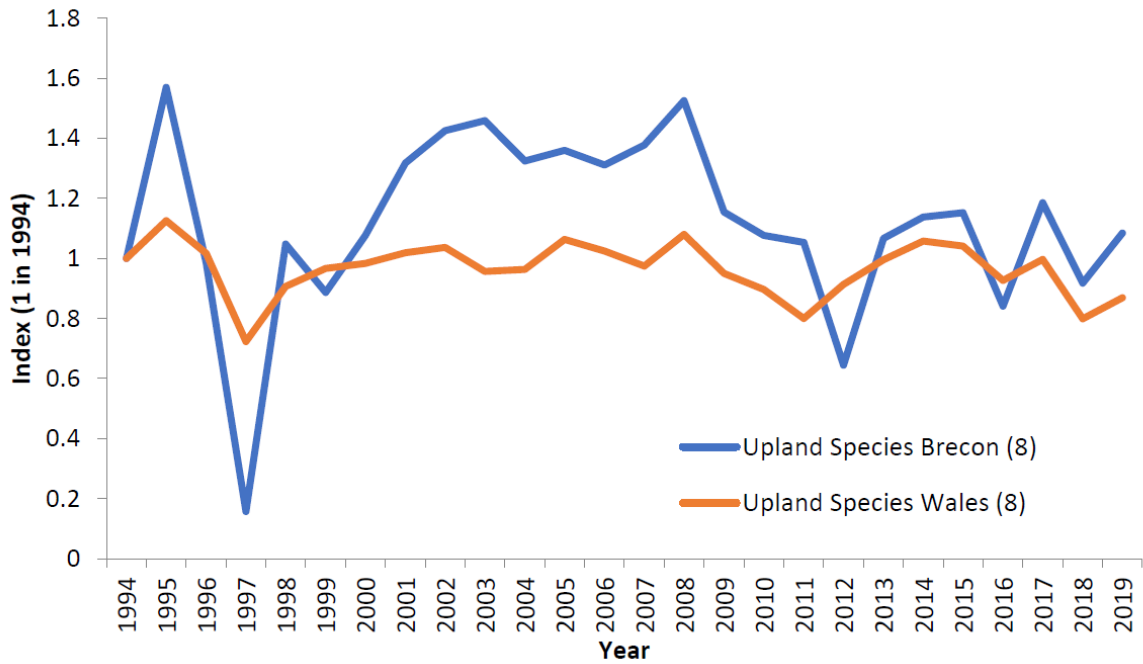


Figure 14 Upland Species

79. Figure 15 below shows woodland unsmoothed trend for Wales and the Brecon Beacon region from 1994 to 2018 for the same 26 indicator bird species. Table I of the report shows species habitat designations included in the indicator and Appendix I shows indicator values. The data shows an increase in both the Park and at national level (12% in Brecon Beacons and 30% increase in Wales).

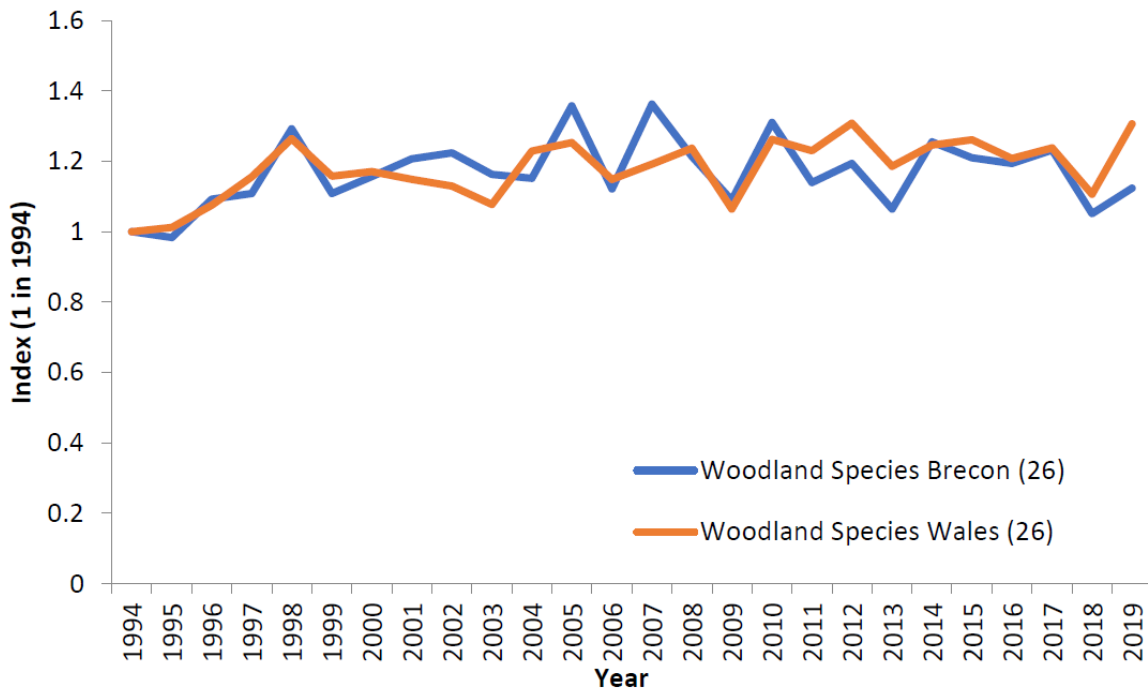


Figure 15 Woodland Species

80. Figure 16 below shows urban, wetland and other species unsmoothed trend for Wales and the Brecon Beacons region from 1994 to 2018 for the same 14 bird species. Table I of the report shows species habitat designations included in the indicator and Appendix I shows indicator values.. The data shows a 15% increase in the Brecon Beacons and a 7% increase in the corresponding Wales trend.

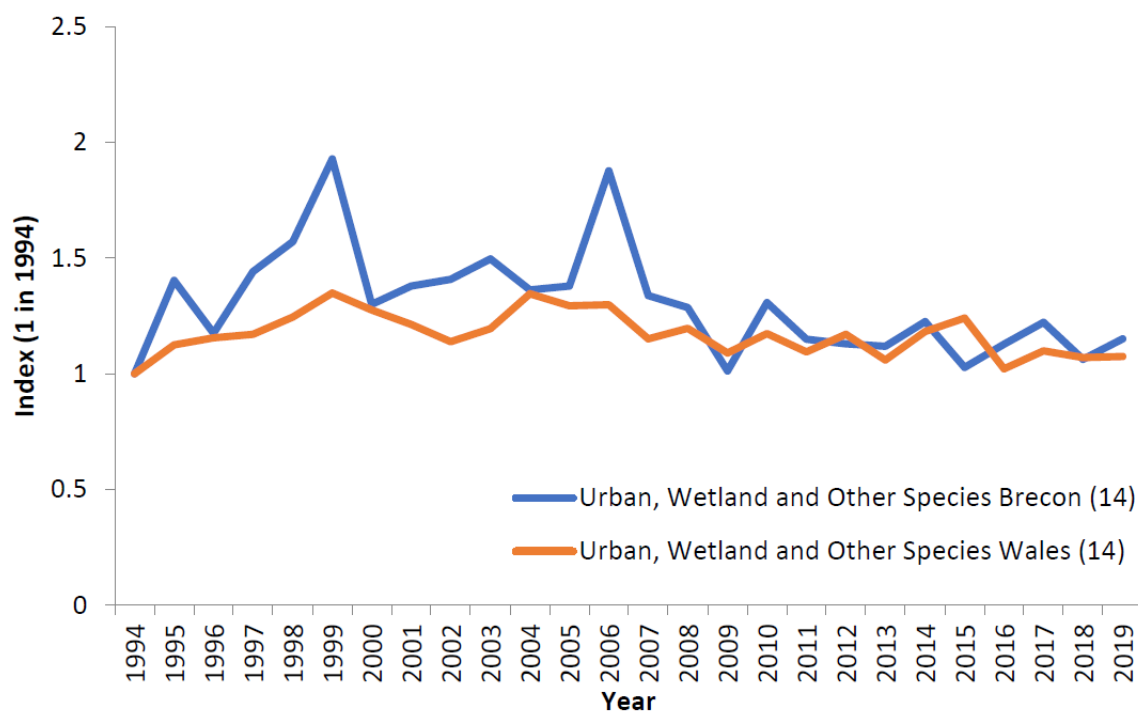


Figure 16 Urban, Wetland and Other Species

81. Appendix 10 provides 23 year trend data (1995-2018) and 5 year trend data (2013-2018) for the bird species used in the indicators, colour coded to highlight level of change: red is representative of RED listing, yellow of AMBER listing, pale green represents a moderate increase and dark green a strong increase. Sample size (number of squares) is in brackets. The data shows:

- 8 red listed species declined by >50% in the Brecon Beacons, of which 4 are associated with farmland, 3 with upland habitat and 1 with urban habitat
- 12 amber listed species declined by >25% in the Brecon Beacons

82. The results section of the BTO report (June 2020)¹⁷ states that 'Of 140 bird species detected at least once on BBS squares in the Brecon Beacons region since 1994, we were able to calculate population trends for 61 species (59 native and 2 non-native species: Canada

¹⁷ https://beaconsnpagovuk-my.sharepoint.com/:b:/g/personal/matthews_breconbeacons_org/EcJlbhmEfWIBtL6p-I7tzHABSSm0lwPCYgPW5iWfVKBjlQ?e=S3E4vg

Goose and Pheasant) using BBS data from the Brecon Beacons National Park region defined in Figure 1. The 59 native species trends are those used in the indicators. Another eight non-native species were also detected, most very rarely (e.g. Helmeted Guineafowl, Mandarin Duck and Little Owl). We could not calculate robust population trends for the other 71 species detected only rarely on BBS squares within the Brecon Beacons National Park. This is not unexpected as even at the UK level with over 4000 constituent squares, we report trends for only 117 species, detected on 40 squares annually across the UK. A summary of the smoothed long-term (23 years) and short-term (5 years) trends for each of the 61 species with sufficient data is displayed in Table 1. Note that although survey counts from 2019 unpublished at the time of these analyses were used in the analyses, the protocol for reporting longterm changes in smoothed trends is from the 2nd to the penultimate year in the time series. Hence the 23-year trends cover the period 1995 to 2018. For the change in the smoothed trend over the most recent five-year period, we compare the 2018 value to the 2013 value. The colour coding indicates whether the decline is indicative of red-listing (>50%) or of amber listing (>25% and <50%). Increases are also indicated in pale green for moderate increases (>50% and <100%) or strong increases (>100%). These thresholds for decline are based on the rates used in the Birds of Conservation Concern status assessment for birds in the UK. Starling notably had the most dramatic decline of 84% between 1995 and 2018. A total of 8 species were shown to be declining by more than 50% over the longer-term period: Swift, Greenfinch, Grey Wagtail, Yellowhammer, Curlew, Wheatear and Rook. Twelve species declined between 25% and 50% in the longer period, including Chaffinch, Magpie, Garden Warbler, Green Woodpecker, House Martin, Grey Heron, Long-tailed Tit, Mallard, Redstart, Jackdaw, Blue Tit, and Raven, and another 16 species were declining by <25%. In contrast, three species have increased by more than 50% (Siskin, Goldfinch and Reed Bunting) and populations of eight species have more than doubled (>100% increase). These were Great Spotted Woodpecker, House Sparrow, Blackcap, Red Kite, Lesser Redpoll, Whinchat, Stonechat and the non-native Canada Goose, although the sample size for the latter three species is small.'

83. Generally trends are similar in the Park to those across Wales. One exception is upland birds which are doing better in the Park. There is more variability across the Park area than in Wales across time, which can be expected because it is a smaller area. The report identifies many caveats with the data, particularly given that there are a limited number of sample points in and around the park.

Indicator 11 – Bats

84. The UK National Bat Monitoring Programme (NBMP) provides data at national scale in relation to population trends for British Bat species. There is no Park level data at the moment. However, survey indices are produced at a country level for England, Scotland, Wales and Northern Ireland for species and surveys where sufficient data are available. These are identified in the NBMP Annual Report (2019)¹⁸.
85. Figure 17 below shows a summary of the bat species trends in Wales, derived from NBMP surveys to the end of summer 2019. For each species, the number of sites contributing to the 2019 trend calculations is shown as well as an approximation of the average annual percentage change since the baseline year. It should be noted,

¹⁸ <https://cdn.bats.org.uk/pdf/Our%20Work/National-Bat-Monitoring-Programme-Annual-Report-2019.pdf?mtime=20200514130739&focal=none>

however, that the average annual percentage change makes assumptions about the data analysis and is only genuinely appropriate for those species for which the trend line appears to be linear.

86. All species showed similar trends at GB and country level with the following exceptions: the greater horseshoe bat Hibernation Survey trend showed a statistically significant increase at GB level and in England, but no significant difference in Wales; the Daubenton's bat Waterway Survey trend showed a statistically significant increase in Wales, but no significant difference at GB or UK level, or in England, Scotland or Northern Ireland; the Natterer's bat Hibernation Survey trend showed statistically significant increases at the GB level and in England and Wales, but no significant change in Scotland, although the sample size in Scotland is small and therefore the trend may be unreliable; the common pipistrelle Field Survey trend showed a significant increase at GB level and in England, but no significant difference in Scotland; and the soprano pipistrelle Field Survey trend showed a significant increase at GB level and in Scotland, but no significant difference in England.

Species	Survey type	No. sites trend analysis	Base year	Long-term trend since base year (%)	Average annual change and 95% CI (%)
Greater horseshoe bat	Hibernation	98	1999	104.9	3.7 (-0.9 to 10.4)
Lesser horseshoe bat	Hibernation	177	1999	173.0*	5.2 (4.0 to 6.0)
	Roost	178	1999	69.1*	2.7 (1.5 to 3.7)
Daubenton's bat	Waterway	49	2000	50.9*	2.2 (0.8 to 3.7)
	Hibernation	98	1999	29.7	1.3 (-2.0 to 4.5)
Whiskered/Brandt's bat	Hibernation	83	1999	-5.1	-0.3 (-3.3 to 0.8)
Natterer's bat	Hibernation	137	1999	63.0*	2.5 (0.4 to 3.3)
Soprano pipistrelle	Roost	53	2002	-70.4*	-6.9 (-10.8 to -4.3)
Brown long-eared bat	Hibernation	90	1999	44.3	1.9 (-0.5 to 3.4)

Notes: * indicates statistically significant result at 5% level.

Figure 17 Wales bat species population trends summary table

87. Bat Maternity Roost data is provided from the A465 HOV2 assessment (Appendix 2). While this is located within the park it is limited to very specific areas and only collected at a fixed point in time.

Indicator 12 - Invasive Non-Native Species



88. Invasive Non-Native Species (INNS) are a significant challenge to nature recovery, with strong and persistent populations of particular plant and animal species, and a long and growing list of other species that have the potential to adversely affect the Park's biodiversity and landscape.
89. Not all non-native species cause problems, but the minority that do have negative impacts on our countryside are considered INNS. Some of the most common INNS found in the UK and the National Park includes the Japanese knotweed, Himalayan balsam and Giant hogweed.
90. In April 2018, the National Park Authority launched an invasive species project 'Invaders of the National Park'. The purpose of which is to establish a pilot project for surveying and controlling INNS in the Usk and Tawe river catchments, working with other projects and organisations to develop a collaborative invasive species partnership approach. Ultimately, the project will be looking at how INNS can be managed long term.
91. There have been 59 INNS recorded within the boundaries of the Brecon Beacons National Park. (Appendix 1). As of February 2020 there are 4300 invasive species records held by the Local Records Centre (BIS) for the Park area. The map in Figure 18 below illustrates records of INNS that have been found in the Brecon Beacons National Park within the last 10 years.²⁰

¹⁹ 2019 State of Nature Report BBNP

²⁰ 2019 State of Nature Report BBNP

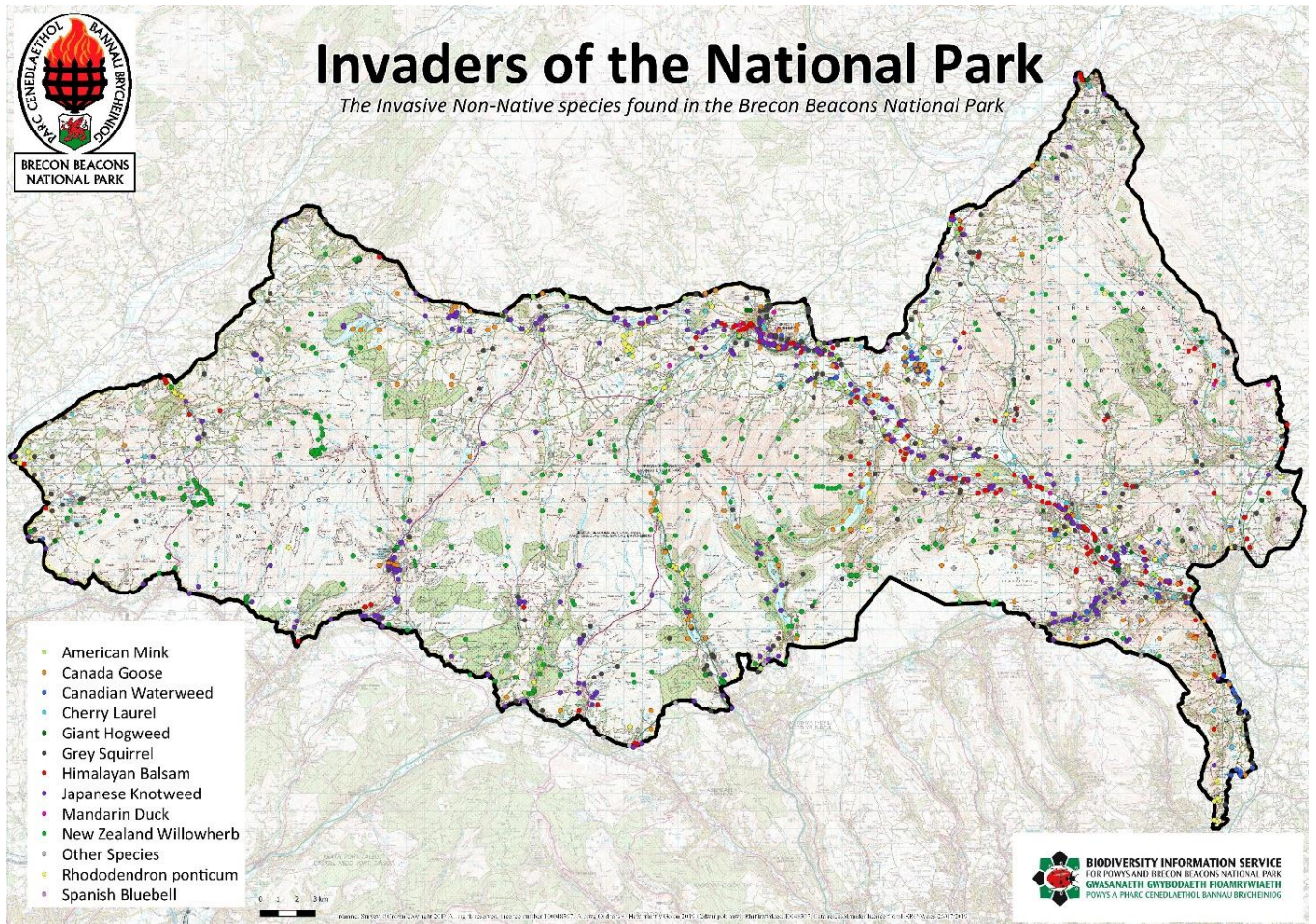


Figure 18 Invasive Non-Native Species

92. The BIS data shows that in the last twenty years both the number of records and the number of different species recorded has increased. In the year 2000, 57 records were submitted of 10 INNS. In the year 2019, 369 records were submitted of 28 different invasive species. A threefold increase in the number of species and a six-fold increase in total number of records submitted since 2000 (Figure 19).

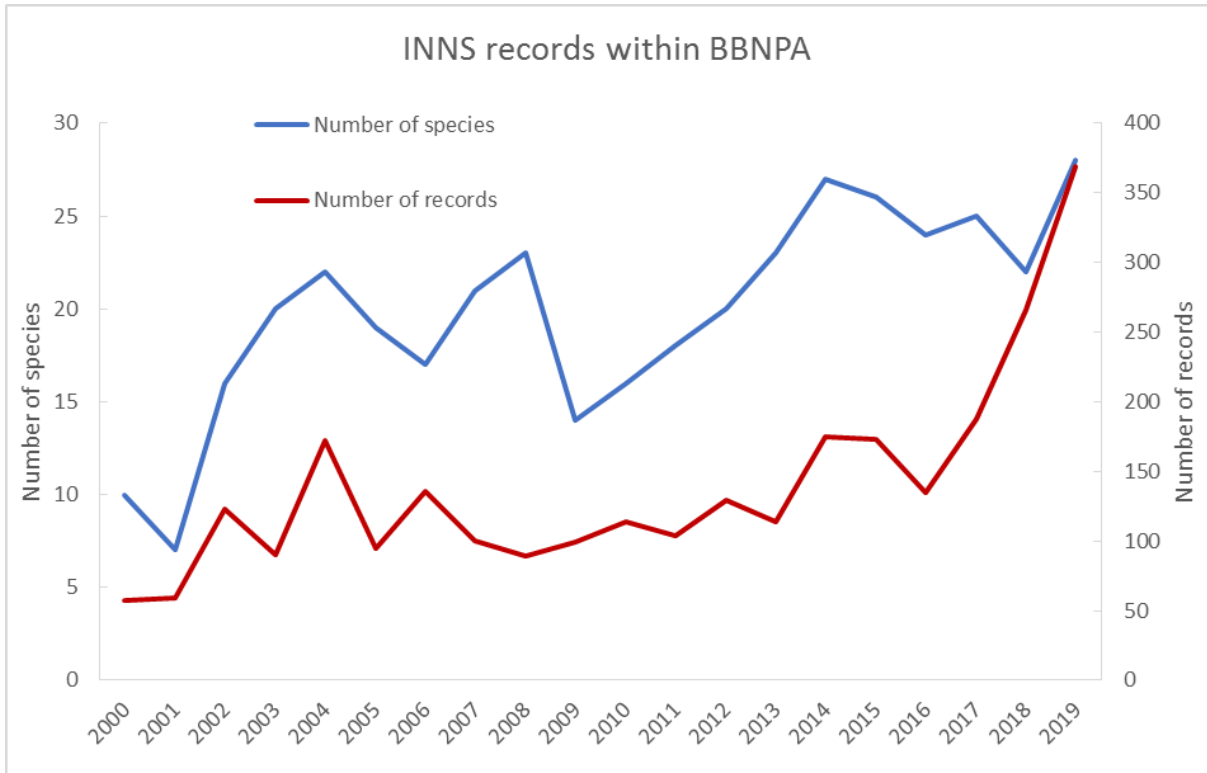


Figure 19 Number of species and number of records of INNS recorded in the National Park within the last twenty years (Data from the Local Records Centre for Powys & BBNP-BIS)

93. The Authority's 'Invaders of the National Park' project (2018) would have resulted in an increase in records from 1st April 2018 due to the increased survey effort.
94. 125 new INNS arrived in the UK between 2000 and 2015. 45 of these are known to have established and 14 of these are considered to have a negative impact (Roy et al. 2014).
95. Figure 20 below shows the top 10 INNS by number of records within the National Park. Note this is not a measure of abundance but the number of times they have been recorded.

Rank	English Name (Latin name)	Total Records
1	Canada goose (<i>Branta canadensis</i>)	944
2	Himalayan balsam (<i>Impatiens glandulifera</i>)	622
3	Japanese knotweed (<i>Fallobia japonica</i>)	516
4	New Zealand willowherb (<i>Epilobium brunnescens</i>)	465
5	Grey squirrel (<i>Sciurus carolinensis</i>)	383
6	American mink (<i>Neovison vison</i>)	166
7	Rhododendron ponticum	129
8	Canadian waterweed (<i>Elodea Canadensis</i>)	106
9	Cherry laurel (<i>Prunus laurocerasus</i>)	92
10	Giant hogweed (<i>Heracleum mantegazzianum</i>)	75

Figure 20 Top 10 INNS by number of records in the Brecon Beacons National Park (Data from the Local Records Centre for Powys & BBNP, correct at 14/02/20)

	Apr-18	May-20	Increase of:
Japanese Knotweed	333	610	277
Himalayan Balsam	209	624	415
Giant Hogweed	48	77	29

Figure 21 Change in Number of INNS Records

96. Figure 21 shows the change in number of INNS records, with all three INNS showing a significant increase, which could be a result of increased recorder effort. It should also be noted that these records are indicators of presence/absence at that particular moment in time. They are not measuring extent or frequency of the plant occurring. Some more detail is sometimes available in the comments section of each individual record along with a photo if the recorder used the full features of the LERC Wales app. It will also not tell you if the plant is still in existence as some of the records date back to 1968. As this is a new indicator and data set there is no previous data to compare to, however comparisons may be made in future State of the Park Reports.

Chapter 2 – Culture and Heritage

Introduction

97. The landform which defines the National Park landscape was carved out by the glacial action of the last ice age which ended some 12 thousand years ago. The evidence of the ice's action is written in to the rough and dramatic skyline, the iconic scarps, cwms, moraines and screes of the Beacons.
98. The National Park is a living, working landscape and has been for over eight millennia, each successive generation has utilised the land to their best advantage from the hunter gatherers of pre-history to the industrialising exploits of the 19th Century. As people have lived in these hills and valleys, so too the evidence of their lives inscribes the landscape with echoes of their presence.
99. This interaction between land and people forms a rich tapestry of human experience seen in the shape of the fields, the bank and ditch of the breast of a hillfort, the footsteps of the drovers treading paths that traverse the valleys. The culture and traditions of people over the ages weaves together a way of life that is inimitably bound to place.
100. For millennia people valued the land for its produce. With the turn of the 19th century the landscape began to take on a new meaning expressed in the art and poetry of the Romantics who believed that natural beauty was and is of itself an entity of worth.
101. Today the National Park landscape is valued as an inspiring landscape host to festivals steeped in music, arts and literature. Hay Festival is an international literary festival held in the border Town of Hay on Wye for 10 days at the end of May, capitalising on the image of Hay as the 'town of books' the festival attracts writers and philosophers from across the world to present their work and ideas to a varied and extensive audiences.
102. In Brecon, the annual jazz festival held every August brings colour and music to the streets of this old market town and has in the past attracted names such as George Melly and Jools Holland to perform in the festival. August also sees the Glanusk Estate at Crickhowell host the Green Man Festival, a festival celebrating alternative and independent music and arts. Since its inception in 2003 the festival has evolved into a 20,000 capacity 4-day event with national radio coverage.
103. Agriculture has long been surpassed as a focus and mainstay of employment for the Park's rural communities, but in terms of communal activity almost all the villages and towns within the Park continue the tradition of the annual agricultural show.
104. The following indicators have been chosen for Chapter 2:

Chapter 2 - Culture and Heritage	
13	The % of Rights of Way that are easy to use
14	Upland Erosion on Paths
15	Welsh Language
16	Cultural Events
17	Historic Environment Scheduled Ancient Monuments

105. Gaps in data within Chapter 2 include:
- Area of Farmed Land by type – data requests have been sent to WG but no information has been provided as of yet. If/when data is received we will be able to use it in this or future iterations of the SoPR. We have received information relation to area of farmed land – see Figure 22 below, however this does not define the type of farmed land.

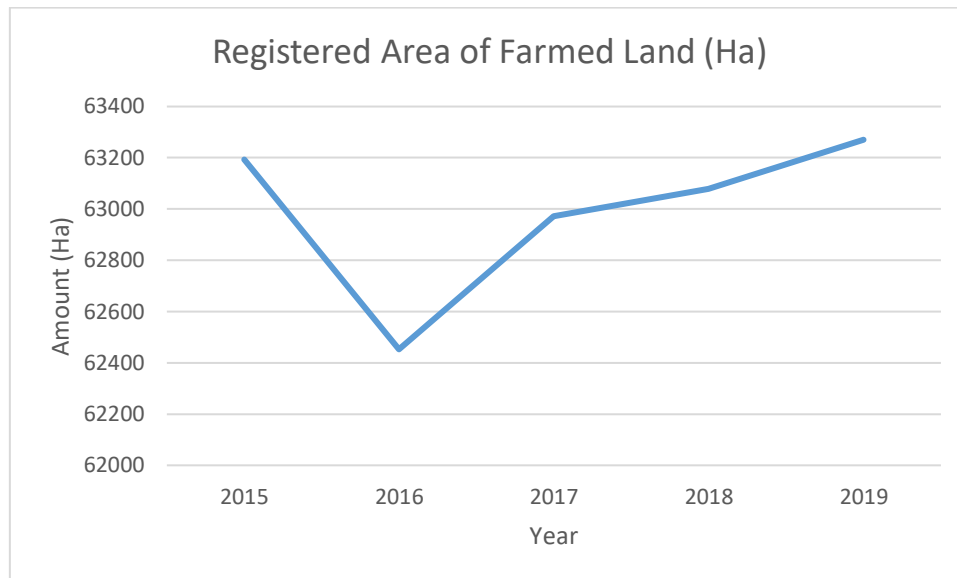


Figure 22 Registered area of farmed land in the park

Indicator 13 - Rights of Way

106. Data is provided by the Rights of Way Improvement Plan (ROWIP) (2019) and additional survey work
107. Rights of Way considered to be 'Easy to Use' are shown in Figure 23 below. The graph shows that the percentage of 'easy to use' rights of way within the Park varied between 2010/2011 and 2013/2014. There has been a more significant increase in the 'easy to use' rights of way between 2013/2014 and 2018/2019.



Figure 23 Rights of way 'Easy to Use'

108. Rights of Way considered to be 'Open' are shown in Figure 24 below.

109. The graph shows that the percentage of open rights of way within the Park increased steadily between 2011/2012 and 2013/2014, and there has been a more significant increase in the open rights of way between 2013/2014 and 2018/2019.

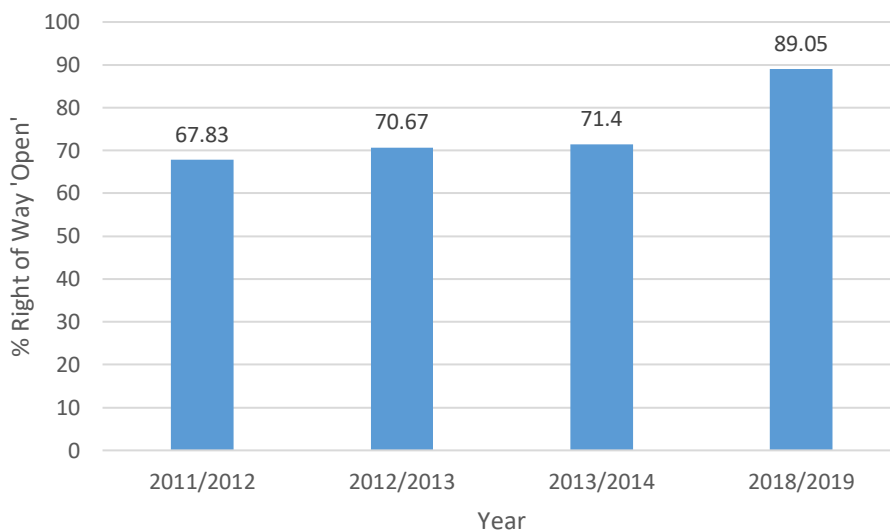


Figure 24 Rights of way 'Open'

- 76 % of Rights of Way within the Park are signposted. This has not been reported in previous editions of the SoPR although the ROWIP (2019) shows that this has improved significantly from 2002 (56%).

Indicator 14 - Upland Erosion

110. Results of an update survey to the 2014 data set are expected in 2020. Unfortunately, due to the COVID 19 pandemic and restrictions accessing upland areas of the National Park, survey work has not been completed in time to present results in the report. Survey work is currently being finalised and it is hoped that the results can be included prior to publication of the report, with an update to the NPA when results come in. There has therefore been no change to the data used in the 2014 SoPR²¹.

Indicator 15 – Welsh Language

111. Welsh language plays a major role in the character and way of life of communities in the National Park. Within the National Park, 10.3% of residents can speak Welsh. In Welsh speaking communities in the Park it is a key feature of day to day life. The richness of the language is celebrated in events such as Eisteddfoddi. The Welsh language is reflected in the landscape and place and building names. All residents and visitors have some access to and awareness of the language in this way. Recent trends have seen a reduction in the proportion of people who can speak Welsh fluently.

*'The Welsh language is one of the treasures of Wales. It is part of what defines us as people and as a nation'*²²

112. Data collected for the 2011 Census identified that there were 562,000 Welsh speakers in Wales. In 2017, the Welsh Government released the 'Cymraeg 2050' strategy with the aim of reaching 1 million Welsh speakers by 2050. In addition, The Well-being of Future Generations Act (Wales) 2015 sets out seven goals, one of which is, 'A Wales of vibrant culture and thriving Welsh language'. The ever-growing importance of the Welsh Language in Wales means that monitoring the percentage of residents in the National Park who have Welsh language skills is a good indicator of the state of the Park in terms of its the culture and heritage.
113. The data used to demonstrate the state of this indicator is taken from the 2011 Census. This data probably doesn't reflect the current state of Welsh language skills in the Park, but more recent/up-to-date data is not currently available.
114. When the 2001 Census was undertaken there was no measurement included for Welsh language spoken in the Brecon Beacons National Park as a specific area, only at Local Authority level. However, the data shows that the ability to speak Welsh varied between 0 and 10% across the East and Central area and rises to 20 – 30% in the far West of the Park (taken from Brecon Beacons National Park Authority Welsh Language Monitoring Report Reporting year 2008-2009). The baseline for this indicator will be the 2011 figures, as they present a more accurate picture of Welsh language skills found in the Park.

²¹ <https://www.beacons-npa.gov.uk/the-authority/who-we-are/npmp/state-of-the-park-report-2/>

²² Welsh Government 'Cymraeg 2050: A million Welsh speakers. Available at: <http://www.assembly.wales/Laid%20Documents/GEN-LD11108/GEN-LD11108-e.pdf>

115. Figure 25 below shows that in comparison to other National Parks in Wales, Brecon Beacons has the highest percentage of residents with no skills in Welsh (77.5%), followed by Pembrokeshire Coast (70.3%), with Snowdonia having the lowest percentage (32.5%). Further data is found in Appendix 11.

116. The Brecon Beacons has the lowest percentage of residents who can understand spoken Welsh only (5.5%), can speak Welsh (13.9%), can speak but no read or write Welsh (2.2%), can speak and read but cannot write Welsh (1.2%), and can speak, read and write in Welsh (10.3%). This data shows that the Brecon Beacons has poor Welsh language skills, relative to other Welsh National Parks.

117. In comparison to Wales as a whole, Brecon Beacons also performs poorly:
- The percentage of residents in Wales who had no skills in Welsh was 73.3% - lower than the Brecon Beacons figure of 77.5%.
 - The percentage of people who could speak, read and write Welsh in Wales was 14.6% - higher than the Brecon Beacons figure of 10.3%.
 - The percentage of people who could understand only spoken Welsh in Wales was 5.3% - lower than the Brecon Beacons at 5.5%.
 - The percentage of those residents of Wales who could speak Welsh was 19% - higher than the Brecon Beacons average of 13.9%.
 - The percentage of those residents of Wales who could speak Welsh was 19% - higher than the Brecon Beacons average of 13.9%.
 - The percentage in Wales who could speak, but could not read or write was 2.7% - higher than the Brecon Beacons of 2.2%.
 - The percentage in Wales who could speak and read, but could not write Welsh was 1.5% - higher than the 1.2% in the Brecon Beacons.

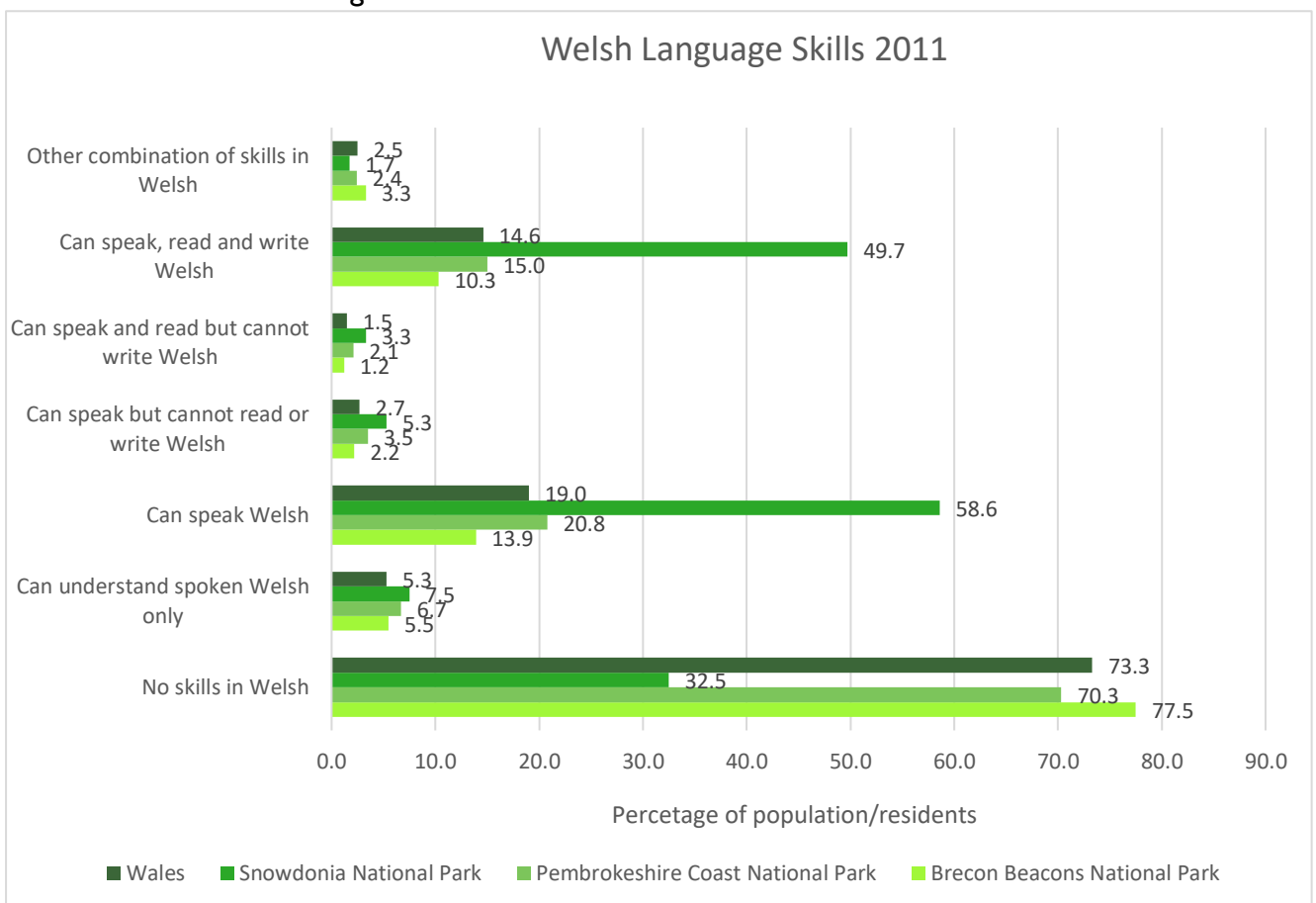


Figure 25 Welsh Language Skills (Source: Census 2011)

Indicator 16 – Cultural Events

118. People connect to the National Park landscape and cultural heritage through coming together at events, which also play an important role in wellbeing and community cohesion for residents and awareness, understanding and enjoyment for residents and visitors alike. Cultural events encompass a wide range from traditional local Eisteddfoddi and local agricultural shows, to new forms through theatre, local arts and dramatic groups including the Young Farmers Clubs. In addition to cultural events a wide range of walking festivals and other outdoor events also take place each year.

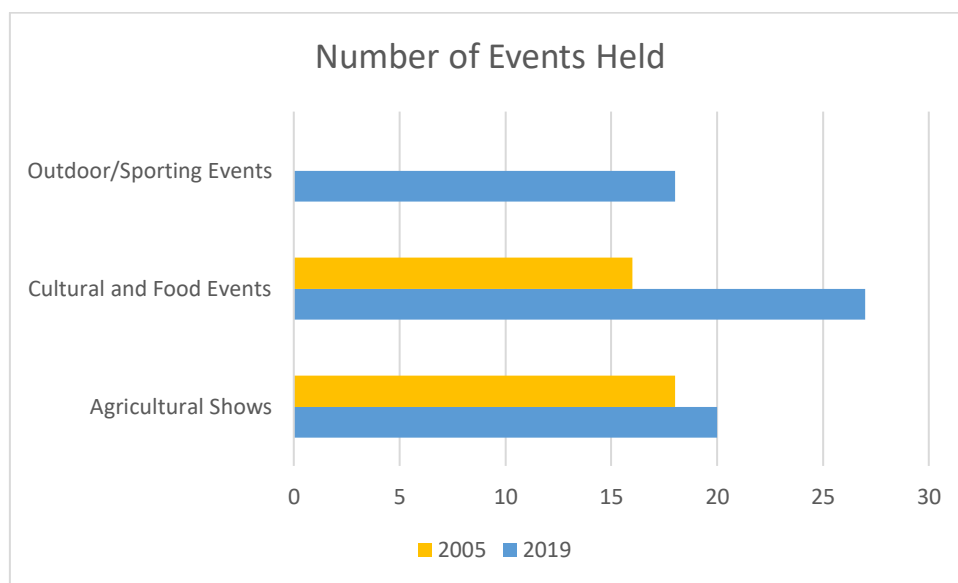


Figure 26 No. of Local Events Held

119. Figure 26 shows that the number of shows across all three categories of events increased between 2005 and 2019.

Historic Environment (Scheduled Ancient Monuments and Listed Buildings)

120. Historic environment is a broad term which refers to all evidence of human interaction within the landscape, both material, as in standing buildings or buried monuments to landscapes such as ancient ploughed furrows or recent planted gardens. The Historic Environment is the story of successive human lives lived out within a landscape that evolves with time.

121. In the National Park the complexity of the Historic Environment is vast, stretching from prehistory right through to the modern day.

122. The Park has a wealth of stone circles, and burial chambers, Iron Age Hillforts and Roman camps. Among our historic churches is St Catwg's, Llangattock, founded in the 6th Century and considered one of the oldest in Britain, although it has been largely rebuilt over the years – its relatively recent additions include a 14th century nave, 16th century tower and two incredibly old yew trees. During the Norman Conquest, the hills were peppered with Castles. The ruins of Carreg Cennen are

probably the best known remaining fortifications. Llanthony Priory was founded around 1100, and medieval farmhouses followed. Land which wasn't used by the Norman barons was used by villagers as a source of firewood, turf, peat and gravel, and as grazing for sheep, cattle and pigs.

123. Huge changes took place during the Industrial Revolution of the late 18th century. Limestone, silica sand and ironstone were quarried on the fringes of the Park to feed demand from the furnaces of the South Wales Valleys.

124. The Monmouthshire Canal and the Brecknock and Abergavenny Canal, founded in the 1790s, completed in 1812 and linked to a network of tramroads and railways, became important corridors for the transport of limestone, coal and iron. Its current incarnation is known as the Monmouthshire and Brecon Canal. As well as industrial structures, the Georgian and Victorian age brought some fine urban and rural buildings to the area, some of which still retain their original features.

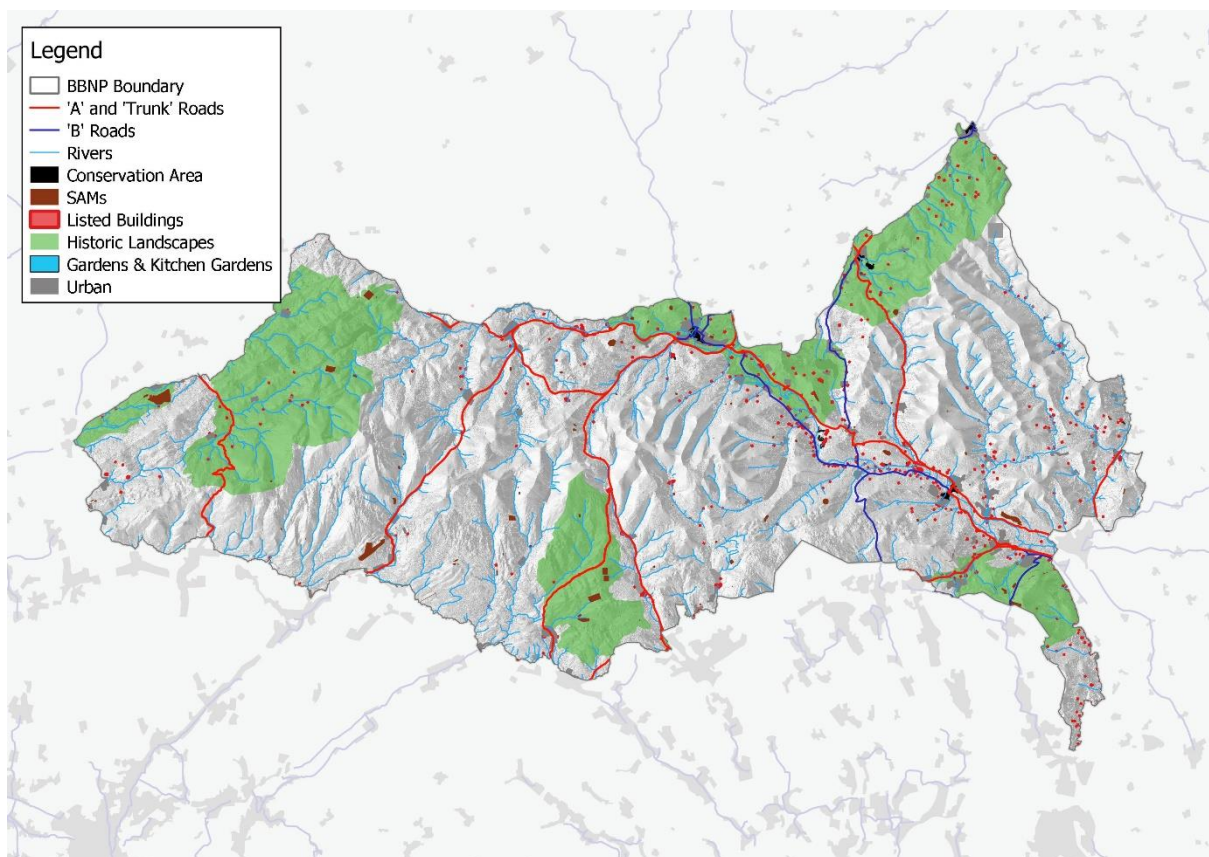


Figure 27 Historic Environment Features in the Park

Indicator 17 - Scheduled Ancient Monuments

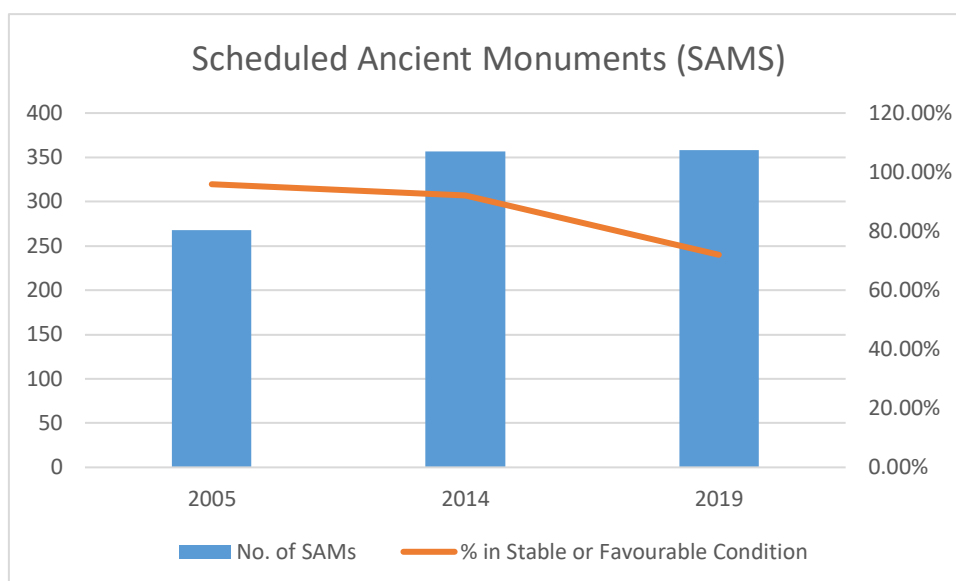


Figure 28 Scheduled Ancient Monuments

125. Figure 28 above shows that:
- In 2005, there were 268 scheduled ancient monuments in the park, of which 95.9% were in a stable or favourable condition
 - In 2014 there were 357 scheduled ancient monuments, of which 92% in a stable or favourable condition
 - In 2019 there were 358 scheduled ancient monuments, of which 72% in a stable or favourable condition
126. The overall number of SAMS in the park is increasing. Between 2005 and 2014 there was an increase in the number of SAMS of 89, which is a 33% increase. One further SAM was identified between 2014 and 2019.
127. The data shows that the condition of the SAMS in the park is deteriorating. Between 2014 and 2019 the percentage of SAMS in the park that were in a stable or favourable condition dropped by 20%. It is not clear why there was such a decrease in the percentage of SAMS that are in stable or favourable condition. Further work is required to understand this and what can be done to prevent further deterioration.
128. The numbers of other archaeological features in the park increased dramatically between 2005 (3,438 sites) and 2018 (c16,830 sites). The number of Historic Parks and Gardens also increased from 6 to 18. Landscapes of outstanding historic interest decreased from 5 to 3 over the same time period.

Indicator 18 - Listed Buildings

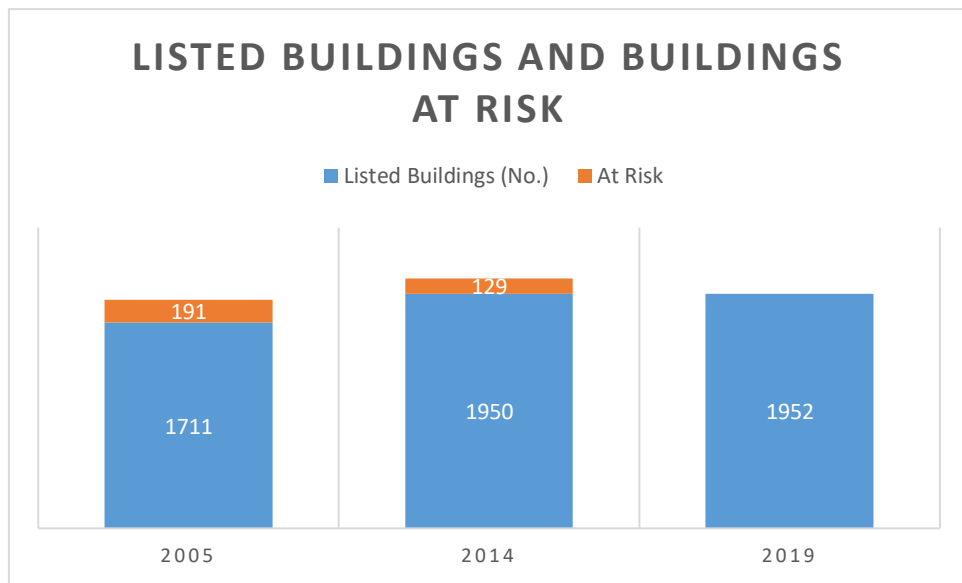


Figure 29 Listed Buildings and Buildings at Risk

129. The number of Listed Buildings in the park increased by 241 between 2005 (total 1,711) and 2019 (total 1,952). The increase was more pronounced between 2005 and 2014 with just 2 new Listed Buildings identified between 2014 and 2019.
130. The number of Listed Buildings at Risk decreased by 62 between 2005 and 2014. We are awaiting data in relation to the Listed Buildings within the park judged to be at risk.

Chapter 3 – People and the Economy

Introduction

131. The interaction of people and nature over time has shaped the distinctive character and aesthetic, ecological and cultural value of the National Park. “Safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values” (IUCN Guidelines for Applying Protected Area Management Categories). National Parks are living landscapes. The NPA has two purposes, the first to enhance the natural beauty, wildlife and cultural heritage and the second to promote opportunities for understanding and enjoyment of the special qualities, through which a Duty to foster the economic and social wellbeing of their local communities is delivered.
132. The many issues currently facing communities in the Park include: climate change, increased flood risk and biodiversity decline with related impacts on peoples’ wellbeing, uncertainty over changes to agricultural support (i.e. switch from income support to ‘public money for public goods’), rural poverty, cost of housing, ageing population, equality and inclusion, inter-generational equity, migration of young people and access to services. Many of these issues have been exacerbated by the current COVID 19 pandemic.
133. Addressing these issues is in the hands of many agencies, organisations and voluntary and community groups. The Park designation offers opportunities to address some of these issues. Sustainable and nature-based tourism confers an economic benefit and can variously contribute to conservation, enhancement and promotion of opportunities for understanding and enjoyment. Furthermore, a high-quality environment and access network offers physical and mental wellbeing opportunities.
134. Current trends have been towards an ageing population with reducing opportunities for younger people and families to live and work within the Park. A reduction in the farming community has had a direct impact on farming practices and an indirect impact on other aspects of rural life and cultural heritage, including community organisations, rural schools, shows and events, informal care and volunteering.
135. Employment data is currently only available by local authority area. The previous iterations of the State of the Park Report in 2006 and 2014 referred to census data from 2001 and 2011. Updated Census data is not available until 2021/2022, although some figures have been provided in this report which are taken from Experian forecasts and therefore not a true reflection of the state of the Park. The categories of employment used in the Experian data differ from those used in the census and direct comparisons are not compatible. Appendix 12 provides some consideration of employment and unemployment levels, though it is not used as an indicator in this report.
136. The next iteration of the SoPR will use census data from 2021 which will provide a useful comparison to the employment data from the SoPR 2006 and 2014.
137. We are expecting data from Welsh Government in relation to the size of farm businesses. If this data is received in time it can be used in this report, otherwise it will

be reported in future iterations. Other areas where the report would benefit from further data are:

- Eligibility for free school meals
- No. of public charging points in the Park
- Walking in the lowlands and Mental Health
- Extent of active travel routes
- Broadband access and speeds
- Political map over time
- International Dark Sky Reserve Data

138. The following indicators are used for Chapter 3 of the SoPR:

Theme 3 - People and the Economy	
19	Tourism Spend
20	Population
21	Housing
22	Vacancy rates
23	Welsh Index of Multiple Deprivation

139. Powys County Council prepared a report in July 2020 ‘Understanding the Impact of COVID 19 in Powys’²³. While the full impact of the virus will not be known for some time, trends are becoming apparent and the report provides some indication of the effects that may be expected on the economy and communities within Powys (the Unitary Authority with the largest area/population within the Park boundary) over the short, medium and long term. The following infographic provides information on the impact of the virus.

²³ <https://sway.office.com/sxfU525TCBDFv9PE?ref=Link&loc=play>

Understanding the Impact of COVID-19 in Powys 'on a page'

In order to consider how Powys may look in the future, it is necessary to clearly see the current situation, what has changed or stayed the same and what this might mean for the County **over the short (6 months), medium (1 year) and long term (5 years).**



Economy

- Business Support** - £46.6m paid out to 4,020 businesses with a further support package to be made available for small charities in Powys
- Employment trends** - 23% of Powys' workforce (13,100 employees) furloughed. From March to May claimant count increased 156% (+2,225) in Powys
- Impact on key sectors** - Accommodation & food services have been the worst hit since COVID-19, with an estimated fall in GDP of 92%

- Short, medium, long term** March and April 2020 compared to 2018 Powys, it is estimated that:
 - Short term** Powys' GVA decreased by 24.5% with 25.2% fewer jobs
 - Medium term** Powys' GVA decreased by 11.8% with 18.1% fewer jobs
 - Long term** Powys' GVA decreased by 4.4% and 7.3% fewer jobs

Vibrant, connected & resourceful communities

- Volunteers** - 372 health and care volunteers across PCC and PTHB. 66% volunteer increase on powys.volunteering-wales.net
- Community provided services** - 5,504 vulnerable persons in Powys communities are recognised
- Environmental impacts** - massive reduction in airborne pollution, most noticeably reduction in Nitrogen Dioxide (NO2) and particulate matter

- Short, medium, long term**
 - Short term** Communities with high numbers of vulnerable persons continue to need additional help
 - Medium term** A possible rise in the need for food banks in the most 'financially stretched and urban adverse' areas
 - Long term** Risk that smaller Environmental NGOs may be lost without additional funding

Residents start well, live well & age well

- Referral numbers** – Referrals to Adult social care increased by 11%. Children's referrals have reduced, mostly because of the schools closures (schools usually refer 10%) this could imply a safeguarding risk to young people
- Homelessness and housing impacts** – 112 homeless as at 29th May 2020, 119% increase compared to May 2019. 80% of those accommodated are single persons

- Short, medium, long term**
 - Short term** Adult support will continue, delivered virtually where possible
 - Medium term** Referrals will increase. More homeless once private landlords can enforce evictions
 - Long term** Adult social care needs will be met in the community. Increase in homelessness for family groups due to unemployment

Capable, confident & fulfilled residents

- Pupil and student trends** – 16 childcare hubs, 307 pupils accessing. 1,413 devices and MiFi dongles distributed
- Free school meals**- 14% increase in students who are eligible, 20% increase in free school meal take up since Sept 2019
- Well-being of pupils and students** - Demand for children and young people's counselling service increased by 60 referrals since lockdown to 190 active cases

Short, medium, long term
The impact on children, young people and education staff is yet unknown

High Performing & well run council

- Financial outlook for the council** - potential £16m deficit for financial year 2020/21. 201 staff furloughed recouping £206k March-May
- Service Performance Impacts** – Significant changes to the way the council is operating. +1,100% daily VPN connections, +634% in Teams activity
- Well-being of staff** – 562 staff have responded so far. 66% staff reported they have increased productivity and 70% have better work/life balance

Short, medium, long term
Short term Significant loss of income
Medium and long term Revisit our MTFS, austerity means we are likely to have a significantly worse financial settlement in future years

Indicator 19 - Tourism Spend

140. Tourism spend information is collected for the Park by STEAM (Scarborough Tourism Economic Activity Model). The value of tourism to the local economy of the National Park is increasing. Figure 22 below shows that between 2006 and 2017, year on year there is almost a continuous increase in tourism spending within the Park (with the exception of a large increase in spending in 2008, followed by a decrease in 2009). The data shows that in 2017, food and drink is the sector with the largest expenditure at 49.4 million, followed by shopping (37.8 million), then transport (36.4 million). In comparison, accommodation only accounted for 21.9 million. This reflects the data shown in Indicator 12 of the 2014 edition of the SoPR, which highlighted that the number of staying visitors to the Park is much lower than number of day visitors, and is comparatively lower than the number of staying visitors in other National Parks.
141. These figures show the continuing and increasing importance of tourism to the economy of the Brecon Beacons National Park.

Sector/Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Accommodation	16.7	17.8	19.4	16.2	17.0	16.9	17.5	16.9	17.1	19.6	20.0	21.9
Food & Drink	34.1	36.8	41.4	38.1	39.7	42.0	40.6	41.4	41.9	45.3	46.9	49.4
Recreation	11.3	12.2	13.7	12.7	13.2	14.0	13.5	13.7	13.9	15.0	15.5	16.4
Shopping	26.2	28.2	31.8	29.4	30.6	32.4	31.3	31.8	32.2	34.7	35.9	37.8
Transport	25.3	27.2	30.9	28.4	29.7	31.3	30.0	30.5	30.7	33.4	34.6	36.4
Direct Revenue	113.7	122.1	137.1	124.8	130.2	136.6	132.9	134.3	135.8	148.0	152.9	161.9
VAT	19.9	21.4	24.0	21.8	22.8	27.3	26.6	26.9	27.16	29.6	30.6	32.4
Direct Expenditure	133.6	143.5	161.1	146.6	153.0	163.9	159.5	161.1	163.0	177.7	183.5	194.2
Indirect Expenditure	46.4	49.8	55.8	50.9	52.9	56.9	55.4	55.8	56.2	61.3	63.8	67.2
Total	180.0	193.3	216.9	197.5	205.9	220.8	214.8	216.9	219.1	238.9	247.3	261.4

Figure 30 Tourism spend by sector of expenditure (STEAM data 2017)

142. The Youth Hostel Association (YHA) have released a report 'Guests staying with the YHA in National Parks'²⁴. Data specific to the Brecon Beacons National Park shows a steady increase in domestic and international guests over the past 5 years.

²⁴ https://beaconsnpagovuk-my.sharepoint.com/:b:/g/personal/matthews_breconbeacons_org/EQ6bPLZnIAVBpDsn28IQ2WUB8Gq-C788bd9Z--RCrd2cdw?e=tbq1nl

Brecon Beacons National Park

Hostels

YHA Brecon Beacons
YHA Brecon Beacons Danywenallt
YHA Llandeusan Activity Centre

12,743

guests stayed with YHA in the Brecon Beacons National Park during 2019/20

4,018

guests aged Under 26 years old stayed with YHA in the Brecon Beacons National Park during 2019/20

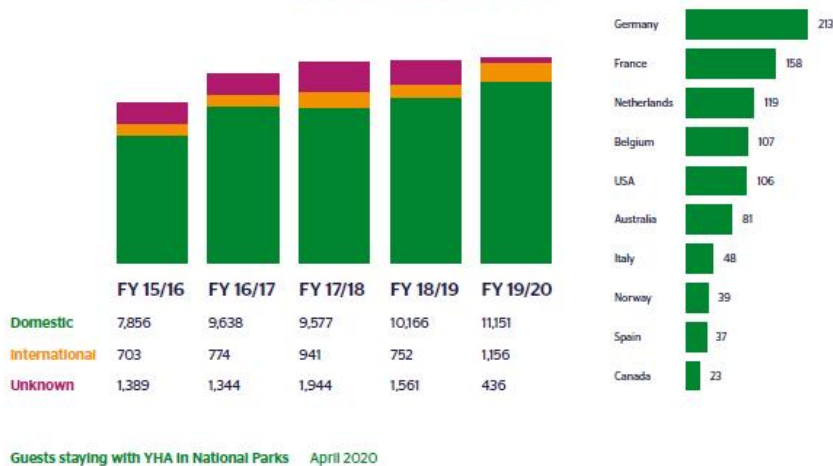


Figure 31 Guests staying in YHA hostel in the Brecon Beacons

Indicator 20 - Population

143. An enduring mixed age population is important for community wellbeing, supporting a healthy society and local economy. The retention of facilities and services (e.g. schools, pubs, village shops and post offices) can be critically and irretrievably affected by local demographic changes; as can local resilience, including informal care for dependent children and adults and informal support for members of the wider community, enabling people of working age to be economically active and older people to stay in their own homes.

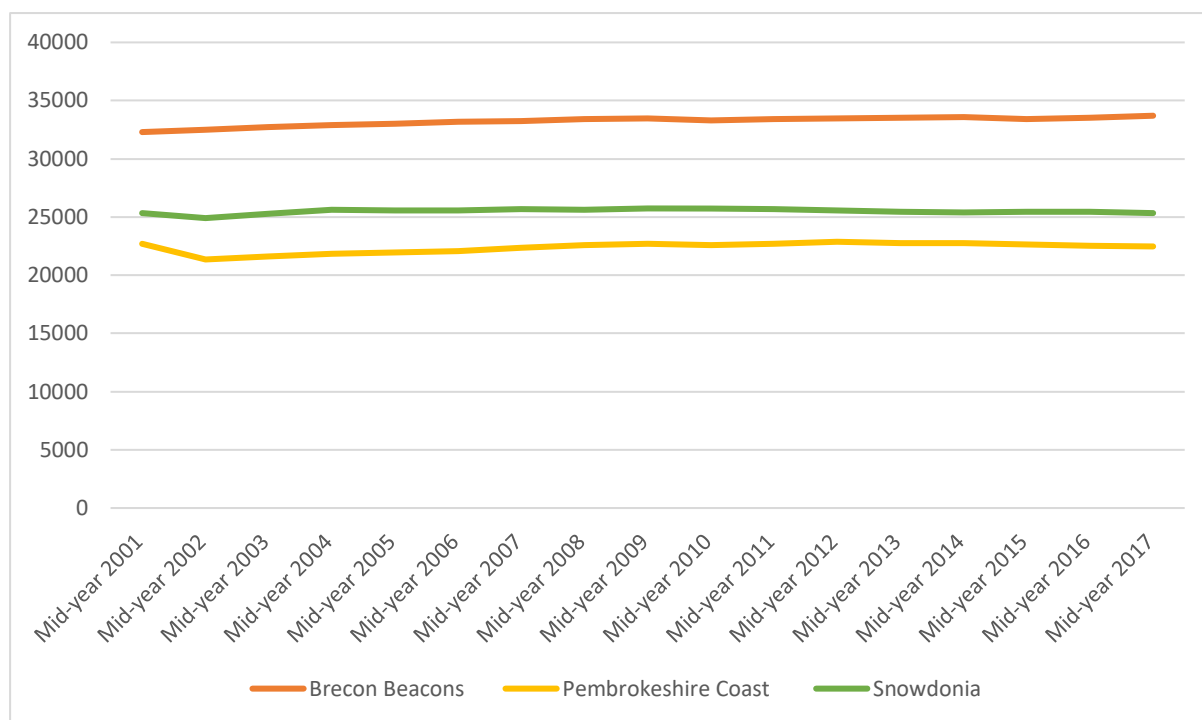


Figure 32 Population of Wales' National Parks (Source: Stats Wales, 2018)

144. Figure 32 above shows that the Brecon Beacons has the highest population of the three National Parks in Wales at 33,701 in 2017, compared to 22,459 in Pembrokeshire Coast and 25,355 in Snowdonia.
145. The Office for National Statistics (ONS)²⁵ projects that the population of Wales is set to increase from 3,138,631 people in 2018, to 3,159,070 people in 2026 before falling back to 3,117,538 people in 2041.
146. Whilst we await 2018-based sub-national projections, 2014-based projections (see graph below) shows that the population of the Brecon Beacons is predicted to follow this trend, experiencing an increase of 1.9% between 2014 and 2029 before falling back. Brecon Beacons is the only National Park in Wales due to experience an increase in population, with both Pembrokeshire Coast and Snowdonia due to experience decreases of 12.3% and 6.6% respectively.²⁶

²⁵ Office for National Statistics (2019). National population projections: 2018 based. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletin/s/nationalpopulationprojections/2018based>

²⁶ Welsh Government (2017). Population projections for National Parks in Wales, 2014-based. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2018-12/170726-population-projections-national-parks-2014-based-en.pdf>

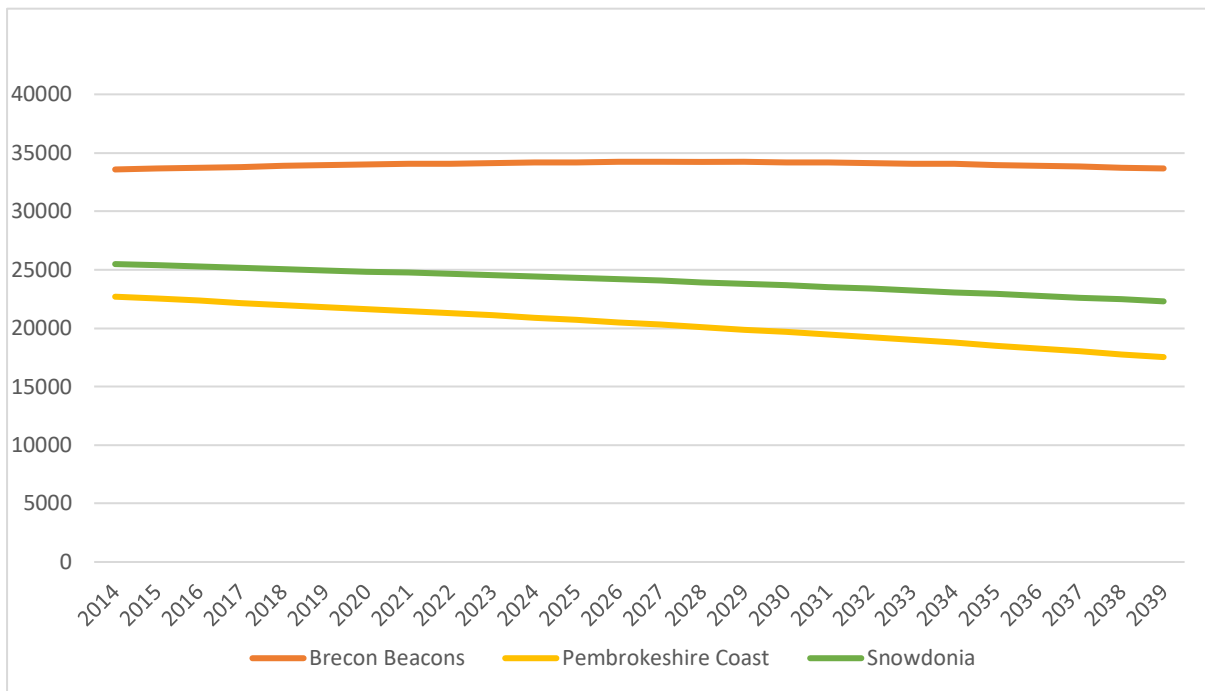


Figure 33 National Park Population Projections (Source: Stats Wales 2017)

147. Population projections use assumptions (based on recent trends) about births, deaths and migration to provide estimates on the size of future populations. The population projections shown in Figure 33 covers the 25-year period from 2014 to 2039.
148. An ageing population is a common demographic feature of National Parks in Wales. As is shown in the graph below, the Brecon Beacons National Park follows this trend. The graph shows that the percentage of the population in the Brecon Beacons National Park is below the national average between the ages of 0– 44. However, between the age ranges of 45 – 85+, the percentage of the population in these age ranges in the National Park is consistently above the average, with the biggest difference found between ages of 50-55. Comparison figures between 2011 and 2017 show how the percentage of the population between 0-19 has increased in this period, but so has the population aged 65+.

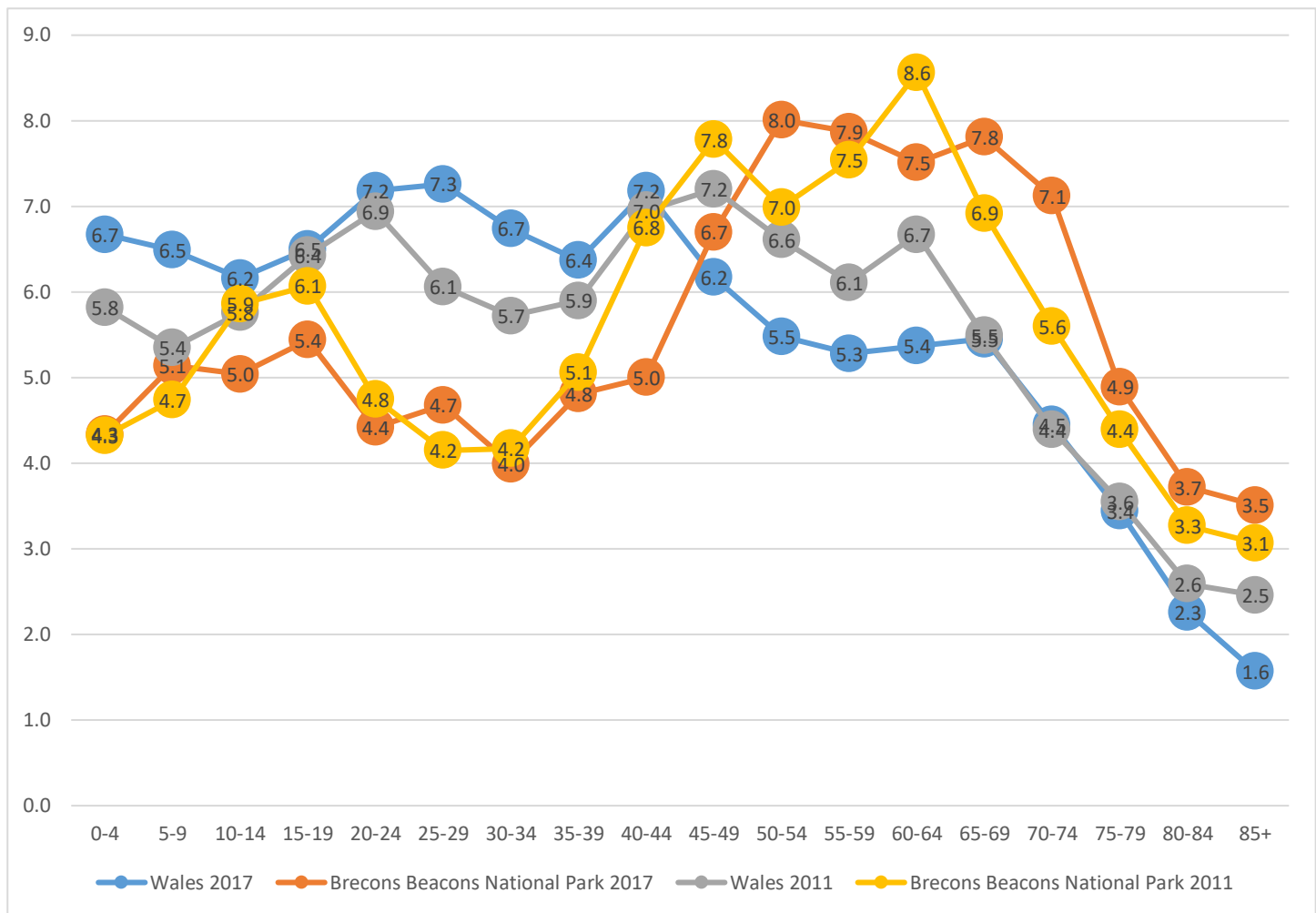


Figure 34 Percentage of Residents per age group (Data Source: Stats Wales)

149. Welsh Government²⁷ predicts there will be a decrease in the number of households in the Pembrokeshire Coast and Snowdonia National Parks between 2014 – 2029, and they anticipate an increase in the number of households in the Brecon Beacons National Park by 900 (5%).

²⁷ Welsh Government (2017). National Park Householder Projections (2014-based). Available at: <https://gov.wales/sites/default/files/statistics-and-research/2018-12/170726-household-projections-national-parks-2014-based-en.pdf>

	1 Person Households	2 Person Households (No children)	4 Person Households (2 adults + 2 children)
2014	4780	5180	1240
2019	5170	5270	1170
2024	5480	5290	1130
2029	5680	5220	1100

Figure 35 Household Projections (Source: Welsh Government 2017)

150. The increase in households could be attributable to a variety of reasons including the change in household types. Welsh Government projections 2014-2029 show a shift in the household type from the most common being 2 Person Households (no children) in 2019, to single person households becoming more prevalent by 2029.

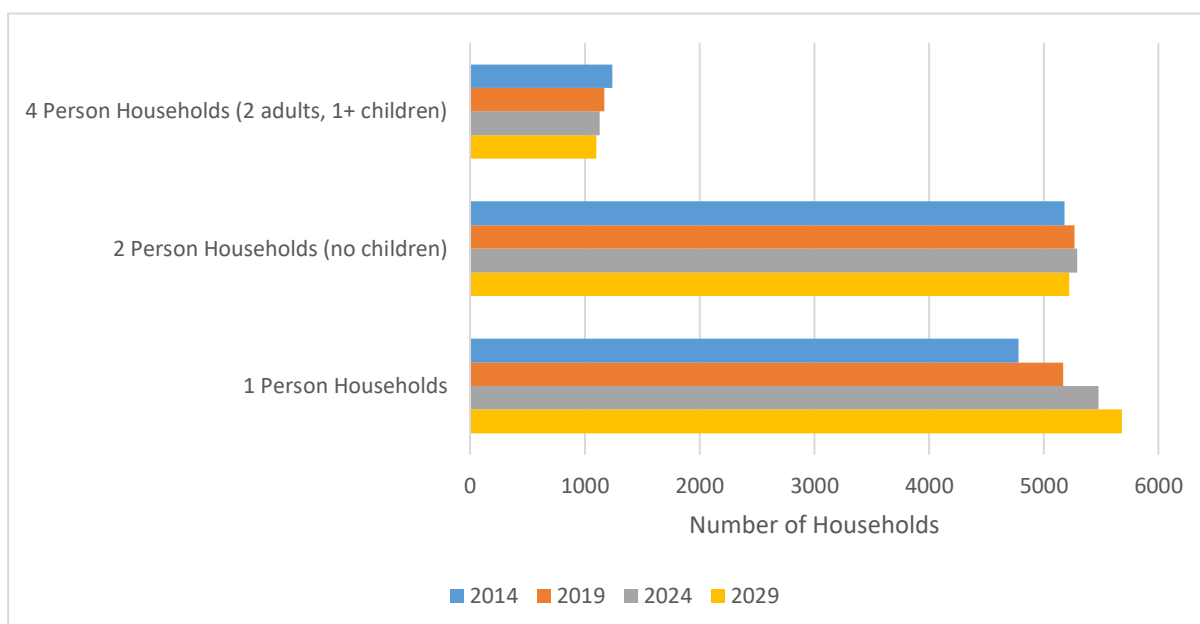


Figure 36 Household type projections 2014 – 2029 (Source: Welsh Government 2017)

151. Figure 36 shows the 3 household types expected to see the biggest change in the Brecon Beacons national park 2014 - 2029. In 2014, the most common household type was two-person (two adults, no children) households. However, Welsh Government projections indicate that the numbers of one-person households is set to increase by 19% (890 households) by 2029, making it the most common household type.

152. The largest decrease is predicted to be found amongst four-person households (at least two adults and one child). This group is projected to decrease by 11% (140 households) by 2029.

153. This is an important indicator for the state of the park as it closely allies with issues associated with an ageing demographic and the loss of families living and working within the National Park.

154. The increase in one person households could negatively affect the state of the park, as it could increase the demand for housing, and lead to under occupation of the larger houses.

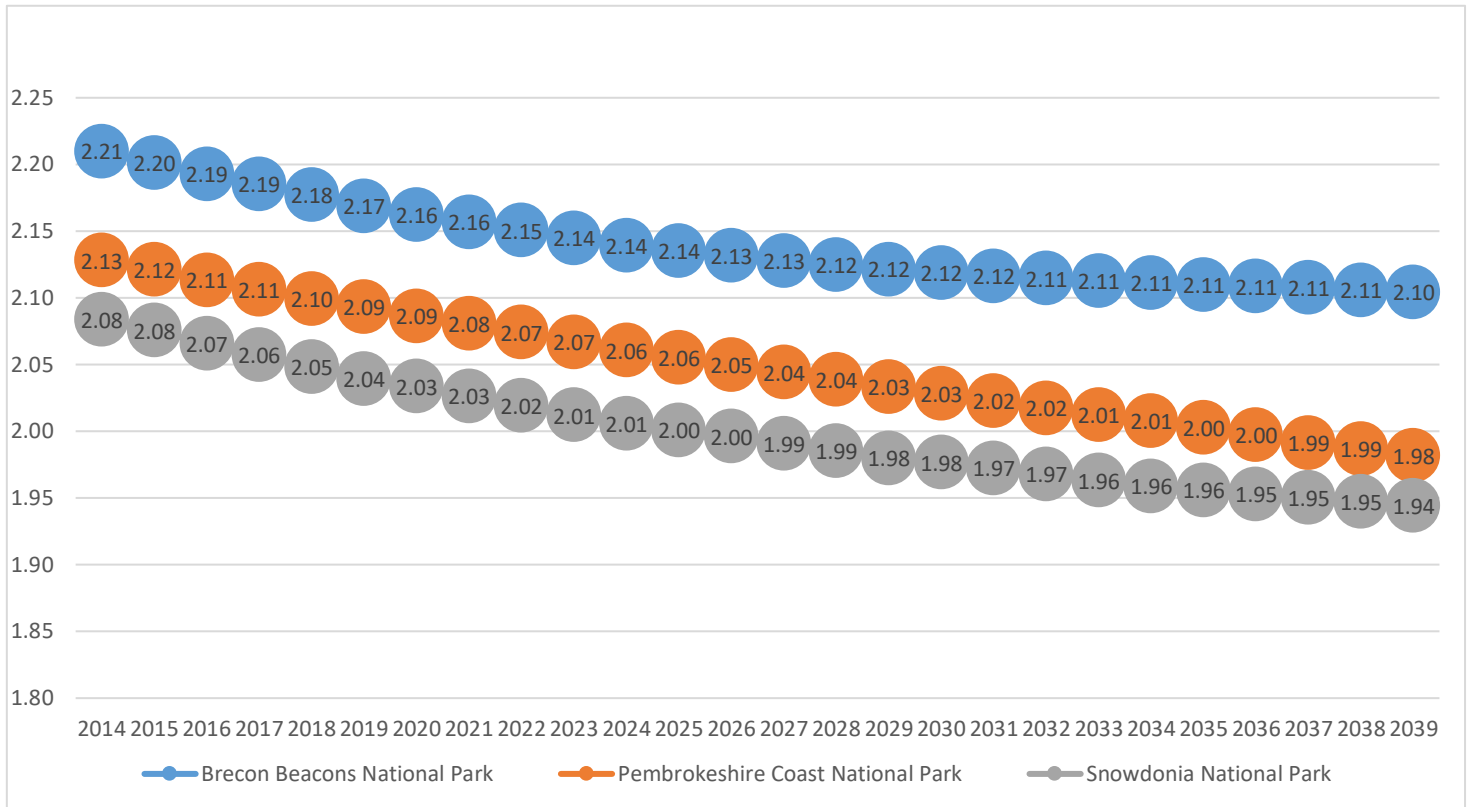


Figure 37 Average Household Size Predictions

Indicator 21 - Housing

155. Vibrant thriving communities are those where people are able to access good quality housing at a level they can afford. Research undertaken to support policy development within the national park²⁸ has highlighted that there is a significant shortfall in affordable housing to meet our community's needs²⁹. Affordable housing is crucial to the sustainability of rural communities, and as housing becomes less affordable the demographic of communities shifts, young people are priced out of the housing market, and available housing stock is sold to incoming retirees or as second homes. This in turn is having an impact on the provision of rural services such as schools, pubs, village shops and post offices. The following indicators consider the housing need of the communities over the next 15 years, the level of affordable housing projected as necessary, and the drivers of housing affordability in terms of average income vs house prices.

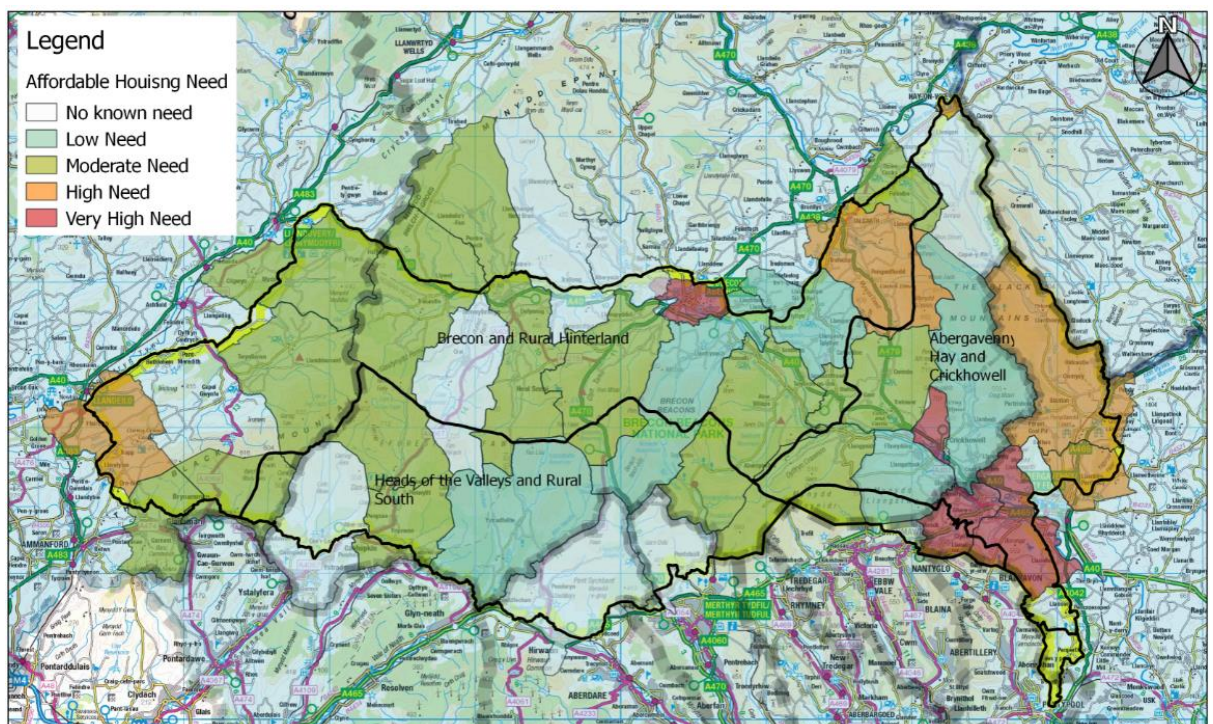


Figure 38 Affordable Housing Need in the Park

156. The LDP 2007-2022 set out an affordable housing need of 1,248 houses, an average of 83 houses per year. By April 2019 140 houses had been completed over the plan period, representing 11% of the total needed. Between 2013 and 2019 planning permission has been granted for 162 new affordable dwellings.

157. The average house price across the Brecon Beacons National Park in 2018 was £244,099, an increase of 14% in the last ten years (Lloyds data on National Park & affordability).

²⁸ Affordable Housing Issues Paper Brecon Beacons National Park Authority 2010

²⁹ Affordable Housing in this context means housing that is provided by a Registered Social Landlord (or equivalent) for rent or part ownership at levels set by the Welsh Government which can only be occupied by people with a local connection who cannot afford to access housing in any other way.

158. House prices are on average 25% higher than elsewhere locally, outside the National Park. The comparison with other National Parks can be seen below³⁰.

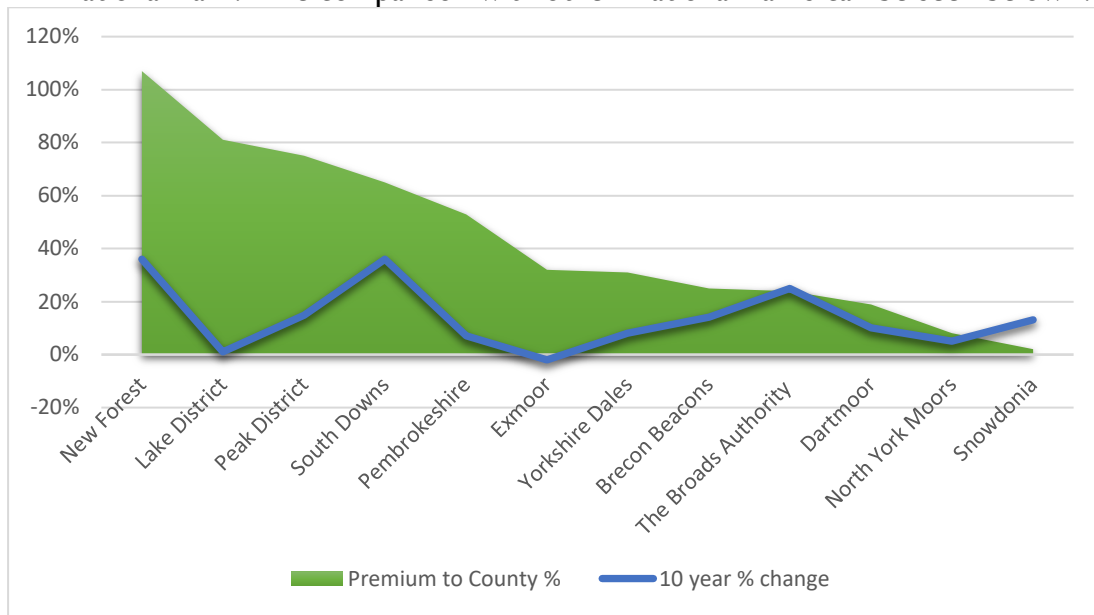


Figure 39 National Park House Prices (Source Lloyds data on house prices and affordability (2018))

159. The price to earnings ratio, also known as the affordability ratio for the Brecon Beacons National Park is 8.6 (i.e. on average house prices are 8.6 times the average income). This compares with an average across Wales of 5.73. The affordability index variation across the National Parks can be seen graphically below.

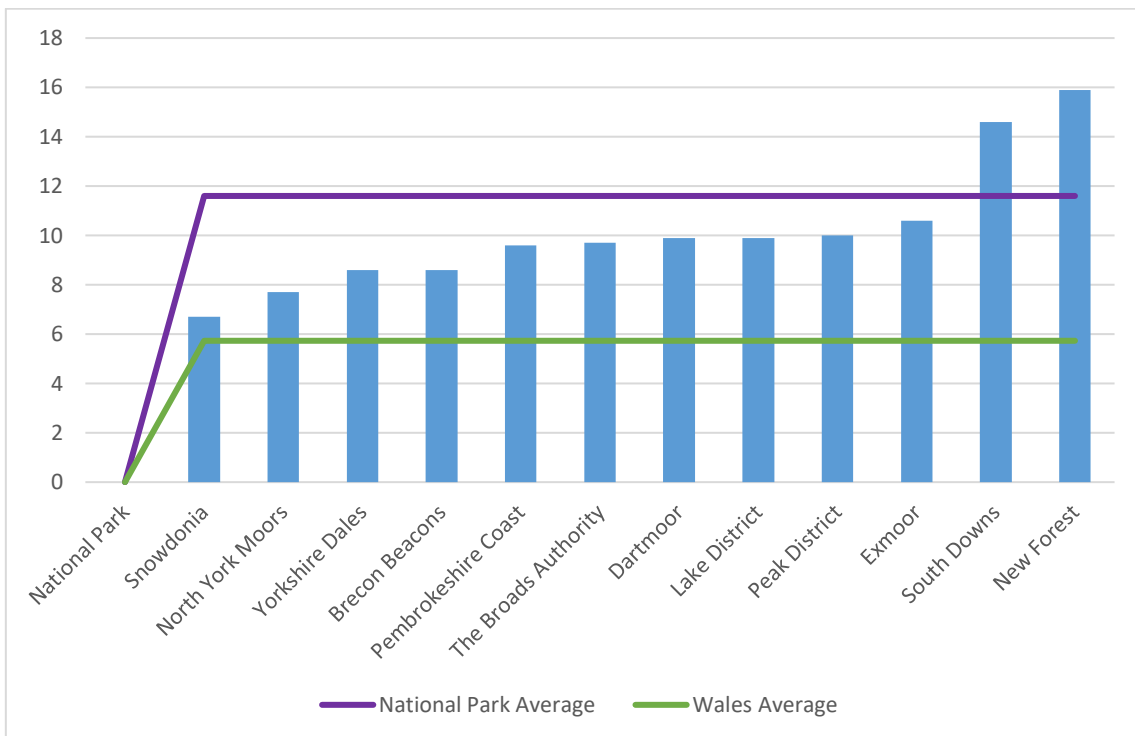


Figure 40 Affordability Ratio (Source Lloyds data on house prices and affordability (2018))

³⁰ [Lloyds data on house prices and affordability \(2018\)](#)

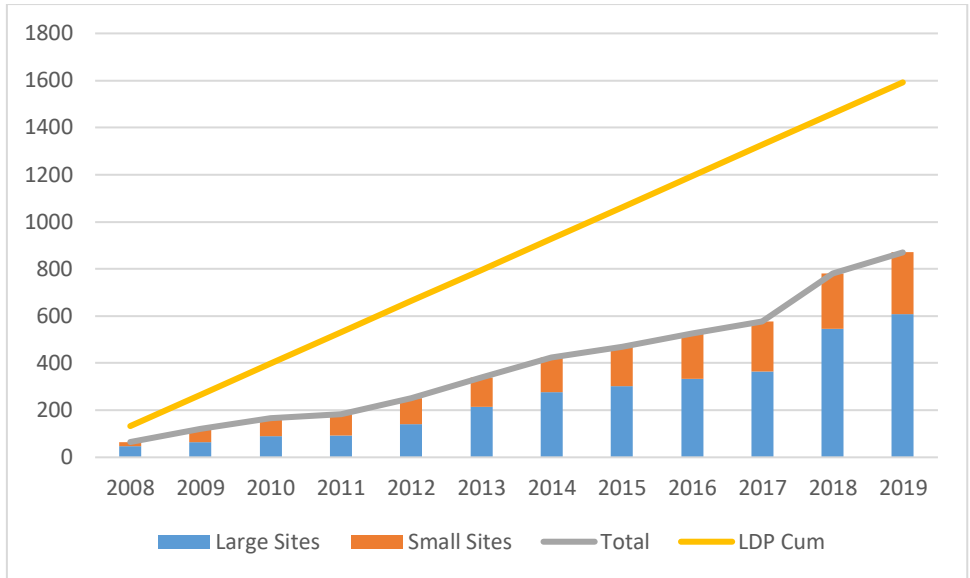


Figure 41 House Completions in the National Park (Source: Joint Housing Land Availability Studies)

160. The graph above shows the total number of completions, on both large and small sites since the start of the current plan amount to 870 homes, compared with a plan to build 1,592 by the end of 2019.

161. Completions data (Figure 42 below) shows how many new houses were completed since 2015 across the park in total. This should be set this out against the targets in the LDP which defined a need for 1,990 homes to meet our community's needs for the period 2007-2022).

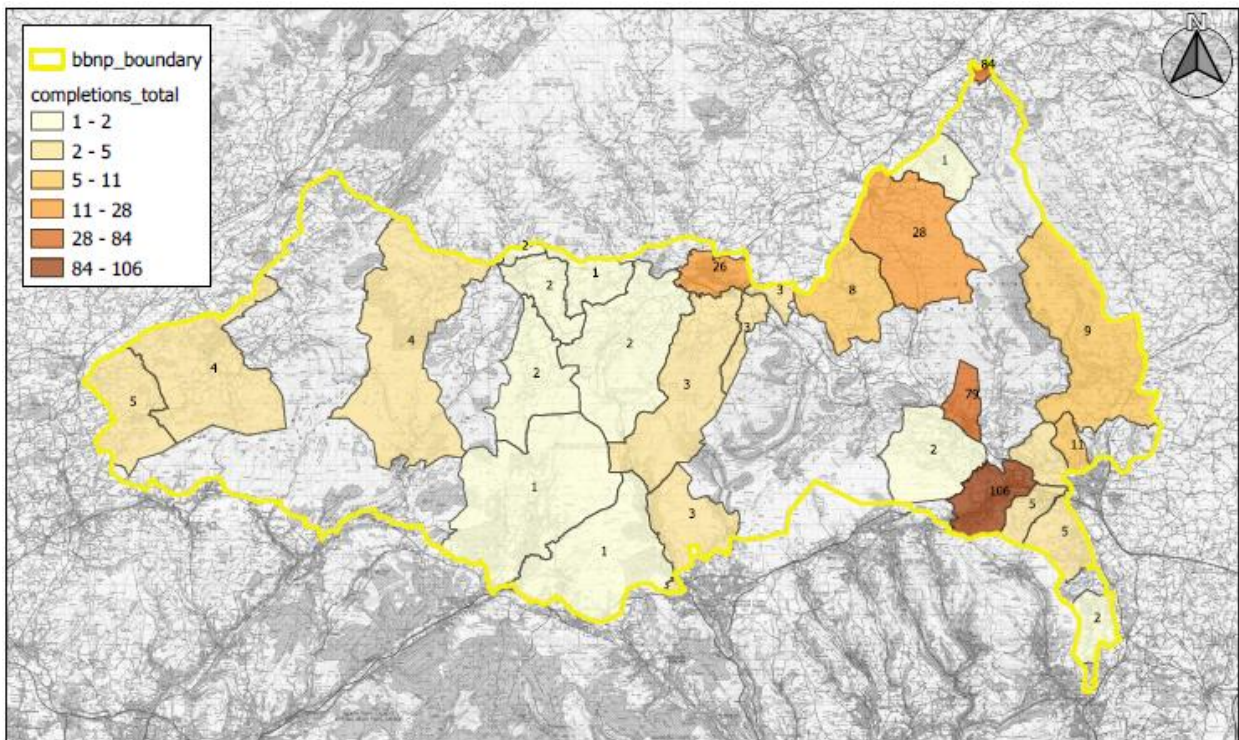


Figure 42 Houses built on large housing sites 2015-2019

Indicator 22 – Town Centre Vacancy Rates

162. Monitoring town centre vacancy rates is a good indicator of the Park's economy and gives an indication of how towns within the Park are meeting the needs of local communities and tourists.

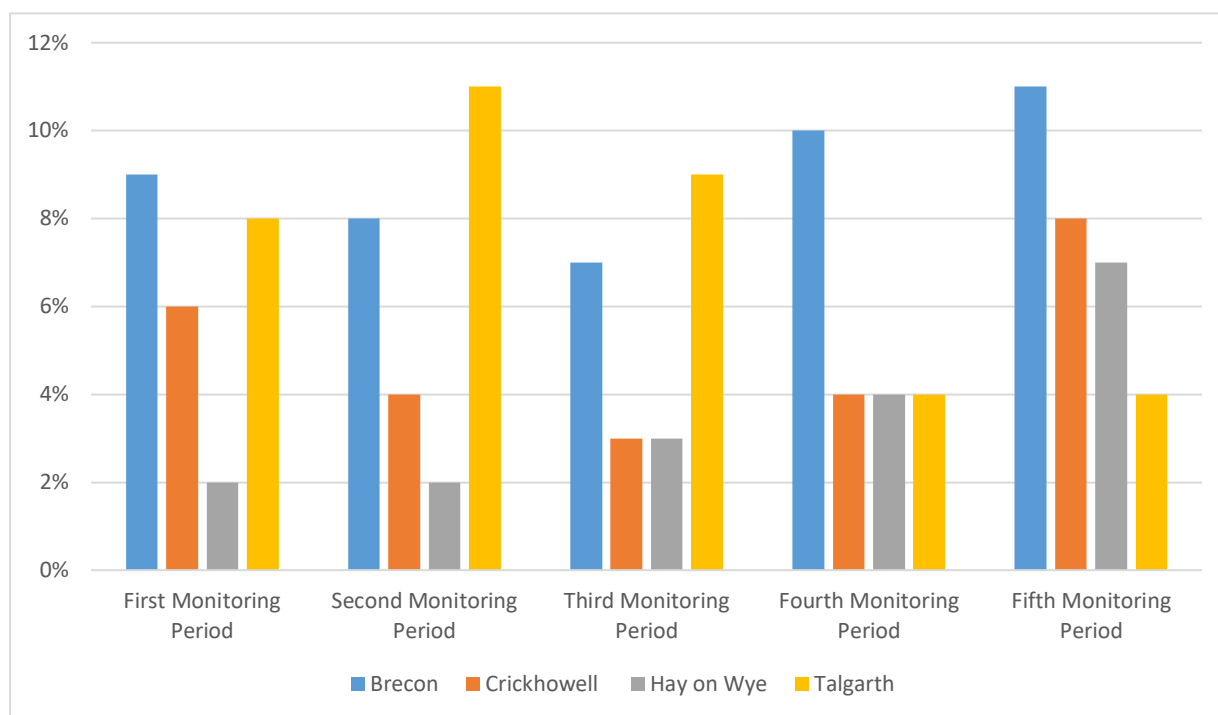


Figure 43 Annual Vacancy Rates (1 Monitoring Period = 1 Year)

163. Figure 43 shows the annual vacancy rates for 4 towns in the National Park – Brecon, Crickhowell, Hay on Wye and Talgarth. As the data shows, in 3 of the 5 monitoring periods, Brecon has the highest vacancy rate. The highest vacancy rate of 11% was recorded in Talgarth, in the second monitoring period and in Brecon in the fifth monitoring period. With the exception of the fifth monitoring period, Hay on Wye consistently has the lowest/joint lowest vacancy rate. The national vacancy rate in July 2019 was 10.3% (British Retail Consortium). This shows that with the exception of two vacancy rates of 11%, rates within the National Park are lower than the national average. The Welsh average vacancy rate is 11%.

164. Figure 43 also shows that all of the centres are showing increased vacancy rates year on year from the third monitoring period, with the exception of Talgarth which seems to be going in the opposite direction. All of the retail centres are at levels which trigger action through the LDP. Brecon has a higher vacancy rate because it is a very different retail centre to the others listed with a higher retail turnover and significantly higher retail floor areas. It is therefore more significant than all the others combined in terms of economic activity in the area and due regard should be paid to the Brecon trend data.

Indicator 23 – Welsh Index of Multiple Deprivation

165. The Welsh Index of Multiple Deprivation (WIMD) is the official measure of deprivation for small areas in Wales. WIMD is made up of eight separate domains of deprivation: income; employment; health; education; housing; access to services; environment; and community safety. WIMD is used to give an overall deprivation rank for each of the 1,909 lower super output areas (LSOA) in Wales and to give ranks for the separate deprivation domains for each of the LSOAs. The most deprived areas are ranked highest for deprivation. Communities in rural areas such as the National Park will generally rank high (i.e. deprived) for access to services, and low (i.e. not deprived) for other domains (e.g. access to environmental services). The shift in ranking over time for the different areas (i.e. compared to other areas) will indicate the changes in the relative wellbeing of the National Park communities.

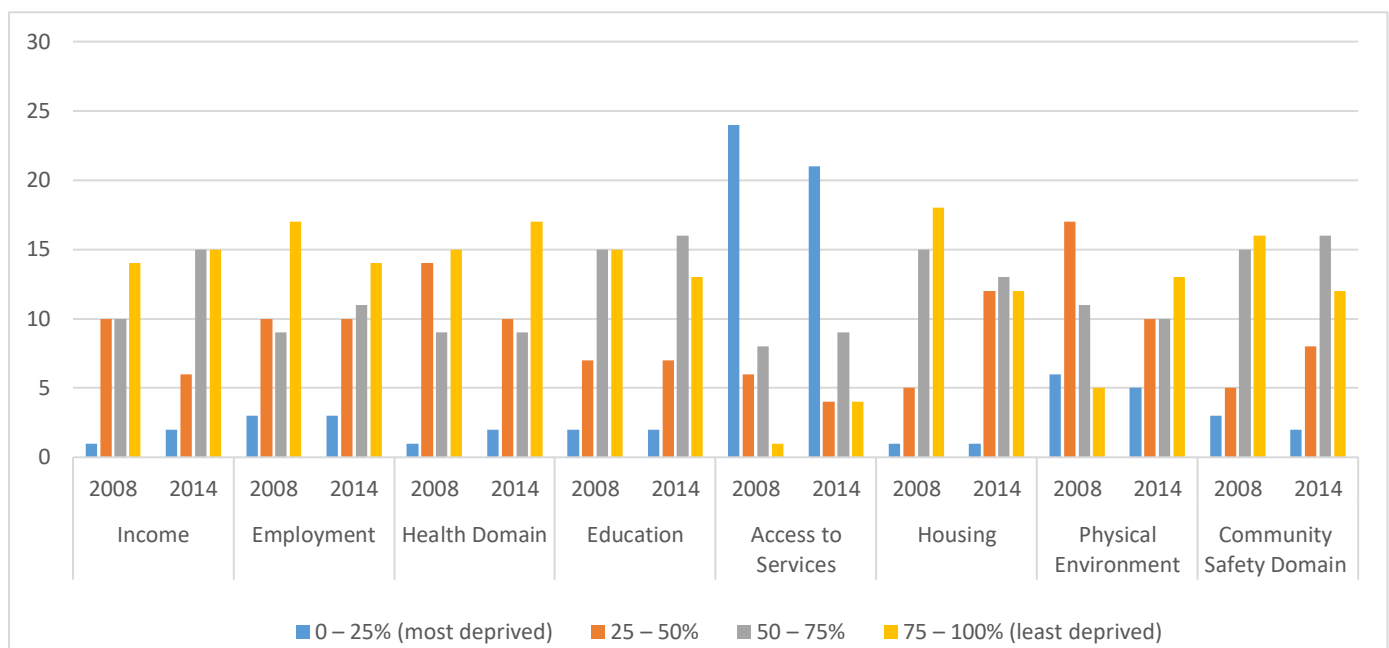


Figure 44 Welsh Index of Multiple Deprivation (Source: Welsh Government WIMD)

166. Figure 44 identifies how the lower super output areas (LSOA) within the Brecon Beacons National Park rank in the eight domains of deprivation.

Income

‘Percentage of population in Income Deprivation. Those who are: in receipt of Income Related Benefits; in receipt of Tax Credits with and income 60% below the Wales median; or a Supported Asylum Seeker’

167. In 2008 there was only 1 LSOA in the most deprived category (0-25%), however by 2014 this had increased to 2. Between 2008 and 2014, the number of LSOAs in the 25-50% category decreased from 10 to 6, and the number in the 50-75%, and 75-100% (least deprived) categories increased from 10 to 15 and 14 to 15 respectively. This shows a positive trend as the most deprived category has the lowest number of LSOAs, and the least deprived category has the highest number of LSOAs, with a slight increase between 2008 and 2014.

Employment

'Percentage of working age population in receipt of Employment Related Benefits'

168. The number of LSOAs within the most deprived category remains unchanged at 3 between 2008 and 2014, as does the 25-50% category with 10 LSOAs. The number of LSOAs in the least deprived category has decreased from 17 in 2008 to 14 in 2014. This has resulted in an increased in LSOAs in the 50-75% category from 9 to 11. This highlights that even though there is a far greater number of LSOAs in the least deprived category compared to the most deprived, there has been a decline, with a number of LSOAs moving to a more deprived category.

Health Domain

'All-Cause Death Rate, Cancer Incidence Long Term Limiting Illness and Low Birth Weight'

169. There has been an increase in the number of LSOAs in the least deprived category from 1 in 2008 to 2 in 2014. There has however been a decrease in the number of LSOAs in the 25-50% category from 14 to 10, and the number in the 50-75% category has remained the same at 9. There has been an increase in the number of LSOAs in the least deprived category from 15 to 17. This shows a positive trend as the number of LSOAs in the more deprived category has decreased, with a corresponding increase in the number in the least deprived category.

Education

'Key Stage 2 Average Point Score, Key Stage 4 Capped Point Score, Key Stage 4 Level 2 Inclusive, Repeat Absenteeism, Proportion of 18-19 year olds not entering Higher Education, and Proportion of 25-64 year olds with No Qualification'

170. The number of LSOAs in the 0-25% (most deprived), and 25-50% categories has remained unchanged between 2008 and 2014, at 2 and 7 respectively. There has been an increase in the number of LSOAs in the 50-75% category from 15 to 16. But a decrease in the least deprived category from 15 to 13. In terms of the education domain, the National Park has experienced a slight downwards trend, with a decreased in the number of LSOAs in the least deprived category.

Access to Services

'Average travel time by public and private transport to the nearest: Food Shop, General Practitioner (GP) Surgery, Post Office, Public Library, Leisure Centre, Primary School, Secondary School, Pharmacy, and Petrol Station (private transport only)'

171. The number of LSOAs in the most deprived category has decreased from 24 in 2008 to 21 in 2014, as has the number in the 25-50% category, from 6 in 2008 to 4 in 2014. The category 50-75% has seen an increase from 8 in 2008 to 9 in 2014. The least deprived category has seen the biggest increase however from 1 in 2008 to 4 in 2014. Although this is a positive trend, with the number of least deprived LSOAs increasing, this domain is still in a poor condition as there is still a much greater number of LSOAs found in the most deprived category.

Housing

'Overcrowding (bedroom occupancy) and Lack of Central Heating'

172. The number of LSOAs in the most deprived category remained the same between 2008 and 2014, at 1. The number of LSOAs in the 25-50% category has increased from 5 to 12, whereas the LSOAs in the 50-75% category have decreased from 15 to 13, as has the number in the least deprived category, from 18 to 12. This shows that the housing domain in the National Park is declining, as a greater number of LSOAs are becoming increasingly deprived.

Physical Environment

'Air Concentrations, Air Emissions, Flood Risk, and Proximity to Waste and Industrial Site'

173. The number of LSOAs in the most deprived category decreased from 6 to 5 between 2008 and 2014. The 25-50% category, saw a significant decline from 17 to 10 as did the 50-75% category from 11 to 10. The least deprived category however saw a significant increase from 5 to 13. This shows that between 2008 and 2014 the physical environment of the National Park has improved.

Community Safety

'Police Recorded Violent Crime, Police Recorded Criminal Damage, Police Recorded Burglary, Police Recorded Theft, Anti-Social Behaviour, and Fire Incidence'

174. The number of LSOAs in the most deprived category has decreased from 3 to 2 between 2008 and 2014. The number of LSOAs in the 25-50% and 50-75% categories have increased from 5 to 8, and 15 to 16 respectively. The number of LSOAs in the least deprived category has decreased from 16 to 12. This shows that in terms of community safety, although there is still a higher number of LSOAs in the least deprived than most deprived category, LSOAs in the National Park are more deprived in 2014 than in 2008.

Appendices

Appendix I- Indicator Comparison Table

SOPR 2006	SOPR 2014	DRAFT SOPR 2020	Indicators where further data is required
1st Purpose Conservation and Enhancement	Theme 1: Managing Park Landscapes to Maximise Conservation and Public Benefits Theme 2: Conserving and Enhancing Biodiversity	Chapter 1 - Nature and Climate	Chapter 1 - Nature and Climate
Geological SSSIs	Geological Heritage (RIGs)	Condition of Geological SSSIs	Emissions of Greenhouse Gases
Biological SSSIs (No. and condition)	Condition of Biological SSSIs	Condition of Biological SSSIs	Gaseous Ammonia within the Park
Scheduled ancient monuments (No. of SAMs and %in stable/favourable condition)	Scheduled Ancient Monuments (No. of SAMs; % in stable/improved condition)	SAMs (Chapter 2)	Carbon levels
Listed buildings (No. and % at risk)	Listed Buildings (No. and % at risk)	LBs (Chapter 2)	Energy supply and consumption
Bats		Maternity Roost - Bat	Renewable energy installations
Breeding farmland birds		Breeding/Nesting Bird Data	Maternity Roost - Bat ?
Cultural events		Cultural Events (Chapter 2)	Annual water abstraction (Awaiting data from NRW)
Broadleaved tree cover			Flood risk – not just map but with interpretation and figures on affected settlements/developments, NRW data on warnings, incidents, etc.
Traditional field boundaries			Rainfall
	Water Quality	Water Quality	Snow cover/days – met office
	Flood Risk data in Theme 5	Flood risk	
	Updated Phase I Habitat Data (2013 data which included a comparison from 1997)	Priority habitats and species (Cf to 2014 data - useful?)	
	Landscape Character Assessment (Visual and Sensory LANDMAP Classification Scheme)		
		Condition of soils/Peat	
		River discharge	
		Overall Ecological Footprint	
		INNS	
		Air Quality	
		Natura 2000	
2nd Purpose Promoting Understanding and Enjoyment	Theme 3: Provide Opportunities for Outdoor Access and Recreation Theme 4: Raising Awareness and Understanding of the Park	Chapter 2 - Culture and Heritage	Chapter 2 - Culture and Heritage
Visitor Satisfaction % visitors satisfied with their visit	Visitor Satisfaction - data re met/exceed/fell short of expectation		Landscape Character Assessment
The % of Rights of Way that are easy to use	The % of Rights of Way that are easy to use	The % of Rights of Way that are easy to use	Area of Farmed Land by type
Awareness of the National Park			
Visitors accessing NPA's services			
Education services			
Visitor accommodation			
	Upland Erosion on Paths	Upland Erosion on Paths	
	Number of Outdoor Education Centres		

	Number of Settlements Benefiting from Interpretation		
	Ratio Staying Visitors compared to Day Visitors		
		Welsh Speaking	
		Cultural Events	
		Historic Environment SAMS	
		Historic Environment LBs	
		Area of farmed land by type	
Duty Vibrant Sustainable Communities	Theme 5: Building and Maintaining Sustainable Communities Towns and Villages Theme 6: Sustainable Economic Development	Chapter 3 - People and the Economy	Chapter 3 - People and the Economy
Economic activity	Economic Activity		Eligibility for free school meals
Employment by type of industry	Employment by Type of Industry		Walking in the lowlands and Mental Health
Tourism spend		Tourism Spend	Extent of active travel routes
Population profile	Some population data in the intro	Population	Broadband access and speeds
Farms and farmers	Employment by Type of Industry (Table ETI SOPR 2014)		Political map over time
Community meeting places			International Dark Sky Reserve Data
Traffic (tourist)			No. of public charging points in the Park
Bus routes and service frequency			
	Flood risk, river levels and climate change	Flood Risk (Chapter 1)	
	Health and Wellbeing (Activities enjoyed within the National Park - resident survey data)		
	Communities with a Village Plan and Open Space Assessment		
	Additional Affordable Housing		
		Housing	
		Vacancy rates	
		Welsh Index of Multiple Deprivation	

Appendix 2 – Bat Maternity Roost³¹

19/07/2019	Buckland House	Adults: 161
Pups: 61 (38% productivity)		
(22 July 2018: 123 Adults, 55 pups = 45%)		
(23 July 2017: 140 Adults, 33 pups = 23%)		
21/07/2019	Clydach House	Adults: 129 from roof and 1 from cellar = 130 total
Pups: 15 (12% productivity)		
(24 July 2018: 92 Adults, 22 pups = 24%)		
(24 July 2017: 111 Adults, 22 pups = 20%)		
23/07/2019	Clydach Viaduct	Adults: 35
Pups: 0 (0% productivity)		
(23 July 2018: 57 Adults, 2 pups = 4%)		
(25 July 2017: 44+ Adults, 3 pups = 7%)		
23/07/2019	Nant yr Hafod Bat House	Adults: 16 from window, 7 from pipe and 8 inside = 31 total
Pups: none = 0%		
(23 July 2018: 25 Adults, 0 pups = 0%)		
(25 July 2017: 2 Adults, 0 pups = 0%; 20/7/2016: 2 ad & 1 pup = 50%)		
Overall for all four roosts: Total 357 Adults, 76 pups = 21% productivity		
(2018: Total 297 Adults, 79 pups = 27% productivity)		
(2017: 297 Adults, 58 pups = 20%)		
(2016: 269 Adults, 70 pups = 26%)		

If we disregard the viaduct and the bat house (since neither had any pups), then overall productivity numbers are 291 adults, 76 pups = 26%. However, our standard so far has been to include both those roosts since they are accessible to assess productivity and as they are components of the local population using the Clydach valley there is a strong argument to include them rather than that to exclude them from the productivity assessment.

³¹ Dr. P.G. Smith, CEnv, MCIEEM – A465 HOV2 Maternity Roost Counts (2019)

Overall there appears to be no cause for concern. The total number of pups is very similar to last year, which was a record high (76 vs 79). The productivity is down due to the marked increase in the July adult count since last year (357 vs 297). The pup count at Buckland House is the highest on record. The Buckland House adult count of 161 is well up on last year and is exceeded only by the July 2011 adult count of 164 (when the pup count was 34) and last year's (not strictly comparable) pre-parturition peak count of 171.

The low pup count at Clydach House is disappointing, but may not necessarily be a cause for concern. At Clydach House, the pup count until three years ago, since when it has been in the low 20's, had regularly been about 15. It is not understood why Clydach House productivity appears to be so much lower than Buckland House, yet at 130 this is the highest July count of adults ever recorded at Clydach House (exceeded only by last year's pre-parturition peak of 131), so something is going right for this roost. Possibly some of the adults are carrying pups out of the roost on emergence to use a creche roost elsewhere.

Dr. P.G. Smith, CEnv, MCIEEM

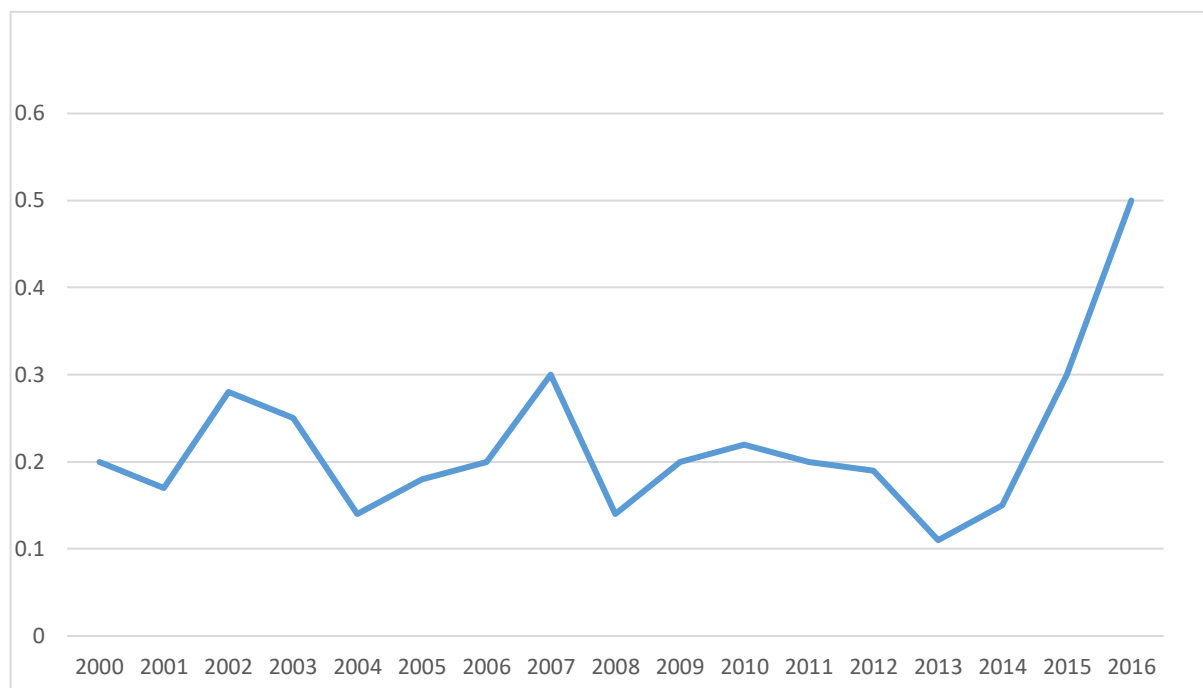
Director and Principal Ecologist

Appendix 3 - Gaseous Ammonia

Gaseous ammonia is derived from intensive agriculture, in particular poultry and dairy farming, biomass burning and fertiliser manufacture and application.

As levels of other air pollutants have declined, ammonia emissions in the UK have been rising since 2013, with significant implications for ecosystems and human health. The release of ammonia into the atmosphere can be used by a number of reasons, the main being, agricultural sources which made up 88% of annual UK ammonia emissions in 2016.³²

Levels of gaseous ammonia is an essential indicator for the state of the Park as high levels of Ammonia can have detrimental effects on; soil, plant biodiversity, water bodies and aquatic organisms, and lichen and mosses found in bog and peatland.



There are not currently any ammonia sites located within the National Park, however there are three located in close proximity; Llyn Brienne (Powys), Holme Lacy (Herefordshire) and Penallt (Monmouthshire). The data for this graph was recorded by the National Ammonia Monitoring Network at the Llyn Brienne site, located in Powys - North West of the National Park.

As is shown in the data, the level of gaseous ammonia varies greatly year on year. Using 2000 as the baseline, with the figure of 0.2ug/m³, between the period of 2000-2016, 7 years were below the baseline (2001, 2004, 2005, 2008, 2012, 2013 and 2015), with the remaining 9 years either being the same, or above. The highest, and most recently recorded mean figure was in

³² DEFRA (2018). Air Pollution from Agriculture. Available at: https://uk-air.defra.gov.uk/assets/documents/reports/aeqg/2800829_Agricultural_emissions_vfinal2.pdf

2016, at 0.5 ug/m³. The critical level for effects of ammonia on vegetation is an annual mean concentration of 8.0ug/m⁻³. Levels present at the monitoring site are below this threshold.

Ammonia levels in the National Park could be expected to be higher than other areas due to the high levels of agriculture activities undertaken. (In 2019, Agriculture, Forestry and Fishing was the fourth largest industry in the Park, employing 7.41% of the population. This figure is set to decrease slightly to 7.23% by 2029).

Appendix 4 – Natura 2000 Sites and Condition of Features

Site Name	Site Code	Site Type	Grid Ref	Feature name (formal)	Feature name (informal)	Broad environment	Feature Type	Feature category	Feature condition: Most recent assessment	Date of most recent assessment
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Alosa alosa</i> (R)	Allis shad. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	May-12
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Lampetra planeri</i> (R)	Brook lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-11
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Cottus gobio</i> (R)	Bullhead. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Lutra lutra</i> (R)	Otter. (R)	Freshwater	Species	Mammals	Favourable: Maintained	Mar-10
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Lampetra fluviatilis</i> (R)	River lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-11
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Petromyzon marinus</i> (R)	Sea lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-11
Afon Tywi/ River Tywi	UK0013010	SAC	SN687263	<i>Alosa fallax</i> (R)	Twaite shad. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	May-12
Blaen Cynon	UK0030092	SAC	SN946066	<i>Euphydryas</i> (<i>Eurodryas</i> , <i>Hypodryas</i>) <i>aurinia</i> (R)	Marsh fritillary butterfly. (R)	Terrestrial	Species	Butterflies	Unfavourable: Un-classified	Sep-08
Brecon Beacons/ Bannau Brycheiniog	UK0030096	SAC	SO024211	European dry heaths	Dry heaths.	Terrestrial	Habitat	Dwarf shrub heath	Unfavourable: Un-classified	Jul-10
Brecon Beacons/ Bannau Brycheiniog	UK0030096	SAC	SO024211	Calcareous rocky slopes with chasmophytic vegetation	Plants in crevices in base-rich rocks.	Terrestrial	Habitat	Inland rock	Unfavourable: Un-classified	Jul-10
Brecon Beacons/ Bannau Brycheiniog	UK0030096	SAC	SO024211	Siliceous rocky slopes with chasmophytic vegetation	Plants in crevices on acid rocks.	Terrestrial	Habitat	Inland rock	Unfavourable: Un-classified	Jul-10
Brecon Beacons/ Bannau Brycheiniog	UK0030096	SAC	SO024211	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	Tall herb communities.	Terrestrial	Habitat	Inland rock	Unfavourable: Un-classified	Jul-10
Coed y Cerrig	UK0012766	SAC	SO291210	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	Alder woodland on floodplains.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Favourable: Maintained	May-12
Coedydd Nedd a Mellte	UK0030141	SAC	SN919093	<i>Tilio-Acerion</i> forests of slopes, scree and ravines	Mixed woodland on base-rich soils associated with rocky slopes.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Unfavourable: Un-classified	Sep-16
Coedydd Nedd a Mellte	UK0030141	SAC	SN919093	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Western acidic oak woodland.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Unfavourable: Un-classified	Sep-16
Cwm Cadlan	UK0013585	SAC	SN961098	Alkaline fens				swamp	Unfavourable: Un-classified	Sep-16
Cwm Cadlan	UK0013585	SAC	SN961098	<i>Molinia</i> meadows on peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	Purple moor-grass meadows.	Terrestrial	Habitat	Fen, marsh and swamp	Unfavourable: Declining	Sep-16

Cwm Clydach Woodlands / Coedydd Cwm Clydach	UK0030127	SAC	SO207123	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	Beech forests on acid soils.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Favourable: Maintained	Jul-15
Cwm Clydach Woodlands / Coedydd Cwm Clydach	UK0030127	SAC	SO207123	Asperulo-Fagetum beech forests	Beech forests on neutral to rich soils.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Favourable: Maintained	Jul-15
Llangorse Lake/ Llyn Syfaddan	UK0012985	SAC	SO131262	Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation	Naturally nutrient-rich lakes or lochs which are often dominated by pondweed.	Freshwater	Habitat	Standing open water and canals	Unfavourable: No-change	Aug-11
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Alosa alosa (R)	Allis shad. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Salmo salar (R)	Atlantic salmon. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Lampetra planeri (R)	Brook lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Nov-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Cottus gobio (R)	Bullhead. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Lutra lutra (R)	Otter. (R)	Freshwater	Species	Mammals	Favourable: Recovered	Mar-10
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Lampetra fluviatilis (R)	River lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Nov-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	Rivers with floating vegetation often dominated by water-crowfoot.	Freshwater	Habitat	Rivers & streams	Unfavourable: Un-classified	Jan-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Petromyzon marinus (R)	Sea lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Nov-12
River Usk/ Afon Wysg	UK0013007	SAC	SO214182	Alosa fallax (R)	Twaite shad. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Alosa alosa (R)	Allis shad. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Salmo salar (R)	Atlantic salmon. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Lampetra planeri (R)	Brook lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Cottus gobio (R)	Bullhead. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Dec-16
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Lutra lutra (R)	Otter. (R)	Freshwater	Species	Mammals	Favourable: Recovered	Mar-10
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Lampetra fluviatilis (R)	River lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	Rivers with floating vegetation often dominated by water-crowfoot.	Freshwater	Habitat	Rivers & streams	Unfavourable: Un-classified	Jan-12

River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Petromyzon marinus (R)	Sea lamprey. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Alosa fallax (R)	Twaiite shad. (R)	Freshwater	Species	Fish	Unfavourable: Un-classified	Jan-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Transition mires and quaking bogs	Very wet mires often identified by an unstable 'quaking' surface.	Terrestrial	Habitat	Fen, marsh and swamp	Unfavourable: Declining	Jul-12
River Wye/ Afon Gwy	UK0012642	SAC	SO547368	Austropotamobius pallipes (R)	White-clawed (or Atlantic stream) crayfish. (R)	Freshwater	Species	Other invertebrates	Unfavourable: Un-classified	Sep-16
Sugar Loaf Woodlands	UK0030072	SAC	SO295166	Old sessile oak woods with Ilex and Blechnum in the British Isles	Western acidic oak woodland.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Unfavourable: Un-classified	Apr-09
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	Blanket bogs	Blanket bog.	Terrestrial	Habitat	Bogs	Unfavourable: Un-classified	Sep-10
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	Caves not open to the public	Caves not open to the public.	Terrestrial	Habitat	Inland rock	Favourable: Maintained	Nov-12
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	Degraded raised bogs still capable of natural regeneration	Degraded raised bog.	Terrestrial	Habitat	Bogs	Unfavourable: Un-classified	Oct-16
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	European dry heaths	Dry heaths.	Terrestrial	Habitat	Dwarf shrub heath	Unfavourable: Un-classified	Mar-12
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	Rhinolophus hipposideros (R)	Lesser horseshoe bat. (R)	Terrestrial	Species	Mammals	Favourable: Maintained	Nov-12
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	Tilio-Acerion forests of slopes, screes and ravines	Mixed woodland on base-rich soils associated with rocky slopes.	Terrestrial	Habitat	Broad-leaved, mixed and yew woodland	Favourable: Maintained	Aug-12
Usk Bat Sites/ Safleoedd Ystumod Wysg	UK0014784	SAC	SO190145	Calcareous rocky slopes with chasmophytic vegetation	Plants in crevices in base-rich rocks.	Terrestrial	Habitat	Inland rock	Favourable: Maintained	Jul-12

Appendix 5 – Natura 2000 Sites and Condition of Features (NRW 2020)

NATIONAL NAME	PARK	FEATURE	F2007_2010				
			-	Favourable	Not assessed	Unfavourable	Grand Total
Brecon Beacons		Alkaline fens		84.20			84.20
		Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion alvae)		9.15			9.15
		<i>Alosa alosa</i>				413.67	413.67
		<i>Alosa fallax</i>				413.67	413.67
		Asperulo-Fagetum beech forests		28.77			28.77
		Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>)		28.77			28.77
		<i>Austropotamobius pallipes</i>				9.63	9.63
		Blanket bog				1686.03	1686.03
		Calcareous rocky slopes with chasmophytic vegetation		1686.03		268.99	1955.01
		Caves not open to the public		1686.03			1686.03
		<i>Cottus gobio</i>				413.67	413.67
		Degraded raised bogs (still capable of natural regeneration)				1686.03	1686.03
		<i>Euphydrias aurinia</i>				14.55	14.55
		European dry heaths				1955.01	1955.01
		Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels				268.99	268.99
		<i>Lampetra fluviatilis</i>				413.67	413.67
		<i>Lampetra planeri</i>		404.04		9.63	413.67
		<i>Lutra lutra</i>		413.67			413.67
		<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caenuleae</i>)		84.20			84.20
		Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation				216.10	216.10
		No data - site managed by Natural England		0.01			0.01
		Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles				503.41	503.41
		<i>Petromyzon marinus</i>		9.63		404.04	413.67
		<i>Rhinolophus hipposideros</i>		1686.03			1686.03
		<i>Salmo salar</i>				413.67	413.67
		Siliceous rocky slopes with chasmophytic vegetation				268.99	268.99
		Tilio-Acerion forests of slopes, screes and ravines		1686.03		329.25	2015.27
		Transition mires and quaking bogs				9.63	9.63
	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation				413.67	413.67	
	TOTAL		0.01	7806.53		10112.31	17918.85

Appendix 6 - Chemical Status of Water Bodies³³

	2009	2010	2011	2012	2013 (Cycle 1)	2013 (Cycle 2)	2014 (Cycle 1)	2014 (Cycle 2)	2015 (Cycle 1)	2015 (Cycle 1)	2017	2018
Usk Reservoir	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	Good	Not assessed	Good	Not assessed	Good	High	Good
Cray Reservoir	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	Good	Not assessed	Good	Not assessed	Good	High	Good
Talybont Reservoir	Not assessed	Not assessed	Not assessed	Good	Good	Good	Good	Good	Good	Good	High	Good
Usk – Conf Afon Hydfer to Conf Afon Senni	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	Good	Not assessed	Good	Not assessed	Good	High	Good
Usk – Conf Afon Senni to Conf Afon Crawnon	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	Good	Not assessed	Good	Not assessed	Good	High	Good
Usk – Conf Afon Crawnon to Conf Gavenny R	Not assessed	Not assessed	Not assessed	Not assessed	Not assessed	Good	Not assessed	Good	Not assessed	Good	High	Good

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Appendix 7 - Ecological Status of Water Bodies³⁴

	2009	2010	2011	2012	2013 (Cycle 1)	2013 (Cycle 2)	2014 (Cycle 1)	2014 (Cycle 2)	2015 (Cycle 1)	2015 (Cycle 2)	2017	2018
Usk Reservoir	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Cray Reservoir	Good	Good	Good	Good	Good	Good	Good	Good	Moderate	Moderate	Moderate	Moderate
Talybont Reservoir	Moderate	Moderate	Moderate	Moderate	Poor	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Usk – Conf Afon Hydfer to Conf Afon Senni	Moderate	Moderate	Moderate	Moderate	Moderate	Good	Moderate	Good	Moderate	Moderate	Good	Good
Usk – Conf Afon Senni to Conf Afon Crawnon	Moderate	Moderate	Moderate	Moderate	Moderate	Good	Moderate	Good	Moderate	Good	Good	Good
Usk – Conf Afon Crawnon to Conf Gavenny R	Moderate	Good	Good	Good	Good	Good	Good	Good	Moderate	Moderate	Moderate	Moderate

³⁴ Contains Natural Resources Wales information © Natural Resources Wales and database right. All rights reserved

Appendix 8 - Overall Waterbody Status

	Usk reservoir	Cray reservoir	Talybont reservoir	Usk - conf Afon Hydfer to conf Afon Senni	Usk - conf Afon Senni to conf Afon Crawnon	Usk - cond Afon Crawnon to conf Afon Gavenny R
2009	Good	Good	Moderate	Moderate	Moderate	Moderate
2010	Good	Good	Moderate	Moderate	Moderate	Good
2011	Good	Good	Moderate	Moderate	Moderate	Good
2012	Good	Good	Moderate	Moderate	Moderate	Good
2013 Cycle 1	Good	Good	Poor	Moderate	Moderate	Good
2013 Cycle 2	Good	Good	Moderate	Good	Good	Good
2014 Cycle 1	Good	Good	Moderate	Moderate	Moderate	Good
2014 Cycle 2	Good	Good	Moderate	Good	Good	Good
2015 Cycle 1	Good	Moderate	Moderate	Moderate	Moderate	Moderate
2015 Cycle 2	Good	Moderate	Moderate	Moderate	Good	Moderate
2017	Good	Moderate	Moderate	Good	Good	Moderate
2018	Good	Moderate	Moderate	Good	Good	Moderate

Appendix 9 - Water Body Status

The table below identifies the different factors that are considered when measuring the status of a water body:

Chemical Status	The chemical status is against the environmental standards for chemicals that are priority substances and priority hazardous substances in the environmental quality standards in the EQS Directive. Chemical status is recorded as good or fail, and is determined by the worst test result.
Ecological Status	Ecological status is based on a number of quality elements including: biological quality, general chemical and physico-chemical quality, water quality with respect to specific pollutants (synthetic and non-synthetic), and hydromorphological quality. Ecological status is recorded as high, good, moderate, poor or bad.
Biological quality elements	A characteristic or property of a biological element (e.g. phytoplankton, macrophytes, phytobenthos, benthic invertebrate fauna and fish)
Biochemical Oxygen Demand (BOD)	BOD is the oxygen demand brought about by organisms in water and sediment acting on oxidisable organic matter, and a key indicator of the oxygenation of water bodies. High BOD is usually a result of organic pollution, caused by discharges from wastewater treatment plants, industrial effluents and agricultural runoff. A high BOD has several effects on the aquatic environment including reducing chemical and biological water quality, reducing the biodiversity of aquatic communities and reducing the microbiological quality of waters.
Dissolved oxygen	Oxygen levels in water bodies are affected by complex interactions between ecological processes, and human activities. Dissolved oxygen refers to the level of free, non-compound oxygen present in water. It is an important parameter in assessing water quality because of its influence on the organisms living within a body of water. A dissolved oxygen level that is too high or too low can harm aquatic life and affect water quality.

pH	The pH of a water body reflects acidity and is an important measure as it influences all chemical and biological processes (e.g. binding in sediments, sources of carbon for photosynthesis, chemical speciation and the development of toxic effects of pollutants). A change in pH levels can therefore have significant effects on water ecology.
Temperature	Water temperature is greatly influenced by heat exchange with the atmosphere, so higher air temperatures lead to higher water temperatures. Higher water temperatures can lead to changes in physio-chemical and biological conditions, which may have consequences for ecosystem structure and services.
Hydromorphological supporting elements	The WFD defines hydromorphological elements as 'supporting the biological elements'. Each surface water body has specific hydromorphological quality elements, however unlike biological elements, as hydromorphological elements are 'supporting elements' they only contribute to status classification for water bodies of high ecological status.
Morphology	Morphology refers to the physical form and condition of a water body, for example the width, depth and perimeter of a river channel, the structure and condition of the riverbed and bank.
Invertebrates	<p>There are different types of invertebrates such as Benthic Invertebrates and Macroinvertebrates, both of which are good indicators of water quality.</p> <p>Bethnic invertebrates (e.g. worms, sand hoppers and clams) live in the mud and sand at the bottom of estuaries and seas, and are good indicators of the ecological status of a waterbody.</p> <p>Macroinvertebrates include; aquatic worms, snails, clams, crayfish, leeches etc. and due to their strong links to pollution and other pressures, they are good indicators of water quality.</p>
Fish	The WFD instructs the use of biological quality elements, such as fish to assess the

	ecological status in water bodies. Fish are considered reliable indicators of environmental quality due to their representation in a broad range of trophic levels, relatively high mobility and long life span.
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Appendix 10 - 23-year trend species data for 1995-2018

Species	Habitat Association	1995_2018_change	2013_2018_change
Starling	Farmland	-84 (16)	-6 (14)
Swift	Urban	-79 (15)	-37 (14)
Greenfinch	Farmland	-75 (18)	-74 (15)
Grey Wagtail	Upland	-67 (6)	-33 (7)
Yellowhammer	Farmland	-62 (8)	-34 (7)
Curlew	Upland	-58 (7)	79 (6)
Wheatear	Upland	-56 (13)	-25 (16)
Rook	Farmland	-54 (13)	-57 (13)
Chaffinch	Woodland	-48 (44)	-32 (52)
Magpie	Other	-47 (30)	-7 (34)
Garden Warbler	Woodland	-45 (15)	-24 (17)
Green Woodpecker	Woodland	-44 (19)	-19 (19)
House Martin	Urban	-43 (17)	-28 (18)
Grey Heron	Wetland	-41 (8)	54 (6)
Long-tailed Tit	Woodland	-34 (16)	-11 (17)
Mallard	Wetland	-30 (12)	-10 (15)
Redstart	Woodland	-29 (20)	-38 (26)
Jackdaw	Farmland	-29 (21)	-23 (31)
Blue Tit	Woodland	-28 (38)	-16 (45)
Raven	Upland	-27 (25)	13 (32)
Linnet	Farmland	-22 (18)	14 (20)
Meadow Pipit	Upland	-19 (22)	-17 (25)
Woodpigeon	Farmland	-17 (40)	-20 (48)
Cuckoo	Other	-17 (18)	-4 (20)
Pied/White Wagtail	Other	-16 (24)	-18 (31)
Bullfinch	Woodland	-16 (17)	-6 (18)
Goldcrest	Woodland	-15 (22)	-3 (26)
Mistle Thrush	Other	-15 (26)	14 (32)
Buzzard	Upland	-12 (36)	0 (42)
Willow Warbler	Woodland	-12 (38)	-12 (43)
Whitethroat	Farmland	-9 (12)	-17 (13)
Robin	Woodland	-9 (42)	6 (49)
Treecreeper	Woodland	-8 (10)	77 (12)
Swallow	Urban	-6 (36)	-6 (42)
Coal Tit	Woodland	-5 (22)	27 (28)

Pheasant	Woodland	-3 (19)	-8 (24)
Collared Dove	Other	1 (11)	9 (14)
Carrion Crow	Other	5 (44)	-13 (54)
Nuthatch	Woodland	6 (20)	-6 (26)
Great Tit	Woodland	7 (38)	-18 (45)
Sparrowhawk	Woodland	7 (5)	31 (5)
Tree Pipit	Woodland	10 (15)	-24 (19)
Skylark	Farmland	12 (26)	-17 (32)
Wren	Woodland	15 (43)	20 (52)
Stock Dove	Farmland	25 (11)	-43 (14)
Jay	Woodland	26 (20)	28 (24)
Duncock	Woodland	28 (33)	-5 (40)
Song Thrush	Woodland	28 (40)	-11 (48)
Blackbird	Woodland	28 (43)	-4 (52)
Chiffchaff	Woodland	34 (31)	-9 (39)
Siskin	Woodland	67 (10)	0 (15)
Goldfinch	Farmland	78 (26)	-3 (32)
Reed Bunting	Farmland	81 (5)	38 (7)
Great Spotted Woodpecker	Woodland	185 (22)	10 (31)
House Sparrow	Urban	197 (23)	23 (28)
Blackcap	Woodland	201 (31)	20 (40)
Whinchat	Upland	208 (6)	-30 (6)
Red Kite	Upland	329 (9)	158 (19)
Lesser Redpoll	Woodland	440 (8)	-5 (10)
Stonechat	Other	467 (6)	95 (9)
Canada Goose	Wetland	914 (6)	40 (11)

Appendix II - Welsh Language Skills Comparison (Source: Census 2011 Welsh Index of Multiple Deprivation)

Knowledge of Welsh Language		2001		2011	
Ward Name	% of population within boundary	% with some Knowledge of Welsh	% can speak, write and read Welsh	% some knowledge of Welsh	% can speak, write and read Welsh
Abercraf	3%	64.0	30.5	58.89	26.28
Bwlch	100%	16.4	7.4	18.23	7.80
Crickhowell & Vale of Grwyne	100%	16.6	8.2	14.35	6.39
Cwmtwrch	0%	70.9	39.7	65.12	30.70
Honddu Isaf/Llanddew (Felinfach)	3%	25.0	10.5	21.48	9.85
Gwernyfed + Llanigon	36%	15.4	6.9	14.87	6.81
Hay	100%	12.3	5.5	14.39	5.82
Llangattock	100%	16.6	7.2	17.92	5.91
Llangors	100%	23.0	10.7	19.63	8.52
Llangynidr	100%	22.9	10.5	18.24	8.59
Maescar/Llywel, Crai	100%	42.6	20.4	40.16	18.09
Brecon St Davids	100%	22.4	9.4	20.65	9.15
Brecon St Johns	100%	25.2	12.9		
Brecon St Marys	100%	21.0	9.8		
Talgarth	96%	19.7	7.0	20.07	8.47
Talybont, Glyntarell, Llanfrynach	93%	23.2	11.2	22.15	8.32
Tawe-Uchaf/Fellte	57%	49.4	21.4	42.97	16.24
Yscir, Trallong,	29%	29.6	12.3	27.55	12.33
Ystradgynlais rural	1%	66.7	31.7	57.23	24.61
Garnant Cwmamman	3%	79.4	55.0	69.47	41.61
Glanamman	1%	77.6	52.3	70.47	41.80
Dyffryn Cennen (Llandeilo)	13%	70.0	42.9	66.54	36.82
Llandovery, Llanfair	5%	60.2	35.7	54.07	29.38
Llandybie	Less than 1%	75.2	46.2	71.41	38.78
Llangadog, Llanddeusant, Myddfai	45%	69.0	51.6	65.16	43.81
Quarter Bach	6%	83.3	61.7	76.62	51.25
Rhigos (Hirwaun)	49%	32.5	13.9	29.59	12.35
Vaynor	12%	21.3	7.8	18.05	6.79
Brynmawr	1%	14.8	6.8	11.86	5.75

Pontypool New Inn	0%	13.5	7.7	11.91	5.83
Abergavenny north (Cantref)	3%	15.0	8.0	13.41	6.24
Crucorney	36%	12.0	7.3	14.29	7.45
Goetre Fawr	10%	14.3	8.0	15.71	8.23
Llanelly	100%	15.0	7.6	14.23	6.49
Llanfoist Fawr	17%	15.2	7.5	15.85	8.51
Llanover	3%	12.2	6.5	12.18	6.45
Llanfoist Llanwenarth Ultra	100%	14.3	7.1	13.61	6.36
Llantilio Pertholey Mardy	13%	14.2	7.4	16.27	7.61

Appendix 12 – Employment/Unemployment

Employment

Employment data is only available by local authority area, with Powys & Monmouthshire combined accounting for 91.5% of the Brecon Beacons National Park’s population in 2015. Data for economic activity by each of the seven constituent local authority is shown below

	Powys	Monmouthshire	Carmarthenshire	Rhondda Cynon Taf	Merthyr Tydfil	Blaenau Gwent	Torfaen	Wales	Great Britain
Economic Activity Rate age 16-64 (2016) (%)	80.4	79.1	76.6	74.2	73.3	69.2	77.0	74.8	77.8

Source: ONS Annual Population Survey/Labour Force Survey 2016

[..\People and Economy\Data\31516 Brecon Beacons NPA Assessment of Housing Need Update with Appendic....pdf](#)

In 2016, four of the seven authorities (Powys, Monmouthshire, Torfaen & Carmarthenshire) had higher levels of economic activity among the working age population (aged 16-64) than Wales as a whole (74.8%). Powys had an economic activity rate of 80.4% which was also higher than the Great Britain average (77.8%), with Monmouthshire high too at 79.1%. The lowest levels of economic activity were in the south of the National Park, Particularly Rhondda Cynon Taf (74.2%), Merthyr Tydfil (73.3%) and Blaenau Gwent (69.2%); however these authorities accounted for less than 4% of the total population of BBNP.

Unemployment levels across Wales, Great Britain & each of the seven local authority areas have decreased from the ten year averages. This is shown below with Powys levels of 2.9% in 2016 lower than the Wales average of 4.6%.

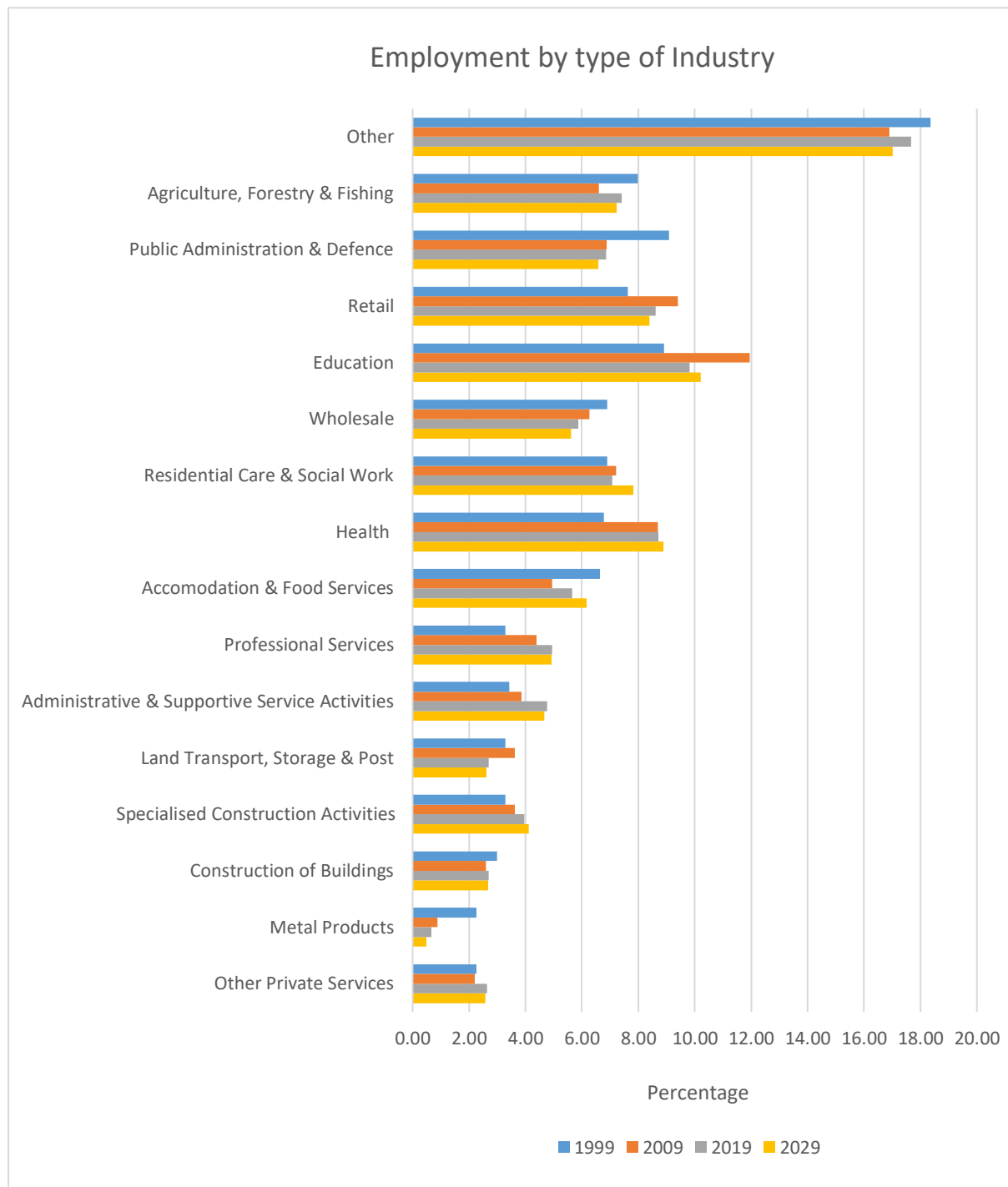
	Powys	Monmouthshire	Carmarthenshire	Rhondda Cynon Taf	Merthyr Tydfil	Blaenau Gwent	Torfaen	Wales	Great Britain
2016	2.9%	3.1%	4.1%	5.3%	5.4%	6.4%	4.2%	4.6%	4.8%
10-year average (2006-2016)	4.4%	4.7%	6.1%	8.5%	9.4%	11.3%	8.4%	7.0%	6.6%

Source: ONS Annual Population Survey/Labour Force Survey

Employment

According to Experian data for March 2019 there were 18,230 workforce jobs in the Brecon Beacons National Park at this date. Workforce jobs increased by 0.3% (50 jobs) between 2009 and 2019 and 11% (1800 jobs) since 1997.

Employment by type of industry



The above graph identifies employment by type of industry in the National Park between 1999 and 2029. The previous iterations of the State of the Park Report in 2006 and 2014 used Census data. As there will not be updated Census data available until 2021, the figures used in this edition are taken from Experian forecasts. The categories of employment used in the Experian data differ from those used in the Census, as such direct comparisons are not

compatible. The graph above shows the top 15 employment industries in the National Park as of 1999, with all other industries grouped together under 'Other'.

It must be noted that the top 15 employment industries have changed slightly since the 1999 figures; from 2009 onwards Recreation has now replaced Metal Products.

The Park's top employment industry in 1999 was Public Administration and Defence at 9.1%, however this percentage had decreased to 6.9% in 2009 and 2019, with a prediction that it will decrease even further to 6.6% by 2029.

In 2009 Education took over as the top employment type at 11.9% (increasing from 8.9% in 1991). In 2019 this figure decreased to 9.8%, however it still remains the top employment industry, and is predicted to remain at the top in 2029 employing 10.2% of the working population.


The category of Agriculture, Forestry and Fishing decreased from 8% in 1999, to 6.6% in 2009, but increased again to 7.4% in 2019. There is predicted to be a slight decrease to 7.2% by 2029.


Between 1999 and 2009 there was a decrease in the number of people employed in the Accommodation and Food Services sector from 6.7% to 5%. This number however has increased to 5.7% in 2019, and is expected to increase further to 6.2% by 2029.


The employment industry of Health is also one of the largest employers in the National Park. This particular industry has grown from 6.8% in 1999, to 8.7% in 2009 and 2019. This figure is set to increase further to 8.9% in 2029.


Metal products is an industry that has declined significantly in this period. It has decreased from 20.3% in 1999 to 0.9% in 2009 and 0.7% in 2019. This figure is expected to decrease even further to 0.5% by 2029.

Experian forecasts

 BBNP Experian
2017 forecast Brecon Beacc

 Experian forecasts by
graph.xlsx

 Experian Data Guide -
March 2017.PDF

 31515 Experian
2019 Brecon Beacons Natio

Attracting working age population to meet economic forecasts... This approach involves significant risk. Significant levels of net migration need to be achieved to deliver a small increase in the indigenous labour force. If the economic forecasts are not realised, this could

lead to more commuting into and out of the National Park and a likely greater demographic imbalance than would otherwise be the case if the increase are facilitated.

