

# England Biodiversity Indicators 2020

This document supports  
15. Funding for biodiversity

Technical background document:  
Public sector expenditure on biodiversity in England and non-  
governmental organisation expenditure on biodiversity in the  
UK

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For further information on the England Biodiversity Indicators visit  
<https://www.gov.uk/government/statistics/england-biodiversity-indicators>

## Technical annex: 10. Funding for biodiversity

**Section 1** of this document describes the methodology used in determining estimates of public sector spending on biodiversity in England. The indicator is based on a combination of estimates and expert opinion with judgment employed to finalise some components of the total. The figures should be taken as approximate.

**Section 2** describes the methodology used to determine estimates of spending by non-governmental organisations (NGOs), with a main focus on biodiversity and/or nature conservation, in the UK. The indicators are based on a combination of published and unpublished estimates, with judgment employed to finalise some components of the total. The figures should be taken as approximate.

### Section 1: Public sector spending in England

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#### Methodology

1. Two main sources are used to obtain information for the indicators from a wide range of government organisations; departmental annual reports; and expert contacts in the relevant organisations.

2. Spending on biodiversity is disaggregated where possible between:

- Spending directly on nature reserves and conservation measures;
- Related spending on administration and training;
- Relevant research and development; and
- Transfer payments to other organisations (in order to remove double counting of financial flows).

3. Direct conservation consists of activities that directly protect and promote variety among living organisms. However, direct action is often ineffective unless supported by a range of other activities such as research and development, education and publicity, or even simply administration. Sources of information may not always distinguish between these elements and it is necessary to exercise judgment as to when an item should be included or not, or whether the relevant component relating to direct action should be estimated by expert judgment or by reference to other information. For simplicity, the staff costs associated with implementing biodiversity focused programmes within large organisations are not included.

4. In practice, because biodiversity spending is not always separately identified within the available sources, or if a single expenditure item includes biodiversity and non-biodiversity elements, an aspect of judgment is sometimes required. One particular example is the treatment of expenditure through agri-environmental schemes, where an estimate is made of the proportion of total scheme spending that is biodiversity-related.

5. Given the large number of public sector organisations in England funding activities related to biodiversity and the complexities involved in both defining and identifying relevant expenditure, the figures presented in this indicator are likely to be an underestimation of total biodiversity spend by the public sector. They do however provide a clear trend of expenditure on biodiversity since the beginning of 2000/01.

6. A further difficulty is that many expenditure items are designed to meet more than one policy objective: an example is tree planting, which promotes biodiversity but might be largely driven by a demand for landscaping. In practice, the assessment by relevant experts of the appropriate share of any spending which can be attributed to biodiversity needs to take into account issues such as the quality of conservation measures and the original intentions of the expenditure.

7. Finally, given the time period covered by this indicator, it is inevitable that government organisations will be restructured, funding streams will change, projects will come to an end and/or new projects will begin and some biodiversity related expenditure will be outsourced to external organisations. Therefore, although every effort is made to consistently report annual expenditure, there are likely to be some differences in the coverage of the indicator from one year to the next.

### Definitional issues concerning spending on biodiversity in England

#### *Access to the countryside*

8. Expenditure on providing access to the countryside has generally been regarded as being for the benefit of society rather than in support of biodiversity. An exception is made for spending on nature reserves, which will include spending on visitor centres and footpaths, but which can be regarded as being for educational and fund-raising purposes. Where expenditure on access is identifiable (for example, expenditure by the Forestry Commission which is specifically allocated to access but not to nature reserves) this is excluded.

#### *Expenditure on National Parks*

9. Much of the spending by the 10 National Parks in England is geared towards services for the public, including access, landscaping etc. However, some specific expenditure in the form of contributions to Local Biodiversity Action Plans (LBAPs) and other activities has been identified. There is also some relevant expenditure that is funded

by the agriculture departments in each country. It has not been possible to gather biodiversity-related expenditure from the majority of National Parks due to various reasons but expenditure on agri-environment schemes within National Parks by relevant departments is captured.

### *Natural resource management*

10. The following spending is excluded on the grounds that it is aimed at managing the use of the environmental assets for the economy, rather than for the protection and enhancement of biodiversity:

- Spending by the Environment Agency on water abstraction licenses
- Spending by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) on the management of the fishing industry, and
- Spending by the Forestry Commission on the management of commercial forests.

### *Forestry Commission expenditure*

11. Gross expenditure by the Forestry Commission is included, in respect of the broad objective that includes biodiversity in the annual accounts for the Forestry Commission in England; each includes a diverse range of activities in addition to the biodiversity-related activities outlined below. A typical activity is the expansion of native woodland, as this is an important habitat to native animal and plant species. Other activities include SSSI management, creating linkages to isolated woodland remnants and woodland glade management for key moth and butterfly species living in the forests.

### *Road schemes*

12. Biodiversity protection expenditure has not in the past been separately estimated by the Highways Agency (for the Department for Transport). However, since 2005/06 the Agency has had a separate budget specifically allocated to the overall achievement of the Biodiversity Action Plan targets. It is believed that prior to 2005/06, the (unallocated) spending on biodiversity was significantly lower. No estimates have been made for these years, therefore some discontinuity will occur.

### *Landscape*

13. Estimates of expenditure on land management regarding Sites of Special Scientific Interest (SSSIs), National Nature Reserves and other protected land areas are included. However, wherever possible expenditure relating to landscaping is excluded, as the main focus of this activity is for aesthetic reasons.

## Financing issues

### *EU funding of biodiversity in England*

14. Financing from the EU, for example, funding to agri-environment schemes, is included in this indicator so total figures are for spending on biodiversity in England irrespective of which public body the money comes from.

### *National Lottery funding*

15. National Lottery funding from both the Heritage Lottery Fund and the Big Lottery Fund is classified as government spending on the grounds that government bodies decide

who and what to fund. Heritage Lottery funding is provided at a UK level; 84% (based on the relative population of the country) is allocated to biodiversity in England.

### Areas of expenditure on biodiversity in England not currently included in this indicator

16. There are a number of areas where funding for biodiversity in England is not currently included in this indicator. Examples of this include spending on local nature reserves and nature conservation by local authorities. Where gaps are identified, they can only be resolved if robust data from reliable sources are available across the entire time series for that particular funding stream, otherwise the trend assessment (particularly over the long term) will be affected.

### Assumptions and adjustments made to the data

17. Where the relevant data are available, expenditure figures relating to biodiversity protection are separated out from general environmental spending. When this breakdown is not possible, estimates are made as to how much of the total spending can be attributed towards biodiversity protection. These estimates are mostly made through contacts within the organisations concerned, ideally by the person responsible for the relevant programme.

18. Although this process should mean that all relevant spending is captured, it does mean that we are sometimes dependent upon expert judgment which can have limitations. The process by which experts arrive at their judgment may not be documented, and subsequent assessments may not be made on a consistent basis. Also, these experts may have a different view of what constitutes spending on biodiversity and hence the estimates they supply may not always be directly comparable. We do try to maintain consistency by asking experts to explain/justify the reasons for any change in the estimated proportion of spend going on biodiversity.

19. There are a few cases where it has not been possible to obtain an expert view of the biodiversity-related proportion of the total spend of a scheme. In these cases, a judgment has been made based on the description of the scheme's priorities.

20. Where possible, the data included in this indicator are reported on a financial year basis; if this is not possible, data have been allocated to the financial year beginning in the relevant calendar year, e.g. 2017 data are included in 2017/18.

#### *Spending by police forces on Wildlife Crime Units*

21. The only Wildlife Crime Units are the National Wildlife Crime Intelligence Unit in the National Criminal Intelligence Service, mainly funded by Defra, and the Wildlife Crime Unit in the Metropolitan Police.

22. Other police forces do have individuals who are wildlife crime leads in their area; in some cases these may be referred to as units. Some officers work full time as wildlife crime officers, others incorporate wildlife crime duties in with work on other crime issues. No estimates of these costs are made.

23. Spending by the Metropolitan Police is difficult to capture as no separate budgets for wildlife crime were allocated until 2004/05. Costs noted are estimated staff costs supplied by the Metropolitan Police. Spending in earlier years is assumed to be negligible

on the understanding that prior to 2004/05 much of the work was either carried out in the individuals' own time or while they were engaged in other duties.

### Indicator assessment

24. The Gross Domestic Product (GDP) deflator is a measure of general inflation in the domestic economy – it captures the price changes over a period of time. The deflator is expressed in terms of an index number. It is used here to convert historic prices into constant prices, thereby allowing meaningful comparisons to be made between biodiversity expenditure in different years. The base year is always set to the most recent year of data available in the time series, therefore, data presented in the current publication are not directly comparable to those in previous publications because a new deflator is used to prepare each annual update.

25. Once the time series for the public sector spend indicator has been deflated, assessments are made by comparing the difference between the value of the measure in the base year and the value in the end year against a 3% 'rule of thumb' threshold. A 3-year average is used to calculate the base year, to reduce the likelihood of any unusual year(s) unduly influencing the assessment.

26. Where the indicator value has changed by less than the threshold of 3%, the traffic light will be set at amber, otherwise it will be set at either red (decreasing) or green (increasing). The choice of 3% as the threshold is arbitrary but is commonly used across other government indicators; the use of this approach will be kept under review.

27. The traffic lights only reflect the overall change in the measure from the base year to latest year and do not reflect fluctuations during the intervening years. Two assessment periods have been used for the public sector expenditure measure:

1. Long-term – an assessment of change since the earliest date for which data are available (2000/01 for the domestic measure and 2001/02 for the international measure), and
2. Short-term – an assessment of change over the latest 5 years.

28. The public sector expenditure indicator also has a third marker showing the direction of change in the latest year. This period is too short for any meaningful assessment to be made. However, when the change exceeds a 1% threshold, the direction of this change is given simply as an acknowledgement of very recent trends and as a possible early indication of emerging trends.

### Indicator revisions

#### *The Community Forests*

29. The expenditure on biodiversity by the Community Forest that was previously included in the domestic measure was removed from the entire time series as part of the 2019 update. This was due to concerns over the continuity of reporting across all years. Compared to the figures reported in 2018 and those that would have been reported at the time, this revision resulted in real-term reductions to reported annual expenditure of between £19.2 million in 2000/01 and less than £1million in 2015/16 to 2017/18 (all figures given in 2017/18 prices).

#### *Agri\_environment schemes*

30. Historical payments made to farmers and land managers in England via agri-environment schemes were revised during the 2019 update. The percentage of these payments that is considered to be of benefit to biodiversity was also revised. Payments under these schemes are now more closely aligned with those reported in '[Agriculture in the United Kingdom](#)' although some inconsistencies may still exist because of differences in reporting years (financial in the Biodiversity Indicators and calendar in Agriculture in the United Kingdom); the treatment of payments for capital items; and the proportions of these payments considered to be of benefit to biodiversity. Up to and including the 2018 indicator publication, the percentage of payments made via agri-environment schemes in England that was considered of benefit to biodiversity and hence included in this indicator was 70% between 2000/01 and 2010/11 and 55% between 2011/12 and 2016/17. These estimates were revised during the 2019 update and the 70% assumption is now applied consistently across the entire time series from 2000/01 through to the current publication.

31. At the time these changes were made, they resulted in real-term increases in the indicator value of between £17 million and £25 million in 2008/09 to 2010/11 and between £70 million and £99 million in the later years of the time series (2011/12 to 2016/17) when compared to the figures reported in the 2018 publication. Figures from 2000/01 to 2007/08 were unaffected by the revisions (all figures given in 2017/18 prices).

### Latest year's change in indicator value

32. Real-term public sector spending on biodiversity in England rose from £318 million in 2017/18 to £335 million in 2018/19 (in 2018/19 prices), a latest-year increase of over 5%.

33. Payments made to farmers and land managers under agri-environment schemes (Countryside Stewardship and Environmental Stewardship) increased in 2018/19. The expenditure on the new Countryside Stewardship schemes, which over time will replace the old Environmental Stewardship schemes, has increased year-on-year since the schemes commenced in 2016. These changes account for the vast majority of the 5% increase in the indicator value between 2017/18 and 2018/19.

### Bibliography

Environmental expenditure statistics, General Government and Specialised Producers data collection handbook, 2007 edition. Eurostat Methodologies and Working papers.

### Further information

Further details on the methodology used for this indicator are available from Defra Environment Statistics: [enviro.statistics@defra.gov.uk](mailto:enviro.statistics@defra.gov.uk). The lead statistician is Christine Holleran (Defra).

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### Glossary

Cefas	The Centre for Environment, Fisheries and Aquaculture Science
Defra	Department for Environment, Food and Rural Affairs
EA	Environment Agency

FC	Forestry Commission
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LGA	Local Government Association
MOD	Ministry of Defence
ONS	Office for National Statistics
SSSI	Site of Special Scientific Interest

### Organisations in the public sector indicator

Department for Environment, Food and Rural Affairs

Environment Agency

Forestry Commission

Heritage Lottery Fund

Highways Agency

Joint Nature Conservation Committee

Royal Botanical Gardens, Kew

Landfill Tax Credit Scheme

Met Police Wildlife Crime Unit

Ministry of Defence

Natural England

The Big Lottery Fund

## Section 2: Non-governmental organisation spending

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### Background

1. Prior to 2014, the expenditure indicator included in the Biodiversity Indicators publications only covered public sector expenditure, and so did not fully represent total expenditure on biodiversity. In 2014, Defra statisticians developed an additional measure of non-governmental organisation (NGO) spend on biodiversity (net of government funded spend). NGO support for and action on biodiversity is vitally important; capturing the contribution of NGOs is a key element of tracking the UK's conservation efforts. In addition, this new measure is likely to account for a large part of the funding from businesses and private individuals that is channeled through the NGOs. Including this source of expenditure will give a more complete picture of spending on UK biodiversity.

### Methodology

#### *NGO selection*

2. NGOs with a primarily biodiversity or nature focus were selected for inclusion in this indicator. Many of the NGOs selected are members of the organisation Wildlife and Countryside Link. Link is an umbrella body, whose purpose is to bring together voluntary organisations in the UK to protect and enhance wildlife, landscape and the marine environment. Focusing on Link members gives a suite of significant NGOs pre-selected for their focus on biodiversity and nature protection. In addition, 13 of the 47 Wildlife Trusts with the highest annual turnover in England and Scotland have been included in this indicator, as well as NGOs that are not members of Link, but have a biodiversity and/or nature focus (British Trust for Ornithology, The British Association for Shooting and Conservation and the Game & Wildlife Conservation Trust). A full list of organisations included in the indicator can be found at the end of this section. Organisations that focus on animal welfare or conduct the bulk of their work abroad are included, however expenditure by the 3 NGOs in the indicator providing the greatest financial contributions to biodiversity in other countries (RSPB, WWF-UK and the Zoological Society of London (ZSL) has been adjusted accordingly.

#### *Data collection*

3. To avoid placing reporting burdens on NGOs, data is collated predominantly from NGO published annual accounts/financial reports. Almost all of the NGOs included in this indicator are registered as charities and detailed annual financial reports are published on the [Charity Commission website](#). In a small number of cases data, or a more refined estimate of expenditure, is collected from the organisation directly, examples of this include the estimates used to apportion spend by the RSPB, WWF-UK and ZSL between work in the UK and work abroad.

4. For consistency with the public sector stream, staff costs associated with administrating biodiversity focused programmes are not included.
5. For the majority of NGOs, the total amount of money spent on 'Charitable Activities', documented in the 'Resources Expended' section of the 'Consolidated Statement of Financial Activities' (present in each NGO annual report) is used as a first estimate of annual biodiversity spend.
6. In practice, because biodiversity spending is not always separately identified within the available sources, or if a single expenditure item includes biodiversity and non-biodiversity elements, an aspect of judgment is sometimes required.
7. A further difficulty is that many expenditure items are designed to meet more than one policy objective: an example is tree planting, which promotes biodiversity but might be largely driven by a demand for landscaping. In practice, the assessment by relevant experts of the appropriate share of any spending which can be attributed to biodiversity needs to take into account issues such as the quality of conservation measures and the original intentions of the expenditure.
8. If organisations fail to supply data in a given year, estimates are made based on the mean of the previous 3 years data. In 2018/19, 2 organisations failed to supply data/apportionment of expenditure: British Association of Conservation and Shooting and the ZSL.

### *Avoiding double counting of public sector grants*

9. It is necessary to avoid double counting of grants and other payments (e.g. research contracts) coming from the government to NGOs, as these are already accounted for in the public sector stream of the indicator. Many NGOs list grants received and the value of these grants in their statement of financial activities. Where this is the case, it is possible to identify grant providers that are already in the public sector indicator and calculate the proportion of a NGO's total income that is from these organisations. The first estimate of the NGO's expenditure on biodiversity is multiplied by the proportion of total income not from these organisations in the appropriate year. This gives a final estimate of biodiversity expenditure funded from non-government sources for each NGO.
10. Itemised grants are not always available in the published accounts. In most of these cases, no correction is made to the NGO estimate of total expenditure as the contribution of the particular individual NGO to the total NGO spend is very small. In cases where the contribution of an NGO without grant information to the overall indicator is significant (more than 1% of the total expenditure), that organisation is contacted directly to obtain grant information, in order that their estimates of expenditure can be refined.
11. It has been assumed that grants and expenditure relate to the same time period.

### *Calculating total NGO expenditure*

12. Total NGO expenditure on biodiversity in the UK is calculated as the sum of the individual estimates of expenditure for all of the NGOs included in the indicator. At present, we have estimated NGO expenditure on biodiversity for 8 years, 2010/11 through to 2017/18. In keeping with the public sector strand of this indicator, final estimates of total NGO expenditure are deflated using the UK Gross Domestic Product (GDP) Deflator to ensure spend is expressed in real terms.

13. Given the time period covered by this indicator, it is inevitable that organisations will be restructured, funding streams will change and projects will come to an end and/or new projects will begin. Therefore, although every effort is made to consistently report annual expenditure, there are likely to be some differences in the coverage of the indicator from one year to the next.

14. Finally, given the limited number of NGOs included within this measure and the complexities involved in both defining and identifying relevant expenditure, the figures presented in this indicator are likely to be an underestimation of total biodiversity spend by UK NGOs. They do however provide a clear trend of expenditure on biodiversity since the beginning of 2010/11

### *Spending on international biodiversity by NGOs*

15. Due to internal resource constraints, this work has been limited to domestic biodiversity expenditure in the first instance.

### Indicator assessment

16. The Gross Domestic Product (GDP) deflator is a measure of general inflation in the domestic economy – it captures the price changes over a period of time. The deflator is expressed in terms of an index number. It is used here to convert historic prices into constant prices, thereby allowing meaningful comparisons to be made between biodiversity expenditure in different years. The base year is always set to the most recent year of data available in the time series, therefore, data presented in the current publication are not directly comparable to those in previous publications because a new deflator is used to prepare each annual update.

17. Once the time series for the NGO spend indicator has been deflated, assessments are made by comparing the difference between the value of the measure in the base year and the value in the end year against a 3% 'rule of thumb' threshold. A 3-year average is used to calculate the base year, to reduce the likelihood of any unusual year(s) unduly influencing the assessment.

18. Where the indicator value has changed by less than the threshold of 3%, the traffic light will be set at amber, otherwise it will be set at either red (decreasing) or green (increasing). The choice of 3% as the threshold is arbitrary but is commonly used across other government indicators; the use of this approach will be kept under review.

19. The traffic lights only reflect the overall change in the measure from the base year to latest year and do not reflect fluctuations during the intervening years. To date, it has only been possible to calculate a short-term assessment (change over the last 5 years) for the NGO measure. Once data are available for at least 10 years, a long-term assessment will also be calculated for the measure.

20. The NGO spend indicator also has a third marker showing the direction of change in the latest year. This period is too short for any meaningful assessment to be made. However, when the change exceeds a 1% threshold, the direction of this change is given simply as an acknowledgement of very recent trends and as a possible early indication of emerging trends.

21. Spending on biodiversity in the UK by non-governmental organisations (NGOs) with a focus on biodiversity and/or nature conservation was £258 million (net of government funding) in 2018/19, a latest-year change of 5%. There was a 28% real-term increase in

biodiversity related spending over the last 5 years and a 36% increase in spending since the time series began in 2010/11.

### Further information

Further details on the methodology used for this indicator are available from Defra Environment Statistics: [enviro.statistics@defra.gov.uk](mailto:enviro.statistics@defra.gov.uk). The lead statistician is Christine Holleran (Defra).

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### Organisations in the NGO indicator

Amphibian and Reptile Conservation Trust	RSPB
Badger Trust	Salmon & Trout Association
Bat Conservation trust	The Shark Trust
British Association for Shooting and Conservation	Whale and Dolphin Conservation (WDC)
British Trust for Ornithology (BTO)	Wildfowl & Wetlands Trust (WWT)
Buglife	The Woodland Trust
Bumblebee Conservation Trust	WWF – UK
Butterfly Conservation	Zoological Society of London (ZSL)
ClientEarth	Royal Society of Wildlife Trusts (RSWT)
Freshwater Habitats Trust	Norfolk Wildlife Trust
Game & Wildlife Conservation Trust	Essex Wildlife Trust
Hawk and Owl Trust	Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire
The Mammal Society	The Wildlife Trust for Lancashire, Manchester and North Merseyside
Marine Conservation Society	Yorkshire Wildlife Trust
MARINELife	Dorset Wildlife Trust
National Trust	Surrey Wildlife Trust
Plantlife	Hampshire & Isle of Wight Wildlife Trust
People's Trust for Endangered Species (PTES)	Berks, Bucks & Oxon Wildlife Trust
The Rivers Trust	Devon Wildlife Trust

Scottish Wildlife Trust

Warwickshire Wildlife Trust

Wiltshire Wildlife Trust