

Indicators of funding of expenditure on biodiversity in the UK, and of UK Government funding on conservation of global biodiversity

Final project report (revised and updated August 2007)

Executive Summary

This project establishes two indicators of the amount of expenditure on biodiversity, in the UK and globally. The indicators are based on a combination of expert opinion and published and unpublished estimates. Both indicators cover the period 2000/01 to 2005/06.

Overall, these indicators are considered to be fairly robust. It should be possible to update them on an annual basis at relatively low cost and resources, although as awareness of new projects is difficult to maintain, and continuity of expert judgement is difficult to guarantee, the process may not be entirely straightforward. The report recommends an annual update in order to maintain consistency.

The results show that there were significant increases in spending on biodiversity in the UK in all the years between 2000/01 and 2005/06, except for 2003/04, which followed some large one-off capital purchases by non-Government Organisations in 2002/03. Spending on global biodiversity was relatively stable over the period, the main change being between 2002/03 and 2003/04 when contributions by the Department for International Development to the Global Environment Facility (GEF), which provides the bulk of the UK's spending on biodiversity overseas, increased significantly.

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Introduction

1. In 2002, the UK along with all other Parties to the UN Convention on Biological Diversity (CBD), made a commitment *“to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth.”* This commitment was subsequently endorsed by world leaders at the World Summit on Sustainable Development.
2. At its meeting in Gothenburg in 2001, the European Council agreed to the target of halting biodiversity decline with the aim of reaching this objective by 2010. This commitment has also been incorporated in the EU Sustainable Development Strategy and the Sixth Environment Action Programme.
3. The CBD Conference of the Parties (COP7)¹ decided that in order to assess progress at the global level towards the 2010 target, and to communicate effectively about trends in biodiversity, a limited number of trial indicators will be developed and used for a global assessment. As far as is feasible it is intended that the indicators will be capable of application at global, regional, national and local levels as tools for the implementation of the CBD and of national biodiversity strategies and action plans. Parties were therefore invited to use or establish national indicators to assess progress towards national and/or regional targets. The COP7 also agreed a framework of seven focal areas covering the different objectives of the Convention and 21 related global indicators. The Second Global Biodiversity Outlook will report in 2006 on global trends in biodiversity using these indicators.
4. In the Europe, following a major stakeholder conference in Malahide in May 2004, the Environment Council² decided to develop a set of headline biodiversity indicators to assess the 2010 target in Europe. The Council

¹ Decision VII/30

² 10997/04 28th June 2004

adopted the CBD indicator framework with some modifications³. The European Environment Agency has subsequently established the *Streamlining European Biodiversity Indicators 2010 (SEBI2010)* project to implement this decision. The SEBI2010 project will promote consistent biodiversity indicators and monitoring required under the Lisbon Agenda, the Sustainable Development Strategy, the Habitats and Birds Directives and the EU Biodiversity Strategy.

5. Whilst the exact form of both the CBD and EU indicator initiatives is not yet determined there is an expectation that there will be requirements for UK national-level reporting to be aligned with these international frameworks. The UK is participating actively in these international work programmes to ensure that any such reporting requirements do not pose unacceptable burdens on the UK and other Member States/Parties. The overall objective is to reduce the burden of international reporting whilst making it more effective.

6. Following a review carried out by the UK Biodiversity Indicators Working Group, the UK Biodiversity Standing Committee approved proposals to develop a small “basket” of headline indicators at UK level to enable reporting on progress towards 2010 targets. The basket includes two indicators which monitor expenditure on biodiversity in order to support the EU/CBD focus on the status of resource transfers and use. An extract of the paper considered by the Standing Committee, giving details of the two indicators and their pros and cons, is included at Annex A.

7. Although the indicators are primarily intended for use at the UK level, the UK Biodiversity Standing Committee recognised that there would be advantages in developing indicators which could be disaggregated to the level of the devolved administrations.

³ CBD Focal Area ‘Status of traditional knowledge, innovations and practices’ was not adopted by EU. EU added a new Focal Area on ‘Public opinion’. Titles of EU Focal Areas were abbreviated.

8. The Standing Committee also noted that the proposed UK headline indicators should be kept under review to take into consideration work on indicator development at the international level and to seek to maintain alignment with these efforts.

9. The main objectives of this project are therefore to:

- Establish the data availability for an indicator of public expenditure on UK biodiversity and bring the data together to form a consistent time series
- Research data availability and methods for extending the indicator to include expenditures by non-government organisations
- Establish data availability for UK Government expenditure on global biodiversity and bring the data together to form a consistent time series
- Assess the scope for calculating country level estimates of indicators of spending in the UK both by the public sector and by NGOs
- Identify lessons learned in compiling the indicators in order to influence their development at the EU and CBD levels.

Research method

10. The following sources were used to obtain information for the indicators:

- Departmental and NGO annual reports
- Contacts in relevant organisations obtained from Departmental sources and/or supplied by GHK Consulting, who have been carrying out parallel research for Defra into the costs of delivering Biodiversity Action Plans in England.

11. These sources were used to obtain estimates of spending on biodiversity between 2000/01 and 2004/05 from a wide range of governmental and non-governmental organisations, distinguishing where possible between

- spending directly on reserves and conservation measures
- related spending on administration and training
- relevant research and development
- whether the spending is direct on biodiversity, or through transfer payments to other organisations (in order to remove double counting of financial flows)

The accounting framework and the definition of environmental protection expenditure

12. The environmental protection expenditure account (EPEA) is a formal framework for the collection and compilation of data on environmental protection expenditure that is closely linked to the National Accounts. It is part of the wider conceptual structure for a harmonised monetary description of environmental protection activities developed by Eurostat in the early 1990s, known as the European System for the Collection of Economic Information on the Environment (SERIEE)⁴. The accounts cover all spending on environmental protection, including spending on biodiversity, which is within the domain of spending on biodiversity and landscape. The description of activities covered by the accounts is set out in the Classification of Environmental Protection Activities (CEPA)⁵, an extract of which is shown in Annex B.

13. The accounts classify spending according to the nature of the costs (staff costs, other current spending, capital formation, land acquisition etc) and in principle cover all the sectors of the economy. The Office for National Statistics (ONS) produces annual public sector accounts, using Treasury spending estimates covering all environmental protection expenditures, broken down into the broad environmental domains covered by the CEPA⁶.

⁴ Eurostat (2001): *SERIEE EPEA Compilation Guide*.

⁵ Eurostat (2001): *Classification of Environmental Protection Activities and Expenditure (CEPA 2000)*

⁶ See Table 3.3 of the Environmental Accounts, at http://www.statistics.gov.uk/downloads/theme_environment/EANov05.pdf

This is a top-down approach which provides a rough estimate of public sector spending on landscape and biodiversity, but unfortunately it is not detailed enough to support a robust indicator of spending specifically on biodiversity.

Definitional and measurement issues

14. 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 judgement as to when an item should be included or not, or whether the relevant component relating to direct action should be estimated by expert judgement or by reference to other information.

15. Expenditures – and costs – might simply not be known in some instances. For example, it is unlikely that expenditure on badger tunnels under roadways is identifiable within the totality of expenditure on roads, whilst the additional costs of diverting roads around particular wildlife sites may not be readily available. It has not been possible to model any such estimates.

16. In practice, either because such spending is not separately identified within the available sources, if a single expenditure item has both biodiversity and non-biodiversity elements, or because an element of judgement is required in order to estimate such spending, there are a significant number of cases where the approach used needs to be documented in detail and potentially revised in the light of discussion with stakeholders and other researchers. One example in particular would be regarding Defra's agri-environmental schemes. The spend on the biodiversity-related aspects of these schemes were only captured in 2004/05 and the judgement was taken to apply the same proportion to the previous years' spending.

17. A further difficulty is that many expenditure items are designed to meet more than one policy objective: an example might be 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 will need to take into account issues such as the quality of conservation measures and the original intentions of the expenditure.

Definitional issues concerning spending on biodiversity in the UK

The administration costs of wildlife charities

18. For the most part, the wildlife charities covered by this project have identified expenditure on the 'Management and administrative costs' of the charity. These expenditures have been included, on the grounds that if the aim of the charity is to promote or conserve biodiversity, then all of its costs can be attributed to that purpose. Also, in the lines regarding conservation related projects and costs, the expenditure is normally split between staff costs and direct costs (at least for the more recent years).

Access to the countryside

19. For this project, 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 has been made for spending nature reserves, which will include spending on visitor centres and footpaths, but which can be regarded as being for educational and fund-raising purposes. But when expenditure on access is identifiable (for example, expenditures by the Countryside Agency, English Nature or the Forestry Commission which are specifically allocated to access but which are not specifically allocated to nature reserves), this has been excluded.

Expenditure on National Parks

20. Much of the spending by the thirteen National Parks in England, Scotland and Wales 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 have been identified. There is also some expenditure that is funded by the agriculture departments in each country. It has not proved possible to gather biodiversity-related expenditure from the majority on National Parks due to the number of National Parks and the lack of response from most, but expenditure on agri-environment schemes within National Parks by each country's relevant departments has been captured (although it has not proved possible to obtain a split of this expenditure between National Park and non-National Park areas in some cases).

Natural resource management

21. The definition of environmental protection expenditure specifically excludes expenditure on natural resource management. Hence Environment Agency spending on water abstraction licences, spending by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) on the management of the fishing industry, and expenditure by the Forestry Commission on the management of commercial forestry have not been included.

Forestry Commission expenditure

22. Bio-diversity related expenditure by the Forestry Commission has been included, disaggregated to the separate countries of England, Wales and Scotland. 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

23. Biodiversity protection expenditure has not in the past been separately estimated by the Highways Agency (for the Department for Transport). However, for 2005-06 the Agency has a separate budget of £1.3 million specifically allocated as a contribution to the overall achievement of the Biodiversity Action Plan targets. It has not been possible to make robust

estimates of spending for past years. Whilst it is believed that the (unallocated) spending on biodiversity was probably significantly lower in earlier years, no estimates for these years have been made, so some discontinuity is inevitable.

Landscape

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

Definitional issues concerning spending on biodiversity overseas

Spending in the UK's Overseas Territories

25. Public sector spending on overseas biodiversity will include spending by the UK in the Overseas Territories. There are two programmes, run by the Foreign and Commonwealth Office (FCO) and the Department for International Development (DfID), which have been included in this remit: the Overseas Territories Environmental Programme (OTEP; both the FCO and DfID contribute to this scheme) and the Environment Fund for Overseas Territories (EFOT, which the FCO helps fund). Estimates relate to 2003/04 onwards.

Wildlife trade and international wildlife crime

26. Estimates of Departmental costs involved in monitoring and controlling the trade in endangered species (CITES) have been included.

Spending on international aid as part of wider initiatives

27. A number of relevant programmes have been identified and allocated to biodiversity. These schemes include the Darwin Initiative (Defra), the Flagship Species Fund (Defra), the Global Environment Facility (DfID and Defra), the Overseas Territories Environmental Programme (FCO, DfID), the Global Opportunities Fund (FCO) and the Environment Fund for Overseas

Territories (FCO). An annual breakdown of the Flagship Species Fund is not available. Because funding to date since November 2001 has been £380,000, the annual breakdown would not contribute much to the overall total and so expenditure from the Fund has not been included in the global expenditure total.

Biodiversity-related expenditure by the FCO

28. Although expenditure by the FCO on their environmental programmes has been captured (£0.6 million in 2003/04, £0.4 million in 2004/05 and £5.6 million in 2005/06), it has not been possible to identify the proportion of the spend which relates to biodiversity. It seems likely that the bulk of spending will relate to the control of emissions and effluent and the use of natural resources, with relatively small amount spent directly on biodiversity. For this reason no estimates of this spending have been included in the global biodiversity protection expenditure total.

Financing issues

EU funding of UK biodiversity

29. Financing from the EU, for example funding to agri-environment schemes, is included in this study so total figures are for spending on UK biodiversity irrelevant of where the money comes from. This could have replications further down the line when looking to make international comparisons, as the EU indicator, for example, is to look at funding to biodiversity as opposed to expenditure on biodiversity, but each country's stance on this issue would need to be looked at individually when this time comes.

Business funding (including water companies)

30. No attempt has been made to include direct spending by businesses. The Royal Society for the Protection of Birds (RSPB) are currently researching the issue of business funding for biodiversity protection, and some estimates may become available as a result of this study. Another potential source is Defra's annual survey of Environmental Protection

Expenditure by Industry, which covers spending on 'Nature Protection' (including landscaping). The results for 2003 suggest that the utilities (in particular electricity generation and water distribution) have the highest spending, followed by the mining and quarrying sector.

National Lottery funding

31. National Lottery funding is classified as government spending on the grounds that government bodies decide who and what to fund. National Lottery monies go into two funding bodies: the Big Lottery Fund (BLF) and the Heritage Lottery Fund (HLF). BLF's funding on biodiversity work consists of grants to projects run by English Nature and British Trust for Conservation Volunteers (BTCV), while HLF funds various biodiversity projects and land acquisitions.

Public sector grants to wildlife charities

32. Where spending by charities has been funded by public sector grants, the spending has been attributed to the public sector even though the activity has been undertaken by non-government organisations. In some cases this has resulted in revisions to estimates of spending by public sector bodies, as the resulting spending had not been reported by the organisations concerned. However, within the public sector the spending is attributed to the organisation making the final grant transfer. For example, grants from JNCC or the Environment Agency to NGOs may indirectly be financed by grant from Defra, but no attempt has been made to attribute the spending back to Defra.

Assumptions and adjustments made to the data

33. Where the relevant data were available, expenditure figures relating to biodiversity protection were separated out from general environmental spending and noted down. When this breakdown was not possible, estimates had to be made as to how much of the total spending can be attributed towards biodiversity protection. These estimates were mostly made through contacts within the organisations concerned, where possible by the person responsible for the relevant programme.

34. Although this process should mean that all relevant spending is captured, it does mean that we are dependent upon expert judgement. This has a number of weaknesses: the process by which experts arrive at their judgement may not be documented, and subsequent assessments, even by the same people, may not be made on a consistent basis. It is even possible that subsequent experts may be less 'cavalier' and may even not be willing to make such assessments. Furthermore, experts may have a different view of what constitutes spending on biodiversity and hence the estimates they supply may not be comparable. Finally, the process of updating the indicator will be somewhat more labour intensive, particularly if experts move on, than it would be if the estimates were drawn from an established accounting system.

35. 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 judgement has been made based on the description of the scheme's priorities.

36. Regarding the agri-environment schemes in Wales and Northern Ireland, the biodiversity-related proportion has been estimated by comparing Defra's biodiversity-related percentage with the one GHK had used in their work and by applying the same increase for Wales and Northern Ireland. Actual 2000/01 and 2001/02 figures for DARDNI's agri-environment spend were unavailable in the timescale, so these years' expenditures have been estimated by looking at the trends in the time period 2002/03 – 2004/05.

Country-level estimates

37. One of the objectives of the project was to explore the extent to which it would be possible to disaggregate the UK spending figure to country level. In practice, while some departments and agencies focus their spending on individual countries, other programmes straddle country boundaries and separate estimates are not readily available.

38. A disaggregation to England has been attempted wherever possible. Where the relevant source organisation has not been able to provide a split (for example, the Environment Agency and the Ministry of Defence), the breakdown can be calculated in a number of different ways.

39. For expenditure by the Joint Nature Conservation Committee (JNCC), the proportion attributable to England has been worked out by applying the share of the English Nature contribution to JNCC compared with the contributions by the other country agencies (SNH and CCW), on the grounds that these contributions will reflect where the money is spent. A similar approach has been adopted for Environment Agency spending, by applying the share of Defra's funding compared with that from the Welsh Assembly.

40. The ratio of England's population to the rest of the UK has been used to work out England's share of spending by the two lottery funds, on the grounds that spending by the funds will relate in some way to the populations buying lottery tickets. Population shares have also been used for allocating local government expenditure and spending through the Landfill Tax Credit scheme.

41. As far as the spending by the Ministry of Defence on Sites of Special Scientific Interest (SSSIs) is concerned, the methodology adopted has been to assume that the spend is proportional to the total number of SSSIs in England and Wales.

42. It has not yet been possible to make a satisfactory estimate of the proportion of spending by Non-Government Organisations which relates to England. Some charities operate solely within particular counties or countries, while others operate throughout the UK. It might be possible to assume that the spending is proportionate to land area⁷, but this assumption needs to be tested by analysing the organisations involved and the geographical distribution of the reserves that they manage.

⁷ This is the assumption used by GHK in their report on spending on Biodiversity Action Plans.

Spending by local authorities on local nature reserves and nature conservation within the local area

43. The Association of Local Government Ecologists (ALGE) represents professional ecologists working in local government in the UK. They produced a paper in 2001 for the Local Government Association (LGA) regarding expenditure in relation to biodiversity, which gave estimated figures for current expenditure at that time. These figures have been used and extrapolated to reflect inflation in each year in order to give figures for a run of five years.

Spending by police forces on Wildlife Crime Units

44. The only Wildlife Crime Units are the National Wildlife Crime Intelligence Unit (NWCUI) in the National Criminal Intelligence Service (NCIS), mainly funded by Defra, and the Wildlife Crime Unit in the Metropolitan Police.

45. 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.

46. Spending by the Metropolitan Police is difficult to capture as no separate budgets for wildlife crime were allocated until 2004/5. 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 2004/5 much of the work was either carried out in the individuals' own time or while they were engaged in other duties.

47. It has not been possible to obtain any estimates of spending by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) on biodiversity-related research.

Results

48. The tables below shows figures for biodiversity protection for both non-governmental organisations (NGOs) and the public sector for expenditure in England, the UK and overseas for 2000/01 to 2005/06. No estimates are available yet of the amount of spending in England by Non-Government Organisations.

Spending on biodiversity in the UK (£ million)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Public sector	216	256	276	298	337	396
NGOs	94	104	139	120	132	154
Total	310	360	415	417	469	551

Of which, spending in England

Public sector	172	203	210	226	253	294
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Spending on biodiversity overseas (£ million)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Public Sector	4	4	5	18	19	20

Conclusion

49. This project has confirmed that a reasonably robust indicator monitoring public sector and NGO spending on biodiversity in the UK can be compiled at relatively low cost. However, it could prove difficult to update, because of the difficulty of keeping informed of new spending programmes, the wide range of organisations and programmes that have contributed to the indicator, and the dependence upon the expert judgement of individuals on the proportions of spending which can be attributed to biodiversity. In order to maintain consistency it would be desirable for the indicator to be updated annually.

50. The project has also confirmed that it is possible to estimate the level of spending by the public sector in England (and by extension of the same methodology, it would be possible to obtain estimates for the other countries).

These estimates will be slightly less robust than the overall UK indicator, but should be sufficient to monitor trends. The methodology for estimating the breakdown of spending in the UK by non-Government organisations still needs to be determined.

51. The methodology adopted in this study is broadly consistent with international experience in this area (see M. Bombana et al). Although in principle the process of compiling and updating the estimates would be more efficient if the definition of spending on biodiversity were built in to existing accounting systems, in practice this would be an unwelcome overhead for the organisations concerned and could not at present be justified. Now that the initial contacts have been made and ground rules established, it is hoped that the burden on suppliers will not be as significant in future.

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Environmental Statistics and Indicators Division

Department for Environment, Food and Rural Affairs, UK

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Annex A – UK Biodiversity Standing Committee: Descriptions of Indicators of funding for biodiversity

EU/CBD Focal Area	Status of resource transfers
EU Indicator	Funding to biodiversity: <ul style="list-style-type: none"> • in economic and development cooperation • in EU research, monitoring and management
Candidate UK Indicator	16. Public sector environmental protection expenditure on biodiversity in the UK
Indicator type	Response
Brief description, incl. relevance to UK BAP, policy signals, ease of communication, resonance etc	The Office of National Statistics (ONS) estimate of Public Sector Environmental Protection Expenditure on the protection of biodiversity and landscape potentially provides data showing trends in public funding for biodiversity in the UK. The estimate could be presented as an overall sum and as a percentage of total public sector expenditure.
Data source, incl. time series available, update frequency, available spatial scales, reliability, scientific credibility etc	The basis of the estimates is the Treasury Public Expenditure Statistics Analysis (PESA). By ONS' own admission the figures are rough and ready - there are obvious gaps and some large lumps of spending which they allocate out to different environmental issues in a fairly arbitrary way.
Availability eg. already published, development work needed, potential improvements etc.	ONS estimates are calculated on an annual basis from 2001-02. Further work is required to validate the data and develop an indicator.
Main advantages	<ul style="list-style-type: none"> • Direct policy relevance • Easily understood • Data already collected
Main disadvantages	<ul style="list-style-type: none"> • Expenditure not directly related to outcomes • Difficult to track and classify expenditure on biodiversity; • Local government, academic, private and voluntary body funding not included • Requires further development
Recommendation	Develop and test indicator methodology.
Linkages	<ul style="list-style-type: none"> • EU: • OECD: • CBD:
Author(s)	Andrew Stott, Rocky Harris (Defra)

EU/CBD Focal Area	Status of resource transfers
EU Indicator	Funding to biodiversity: <ul style="list-style-type: none"> • in economic and development cooperation • in EU research, monitoring and management
Candidate UK Indicator	17. UK Government funding for conservation of global biodiversity
Indicator type	Response
Brief description, incl. relevance to UK BAP, policy signals, ease of communication, resonance etc	<p>An objective of the UK Government's World Summit on Sustainable Development Biodiversity Delivery Plan is to ensure that biodiversity is given due consideration in the development aid process, including in Poverty Reduction Strategies. Adequate access to resources is essential for the effective implementation of the CBD in developing countries as part of more general development aid and poverty alleviation. The UK contributes significantly to the conservation of global biodiversity through various initiatives including: the Global Environment Facility (GEF); DFID direct bilateral aid programmes (though there is no earmarking of aid for biodiversity conservation); the joint FCO/DFID Overseas Territories Environment Programme (OTEP); FCO's Sustainable Development Global Opportunities Fund (SD GOF); and Defra's Darwin Initiative and Flagship Species Fund. In addition we have contributed to other projects such as the Great Apes Survival Project (GRASP) as well as through our many contributions to the work of the international biodiversity conventions.</p> <p>Existing financial systems do not enable full identification and quantification of all biodiversity-related expenditure. However, it is possible to quantify trends for some important elements of expenditure. Initially it is proposed to include: (1) UK contributions to GEF; (2) Estimated DfID bilateral expenditure on forestry programmes and contributions to multilateral organisations working on forestry; (3) the FCO/DfID OTEP fund; (4) FCO's SD GOF; (5) Defra's Darwin Initiative and (6) Defra's Flagship Species Fund. Trends of expenditure in these areas give a clear signal of UK Government commitments to global biodiversity.</p>
Data source, incl. time series available, update frequency, available spatial scales, reliability, scientific credibility etc	Data sources: DfID, FCO and Defra Annual Reports and on request to the funding bodies. [Time series – to be confirmed]
Availability eg. already published, development work needed, potential improvements etc.	Data currently available for the 5 items of expenditure. Development work needed to collate the information and present as an indicator. Future development work needed to provide more comprehensive identification of biodiversity-related bilateral development aid.
Main advantages	<ul style="list-style-type: none"> • Policy relevant • Used by EU and CBD • Data available
Main disadvantages	<ul style="list-style-type: none"> • Data coverage incomplete • Shows resource transfers not outcomes (CBD indicators include global outcomes – ie status of global biodiversity - but these are not included within UK indicators)
Recommendation	Further development required.
Linkages	<ul style="list-style-type: none"> • EU: Development of indicator included in SEBI2010 initiative • CBD: Adopted for immediate testing by CBD (see UNEP/SBSTTA/10/INF/22)
Author(s)	Andrew Stott (Defra)

Annex B - The Classification of Environmental Protection Activities and expenditure (CEPA 2000)

1 Protection of ambient air and climate

2 Wastewater management

3 Waste management

4 Protection and remediation of soil, groundwater and surface water

5 Noise and vibration abatement (excluding workplace protection)

6 Protection of biodiversity and landscapes

Measures and activities aimed at the protection and rehabilitation of fauna and flora species, ecosystems and habitats as well as the protection and rehabilitation of natural and semi-natural landscapes. The separation between 'biodiversity' and 'landscape' protection may not always be practical.

Excluded is the protection and rehabilitation of historic monuments or predominantly built-up landscapes, the control of weed for agricultural purposes and the protection of forests against forest fire when this predominantly responds to economic reasons. The establishment and maintenance of green spaces along roads and recreational structures (e.g. golf courses, other sports facilities) are also excluded.

Actions and expenditure related to urban parks and gardens would not normally be included but may be related in some cases to biodiversity – in such cases the activities and expenditure should be included.

6.1 Protection and rehabilitation of species and habitats

Activities and measures aimed at the conservation, reintroduction or recovery of fauna and flora species, as well as the restoration, rehabilitation and reshaping of damaged habitats for the purpose of strengthening their natural functions. Includes conserving the genetic heritage, re-colonising destroyed ecosystems, placing bans on exploitation, trade, etc. of specific animal and plant species, for protection purposes. Also includes censuses, inventories, databases, creation of gene reserves or banks, improvement of linear infrastructures (e.g., underground passages or bridges for animals at highways or railways, etc.), feeding of the young, management of special natural reserves (botany conservation areas, etc.). Activities may also include the control of fauna and flora to maintain natural balances, including re-introduction of predator species and control of exotic fauna and flora that pose a threat to native fauna, flora and habitats.

Main activities are the management and development of protected areas, whatever the denomination they receive, i.e. areas protected from any economic exploitation or in which the latter is subject to restrictive regulations whose explicit goal is the conservation and protection of habitats. Also included are activities for the restoration of water bodies as aquatic habitats: artificial oxygenation and lime-neutralisation actions. When they have a clear protection of biodiversity purpose, measures and activities related to urban parks and gardens are to be included. Purchase of land for protection of species and habitats purpose is included.

6.2 Protection of natural and semi-natural landscapes

Activities and measures aimed at the protection of natural and semi-natural landscapes specifically to maintain and increase their role in biodiversity preservation. Much of this expenditure, such as the preservation of legally protected natural objects, expenditures incurred for the rehabilitation of abandoned mining and

quarrying sites, renaturalisation of river banks, burying of electric lines, and the maintenance of landscapes that are the result of traditional agricultural practices threatened by prevailing economic conditions, etc, will not be geared specifically towards biodiversity preservation. For biodiversity protection related to agriculture, the identification of specific state aid programmes to farmers may be the only data source available.

Excluded in all cases are measures taken in order to protect historic monuments, measures to increase aesthetic values for economic purposes (e.g., re-landscaping to increase the value of real estates) as well as protection of predominantly built-up landscapes.

6.3 Measurement, control, laboratories and the like

Measurement, monitoring, analysis activities which are not classified under the preceding items. In principle, inventories of fauna and flora are not covered since they are classified under protection of species.

6.4 Other activities

All other activities and measures aimed at the protection of biodiversity and landscape. It includes administration, training, information and education activities specific to the domain, where separable.

7 Protection against radiation (excluding external safety)

8 Research and development (not elsewhere allocated)

9 Other environmental protection activities

Source: Eurostat (2001)

Annex C - Summary of estimated spending on biodiversity

UK Biodiversity Related Expenditure

	Summary	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Non-governmental organisations	Grants outgoing	0.0	0.0	0.6	1.1	1.0	3.1
	Management, admin and staff	16.0	20.7	24.0	26.4	27.9	24.8
	Research	1.7	1.8	1.7	2.2	2.3	2.1
	Land management, maintenance and purchases	23.0	25.0	54.9	26.1	32.3	45.1
	Programme expenditure	52.3	55.2	59.7	65.2	70.1	75.4
	Education and publication	15.7	15.3	17.5	19.3	21.4	27.8
	Non-EU grants received	-14.6	-13.7	-19.1	-20.5	-22.7	-24.6
	Net Expenditure	94.1	104.4	139.3	119.6	132.4	153.7
Defra	Biodiversity related spend on Environmentally Sensitive Areas and Countryside Stewardship schemes	49.1	57.5	68.6	84.2	108.4	127.9
	Biodiversity Grants	3.1	3.7	3.7	5.1	5.2	6.5
	Research	2.3	3.3	3.4	3.2	3.3	3.3
	Wildlife Crime expenditure (NWCIU grant)	0.0	0.1	0.2	0.1	0.1	0.0
	Total Expenditure	54.5	64.5	75.9	92.6	117.1	137.7
Forestry Commission	England	18.1	20.1	15.1	14.4	14.7	17.7
	Scotland	3.6	4.2	8.8	9.9	8.4	15.3
	Wales	0.5	0.7	0.5	0.9	1.2	1.8
	Total Expenditure	22.2	25.0	24.4	25.2	24.3	34.8
English Nature	Grants outgoing	2.1	2.5	2.8	4.2	4.1	3.1
	Management, admin and staff	25.8	29.7	29.0	32.0	33.3	37.6
	Research	2.4	2.5	2.7	2.7	3.5	4.7
	Information and publicity	1.3	1.4	1.6	1.7	1.7	1.8
	Land management and maintenance	12.8	16.8	23.7	22.5	21.1	21.5
	Programme expenditure	2.3	3.5	3.8	3.6	3.3	3.7
	Total Expenditure net of transfers to JNCC, ALSF	46.7	56.4	63.6	66.7	67.0	72.4

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
JNCC	Staff	1.9	2.1	2.8	3.2	3.5	4.0
	Research	1.5	1.8	1.9	1.8	1.7	2.1
	Other related costs	0.2	0.1	0.1	0.2	0.8	1.1
	Total Expenditure	3.6	4.0	4.8	5.2	6.0	7.2
Countryside Agency	Living Landscapes	0.0	0.0	0.0	0.0	0.0	0.0
	Related staff costs	0.0	0.0	0.0	0.0	0.0	0.0
	Biodiversity grants	0.1	0.5	0.4	0.4	0.1	0.1
	Total Expenditure	0.1	0.5	0.5	0.4	0.1	0.1
Environment Agency	Biodiversity-related expenditure	4.0	4.0	4.1	4.0	6.1	9.8
	Total Expenditure	4.0	4.0	4.1	4.0	6.1	9.8
Local Government	Access to professional ecological advice	4.4	4.5	4.6	4.7	4.9	5.0
	Local Record Centres (Maintenance of, and ongoing surveys)	2.4	2.5	2.5	2.6	2.7	2.8
	Local Sites Systems	1.0	1.0	1.0	1.0	1.1	1.1
	Biodiversity Action plan co-ordinator	0.5	0.5	0.5	0.5	0.5	0.6
	Local Nature Reserve management	1.2	1.3	1.3	1.3	1.3	1.4
	Biodiversity grants	1.1	0.3	0.5	3.3	2.2	3.7
	Total Expenditure	10.6	9.8	9.9	10.2	10.5	10.8
MoD	SSSI Condition Improvement System					2.5	2.5
	Total Expenditure	0.0	0.0	0.0	0.0	2.5	2.5
Landfill Tax Credit Scheme	Object D: public parks & open space, nature reserves, village halls etc	4.7	5.5	4.7	4.6	4.2	4.1
	Object DA: specific expenditure at Biodiversity Action Plan or Local Biodiversity Action Plan priority species or habitats	-	-	-	0.1	0.6	1.8
	Total Expenditure	4.7	5.5	4.7	4.7	4.8	5.9
The Big Lottery Fund	Wildspace	0.0	0.0	0.4	1.5	1.5	1.1
	People's Places	0.0	0.0	0.1	0.2	0.3	0.1
	Total Expenditure	0.0	0.0	0.5	1.7	1.7	1.2

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Aggregates Levy Sustainability Fund	Biodiversity-related expenditure	0.0	0.0	5.7	1.3	2.0	1.3
	Total Expenditure	0.0	0.0	5.7	1.3	2.0	1.3
DARDNI	Agri-environment schemes	3.2	3.9	4.6	5.8	7.5	8.8
	Biodiversity grants	0.0	0.0	0.0	0.1	0.2	0.4
	Total Expenditure	3.2	3.9	4.6	5.9	7.8	9.2
Forest Service NI	Programme expenditure	1.7	1.7	1.8	1.1	1.2	1.3
	Total Expenditure	1.7	1.7	1.8	1.1	1.2	1.3
Environment and Heritage Service, NI	Spend on biodiversity issues	0.0	0.0	6.8	7.7	10.4	9.0
	Total Expenditure	0.0	0.0	6.8	7.7	10.4	9.0
Scottish Executive Environment and Rural Affairs Dept.	Countryside Premium scheme	1.2	2.8	1.0	1.1	3.3	3.3
	Rural Stewardship scheme	0.0	0.0	1.6	3.7	6.3	6.3
	Environmentally Sensitive Areas	7.1	7.3	8.8	8.5	7.8	7.8
	Biodiversity Action grants scheme	0.2	0.3	0.6	0.3	0.3	0.4
	Total Expenditure	8.5	10.4	12.0	13.6	17.7	17.8
Scottish Natural Heritage	Securing protected area management	9.6	11.7	11.6	11.4	13.0	16.1
	Supporting biodiversity action	1.6	1.7	3.1	3.7	3.0	2.7
	Total Expenditure	11.2	13.4	14.7	15.1	16.0	18.8
SEPA	Externally funded habitat enhancement site	0.0	0.0	0.0	0.0	0.0	0.0
	Total Expenditure	0.0	0.0	0.0	0.0	0.0	0.0
Welsh Assembly	Tir Cymen	2.3	2.1	1.5	1.0	0.9	0.3
	Tir Gofal	1.0	2.3	3.8	6.3	7.8	7.8
	Biodiversity grants	0.6	1.0	0.6	0.5	1.0	1.7
	Total Expenditure	3.8	5.3	5.9	7.8	9.7	9.8

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Countryside Council for Wales	Grant aid for biodiversity	0.4	0.5	0.6	0.8	1.5	0.8
	SSSI NRA/management agreements	2.0	1.8	1.8	2.4	2.3	1.7
	Total Expenditure	2.4	2.3	2.4	3.1	3.8	2.5
	Summary	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
	NGO Expenditure	94.1	104.4	139.3	119.6	132.4	153.7
	Public Sector Expenditure	215.5	255.6	275.8	297.6	336.7	395.9
	Total UK Expenditure	309.6	360.0	415.2	417.3	469.1	549.6

Annex D - Acronyms

ALGE – Association of Local Government Ecologists

BLF – Big Lottery Fund

BTCV – British Trust of Conservation Volunteers

CBD – Convention on Biological Diversity

CCW – Countryside Council for Wales

CEFAS – The Centre for Environment, Fisheries and Aquaculture Science

CEPA - Classification of Environmental Protection Activities and Expenditure

CITES – Convention on International Trade in Endangered Species

DARDNI – Department of Agriculture and Rural Development Northern Ireland

DEFRA – Department for Environment, Food and Rural Affairs

DfID – Department for International Development

DfT – Department for Transport

EA – Environment Agency

EFOT – Environmental Fund for Overseas Territories

EHS DoENI – Environment and Heritage Services, an agency of the Department of Environment Northern Ireland

EPEA - Environmental protection expenditure account

FCO – Foreign and Commonwealth Office

GEF – Global Environment Facility

HLF – Heritage Lottery Fund

JNCC – Joint Nature Conservation Committee

LGA – Local Government Association

MoD – Ministry of Defence

NCIS –National Criminal Intelligence Service

NWCIU - National Wildlife Crime Intelligence Unit

NGO – Non-governmental organisation

ONS – Office for National Statistics

OTEP – Overseas Territories Environmental Programme

RSPB – Royal Society for the Protection of Birds

SERIEE – European System for the Collection of Economic Information on the Environment

SEPA – Scottish Environment Protection Agency

SFPA - Scottish Fisheries Protection Agency

SNH – Scottish Natural Heritage

SSSI – Site of Special Scientific Interest