

# Technical Background Paper

## Expenditure on Biodiversity

### Public sector expenditure on UK and global biodiversity

#### Headline results

In 2010-11, £459 million pounds of public sector funding was spent on UK biodiversity. Since 2000-1 public sector spending on UK biodiversity has increased by 79 per cent (at 2010/11 prices). Over the same period GDP increased by 17 per cent.

In 2010-11, UK funding for global biodiversity totalled £50 million. Global spending by the UK public sector has increased by 62 per cent since 2000-1 (at 2010/11 prices).

This paper describes the methodology used in determining estimates of UK public sector spending on biodiversity in England, the UK and the rest of the world. The indicators are based on a combination of published and unpublished estimates and expert opinion with some judgment employed to finalise some components of the total. The figures should be taken as approximate.

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### Research method

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1. Two main sources were used to obtain information for the indicators from a wide range of Government organisations, firstly departmental annual reports and secondly expert contacts in the relevant organisations.

2. Spending on biodiversity is disaggregated 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).

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 have not been included.

4. 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.

5. In practice, because such spending is not 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 Defra's agri-environmental schemes where an estimate is made of the proportion of total scheme spending that is biodiversity-related.

6. 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 England and the UK**

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### *Access to the countryside*

7. 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 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 has been excluded.

#### *Expenditure on National Parks*

8. Much of the spending by the fifteen 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 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 each country's relevant departments has been captured.

#### *Natural resource management*

9. The definition of environmental protection expenditure specifically excludes expenditure on natural resource management. Hence the following spending has been excluded:

- 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*

10. Gross expenditure by the Forestry Commission has been included, for the broad objective that includes biodiversity in the annual accounts for FC in England, Wales and Scotland; 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*

11. Biodiversity protection expenditure has not in the past been separately estimated by the Highways Agency (for the Department for Transport). However, the Agency now has a separate budget specifically allocated as a contribution to the overall achievement of the Biodiversity Action Plan targets. 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 will occur.

### *Landscape*

12. Estimates of expenditure on land management regarding Sites of Special Scientific Interest (SSSIs), National Nature Reserves and other protected land areas have been included. However, 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**

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### *Spending in the UK's Overseas Territories*

13. Public sector spending on overseas biodiversity will include spending by the UK in the Overseas Territories. Spending on the Overseas Territories Environmental Programme (OTEP) is provided by the Foreign and Commonwealth Office (FCO) and the Department for International Development (DfID), whilst other spending is carried out by the Royal Botanic Gardens, Kew and the Ministry of Defence (MOD).

### *Wildlife trade and international wildlife crime*

14. 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*

15. 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), the Overseas Territories Environmental Programme (FCO, DfID) and the Global Opportunities Fund (FCO).

## **Financing issues**

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### *EU funding of UK biodiversity*

16. 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 irrespective of where the money comes from.

### *National Lottery funding*

17. National Lottery funding is classified as Government spending on the grounds that government bodies decide who and what to fund.

## **Assumptions and adjustments made to the data**

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18. Where the relevant data were available, expenditure figures relating to biodiversity protection were separated out from general environmental spending. 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, ideally by the person responsible for the relevant programme.

19. 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.

20. 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.

### *Spending by local authorities*

21. Spending on local nature reserves and nature conservation within the local area is included in the total. 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.

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

22. 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.

23. 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 have been made.

24. 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.

## Bibliography

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Cooper, A. 2001. *ALGE Advice to LGA in respect of Biodiversity.*

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<http://www.defra.gov.uk/statistics/environment/biodiversity/england-biodiversity-indicators/21-expenditure-on-biodiversity-in-england/>

16. UK biodiversity expenditure <http://jncc.defra.gov.uk/page-4251>

17. Global biodiversity expenditure <http://www.jncc.defra.gov.uk/page-4251>

Biodiversity Indicators in Your Pocket <http://www.jncc.defra.gov.uk/page-1824>

## Contacts

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## Glossary

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ALGE	Association of Local Government Ecologists
Cefas	The Centre for Environment, Fisheries and Aquaculture Science
CITES	Convention on International Trade in Endangered Species
Defra	Department for Environment, Food and Rural Affairs
DfID	Department for International Development

EA	Environment Agency
FC	Forestry Commission
FCO	Foreign and Commonwealth Office
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LGA	Local Government Association
MOD	Ministry of Defence
ONS	Office for National Statistics
OTEP	Overseas Territories Environmental Programme
SSSI	Site of Special Scientific Interest