

Putting Nature on the Map

A Report and Recommendations on the Use of the IUCN System of Protected Area Categorisation in the UK

Roger Crofts, Nigel Dudley, Chris Mahon, Richard Partington, Adrian Phillips, Stewart Pritchard and Sue Stolton



Fourteen reasons why the IUCN National Committee UK thinks the Putting Nature On The Map work is important:

- 1. It will provide a more accurate picture of those nature and landscape conservation sites in the UK which meet international standards;
- It will provide a common database for all protected areas in the UK, whether they are in England, Northern Ireland, Scotland or Wales; or whether they are owned or managed by official, private, NGO or community groups;
- 3. All this data will help to show how well the UK is meeting international commitments, for example in achieving relevant Convention on Biological Diversity Aichi Targets, notably Target 11;
- It will provide better information on nature conservation for use in a wide range of development and conservation work undertaken by national and devolved administration bodies;
- It will provide better information on nature conservation locally for use by planning authorities, and for initiatives such as Nature Improvement Areas (NIAs), and partnerships like Local Nature Partnerships (LNPs);
- 6. It will make all this data easily available to the public in a reliable, accurate, comprehensible and mapped format;
- 7. It will raise the public profile of protected areas which meet international standards;
- 8. It will help to establish targets for other places that are not at present protected areas, to aspire to;
- 9. It will offer information that can be used by tourist interests seeking contact with nature and landscape;
- 10. The outcome of the project can be used to showcase UK nature conservation more effectively;
- 11. It will establish the foundation for an updateable system of protected area data that, over the long term, will help determine trends in protected area provision etc.;
- The exercise can be used to strengthen nature conservation in protected landscapes and similar designations – indeed, as the Statements of Compliance for such areas demonstrate, this is already happening;
- The database will allow the UK to compare itself with other countries because the IUCN protected area definition and related advice represent a global standard which is followed in all parts of the world;
- 14. The database will be useful in establishing how well different kinds of protected areas work, in conjunction with related work to evaluate management effectiveness and outcomes (e.g. to compare how well Category V does as against Category IV in meeting biodiversity targets).

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Glossary

AONB	Area of Outstanding Natural Beauty
ASSI	Area of Special Scientific Interest
BR	Biosphere Reserve
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
CDDA	Common Database on Designated Areas
DEFRA	Department of Environment, Food and Rural Affairs
DOENI	Department of Environment Northern Ireland
EEA	European Environment Agency
EU	European Union
GB	Great Britain
IUCN	International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MCZ	Marine Conservation Zone
MPA	Marine Protected Area
NCUK(IUCN)	National Committee for the United Kingdom
NE	Natural England
NGO	Non-Governmental Organisation
NNR	National Nature Reserve
NP	National Park
NRW	Natural Resources Wales
NSA	National Scenic Area
NT	National Trust
NTS	National Trust for Scotland
PNOTM	Putting Nature on the Map
PPA	Privately Protected Area
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SNH	Scottish Natural Heritage
SoC	Statement of Compliance
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCMC	World Conservation Monitoring Centre
WCPA	World Commission on Protected Areas
WDPA	World Database on Protected Areas
WHS	World Heritage Site

Preface

Putting Nature on the Map

The aim of the Putting Nature on the Map project (PNOTM) has been to use the International Union for Conservation of Nature's (IUCN) *Guidelines for Applying Protected Area Management Categories* (Dudley, 2008, hereafter called the 2008 Guidelines) to identify all the places in the United Kingdom (UK) that meet the IUCN definition of a protected area; and then to assign to them one of the six IUCN protected area management categories and four protected area governance types (see *inside back cover*).

In February 2010, the Chair of IUCN's World Commission on Protected Areas (WCPA) asked the IUCN National Committee for the UK (NCUK) to take the lead in a project to apply the 2008 Guidelines in the UK. NCUK set up a project group and a broader advisory group to implement PNOTM.

PNOTM has only been possible through the financial support of The Sibthorp Trust, Natural England, the John Muir Trust, WWF-UK and Scottish Natural Heritage. The existence of five widely different kinds of funding partners, and the sponsoring role of the NCUK, shows evidence of wide support for the aims of the project.

In implementing PNOTM, we developed a dialogue with protected area policy makers, managers and owners, at the UK, country and local levels, and in the public, private and voluntary sectors. This dialogue confirmed that the UK has a complex arrangement of protected areas, involving many different organisations, varying between each country (England, Wales, Scotland and Northern Ireland), and using several management categories and governance types.

The most important partners we have engaged with are:

- The UNEP World Conservation Monitoring Centre (UNEP-WCMC), which collects data on protected areas and sets the data standards that they require for site entry into the World Database on Protected Areas (WDPA) and its Protected Planet portal (www.protectedplanet.net) where the data is made publicly available.
- The UK's Joint Nature Conservation Committee (JNCC), the statutory body that collects official protected area data and makes it available to the European Environment Agency (EEA) and the WDPA.
- The UK's statutory nature conservation and landscape protection bodies in each of the four countries.

- Managers of individual protected areas and representatives of groupings of certain protected area types, such as National Parks (NPs) and Areas of Outstanding Natural Beauty (AONBs).
- A wide range of non-governmental organisations (NGOs): some operating across the UK, others only in parts of it; some focused on landscape protection, others on species or habitat protection; most owning land, but often leasing it too, or advising on land management.

We have engaged with these and other interests in a number of different ways. For example: creating an advisory group drawn from a variety of institutions; organising a sequence of awareness raising events, such as conferences, workshops and seminars (including a spatial data training workshop run by UNEP-WCMC); publishing an e-newsletter for all interested parties; setting up an on-line 'Protected Areas Categories Club'; dedicating a part of the IUCN NCUK website for recording progress; holding numerous face-to-face meetings and tailored correspondence with data providers; and running a pilot project with the Scottish Wildlife Trust to test emerging ideas.

At various stages we have shared progress with IUCN World Commission on Protected Areas (WCPA) members, for example, in Europe at a protected area managers' workshop on assigning the IUCN management categories in Slovakia in 2013, globally, at a workshop at the World Conservation Congress in Jeju, Korea in September 2012 and with similar projects starting up in China and Japan.

Through such wide-ranging consultation it was possible to build an understanding of the IUCN system among all concerned. For some, it was the first time that they had encountered it in any detail, and often they needed persuading of its benefit and of the value of participating in the project. This was true in equal measure for the government and official sectors as well as for the NGO community. However, over time all the main official and NGO bodies became more engaged in PNOTM and we believe that a broad consensus has now emerged about the value of having reliable data about the UK's protected areas based on the IUCN framework. In all, it has taken over four and a half years, from the inception of the exercise in February 2010 to the finalisation of this report in September 2014. Now, with publication in time for the World Parks Congress in Sydney, November 2014, the project is essentially complete. Though PNOTM has been far more complex and challenging than was foreseen at the outset, it has also been far more valuable, instructive and ground-breaking than anyone expected.

We hope that our report offers a much richer picture of protected nature in the UK, and will inspire and guide similar projects to implement the 2008 Guidelines in other countries.

Signed by the project team

Roger Crofts

Nigel Dudley

Chris Mahon

Richard Partington

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Adrian Phillips

Stewart Pritchard

Sue Stolton

Foreword

We are delighted that the IUCN National Committee for the United Kingdom and members of IUCN's World Commission on Protected Areas have responded so positively to the request in 2010 from the then Chair of WCPA, Nik Lopoukhine, to apply the revised 2008 Guidelines in the UK. He said that '...there has never been a thorough exercise to categorise all the protected areas in the UK'. He challenged the UK by stating that it was 'currently lagging behind many countries in the quality of protected areas reporting'. However, he recognised that 'the revitalised national IUCN Committee represented a real opportunity for the country to become a global leader in this field'.

This report and the work behind it, is testament to the determination of the IUCN NCUK and, in particular, to key members of WCPA in the UK to rise to the challenge set by Nik.

We commend the many innovations developed during the course of this project. Engaging a wide range of stakeholders in protected areas, especially state bodies and NGOs who own a great deal of land, has increased the level of interest about this important IUCN knowledge-based system, as well as about the importance of protected areas in the UK. The development of a Handbook to clarify the 2008 Guidelines in a national context has provided users with a valuable tool kit. The use of experts on the IUCN categories system has brought a level of objectivity not previously achieved. And the collection of a great deal of data has provided new insights into many aspects of the UK's protected areas, particularly into their management aims (the six categories) and governance arrangements (the four types). This, in turn, will provide more valuable information to the UNEP World Conservation Monitoring Centre in Cambridge, for upload to the World Database on Protected Areas and accessible to all through the *Protected Planet* website.

We hope that the responsible bodies in the UK will adopt the recommendations in this report. However, *Putting Nature on the Map* has relevance beyond the UK. The whole point of the new guidelines was to promote their adoption throughout the world. The UK approach is exemplary and we commend it to others, particularly development of the concepts of Statements of Compliance to provide assurance that sites meet the IUCN definition. Stakeholder engagement, expert review systems, local handbooks and improved data are relevant to all nations if they are to gain the benefits from adopting the IUCN categories system and make their contribution to the global CBD Aichi Biodiversity targets.

So we hope that PNOTM will be an inspiration to other countries as they too seek to strengthen the role of protected areas in the conservation of biodiversity, geodiversity, landscapes and ecosystem management.

Ernesto Enkerlin Hoeflich IUCN WCPA Chair,

Stewart Brooks IUCN NCUK Chair

Jonathan Hutton Diector UNEP-WCMC

Executive Summary

The context

While the origins of nature conservation and landscape protection in the UK can be traced back hundreds of years, it was the 1949 National Parks and Access to the Countryside Act, applying to England, and Wales (and in part to Scotland), that led directly to a system of statutory protection for the UK. This legislation separated nature conservation from landscape protection and access. It is this separation - along with growing devolution in the governance of the four countries of the UK (England, Wales, Scotland and Northern Ireland); a range of international conservation obligations; and conservation NGOs creating their own protected sites - that accounts for the numerous types of protected area that exist in the UK today.

IUCN advocates the benefits of having a single global system to define and classify protected areas, through a single definition of a protected area: 'A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values', plus associated principles, including that 'in the case of conflict, nature conservation will be the priority'. IUCN, through its 2008 Guidelines for Applying Protected Area Management Categories, also recognises six categories of protected areas defined by management objectives and four governance types of protected areas.

The process

Using the 2008 Guidelines, the aim of Putting Nature on the Map (PNOTM) has been to identify all the places in the UK that meet the IUCN definition of a protected area, and to assign to them the appropriate management category and governance type. To do this PNOTM developed a five-step process: 1: Identify all sites that might possibly be protected areas; 2: Develop UK-specific guidance based on the IUCN guidelines; 3: Determine what is, and what is not, a protected area under the IUCN definition; 4: Assign management categories and governance types; and 5: Collect and report on data. Three significant innovations were adopted in the course of implementing PNOTM:

- A Handbook, prepared to help explain how the IUCN guidance should be applied in the UK.
- A UK Assessment Panel of experts from IUCN WCPA to provide peer review and rigorous debate around implementing the categories.
- Statements of Compliance (SoCs) for each type of site, to provide a common format for a critical review of the legislative and policy context, governance and management objectives relevant to a site meeting the IUCN protected area definition.

This work has resulted in changes to the UK protected area data flows to the World Database on Protected Areas (WDPA) – the primary global data source for protected areas worldwide. Previously data from the UK was restricted to statutory sites and there was no input from the NGO sector and no quality control for meeting the IUCN definition, category or governance type, despite this being identified in the data standards as a requirement for sites on the WDPA.

The results

At the outset of the project, IUCN WCPA and IUCN NCUK believed that the data on UK protected areas held on the WDPA was deficient in several respects. It was not collected using the 2008 Guidelines; it was not comprehensive; it included some areas that might not meet the IUCN definition; omitted other areas that should be included; and it was not categorised by the purposes for which sites were managed.

The PNOTM project confirmed these suspected shortcomings. Sixteen SoCs (out of twenty-three received) were approved by the Assessment Panel for statutory and NGO sites and, as a result, revisions are being made to the UK data on the WDPA to provide a more complete and accurate record of the protected areas that meet the IUCN definition. The principal changes are:

- Data on protected areas has been updated
- Designations have been added, that were not previously recorded in official databases
- Designations will eventually be adjusted where they do not meet the IUCN definition
- A large number of privately protected areas have been added

- A wider range of management categories reflects the diversity of *in situ* conservation in the UK
- Information has been added on governance types.

As a result, PNOTM has built up a picture of protected areas in the UK that is quite different from that previously reported to WDPA. In particular:

- The substantial contribution made by the third sector, NGOs, to conservation in the UK. Several thousand sites owned or managed by NGOs protect almost 500,000 ha. This diversity of governance has not been recorded previously, nor has much of the area protected. At a time when resources for conservation in the public sector are declining and policy commitment in some areas has weakened, understanding this contribution to conservation is particularly important.
- The UK has a wider diversity of conservation approaches, reflected by the type of management undertaken, than previously recognised. Until now, all protected areas were classified as either management Categories IV or V. PNOTM has shown that while most sites still fall into one of these two categories, there are also Categories la, II and III in the UK. The sites covered by these other categories include: some unique areas for biodiversity conservation which are managed as strict nature reserves with a focus on research; large areas in Scotland where whole ecosystems are protected and are managed primarily for tourism; and some important areas for geodiversity conservation.
- The project has highlighted several types of conservation area which do not meet the IUCN definition. For these the process of developing the SoC has clearly identified areas where better protection strategies (e.g. stronger legislation) or management focus on nature conservation are needed. As a result, we have the blueprint of actions required for several more potential protected areas in the UK.
- By being perhaps the first country in the world to develop a system for assessing all conservation areas against the IUCN protected area definition, categories and governance type, the UK project has created a system for the hitherto unrecognised community, private and local conservation areas to have their sites assessed against international standards and be reported on the WDPA.
- Finally, the project has provided information on protected areas in the UK which could be used in a variety of ways. For example, more accurate reporting on international conservation obligations; providing a baseline against which to assess the effectiveness and value of protected areas; encouraging a dialogue and cooperation between different authorities and organisations managing protected areas; clarifying the place of protected areas within landscape-scale nature conservation strategies; and providing a more robust context against which to measure the potentially damaging impacts of policies, projects and practices affecting nature conservation. The value of the work is all the greater as it comes at a time when there is rising concern about the continuing loss of biodiversity and the role of protected areas in this regard.

The recommendations

In conclusion, the report identifies ten detailed recommendations addressed to the partners in this work and designed to apply the PNOTM approach. These deal with data collection, the Assessment Panel, data consistency, 'non-compliant' areas, marine protected areas, nature conservation in landscape protection areas, and communicating the findings and recommendations of PNOTM. Then, based on the results from PNOTM, the report reflects on the wider significance of this work, particularly addressing the need for a new emphasis on the role of protected areas in the UK. This leads to one final recommendation addressed to IUCN NCUK for a Programme of Work on UK Protected Areas, to follow on from its support for PNOTM, and build on its results.

SECTION 1

Protected Areas in the UK: the context

In this section, we first give a very short history of nature conservation and landscape protection in the UK. Then we summarise the current situation, including trends in the state of nature and recent policy initiatives. Finally, we introduce the IUCN Protected Area Management Categories system against which our report has assessed current UK nature conservation and landscape protection.

A short history of protecting places for nature and landscape in the UK

The origins of nature conservation and landscape protection in the UK¹ can be traced back hundreds of years. The poet William Wordsworth wrote of the beauties and values of nature, and sowed the seed of an idea that grew, in later years, into the case for national parks. In his Guide to the Lake District of 1810, he spoke of the area as 'a sort of national property, in which every man has a right and interest who has an eye to perceive and a heart to enjoy'. In fact, three separate conservation campaigns emerged: a call for measures to protect nature on scientific and ecological grounds; a concern about the aesthetic damage caused by industrialisation; and a demand for working people to have access to the countryside for recreation. These concerns came together before and during the Second World War in a call for legislation, which was enacted in the ground-breaking 1949 National Parks and Access to the Countryside Act. They also gave rise to, and have since sustained, the UK's powerful NGO conservation movement, which has helped to protect many areas for nature and landscape through ownership of land and by exercising political influence.

Statutory nature conservation and landscape protection

The 1949 Act made possible the establishment of a selection of sites that were given statutory protection for nature conservation in England, Wales and Scotland (Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)), and a similar list of statutorily designated areas for landscape protection in England and Wales (National Parks (NPs) and Areas of Outstanding Natural Beauty (AONBs)). These sites have been the foundation upon which a great deal of subsequent legislation has been

1 The UK comprises four countries: England, Wales and Scotland (collectively called Great Britain (GB)) and Northern Ireland.

built, they have enabled the UK to fulfil its international obligations and continue to do so today. In Scotland, landscape protection measures, in the form of National Scenic Areas (NSAs), were put in place in 1980 (and re-designated under new legislation in 2010); Scotland's national parks were established under the National Parks (Scotland) Act in 2000. Northern Ireland's nature protection sites (Areas of Special Scientific Interest (ASSIs)) are similar to SSSIs; its AONBs were established under separate arrangements: the Amenity Land (Northern Ireland) Act 1965, and the Nature Conservation and Amenity Land (Northern Ireland) Order 1985.

So, while the 1949 Act was a response to an alliance of interests, the legislation put in place separate arrangements for nature conservation to those for the protection of 'natural beauty' and improved public access, reflecting two distinct areas of interest: ecological and habitat conservation, and scenic beauty and amenity protection. For the next 40 years, nature conservation operated as a separate system from landscape protection and public access, each with its own statutory agencies, designations, objectives, institutions, career paths etc. However, the two parts of the conservation movement faced common threats, notably the intensification of agriculture and, once the UK became a member of the European Union (EU) in 1973, the lack of an environmental stewardship component in the EU's Common Agricultural Policy. During the 1980s, especially, it became evident that they could be more effective in dealing with such threats if they came together.

So the two systems were required to work together and over time new structures were put in place to make this possible, a process helped by the trend towards devolution of political powers in Scotland and Wales. Single integrated conservation agencies were set up by statute in Wales in 1991, in Scotland in 1992 and in England in 2006, all with responsibility on their own part

The reintroduction of red kites (Milvus milvus) is a major conservation success story in the UK @ Wild Wonders of Europe /Juan Carlos Munoz / WWF

or in consultation with the devolved administrations over a range of designations. A similarly integrated approach has been taken through a committee advising the Northern Ireland government since 1989, where there has also been a trend towards greater political devolution in recent years. However, all four countries were embraced by UK-wide legislation in 2010 to create marine protected areas.

Internationally-driven nature conservation

More recently, the development of protected areas in the UK has been increasingly influenced by its international obligations. Some of these derive from its membership of United Nations (UN) Conventions and other agreements, notably the Convention on Biological Diversity (CBD), the UNESCO World Heritage Convention, the UNESCO Man and the Biosphere Programme, the Ramsar Wetland Convention and more recently the UNESCO Geoparks programme. As an EU Member State the UK also has to identify, designate and protect sites under the Birds Directive and the Habitats and Species Directive as Special Protection Areas (SPAs) and Special Areas for Conservation (SACs) respectively, contributing to the Natura 2000 network.

The non-governmental sector

The involvement of NGOs in pressure and action for the protection of nature and landscape in the UK also has a long history. From the outset, many NGOs combined campaigning with on-the-ground action for conservation. Bodies like the National Trust (NT), now with more than 4.1 million members, and the Royal Society for the Protection of Birds (RSPB) with more than 1 million, were founded in the 19th century. Both had begun to create nature reserves before 1900, and the number of sites that they protect for landscape and nature has grown nearly every year since.

The first County Wildlife Trust was established in 1926: today, there are 45 of them in the UK (mainly based on counties in England and Wales, with a single body each for Scotland and Northern Ireland) with over 800,000 members, covering all parts of the UK, including urban areas; each trust has developed its own nature reserves. Other NGOs with a more specific focus – on wetlands, wildland, woodlands, plants and raptors, for example – have also acquired and developed their own nature reserve systems. All of these are membership bodies, operating under UK or devolved administration law as charities, and wholly independent of government.

Other sectors

Since the 1949 Act, many local government bodies, private landowners, institutions and communities have taken up land-based measures for nature conservation and landscape protection. Some of these reinforce national designations, others are independent of them. Many thousands of individual farmers and landowners are involved in site-based protection through national legislation, especially that for SSSIs. Communally-owned land, in particular 'commons' provides a range of conservation benefits; many commons are also designated as SSSIs.

Nature conservation and landscape protection in the UK – an overview and critique

A variety of past legislation, several international obligations, and the various aims of numerous NGOs and other actors account for the great diversity of areas managed for conservation in the UK. This variety is increasing as the

Child sledging in the snow in Cairngorms National Park, Scotland © Global Warming Images / WWF-Canon

four countries of the UK develop their own, increasingly distinctive approaches to conservation. Diversity is evident, therefore, in the purposes for which the areas are managed and the governance arrangements that apply to them. The statistics will be covered in detail later in the report (see Tables 1 and 2).

Impressive as this may be, coverage alone does not ensure conservation success; in fact, the effectiveness of some of the UK's nature protection and landscape measures has been criticised. For example, while the creation of NPs in England and Wales in 1949 was certainly a radical measure - extending public access to huge areas of the countryside that had been inaccessible in the past and introducing the objective of conservation of cultural, landscape and nature values across nearly 10 per cent of England and 20 per cent of Wales - the purposes of NPs have been partly undermined by the intensification of farming practices, national demands for minerals and infrastructure, and local pressures to put economic considerations ahead of conservation ones. AONBs have perhaps been at greater risk as they were not provided with many of the powers and funds available to NPs. Similarly, the NSAs in Scotland provide only limited protection and depend upon the support of communities and local councils: they may be called 'national' but there is little national political momentum behind them. Even the newly established NPs in Scotland do not claim to be strictly protected areas, despite having

rather stronger nature conservation duties than those in England and Wales, because they are also required to deliver social and economic benefits. It is these weaknesses that led some to suggest that IUCN should no longer consider places such as the UK's NPs and AONBs to be protected areas at all (Locke & Dearden, 2005).

Though the nature conservation measures of the 1949 Act were strengthened in the 1980s, their effectiveness has also been criticised. At their core are the SSSIs and ASSIs, most of which are on private land and are managed through voluntary agreements between the owners and the designating authority, the statutory government conservation agencies. In practice, the agencies had limited leverage over the owners, and a high proportion of sites were degraded or destroyed after they were designated (e.g. King, 2000). Many loopholes were closed by subsequent legislation, especially the Countryside and Rights of Way (CRoW) Act of 2000 and the Nature Conservation (Scotland) Act of 2004.

A recurring issue of concern has been the relationship between land management for farming and forestry, and the conservation of nature and landscape. Several phases can be identified. At first, the land users operated without any constraints, leading to ever more obvious conflicts with the aims of NPs and SSSIs. In 1981, changes were introduced to avoid the most intractable conflicts by paying compensation to land owners in return for their not undertaking practices that would damage nature or landscape. This 'profits foregone' formula proved unsustainable and was replaced by a series of agrienvironmental initiatives, supported under the Common Agricultural Policy (CAP), to encourage better stewardship of land, plus more general undertakings - including Codes of Good Agricultural Practice in England, Scotland and Wales to avoid environmentally damaging action in return for CAP payments. Arrangements vary from country to country within the UK, management measures are more temporary than those in place in formally protected sites, and the success rate has been variable, but even so the introduction of incentive measures and codes of practice over the past thirty years has influenced land management for the better.

There are also many other positive features of nature conservation in the UK, such as the series of NNRs, the growing number of privately managed nature reserves and local government action to create Local Nature Reserves (LNRs). The UK has also pioneered the protection of important geological and geomorphological features as SSSIs through the Geological Conservation Review (40 volumes arranged thematically of proposed sites for designation as SSSIs (Ellis, 2011)). Above all, there is a wide body of public opinion in support of conservation as evidenced by the massive membership numbers of many conservation bodies, which far exceed those of all three largest UK political parties combined.

Nonetheless, there has been a continuing decline in biodiversity within the UK. Despite some successes, such as the recovery of otter (*Lutra lutra*) and the re-introduction of white-tailed eagle (*Haliaeetus albicilla*) and red kite (*Milvus*)

BOX 1: Protected Areas, designated areas and other effective area-based conservation measures – a recipe for confusion?

Though this report promotes the IUCN definition of a protected area, some similar terms are also in use at the international level and this could cause confusion. In particular:

- European Environment Agency: The UK along with other European countries is required to provide information to the Common Database on Designated Areas (CDDA), which is managed by the EU's European Environment Agency. The database collects information about 'nationally designated areas'. Many of these will be protected areas in the IUCN sense, but some are not.
- **Convention on Biological Diversity:** The CBD's definition of a protected area, 'a geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives', is more general than that used by IUCN, although there is tacit agreement between the CBD and IUCN to treat the two definitions as if they were the same.
- Aichi Targets: The CBD's Aichi Biodiversity Target 11 requests all parties to the convention to have 'at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures' and integrated into wider landscapes and seascapes (emphasis added). This allows data to be collected on areas which may not be protected areas in the IUCN sense but which still contribute to nature conservation. The global community is still trying to decide exactly how these 'other conservation measures' should be defined and they are not considered in this report.
- World Database on Protected Areas: UNEP-WCMC advises originators of data to use the IUCN definition as the standard against which to identify protected areas for reporting to the WDPA, which is in turn used to report to UN processes like the CBD. But it must be recognised that data collection on protected areas has been undertaken against a background of subtly different requirements and that this will inevitably affect the consistency of results.

The advantage of the IUCN definition is that, through the 2008 Guidelines and additional guidance on marine protected areas (Day et al., 2012) and assignment (Stolton et al., 2013), the definition has been thoroughly explained word by word, is associated with principles to guide its implementation, and is accompanied by advice on how it should be applied. This guidance provides a common standard for reporting, for example through national exercises such as those being undertaken in the UK.

We acknowledge the different definitions noted above, but consider that there are many good reasons to encourage the use of one, standardised and internationally agreed definition, consistently and rigorously applied throughout the world, so that the resulting data are comparable and robust. An aim of this project is to provide a practical demonstration of how this can be done nationally and so encourage the wider use of the IUCN definition.

milvus), populations of many other species have continued to fall, in some cases very rapidly. For example, the near disappearance of curlew (Numenius arguata) and golden plover (Pluvialis apricaria) as breeding species in Wales, the collapse of populations of skylark (Alauda arvensis) and corn bunting (Miliaria calandra) in much of lowland England and the restriction of the corncrake (Crex crex) to the Western Isles and Orkney in Scotland, at the outer edge of its former range. Alongside the larger and more noticeable species, specialists complain of a steady and largely unrecognised trickle of losses amongst invertebrates and lower plants. A wide-ranging report, which assessed population and distribution trends among 3,148 UK species, found that 60 per cent of them had declined over the last 50 years, and 31 per cent were declining strongly (Burns et al., 2013). While similar declines are occurring throughout Europe, this is very

disappointing in the context of such strong public support for conservation in the UK and the existence of many legal and policy measures and funding streams dedicated to protecting species and their habitats.

In the past few years, a consensus has emerged around three powerful ideas that should benefit biodiversity and landscape protection. They are:

• The value of the services provided by nature: the UK undertook a national ecosystem assessment which confirmed the importance of ecosystem services to the economy and well-being, and called for their proper valuation and protection (UK National Ecosystem Assessment, 2011). 'Natural capital' has been increasingly recognised as a meaningful way to measure the economic value of environmental systems and processes. Recent

serious river and coastal flooding and other evidence of climate change have strengthened the case for naturebased solutions to land and water management issues.

- The importance of ecological networks: while the UK was rather slow to understand the value of such networks, work began in the 1990s through the 'Natural Areas' programme developed by English Nature and 'Natural Heritage Futures' by Scottish Natural Heritage. More recently, an influential government report was published advocating the establishment of coherent and resilient ecological networks in England: it called for 'more, bigger, better and joined up' nature areas (Lawton, 2010), which was endorsed in a subsequent Government White Paper (HM Government, 2011). Such ideas have been recognised within conservation biology for some time and their re-statement in a policy context is significant. As a result, there are now many examples of emerging ecological networks being developed around the UK, which aim to maintain ecological processes and rebuild biodiversity in areas of fragmented semi-natural habitat.
- The need to reconnect people to nature: no effective nature conservation will be achieved without public support. But the public need to have contact with nature if they are to value it. Reconnecting people to the natural world can bring all sorts of health and well-being benefits as well as creating a more favourable environment for conservation. This has implications for urban design, education and land use planning, as well as protected areas management.

The IUCN Protected Area Management Categories system

The numerous areas identified within the UK for various forms of protection are part of a global system of lands and waters managed for conservation. While each country will choose to manage these areas in its own way, guided by international requirements in some cases, it has long been recognised that there are benefits in having a global system to define and classify such areas. Such a system:

- Provides a framework for data collection and handling, leading to better data, more credible reporting and more reliable measurement of progress towards international targets (such as those agreed to in the *Programme of Work on Protected Areas* and Aichi Biodiversity Target 11 of the CBD – see Box 1).
- Helps in delivering nature conservation at the national level in many ways, such as supporting national strategies for wildlife protection, designing landscape-scale approaches to conservation, and integrating nature into development plans.
- Helps to reveal the variety of approaches to protected areas management and how they can complement each other within a national protected areas system.
- Provides a globally consistent approach to the protection of land and sea based on management objectives.
- Helps identify the full range of stakeholders involved in protected areas ownership and management, including state protected areas and other forms of ownership and governance.

• Improves communication and understanding between all those involved in conservation.

The use of such a system to classify areas under protection is about data collection but also about raising management standards. Using the system in the UK could help provide better data to inform action designed to value nature, create functioning ecological networks and enable people to reconnect with nature – the three new approaches to nature conservation referred to above.

International attempts to classify protected areas

Work has been led by IUCN WCPA to develop an international approach to the classification of protected areas. This has resulted in a system that involves defining what a 'protected area' is, categorising protected areas by management objective, and classifying them by governance type. First adopted in 1978 and revised in 1994, the system was reviewed through an international project based at the University of Cardiff (Bishop et al., 2004). As a result, new management categories guidelines were published in 2008 (Dudley, 2008) and approved by an IUCN Resolution at the World Conservation Congress in 2012 (WCC-2012-Res-040-EN: Endorsement and uniform application of protected area management guidelines).

Since 2008, IUCN has defined a protected area as: 'A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley, 2008, p. 10). This new definition is clarified by a set of complementary principles, the most relevant being: 'for IUCN, only those areas where the main objective is conserving nature can be considered protected areas; this can include many areas with other goals as well, at the same level, but in the case of conflict, nature conservation will be the priority' (p. 10). Within this definition, IUCN recognises six categories (one with a sub-division), defined by management objectives, and four governance types (see inside back cover).

While there are a number of similar terms in circulation (see box on page 5), both IUCN and the CBD encourage all countries to implement the categories system. Some countries have used the IUCN definition to develop their whole protected areas system from scratch, or to redesign an existing system, following the six categories and four governance types. More commonly, implementing the system means testing the national arrangements for conservation against IUCN's standards. This involves several steps: establishing what might be protected areas as defined by IUCN, examining them to see if they are, and then assigning to each of them management categories and governance types.

This is the challenge that the Chair of IUCN WCPA posed to the NCUK in February 2010 when he invited the committee to take the lead in a project to apply the 2008 Guidelines in the UK. The rest of this report describes the work undertaken and the results.

SECTION 2

Putting Nature on the Map: The Process

In this section, we first explain the aim of the UK protected areas assignment project. We then give a short, step by step account of how it was carried out, and the approach adopted. Next, we highlight three significant innovations, the UK Handbook, the IUCN WCPA UK Assessment Panel and Statements of Compliance, all designed to ensure high quality decisions. Finally, we describe how the protected area data flows have been changed by PNOTM.

The aim of PNOTM

The aim of PNOTM has been to use the 2008 Guidelines to identify all the places in the UK that meet the IUCN definition of a protected area, and then to assign to them one of the six IUCN protected area management categories and four protected area governance types (see inside back cover).

IUCN has recently published advice on how to use the 2008 Guidelines (Stolton et al., 2013). Prepared with input from many sources, including PNOTM, this breaks the assignment process down into a sequence of steps: identify, confirm, report and, if required, verify. IUCN also sets down some principles for this exercise:

- All possible areas, including those managed by NGOs, individuals and communities, should be examined to see if they meet the IUCN definition of a protected area.
- The assignment process should identify all relevant stakeholders and secure their agreement to take part in the process.
- A broad-based consensus confirming management categories and governance types should be sought among all those involved in the process.
- Self-assessment assignment processes may identify indicative category and governance types, but these should be complemented by an independent and informed confirmation and verification process.

These best practice principles have been applied to the situation in the UK through the PNOTM project.

The five steps involved in PNOTM

The work has followed a sequence of five steps based on IUCN's advice on best practice:

Step 1: Identify all sites that might possibly be protected areas

This was a major initial scoping exercise, as the UK has many different forms of site-based protection, run under a wide variety of governance regimes. To compile a comprehensive picture of all these required working with many stakeholders in all parts of the UK. The exercise went much wider than the list of UK official protected areas previously recorded on the WDPA, by including sites where the governance types are private (including NGO), mixed and community. However this scoping stage specifically omitted designated areas in the UK Overseas Territories and Crown Dependencies (including the Isle of Man and the Channel Islands) due to constraints on time and funding. Data are therefore still required from these sites.

Step 2: Develop UK-specific guidance based on the IUCN guidelines

The 2008 Guidelines were the foundation for the whole exercise. However, the project steering group judged that a UK interpretation was needed to help explain how these global guidelines should be implemented nationally and applied to the long list of places identified by Step 1. Following a round of consultations with stakeholders, additional UK-specific guidance was developed in the form of a Handbook (IUCN NCUK, 2012).

Step 3: Determine what is – and what is not – a protected area under the IUCN definition

Using the 2008 Guidelines and the UK Handbook, it was possible to refine the long list of all possible types of designation by excluding those which clearly did not

A young common seal (Phoca vitulina) in the seas around Lundy Island, England which is owned and managed by the National Trust © naturepl.com / Alex Mustard / WWF-Canon

conform to the IUCN definition, for example because they were not focused on nature conservation or were temporary measures only. These included: designations to guide decision making through the statutory Town and Country Planning system, such as Green Belt areas; areas defined under time-limited EU-funded agrienvironmental and rural development schemes; measures to protect the built heritage; and other areas which might be for nature conservation but where protection could not be provided with a reasonable guarantee into the future, such as Local Wildlife Sites. These kinds of areas were identified as outside the IUCN definition of a protected area, and not considered further.

What remained was still a long list of different types of protection for areas of land and sea that might or might not be protected areas in the IUCN sense, and represented many thousands of sites. Some of these designations are found throughout the UK, notably those deriving from international obligations and many NGO-owned sites; others are specific to particular places. The core of this part of the exercise was to determine which of these designations met the IUCN definition. The Handbook included sets of keys to help make that judgement: these keys were a useful aid to decision making but not sufficient on their own.

This was more than a technical exercise. A recurrent message from many of the bodies consulted was a desire to stay within the international system and maintain their status as protected areas recognised by IUCN. There was, for example, strong resistance to the possibility of 'delisting' certain types of protected area such as NPs and AONBs, fearing that this would undermine efforts to protect the areas and exclude them from global conservation efforts. Some NGO bodies responsible for protected areas wished their land to be included in the WDPA for the first time. At the same time, PNOTM revealed that there had been no systematic approach by the UK in the past to the inclusion of sites as protected areas in the WDPA. There was clearly a need for greater rigour in deciding what should be considered as a protected area and how the categories were assigned; as well as a need for a rational process to

be developed which could effectively implement the 2008 Guidelines in many thousands of often very small sites.

As well as the Handbook, PNOTM introduced two other innovations – the WCPA UK Protected Areas Assessment Panel and Statements of Compliance (see below) – to help determine which places were truly protected areas as defined by IUCN.

This exercise was particularly revealing in two respects:

- It became clear that several types of officially designated areas had been included in the WDPA in the past, which on closer study by the Assessment Panel clearly did not meet the IUCN definition of a protected area. Notable among these were Heritage Coasts in England and Wales, AONBs in Northern Ireland, and National Scenic Areas and Regional Parks in Scotland.
- It was also possible to show that many thousands of individual areas owned or managed by conservation NGOs met the IUCN definition, even though they had not previously been included on the WDPA.

Step 4: Assign management categories and governance types

Once the question 'Is this a protected area?' had been answered positively, further questions regarding management categories and governance types could be asked as follows:

- What IUCN management category should the protected area be assigned to? The Handbook provided detailed keys and descriptive material to encourage a step by step assessment of management objectives to aid the determination of the most appropriate IUCN management category (the full list of categories is given on the inside back cover). Again, the keys in the Handbook were useful in decision-making but not sufficient. The names that IUCN attaches to the categories were not used in the Handbook because of the confusion that can occur between these and the national names for protected areas: in the UK, for example, all national parks have been classified not as Category II (which IUCN terms 'national parks') but as Category V (protected landscape/seascape).
- What governance type should the protected area be assigned to? The type of governance was assigned using one of the four types described in the 2008 Guidelines (*see inside back cover*), along with the supporting material there, in the UK Handbook and in subsequent guidance from IUCN (Borrini-Feyerabend et al., 2013).

Step 5: Data collection and reporting

Once protected area status had been confirmed, data providers were invited to compile lists of their protected areas, with management categories and governance types, in accordance with UNEP-WCMC's Data Standards (UNEP-WCMC, 2012). In the case of government agencies, established data protocols were respected; but with the NGO data sets, which had never been included before, large bodies of new data on the UK's protected areas were

BOX 2: Statements of Compliance (as of October 2014)

- Areas of Outstanding Natural Beauty in England and Wales
- Areas of Outstanding Natural Beauty in Northern
 Ireland
- Butterfly Conservation reserves
- John Muir Trust reserves
- Marine Conservation Zones
- Marine Protected Areas
- National Nature Reserves in England, Wales and Scotland
- National Parks in England and Wales, and in Scotland
- National Scenic Areas
- National Trust land in England, Wales and Northern Ireland
- National Trust for Scotland land
- Plantlife reserves
- RSPB reserves
- Scottish Wildlife Trust reserves
- Sites of Special Scientific Interest and Areas of Special Scientific Interest
- Special Areas of Conservation
- Special Protection Areas
- Wildfowl and Wetlands Trust reserves
- Wildlife Trust reserves in England, Wales and Northern Ireland
- Woodland Trust ancient woodland sites
- World Heritage Sites
- UNESCO Biosphere Reserves
- UNESCO Geoparks

collected, reviewed by the Assessment Panel and then transmitted to UNEP-WCMC.

Data collection has been challenging. WDPA data standards were new to many in both the official and NGO sectors, and additional tasks were not always welcomed by staff already responsible for many other data management jobs. To overcome this, PNOTM invested in a pilot scheme with the Scottish Wildlife Trust to test and demonstrate the practicality of what was being asked, held face-to-face meetings with data staff and supported a UNEP-WCMC training workshop for data managers. Where NGOs faced difficulties in providing full digitised data, or were cautious about revealing the full details of holdings because it might advantage rival interest groups, UNEP-WCMC agreed to accept point data rather than boundary polygon detail.

A dialogue that was developed with the UK Joint Nature Conservation Committee (JNCC) helped clarify the position with regard to 'statutory data'. Previously, the statutory nature conservation body in each UK country sent data on statutorily designated sites directly to JNCC for onward transmission to the EEA and its Common Database on Designated Areas (CDDA). PNOTM encouraged the data providers to transmit this information via the Assessment Panel before it went to JNCC.

PNOTM collected four types of data from contributing participants:

- 1. Information required for the completion of the SoCs (see below).
- 2. Standard data for each site, or group of sites, for entries in the WDPA, following the form required by the WDPA Data Standards. These are of three kinds: a minimum requirement of very basic information; 'core content' (including the management category); and an 'enhanced' or complete data set (including the governance type). PNOTM encouraged participants to provide data at the third, highest level if possible.
- **3.** Spatial boundaries of protected areas were provided as digital polygons (.shp format). Where boundary polygon data were unavailable, the central geographic point location (latitude and longitude) was accepted, in accordance with the WDPA standards.
- **4.** Contact details on individuals responsible for protected areas data.

Innovations designed to ensure quality control

IUCN advises that there should be an independent and informed process to verify and confirm decisions regarding protected areas, especially: i) when establishing if a site is a protected area in IUCN terms; and ii) when assigning to it a management category and governance type (Stolton et al., 2013). Despite the range of published and on-line guidance from IUCN on how to make such judgements, no two cases are exactly alike and decisions of this kind are not always easy, often requiring informed judgement. For these reasons, PNOTM introduced three novel ways to help ensure that decision making was consistent, independent, transparent and informed: preparing a UK Handbook on the IUCN categories system, setting up the WCPA UK Assessment Panel, and calling for Statements of Compliance from those responsible for groups of protected areas.

Publication of a national Handbook on the application of the IUCN guidelines in the UK

IUCN's global guidance on protected area categories is inevitably broad-brush, applying in principle to all countries. What is often needed is a 'bridge' between that global guidance and the national situation – thus making the former relevant to the latter. The UK Handbook, completed during the first phase of PNOTM, performed this function. It proved to be an essential tool in explaining how the IUCN advice should be applied in a specifically UK context. It demonstrated the value of using the IUCN categories system in the UK, introduced some novel assignment keys and included examples of the application of the categories in the UK. It also explained how the remaining work involved in PNOTM would be undertaken, including the setting up of the Assessment Panel and the purpose of SoCs. In effect it provided a blueprint for much of the project. Any country embarking on an assignment exercise should consider the need to prepare such tailor-made national advice on the IUCN system.

The IUCN WCPA UK Assessment Panel

The IUCN NCUK, acting on the advice of the project steering group, set up the WCPA UK Assessment Panel whose role was explained in the Handbook as 'to assess the material collected, including the SoCs' (IUCN NCUK, 2012, p.11). This followed a number of trials in other areas of the world and is part of an international effort within IUCN WCPA to increase the use of the 2008 Guidelines and to improve the accuracy of assessments by appointing accredited members of WCPA to be members of national Assessment Panels (Stolton et al., 2013). Using the SoCs (see below), the Assessment Panel looked at each designation to verify whether or not it met the IUCN definition of a protected area, and to confirm the proposed classification by management category and governance type; it also looked at a number of individual protected areas to confirm proposed assignments. The panel's membership was approved by the Chair of IUCN WCPA, its six members all being senior members of WCPA in the UK, who had worked closely with the categories system for many years. Through this critical process of peer review, every candidate for protected areas status was subject to rigorous discussion, sometimes involving several iterations between those arguing the case and the Assessment Panel.

Statements of Compliance

Early on in the project, it became clear that a structured approach would be needed to the Assessment Panel's work. Building on a suggestion made during a PNOTM workshop, 'Statements of Compliance' (SoCs) were requested from those representing different kinds of candidate protected areas. The Handbook advised that SoCs be produced for a conservation site or group of sites. The panel gave guidance on the form and content of SoCs in the form of a detailed template. In this way they had before them proposals for potential protected areas which were set out in a consistent, comparable, verifiable and transparent form.

SoCs have been produced for most official designations and for almost every major NGO in the conservation field as listed in Box 2. Each statement consists of three common elements:

- **1.** A standard introduction (drafted by the panel) explaining the purpose of the SoC.
- **2.** A critical review of the policy context, for example any relevant legislation affecting the site or group of sites, or the legal objectives of the NGO, which indicate the purposes for which the areas are managed.
- **3.** The answers to the questions asked in a key contained in the Handbook which relates to each part of the IUCN definition of a protected area (e.g. 'Is the site a clearly defined geographical area?' and, 'Is the main management objective nature conservation?').

In addition, most SoCs also contain the proposed assignments of management categories and governance

types, and some provide answers to questions contained in other keys in the Handbook. The full texts of all 23 SoCs can be found on the IUCN NCUK web site (http://www.iucn-uk. org/projects/protectedareas/tabid/65/default.aspx).

In reviewing the SoCs, the Assessment Panel took several kinds of decisions:

- In some cases, they confirmed the sites described were protected areas that met the IUCN definition.
- In others, they sought further information from the authors, sometimes challenging claims made. Several SoCs were extensively redrafted as a result before the panel confirmed they were protected areas that met the IUCN definition.
- In the case of the 38 AONBs in England and Wales, the Assessment Panel was not able to confirm the SoC until the manager of each AONB had individually provided written confirmation of their understanding of the IUCN advice, their endorsement of the 'generic' AONB SoC and their commitment to maintain or strengthen nature conservation policies in the next round of management plans.
- In some cases, the panel concluded that the sites did not meet the IUCN definition of a protected area. This included certain types of area that have previously been submitted to UNEP-WCMC for inclusion in the WDPA.

Changes in protected area data flows

Figure 1 compares how protected area data flows in the UK were organised in the past and how they are now organised following the processes put in place by PNOTM. In the past there was no input from the NGO sector and no quality control in terms of meeting the IUCN protected area definition, category or governance type. As a result of PNOTM, data flowing through to the WDPA now includes data from NGOs and incorporates the input of the Assessment Panel as a way to ensure that the data have been verified. The panel transmits its views either to the JNCC which submits the 'official' data to UNEP-WCMC via the EEA, or (in the case of NGOs' data) straight to UNEP-WCMC for inclusion in the WDPA.

SECTION 3

Putting Nature on the Map: The Results

In this section, we first provide an overview of the information about protected areas in the UK that was held on the WDPA at the time of the launch of PNOTM. We then summarise the information that was revealed through the project. Important differences between these two data sets are identified and described in some detail. The core findings of PNOTM add greatly to an understanding of the UK's system of protected areas.

The UK's system of protected areas

In order to appreciate the significance of the results of this work in revealing a better understanding of the UK's system of protected areas, the information available about protected areas in the UK *before* the project is the starting point. As noted in Box 1 (see page 5) there is some confusion about what exactly is being recorded on different databases. Table 1 shows two sets of data: the WDPA and the CDDA. For the purposes of this study the focus is the data held on the WDPA (column 2) as this is explicitly based on the IUCN system.

In the UK Handbook, we suggested that the information held in the WDPA in 2011 (see Table 1) was deficient in several respects because site data:

- had not been collected using the 2008 Guidelines;
- was not comprehensive, either in the types of sites listed or in the data provided;
- included some areas that might not meet the IUCN definition of a protected area;
- omitted other areas that perhaps ought to be included; and
- was categorised generically without regard to the different purposes for which individual sites were managed.

Furthermore, even if all the sites listed had met the IUCN definition of a protected area, data provided in this way does not allow total protected area coverage to be calculated, because it does not distinguish nested sites (e.g. a NNR might be inside an AONB, but a simple summing of the hectarage data would mean that it was counted twice).

These shortcomings in the WDPA have been confirmed by the PNOTM project. As a result of revisions, we now have a more complete and accurate record of the places in the UK that meet the IUCN definition (Table 2, page 16). Sites highlighted in **green** were considered to meet the IUCN definition, those in **yellow** being new sites to be kept under review and those highlighted in **red** did not meet the definition.

The principal differences between Tables 1 and 2 are as follows:

- Some designations have been added
- Some designations have been shown as 'non-compliant'
- The status of international designations has been clarified
- Many privately protected areas (e.g. NGO-owned or managed sites) have been added

In addition the new database generated by PNOTM differs from that held previously on the WDPA because it now includes:

- A wider range of categories
- Information on governance type

Each of these points is developed below.

Some designations have been added

The 2011 WDPA did not include European designations (SPAs and SACs), though they are now included on WDPA's list of protected areas in the UK. Marine legislation of 2009 and 2010 has now been implemented and it is necessary to add the Marine Conservation Zone and Marine Protected Area designations which have been approved in England and Scotland respectively (equivalent areas elsewhere in UK waters had not been designated as of September 2014).

Some designations shown as non-compliant

Several designations (i.e. Heritage Coasts, Forest Parks, National Scenic Areas, Regional Parks, and AONBs in NI) have been highlighted because the Assessment Panel did not consider that they met the IUCN definition of a protected area. Also, Marine Consultation Areas because they are considered to be a transitional stage towards the creation of marine protected areas in Scotland and have no permanency, and Local Nature Reserves (LNRs) as

Designations	UK sites on WDPA in 2011	UK site data sent to CDDA by JNCC in 2013					
NATIONAL DESIGNATIONS							
Area of Outstanding Natural Beauty (E, W, NI)	49	47 (2,278,315 ha)					
Area of Special Scientific Interest (NI)	226	334 (101,658 ha)					
Forest Park (UK)	0	16 (232,807 ha)					
Heritage Coast (E, W)	32	46 (163,408 ha)					
Local Nature Reserve (UK)	1,372	1,603 (53,843 ha)					
Marine Conservation Zone (UK)	0	1 (3,038 ha)					
Marine Consultation Area (UK)	2	29 (111,895 ha)					
Marine Nature Reserve (UK)	3	2 (17,807 ha)					
National Nature Reserve (UK)	403	366 (227,194 ha)					
National Park (E, W, S)	14	15 (2,262,518 ha)					
National Scenic Area (S)	40	40 (1,381,118 ha)					
Regional Park (S)	4	4 (86,160 ha)					
Site of Special Scientific Interest (E, W, S)	6,586	6,609 (2,369,663 ha)					
NGO RES	SERVES AND OTHER SITES	S					
Local Wildlife Site (UK)	0	0					
NGO nature reserve (UK)	0	1 (272 ha)					
Private Protected Area or Voluntary Reserve (UK)	0	6 (1,030 ha)					
EUROPEAN UNION DESIGNATIONS							
Special Area of Conservation (UK)	0	0					
Special Protection Area (UK)	0	0					
OTHER INTERNATIONAL DESIGNATIONS							
Ramsar site (UK)	158	0					
UNESCO Geopark (UK)	0	0					
UNESCO Biosphere Reserve (UK)	9	0					
World Heritage Site (Natural and Mixed)	3	0					

Table 1: Data on UK Protected Areas before PNOTM: Two different data sets

the variety of these, and the weakness of the statutory protection given to many of them, made it impossible to arrive at a decision that could be applied generically to all these sites (although some will be identified as protected areas where they are also SSSIs).

The status of international designations has been clarified

The 2011 database included a number of international sites without a critical consideration of their status in terms of their being IUCN protected areas. As a result of the detailed review of all of these, the Assessment Panel was able to confirm that Ramsar sites and Natural and Mixed World Heritage Sites can be considered to be protected areas. Similarly for the core and buffer zones of Biosphere Reserves, though it was established that the transition zones of BRs and Geoparks are not protected areas.

Many NGO-owned or managed sites have been added

Between 2013 and 2014, IUCN WCPA has been involved in a project to expand support for privately protected areas worldwide. New guidance proposes that an area should only be classified as a privately protected area on the WDPA if it also qualifies as a protected area according to the IUCN definition (Stolton et al., 2014). Although this may seem obvious, the WCPA project found over 50 definitions of privately protected areas in use, which made it impossible to achieve worldwide equivalence of reporting on this governance type. The global coverage of privately protected areas, therefore, remains unknown and many governments do not report them to the CBD and WDPA.

When PNOTM began, this global picture was mirrored in the UK. Although many privately protected areas were included

Table 2: Protected Areas in UK: the 2011 Data and the Results of PNOTM²

Designations	Sites on WDPA 2011	Sites meeting the IUCN definition in 2014	Summary of PNOTM findings (with reference to contents of SoCs)	
	1	NATION	IAL DESIGNATIONS	
Area of Outstanding Natural Beauty (E, W)	49	38 1,950,000 ha Evidence includes receipt of a letter of endorsement and a c to nature conservation which will be reflected in future mana plans from each AONB manager.		
Area of Outstanding Natural Beauty (NI)	-10	0	Evidence for the effectiveness of protection of nature in planning policy is insufficient at present.	
Area of Special Scientific Interest (NI)	226	334 101,658 ha	Designated by statutory bodies for the representation and protection of natural features. Increased number owing to active designation programme.	
Forest Park (UK)	0	0	There is no evidence for long term security assurance or primacy of nature for these sites.	
Heritage Coast (E, W)	32	0	Sites not derived from legislation, with no statutory standing, and no long-term security assurance.	
Local Nature Reserve (UK)	1,372	0	Sites generally do not guarantee long term protection and management for nature, so a site by site approach needs to be developed if these sites are to be included on the WDPA.	
(Nature Conservation) Marine Protected Area (S)	0	30	The Assessment Panel considers that the intent is compatible with protected area status and this designation merits recognition in principle. But this is a new designation and until the precise arrangements for the management of natural resource extraction, especially fishing, are in place the panel considers it premature to make a definitive judgement. The panel has recommended that the position is reviewed in 2017 in light of experience and especially of the interpretation of the clause that would permit potentially damaging activities where the 'public benefit outweighs the risk of damage'.	
Marine Conservation Zone (E)	0	27	The Assessment Panel considers that the intent is compatible with protected area status and this designation merits recognition in principle. But this is a new designation and until the precise arrangements for the management of natural resource extraction, especially fishing, are in place the panel considers it premature to make a definitive judgement. The panel has recommended that the position is reviewed in 2017 in light of experience and especially of the interpretation of the clause that would permit potentially damaging activities where the 'public benefit outweighs the risk of damage'.	
Marine Consultation Area (S)	2	0	A transitional stage towards the creation of MPAs in Scotland that has no permanency.	
Marine Nature Reserve (UK)	3	2	Marine nature reserves were introduced in England and Wales by the Wildlife and Countryside Act 1981, and in Northern Ireland by Article 20 of The Nature Conservation and Amenity Lands (NI) Order 1985. They were designed to conserve marine life and geological or physiographical features of special interest. They have similar status and protection to NNRs, but were specifically concerned with a marine environment, including both the sea and seabed. In view of their closeness to NNRs, it was not thought necessary to prepare a separate SoC for these two sites, which will in any case soon be replaced by other forms of marine protected areas arising out of the Marine and Coastal Access Act 2009.	
National Park (E, W, S)	14	15 2,262,518 ha	Legislation for the 15 NPs in the UK affords a statutory basis which delivers nature conservation goals.	
National Scenic Area (S)	40	0	Evidence of the effectiveness of protection of nature in planning policy is insufficient.	
National Nature Reserve (UK)	403	394 c. 224,862 ha	Legal and policy arrangements vary but the use of the statutory designation in common across the UK.	
Regional Park (S)	4	0	Regional Parks are not able to demonstrate the primacy of nature in policy and the decision making process.	
Site of Special Scientific Interest (E, W, S)	6,586	6,609 2,369,663 ha	Designated by statutory bodies for the representation and protection of natural features.	

2 As there is now clarity on what is and what is not a protected area in the UK, data is now being collected and being added to the WDPA. Until this process is completed, we cannot give a definitive figure for area under protection, as without the UNEP-WCMC analysis it is impossible to identify nested sites (i.e. when one parcel of land and water is defined as a protected area under different designations). The full analysis and a new map will be published in 2015.

Designations	Sites on WDPA 2011	Sites meeting the IUCN definition in 2014	Summary of PNOTM findings (with reference to contents of SoCs)			
NGO RESERVES AND OTHER SITES						
Local Wildlife Site (UK)	0	0	These areas (42,000 sites covering 690,000 ha) do not enjoy a sufficient level of protection to be considered protected areas.			
Privately Protected Areas managed by NGOs (UK)	0	3,640 475,991 ha	NGOs own multiple sites in the UK. Site data in nine SoCs received from landowning/managing NGOs were analysed. Some sites will have been listed on the WDPA previously as SSSIs, but not all. Updated site data includes governance information and WDPA data management ensures areas with multiple designations (e.g. NGO site and SSSIs) are not double counted, but any variation in boundary will be shown.			
Privately Protected Areas managed by individuals and Voluntary Reserve (UK)	0	0	This group of sites includes community conservation areas and private conservation initiatives developed by landowners, business etc. As there is no centralised body representing these reserves no SoC for the group could be developed. So, as with local nature reserves, a site by site approach needs to be developed if these sites are to be included on the WDPA.			
		EUROPE	EAN DESIGNATIONS			
Special Area of Conservation (UK)	0	615 8,013,587 ha	SACs are the means to implement the 'Habitats Directive' throughout the UK as an EU Member State. These areas are also covered by other designations in the UK.			
Special Protection Area (UK)	0	270 2,750,335 ha	SPAs are the means to implement the EU Directive on the Conservation of Wild Birds throughout the UK as an EU Member State. These areas are also covered by other designations in the UK.			
INTERNATIONAL DESIGNATIONS						
Ramsar sites (UK)	158	148	UK policy is to treat Ramsar sites in the same way as Natura sites; most are also SSSIs or ASSIs; this means that Ramsar sites in the UK are always equivalent to IUCN protected areas (this is not true in a global sense).			
UNESCO Geopark (UK)	0	0	Analysis undertaken and concludes with six reasons why the UK's seven Geoparks do not at present meet the IUCN protected area definition.			
UNESCO Biosphere Reserve (UK)	9	6	The core and buffer zones of BRs meet the IUCN definition but the transition zone does not. BRs often include sites designated for nature and/or landscape protection.			
World Heritage Site (Natural and Mixed) (UK)	3	3	WHS aim to protect the Outstanding Universal Values for which they were inscribed. These three areas are managed for the protection of their natural values.			

in protected area data, this was usually only the case if they were recorded as statutorily designated sites (e.g. NGO reserves which were also SSSIs or NNRs, or in shared management with a government agency). The NGOs' reserves were not recorded as such in the national data because there had not previously been a coordinated effort to collect data on privately protected areas across the UK. However, NGOs are very important for nature conservation in the UK, and PNOTM focused on gathering data from this sector. (There are also sites owned and/or managed by individuals, businesses etc. and these could follow the processes outlined here, such as completing a Statement of Compliance, and be recorded on the WDPA, although this has not been done as yet.)

Perhaps the most significant finding of PNOTM is that so many sites owned (or leased) and managed by conservation NGOs meet the IUCN protected area definition and can therefore be added to the WDPA. The position is summarised in Table 3 (see page 18). Table 3: Statements of Compliance approved for sites owned and/or managed by the major nature conservation NGOs in the UK

NGO name	Total area (ha) (SSSI overlap where relevant & available)	Average size (ha)	Number of sites & country-specific data
Butterfly Conservation	457 (240 SSSI)	20	23 sites in England and Wales
John Muir Trust	24,461 (7,662 SSSI)	2,718	Scotland 9 sites
National Trust	135,645 (c. 100,000 SSSI)	230	England & Wales 555 sites Northern Ireland 35 sites
National Trust Scotland	46,305 (33,686 SSSI)	1,653	Scotland 28 sites
Plantlife	1,775 (no SSSI data)	85	England 18 sites Scotland 1 site Wales 2 sites
Royal Society for the Protection of Birds	150,486 (97,875.67 SSSI)	710	212 sites in the UK
Wildfowl and Wetlands Trust	2,632 (1,536.7 SSSI)	292	England 6 sites Northern Ireland 1 site Scotland 1 site Wales 1 site
Wildlife Trusts	90,000 (c. 61,550 SSSI)	39	England 1,946 sites Northern Ireland 18 sites Scotland 120 sites Wales 216 sites
Woodland Trust	24,230 (2,493.5 SSSI)	56	England 290 sites Northern Ireland 9 sites Scotland 42 sites Wales 95 sites
Totals	475,991 (c. 300,000 SSSI)	131	3,630

The data in Table 3 shows that NGOs:

- Manage 1.94 per cent of the UK land surface as protected areas (475,991 ha out of 248,531.52 km² (UK Office of National Statistics, 2014)).
- Manage 12.5 per cent of the UK's SSSI/ASSIs (305,044 ha out of 2,471,321 ha).
- Manage c. 300,000 ha of SSSI/ASSI land from a total NGO landholding of 475,991 ha, (meaning that around 176,000 ha of land meeting the IUCN protected area definition may not previously have been accounted for on the WDPA).
- The data also reveal other key facts about the role of NGOs in owning and managing land that meets the protected area definition:
 - The NGOs with the most sites of this kind are:
 1. The Wildlife Trusts (2,300 sites), 2. Woodland Trust (1,029 sites), 3. National Trust (590 sites).
 - The NGOs with the largest overall landholding of this kind are: 1. RSPB (150,742 ha), 2. National Trust (135,645 ha), 3. The Wildlife Trusts (90,000 ha).
 - The NGOs with largest average-size holding of this kind are: 1. John Muir Trust (2,718 ha), 2. National Trust Scotland (890 ha), 3. RSPB (703 ha).
 - The NGOs that manage most SSSI land are:
 1. National Trust (c. 100,000 ha), 2. RSPB (97,875 ha),
 3. The Wildlife Trusts (c. 61,550 ha).

The Assessment Panel considered SoCs from all of the above bodies and believes that all the land listed in Table 3 meets the IUCN definition of a protected area³. Many of the sites owned by these and other NGOs will have been recorded already on the WDPA as SSSIs, but certainly not all of them. For the first time, PNOTM provides an authoritative, national picture of the contribution made to the management of land and water for conservation purposes in the UK by conservation NGOs. Of the NGOs that have taken up the PNOTM challenge, the role of three is considered in more detail in Boxes 3, 4 and 5.

A wider range of categories

Until now, protected areas on the WDPA have been classified as either Category IV (Habitat/Species Management Area) or Category V (Protected Landscapes/ Seascapes). PNOTM has shown that, while most sites fall into one of these two categories, there are also a small number that would be more correctly categorised under one of three additional categories: Ia, II and III.

Category la sites are strict nature reserves. Examples of these are small islands with (geographically) limited public

³ Note that a SoC has been approved for Scottish Wildlife Trust (SWT) reserves, and a separate SoC for Wildlife Trust reserves in England, Wales and Northern Ireland has been received. As all the wildlife trusts operate under similar principles and SWT was used as a test case, it is assumed for the purposes of this report that Wildlife Trusts' sites meet the IUCN definition.

Protected areas owned/managed by NGOs have not been officially recorded in UK protected area data before the PNOTM project. The Farne Islands, England © Equilibrium Research

BOX 3: The Royal Society for the Protection of Birds – RSPB

The RSPB manages more than 150,000 ha of land in the UK. While this represents only 0.52 per cent of the UK land area the reserves under RSPB management protect 80 per cent of the UK's rarest or most threatened bird species. As of August 2014, of the 198 sites managed by the RSPB, seven are solely owned by the Society covering an area of 180 ha. The rest are in shared governance of several kinds.

Although RSPB staff were initially uncertain of the relevance of the categories system to their work, they were persuaded to develop a SoC. This showed that all their reserves can be considered to be protected areas. Discussion then moved on to how to categorise them. The panel recommended that while 176 should be considered as Category IV sites, there were also a number of sites that were more properly considered as Categories Ia, II and III. The Category Ia sites are mostly reserves on uninhabited islands with restricted public access; Category II is represented by two large reserves in Scotland, Abernethy and Forsinard, and three island reserves with managed tourism; the one Category III site is Ailsa Craig which is of geological and cultural interest as well as an important seabird colony.

access, such as the Farne Islands (owned by the National Trust) or the Barra Head islands of Mingulay and Berneray in the Western Isles (owned by the National Trust for Scotland). There are also a few other areas that are strictly protected, such as Wytham Woods SSSI in Oxfordshire (owned by Oxford University) to which access is by permit only.

Category II sites are national parks in the IUCN sense, i.e. basically large, mainly natural areas managed to protect ecosystems where responsible tourism is accepted, and thus very different from lived-in, working landscapes that are typical of UK national parks (Category V). The Assessment Panel considers that there are a handful of sites in Scotland which allow for the protection of whole ecosystems, including these extensive areas:

- The Isle of Rum, covering 10,000 ha, including SSSI, SAC and SPA (owned by SNH) and managed for geodiversity and biodiversity conservation.
- The Abernethy estate, Cairngorms 13,600 ha (owned by RSPB) and managed for habitat restoration and species protection in the Caledonian pine forest ecosystem.
- The Torridon Estate, about 6,500 ha (owned by National Trust for Scotland) and including a large SSSI, and the adjacent SNH-owned Beinn Eighe estate with its SSSI and NNR covering over 11,000 ha. Both areas are managed for ecosystem protection, plus landscape, biodiversity and geodiversity conservation with public access.

Category III sites are natural monuments or features. There are many examples throughout England, Scotland and Wales protected as SSSIs as part of the GB Geological

BOX 4: The National Trust

The National Trust owns 250,832 ha of land in England, Wales and Northern Ireland; its purposes, as set out in legislation of 1907, are the 'preservation for the benefit of the Nation of lands and ... buildings of beauty or historic interest and, as regards lands, for the preservation of their natural aspect, features and animal and plant life' (there is a separate National Trust in Scotland with similar purposes). While many countryside properties were acquired specifically for their scenic or scientific value, most of the land in the Trust's ownership consists of the parks and agricultural estates (mostly run as agricultural tenancies) which are attached to country houses. The Trust has committed itself to following the highest nature conservation standards wherever it can, but this is hard to deliver on much of the tenanted land. An important feature of the Trust's ownership, which it shares uniquely with the National Trust for Scotland, is the ability to declare land as inalienable, which means land cannot be sold or mortgaged against the Trust's wishes without special parliamentary procedure, so providing a very high level of protection.

In discussion with the PNOTM team, it was possible for the Trust to identify that part of its estate that met the IUCN definition of a protected area. For it to qualify, it was agreed that land had to be:

- in holdings of over five hectares (to remove any buildings or gardens);
- held inalienably; and
- either managed by the Trust itself, or form part of an SSSI (or both).

This formula excluded agricultural tenancies that were not covered by statutory nature conservation protection. The area of land that met the agreed test of being a protected area was 135,645 ha, i.e. 54 per cent of all land in the Trust's ownership.

Conservation Review. For example, in Scotland, the Glencoe SSSI with its remnants of a super volcano and ring dykes as evidence of cauldron subsidence and the Parallel Roads of Lochaber SSSI, with its glacial lake shorelines in Glens Gloy, Roy and Spean; in Northern Ireland, the Giants Causeway WHS and, in England, the Dorset and East Devon Coast WHS.

Information on governance types

The Assessment Panel considered which type of governance was in place in each accepted protected area. In many cases, this was fairly straightforward but sometimes the decision called for a fine judgement, for example, how is assignment done for a nationally designated site like an SSSI which is managed under an agreement between The Woodland Trust is a conservation charity operating throughout the UK with a mission to protect forests, woods and trees. It looks after more than a thousand woods covering 190 km2 in total. All are managed under a shared governance model. Of these sites, 436 contain ancient woodland, of which 70 per cent is semi-natural ancient woodland - land which has been under tree cover since at least 1600. It is these 436 sites that the Assessment Panel agreed were protected areas as they have all been recorded as such on the appropriate Ancient Woodland Inventory, which is held and maintained by the relevant statutory nature conservation body in each constituent part of the UK. This decision excluded many other of the Trust's woodland and forested sites which are mainly new broadleaf planting. All the Woodland Trust's protected areas have been categorised as Category IV.

a government agency and a private landowner? In this instance, the panel concluded that the governance type was 'shared governance'. However, land which is owned and managed by an NGO or a community, and which it manages in support of a statutory designation, was considered to be an example of private governance. Virtually all UK sites could at one level be regarded as 'shared governance', but to do so would eliminate much of the usefulness in considering governance; in practice choices were made in line with the dominant governance type in a particular protected area.

By far the most important governance finding is that private governance (either solely or shared with others), which is mostly the land owned and managed by conservation NGOs, plays a very large part in delivering conservation in the UK. While this was widely understood, it had gone virtually unrecognised in the official statistics until now.

Conclusions

PNOTM has built up a picture of protected areas in the UK which is guite different from that previously reported to WDPA. The project has questioned the inclusion of several designations in the WDPA because, when subject to critical and objective scrutiny, they do not meet the IUCN definition of a protected area. At the same time, this has been offset by recognising the extensive contribution of conservation NGOs, which has not previously been recorded in official UK and international databases. This core finding provides evidence of how nature conservation has moved beyond public policy and is increasingly also becoming a third sector or community-led activity. At a time when resources for conservation in the public sector are declining and policy commitment to conservation has weakened at least in parts of the UK, PNOTM is able to report that the place of conservation is as strong as ever in civil society.

SECTION 4

Putting Nature on the Map: The Outcomes

In this section we report on the outcomes. PNOTM has been a coordinated and multi-year conversation about conservation which has brought about several important changes. These are of three kinds: there is a better understanding of the international standards for protected areas in the UK and their management for nature conservation; there is better quality data about protected areas in the UK; and important advances have been made in the way in which the IUCN definition, categories and governance type assignment exercise is undertaken that will ensure future high quality data collection in the UK, and which could also help in carrying out similar exercises elsewhere. Perhaps most important of all, there has been an active and continuing debate about the changing role of many protected area types in the UK and a strong desire amongst stakeholders to remain part of the international system, strengthening conservation management if necessary to achieve this.

Improved understanding of international standards for protected areas

At the outset of PNOTM there was a low level of understanding of the IUCN categories system among government and NGO bodies. While many had a general awareness of the existence of the system, few had a proper appreciation of its significance. That was apparent, for example, from the quality of the data previously returned to UNEP-WCMC and in the widespread misunderstandings that were revealed during our contacts with data providers. Very few NGOs, even those with a strong international role, seemed aware of the relevance of the system to their work and how it could provide a benchmark against which to assess their efforts. There were of course individuals who were familiar with IUCN's work on protected areas but institutional understanding was rather low.

PNOTM has taken all those who have been involved in the project, including the authors of this report, on a learning journey. In the first place, this was about informing UK protected areas practitioners of the significance of the new protected area definition and the associated principles and guidelines that were adopted by IUCN in 2008. Then there was an exercise to promote their wider and more informed use through the development of the UK Handbook. Finally, the protected areas community was engaged directly through the writing of SoCs and collecting data. The

signing-off of the SoCs can be seen as certifying that the learning process had been successfully completed, as no SoC could be adopted without the author understanding and appreciating the concepts around the IUCN protected areas system, in particular what a protected area is, and how the management categories and governance types should be applied. However, the knowledge which has been acquired about the IUCN system in this way is probably still confined to guite a small group of people who have been directly engaged with the project. While there is not yet full institutional awareness of the IUCN categories system among all those who can benefit from it, and spreading a wider understanding of its value to all who can make good use of it is bound to take time, the project has nonetheless deepened and widened knowledge about the system, and its value to conservation, among the UK protected areas community.

Better understanding of the implications of the IUCN system for conservation management

More specifically, the project promoted a better understanding of the system among protected area managers and of its implications for them. The clearest example of this is the 38 AONB managers in England and Wales who, as part of the adoption of the SoC, each personally signed a document confirming their familiarity with the standards of nature conservation provided by the IUCN guidelines. They all stated their commitment to maintain or strengthen nature conservation policies in the next round of management plans to make these objectives a stronger

Dormouse (Muscardinus aveilanarius) found in the ancient oak woodland of Hembury Wood, Devon, England © National Trust

focus of management. Although this particular requirement was not adopted in the case of NPs, their managers (ten in England, two in Scotland and three in Wales) were involved in signing up to the 'generic' SoC for all the parks. The Scottish Wildlife Trust volunteered to test the idea of SoCs and to assign categories and governance types: again site managers were involved in this exercise. In this and in other ways, individual protected area managers across the UK recognise the relevance of the IUCN system and engaged actively in addressing the overarching focus on nature conservation enshrined in meeting the IUCN definition.

Confirmation of the status of protected areas in the UK

PNOTM has also removed uncertainty in a positive way by confirming the status of several UK designations, notably SSSIs. Following a well-attended workshop to discuss the conservation role of SSSIs, the Assessment Panel considered that the progressive strengthening of the legal protection given to SSSIs had ensured that they now meet IUCN's definition of a protected area. The panel was also able to confirm that the newly introduced designations for marine sites (MCZ in England and MPA in Scotland) met the IUCN definition and should be added to the WDPA.

Most importantly, the project confirmed that the nature reserves managed by Britain's conservation NGOs were also

protected areas in the IUCN sense. Such areas have now been given proper recognition as part of the UK protected area effort and their reserves appropriately categorised. In the case of the 250,000 ha owned by the National Trust, staff who were working with PNOTM have been able to carry out a comprehensive exercise (see Box 4) to help identify which parts of their estate meet the IUCN definition. These valuable areas can now be included on the WDPA and contribute to UK obligations to the CBD Programme of Work on Protected Areas and Aichi Biodiversity Target 11.

Identification of sites which do not meet the definition and actions required to strengthen protection

Just as the project has helped to build a better understanding of what a protected area is, it has also clarified what is not a protected area according to the international definition of IUCN. In particular, the Assessment Panel's view of designations previously on the WDPA showed that some failed to meet the objectives and principles set by the IUCN definition, even though they are important tools for conservation. An example is Heritage Coasts in England and Wales. While recognising that their purposes included the conservation, protection and enhancement of 'the natural beauty of the coasts, their marine flora and fauna, and their heritage features', the panel noted that Heritage Coasts had no legal or statutory foundation, their permanence was not assured and there was no hierarchy that gave conservation policies priority. The panel also concluded that other areas which did not meet the standards set out by IUCN should be removed from the WDPA, some because their purposes were not really nature conservation at all (for example, NSA which is primarily about scenery) or because the statutory protection was too weak (for example, AONBs in Northern Ireland). These decisions were not easy and it was recognised that they caused disappointment amongst many people committed to such sites.

However, the process of developing SoCs for sites such as these that were found 'non-compliant' helps identify actions which could be taken to strengthen protection. If this were done, they could in time be added to the list of protected areas in the UK which already meet the IUCN definition and which have reasonable security of purpose and clarity of conservation objectives. Strengthening protection of these areas will also help the UK meet its international conservation commitments, such as the CBD Aichi Biodiversity Targets.

Other areas which do not meet the IUCN definition are Local Wildlife Sites (they have different names in different parts of the UK). These, in the words of the Lawton report, "are non-statutory, having only minimal protection through recognition in national planning policy, and are highly vulnerable to damage and loss" (Lawton, 2010, p.13). Again, strengthening protection of these areas (over 42,000 sites covering 690,000 ha in England alone) would help protect them and the important potential contribution they could make to nature conservation.

Revealing the variety of conservation management approaches and governance types

A notable achievement of PNOTM has been to reveal that protected areas in the UK are in fact managed in a much more varied manner than has been previously recorded. At the outset of the project, the UK's protected area data records assigned all protected areas either to Category IV (Habitat/Species Management Area) or Category V (Protected Landscapes/Seascapes). By exploring with protected area managers the true nature of management aims, it has been shown that a number of areas are more accurately assigned to Category Ia (Strict Nature Reserve), Category II (National Park) and Category III (Natural Monument or Feature).

Similarly PNOTM has revealed the complicated nature of protected areas governance in the UK. While some areas are of the government type of governance, an important finding of this work is to confirm that NGOs manage a large part of the UK's most important protected areas estate. IUCN considers most of this to be a form of private governance, though there are also areas where governance is shared, with government, NGO and/or private landowning interests working together.

Improved the quality of data about protected areas in the UK

The second major outcome, improved data about the UK's protected areas, flows directly from the improved understanding of international standards for protected areas. This has been evident in several ways.

Collecting more complete data and ensuring it is added to the WDPA

There is now much more complete data about UK protected areas in the form of a consolidated database about all public and private protected areas in the UK. This has been achieved through working closely with specialists at the UNEP-WCMC in Cambridge, who provided guidance in applying the WDPA Data Standards, particularly to the NGO community. These standards provide a common template for attribute data which enabled uniformity to be achieved between existing data sets held by UNEP-WCMC and the new information provided through PNOTM.

The NGO contribution has now been placed on an equal footing with official protected area statistics in the WDPA. This took considerable effort by the NGOs concerned, who invested time and expertise in adapting their information to the data attributes required by the WDPA standards. In the case of The Wildlife Trusts, this meant overcoming obstacles surrounding data ownership requiring creation of an altogether new database for over 2000 nature reserves.

Collecting more accurate data

The data sets of UK protected areas are now more accurate. PNOTM identified some questionable data (notably about places that do not meet the IUCN definition of a protected area) and substituted data that have been independently reviewed by the Assessment Panel.

Providing a better map of protected areas in the UK

The more complete, and more accurate UK digitised data set supplied to the WDPA will be uploaded onto the Protected Planet website. The data will then become openly available to policy makers, who can use it with greater confidence in shaping nature conservation policy at the national level and in reporting by the UK government at the international level – see also Section 5 below. The data is also freely available through the website to interest groups, local communities and the general public.

Improved assignment processes of the 2008 Guidelines

PNOTM has been a pioneering project. There were few other examples to draw upon in addressing our ambition to apply the 2008 IUCN definition and guidance to a complex system of protected areas such as exists in the UK. At the same time, a project of this kind can only succeed with the support of many stakeholders. PNOTM had to break ground in two ways: it had to be far more inclusive in its approach to

The need to reconnect people to nature starts with active educational programmes, -such as the one at Tentsmuir NNR, Scotland © Lorne Gill/SNH

protected areas assignment than had been the case in the UK in the past; and far more innovative.

Developing an inclusive process for assigning the 2008 Guidelines

PNOTM was based on an inclusive process, involving the land/water-managing conservation movement in the UK. Stakeholders in all regions were engaged: government bodies at the national and local level, national and local NGOs, and individual experts (drawn from the academic world, consultants etc.). While some were already involved as representing members of IUCN or of one of its Commissions, this was by no means always the case. The complexities of the UK's constitution, with its varying degrees of devolution between the four countries, each with different and diverging conservation regimes, further complicated the exercise.

Some of the more important features of this inclusive process include:

- Hosting the exercise within the IUCN NCUK
- Setting up a small project team of WCPA experts to steer the work
- Establishing a wider advisory group to obtain broader buy-in from all stakeholders
- Holding workshops as part of the exercise to address difficult issues
- Working closely with UNEP-WCMC
- · Creating a project web page and categories newsletter
- Creating a 'Categories Club' to create a sense of engagement.

Developing innovative approaches to implementing the 2008 Guidelines

As PNOTM developed, the need was found to create innovative solutions to help spread understanding of

the project and ensure we had the means to apply, and demonstrate, consistent standards. Three of these were particularly important and have already been described in earlier sections of this report:

- The production of a UK Handbook. This took IUCN's global advice from the 2008 Guidelines and showed how it should be applied in the UK, including keys to help answer questions about the IUCN definition and category assignment. Though not perfect, keys like these can help the assignment exercise.
- Statements of Compliance. These used a standard set of questions to examine systematically how sites or designations compared with the IUCN definition. This process reduced areas of possible disagreement and helped identify the key issues in deciding if a site or designation met the IUCN definition and on assigning management categories and governance types. The SoCs are a transparent resource available on the IUCN NCUK website for anyone to review.
- A National Assessment Panel. The panel used WCPA experience in the UK to review each SoC in detail. The panel worked well but involved considerable effort. Objectivity and consistency were necessary throughout, which involved the panel entering into dialogue with proponents of different types of protected areas.

No two countries are alike and the UK experience will only be relevant in part to other countries. Nonetheless the inclusive and innovative approaches adopted in PNOTM have lessons for wider application. IUCN commends the UK experience, especially the SoCs, in the recently published IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types (Stolton et al., 2013).

SECTION 5

Putting Nature on the Map: The Implications

In this section we describe the implications of the project, and of how the experience and the data generated, could help strengthen conservation practice in the UK. This is all the more important as it comes at a time when a number of issues (e.g. developments approved in protected areas) threaten to weaken the safeguards previously in place within protected areas in the UK.

The fundamental purpose of PNOTM has been to provide better information about protected areas so as to improve the prospects for nature conservation in the UK. There are many implications of this work – and of the results which it has brought to light – as follows.

Helping the UK to meet its international conservation obligations

The UK government is a party to the CBD, and so is committed to implementing its recommendations and reporting to it regularly on the steps taken to protect biodiversity, including the establishment of protected areas. In this context, the important obligation is Target 11 of the Aichi Biodiversity Targets (see Box 1).

The UK can now use the data generated through PNOTM in its assessment of how well it is doing in respect to Target 11 in the knowledge that the data has been collected in a rigorous manner, independently reviewed, compiled according to IUCN advice and in line with the standards of the WDPA (the source of official CBD data).

The UK has other international obligations that concern protected areas (e.g. Ramsar Wetlands Convention, World Heritage Convention and the Man and Biosphere programme). In all these cases, the UK is better equipped to fulfil its obligations, and to report on how it has done so, through the additional information that this study has brought to light. An example would be the ability to demonstrate the extensive contribution being made to meeting national commitments through the efforts of conservation NGOs; another would be the opportunity to remove the confusion about the status of areas like Geoparks or the transition zones of Biosphere Reserves, which are not protected areas though they may on occasion have been described as such.

Contributing to international conservation work

There are many other ways in which the UK interacts with other countries in the area of conservation, for example through its bilateral aid programmes, through UK-based conservation and development NGOs working in developing countries, and through professional co-operation, especially globally through IUCN WCPA and within Europe under the auspices of the EU or the EUROPARC Federation. The quality of information exchange, advice and technical assistance will all be helped by a better understanding of the IUCN system – with its 'common language' about protected areas – among those in the UK.

Raising the profile of protected areas in the UK

As noted in the previous section, an outcome of the project is greater understanding of the significance of the IUCN categories system, based around the international definition of a protected area. Through the wider, more consistent and better understood use of this term, it seems reasonable to assume that protected areas will enjoy a higher profile in future.

One area in which it would be particularly helpful to use the term 'protected areas' in a consistent way is in relation to planning policies that are applied differentially to areas of environmental sensitivity, for example policies in national planning policy frameworks. While there will be occasions when certain policies should apply only to certain types of protected area, such as SSSIs, it would be easier for policy makers and the public to understand if policies, designed to protect important biodiversity or valued landscapes from development, were to be applied consistently to all protected areas that meet the IUCN definition. This approach would need to be applied without de-valuing the important contribution to nature conservation made by sites that do not yet meet the criteria.

Helping to assess the effectiveness and economic value of protected areas

More and more efforts are being made to assess the management effectiveness of protected areas, and the economic and non-economic benefits that they bring, both locally and nationally. Although assessment of this sort goes beyond the scope of PNOTM, having more reliable data on protected areas is an invaluable baseline for such exercises.

Clarifying the nature-focus of protected landscapes

The recognition of a site as a protected area according to the international standards set by IUCN implies that nature conservation has priority. This was a particularly difficult issue to determine in the case of landscape designations like NP, AONB and NSA, which focus on the protection of 'natural beauty' rather than specifically on biodiversity. It merits some discussion here.

Several of the SoCs discuss this challenge, for example the AONB SoC does so in these terms:

'The statutory definition of "natural beauty" includes a reference to the conservation of the area's flora, fauna and geological and physiographical features; so it includes elements of nature. But at the same time the concept of natural beauty is more than biodiversity and geodiversity, as it also includes important cultural and historic elements, and has a subjective dimension. On the other hand "nature", as defined by the 2008 IUCN Guidelines, refers to all levels of biodiversity and to "geodiversity, landforms and broader natural values". Such a broad view of nature would seem to include all the natural aspects of natural beauty. A common sense conclusion therefore is that, while nature conservation is not exactly the same as the protection of natural beauty, the protection of natural beauty will normally benefit nature conservation. The exception is where there is a very specific conflict with some other aspect of the protection of natural beauty (for example, the safeguarding of some heritage features in the landscape); in practice, such conflicts are uncommon and usually localised.

'AONBs are established with a clear conservation purpose that will normally take priority over development considerations. However AONBs are lived-in, working landscapes, and the law does not provide for every decision to be taken with conservation considerations trumping all others, although it does require that such considerations should always be taken into account and given much more weight than they would elsewhere. So AONBs are places where special measures are taken to safeguard natural beauty, but not places where there is an absolute bar on any development that might conflict with nature. On the other hand, in many AONBs there are extensive areas where nature protection is assured through a range of landownership and land management measures, and where at least 75% is managed for the prime purpose of conservation as required by IUCN.'

The debate which is captured by this discussion was at the heart of the challenge to Category V referred to earlier. When PNOTM started, there was some publicly stated scepticism amongst some senior conservation figures about whether core protected landscapes designations, including NPs and AONBs, would meet the IUCN definition.

The Assessment Panel examined in great detail the question of whether the UK protected landscape designations are protected areas in the IUCN sense, and above all the issue of the standing of nature conservation within them. While the panel considered that AONBs in England and Wales especially were near 'the outer limit' of what can be considered to be protected areas, it was reassured by the subsequent correspondence with the individual managers that they understood and agreed with the IUCN definition and its implications that priority should be given to nature conservation. The strong debate about this was heartening and it is hoped and believed that this will contribute to long-term changes in management to give greater emphasis to nature conservation. In this way, designations that were originally aimed mainly at preservation of landscape and cultural values could play an increasingly important role in biodiversity conservation.

However, the panel considered that Northern Ireland's AONBs did not qualify. Nor did Scotland's NSAs (see Table 2). Despite several attempts to improve the status of NSAs, the authorities in Scotland have not provided sufficient evidence for the Assessment Panel to be convinced that this designation passes the IUCN definition tests. Recommendations are made in Section 6 on what the panel consider would need to be done to remove the ambiguity between landscape designations and nature conservation objectives, especially in Scotland and Northern Ireland.

This work has been undertaken at a time when economic considerations are being accorded a very high national priority in the UK, whilst the protection of landscapes seems to have been downgraded as a policy priority. If the credibility of the protection offered by such areas is undermined, the case for their retaining IUCN recognition may need to be re-visited.

Encouraging cooperation between different authorities and organisations managing protected areas

Since the 1990s, the UK has been on a journey towards greater devolution of political powers from central government to the governments of Scotland, Wales and Northern Ireland. Powers in the field of conservation have been among many others that have been affected. As a result, each country is developing separate policies and practices in nature conservation to meet its needs and aspirations. Yet natural systems are not, of course, constrained by political boundaries and so co-operation in nature conservation across the UK is essential. The IUCN system for identifying and categorising protected areas provides a means of maintaining informed dialogue and co-operation across the borders of each constituent country (federated countries such as Australia and Canada

School trip to Attenborough Nature Reserve, England, owned and managed by Nottinghamshire Wildlife Trust © Equilibrium Research

recognised the importance of the categories system several years ago for just this reason) and between the many different organisations (government and private) managing protected areas. The results of PNOTM strengthen this foundation for continuing dialogue into the future.

Clarifying the place of protected areas within landscape scale nature conservation strategies

It would have been of great benefit to Sir John Lawton and his group in writing their report on biodiversity in England in 2010 to have had access to the database of protected areas being generated by PNOTM. They would then have had data on all the areas that met international standards of conservation, including those NGO sites not designated as SSSIs.

Looking to the future, the existence of this universal, reliable, mapped database of protected areas will provide a key building block for new landscape scale initiatives, such as Nature Improvement Areas in England, the RSPB's Futurescapes programme, the Living Landscape projects of the Wildlife Trusts and the National Trust's Land, Outdoors and Nature Strategy, all of which set out visions that include land held by official bodies, NGOs and privately owned properties. Such data will also be invaluable to Local Nature Partnerships in England and similar groupings of concerned conservation interests elsewhere in the UK.

Developing a better understanding of the potentially damaging impacts of policies, projects and practices on nature conservation

In the current economic and political climate, where economic considerations are being given priority and there is a focus on major new infrastructure projects, energy generation and housing developments, it is important to be able to assess accurately the environmental impact of various policies, projects and practices, and to assess which options are least destructive. A good starting point would be to ask which have most adverse impact on protected areas, and their immediate environments, for example in respect of alternative routes or sites for infrastructure. The kind of mapbased data now produced by the UNEP-WCMC Protected Planet website provides excellent material to help in such comparative assessments, at least at the early, strategic stage when certain options need to be ruled out.

Informing the quality of debate about conservation in the UK

Generally, all who need information about conservation and protected areas – including planners, developers, conservation bodies, education and research institutions – will now have access, through the Protected Planet website, to readily available and more reliable data. It could, for example, inform the JNCC and SNH both of which are currently reviewing their approaches to biodiversity conservation. This website, freely accessible to the general public, will also provide information on protected areas to anyone who is interested in the use of land or the protection of nature. In this way, the data generated by PNOTM should lead to better informed debate and decision making, for example, in the discussion stimulated by JNCC in their paper *Advancing conservation science thinking on protected areas in the UK* (JNCC, 2014) and the SNH review of approaches to biodiversity conservation and the role of protected areas (SNH, 2014).

Providing a foundation for improved data collection PNOTM is only the first stage in a continuing exercise to maintain and update information about protected areas in the UK, stored on the WDPA and available on the Protected Planet website. It will of course be necessary to keep the data up to date, for example taking account of changes in policy and practice, as well as legislation and new designation programmes, such as MPAs. Site level protection must be maintained if IUCN protected area status is to be retained; the danger of losing protected area recognition could be used by the conservation community as an incentive to insist on keeping to high conservation standards.

Striving towards continual improvement of management for nature conservation

There are three ways in which the results of PNOTM can be used to assist the public and NGO sectors to pursue higher standards of site management and protection:

- By encouraging managers of 'marginal' protected area designations to strengthen their conservation commitment so that they retain their status as protected areas (as with the AONBs in England and Wales).
- By helping managers of 'potential' protected areas that are currently 'non-compliant' to see what they need to do to meet the IUCN definition in future.
- By offering all land managers a powerful information, communication and management tool. For example, the National Trust can use it to help fulfil its commitment to make its land management more sympathetic to biodiversity conservation, in its nature reserves and in SSSIs and across much of its tenanted farmland too. Knowing that more than 100,000 ha of its land currently falls short of meeting the IUCN standard of protection, provides a good indication of the challenge it faces and the ways in which it might measure progress.

SECTION 6

Putting Nature on the Map: Moving Forward

In this final section of our report, we first identify nine recommendations addressed to our partners in this work, designed to apply the PNOTM approach. Then, based on the results from PNOTM, we provide our reflections on the wider significance of our work, particularly addressing the need for a new emphasis on the role of protected areas in the UK. This leads us to one final recommendation addressed to IUCN NCUK for a **Programme of Work on UK Protected Areas** to follow on from its support for PNOTM, and to build on its results.

Applying the PNOTM approach

The engagement of so many organisations in the PNOTM project, and their desire to ensure that their type of protected area meets international standards, is testament to the innovative and collaborative approach PNOTM has developed in the UK. To build on these achievements, a number of important issues with recommendations are addressed as follows:

Data collection

The data collection undertaken for PNOTM should not be a one-off effort. New information will become available, monitoring will reveal changes in objectives, policies will change and new initiatives will be developed. So all the managing bodies and the statutory agencies should periodically review the relationship of the areas for which they are responsible against the IUCN protected areas definition, categories and governance types.

Recommendation 1: All statutory agencies and other bodies owning and/or managing protected areas should update their data sets every three years starting in 2017, using the IUCN 2008 Guidelines, UK Handbook and the findings of PNOTM, and make their returns for the WDPA.

Assessment Panel

Given the importance placed on objective assessments and the success of the panel in undertaking reviews of SoCs in a timely fashion, the IUCN NCUK should retain the WCPA Assessment Panel so as to maintain standards for data collection and assessment through the periodic review processes. Recommendation 2: IUCN NCUK should retain the WCPA Assessment Panel to undertake reviews of new data and to continue to encourage the wider adoption of international approaches to protected areas categorisation in the UK.

Data consistency

PNOTM has identified a number of different ways in which protected area data is collected for inclusion in the WDPA and the CDDA. Since data collection protocols differ and the scrutiny of data quality varies, the resulting data sets are confusingly inconsistent and not easy to compare.

The growing differences of approach between the data collection standards used in each part of the UK has also been noted. This is a cause for concern. It is right that each country should design the protected areas system it needs, but this is about the way *international* data standards are applied. So it is also right that all parts of the UK should aim at greater consistency of approach and continued improvements in the quality of protected areas data.

Recommendation 3: UNEP-WCMC should work with the JNCC and the EEA to improve the quality, consistency and comparability of UK data included in the WDPA and CDDA.

Recommendation 4: the statutory bodies should retain a cross-border dialogue, involving the JNCC, to maintain a reasonable consistency of approach in the collection and transfer to central databases.

More people are encouraged to visit and understand the importance of protected areas, such as these conservation volunteers, Wester Moss SSSI, Scotland © Lorne Gill/SNH

'Non-compliant' areas

Not all of the types of designated sites in the UK meet the IUCN definition of a protected area at present; some are 'non-compliant'. The outcome of the SoC process provides the managing authorities and site managers of these noncompliant areas with an indication of the action required to secure recognition in future, for example through new legislation and/or improved site management.

Recommendation 5: The bodies responsible for all designations which are non-compliant should consider what they need to do to make them compliant.

Recommendation 6: The Assessment Panel should reconsider the 'non-compliant' areas by 2017 to establish if they have made progress towards achieving the IUCN standards.

New marine protected areas

The establishment of systems for marine protected areas in England and Scotland are welcomed. These are seen as a step forward and, on the basis of current proposals, are considered to be protected areas. However, until the precise arrangements for activities to be permitted are agreed between the parties and fully implemented, especially for various types of fishing and other natural resource exploitation, the Assessment Panel cannot predict with certainty that these designations will continue to meet the test of being protected areas. The position in Wales and Northern Ireland – where MPAs have yet to be established – is also uncertain. The panel should therefore review the implementation of MPAs in 2017.

Recommendation 7: The Assessment Panel should review the effectiveness of the implementation of marine conservation areas in 2017.

Nature conservation in landscape protection areas

A particular challenge in the UK is how the definition of 'natural beauty', which applies to most landscape designations, might better promote the objective of nature conservation. Areas designated to protect landscapes do not always have nature conservation as a clear management objective and therefore some fail the IUCN definition test. This is currently the case in Scotland with NSAs, in England with Heritage Coasts and in Northern Ireland with AONBs. As was demonstrated in the response from the AONB authorities in England and Wales, the case can be strengthened with the adoption of policies and management objectives to favour nature conservation, which will at the same time reinforce landscape conservation. It is hoped that similar reviews of these landscape designations can be carried out with the same outcome.

Recommendation 8: The relevant bodies in Scotland, England and Northern Ireland should examine and seek approval for the changes needed for NSAs, Heritage Coasts and AONBs respectively to pass the IUCN definition.

Communicating the findings and recommendations of PNOTM

Reports have a habit of gathering dust, so all involved need to ensure that this work is widely known, the data used and the implications understood and acted upon. Therefore, there should be a process of briefings of key constituencies within the UK – governmental, conservation NGOs, plus land owning and managing bodies. Also the approach and findings should be shared internationally at the 2014 World Parks Congress and the events preceding it, such as the CBD COP12, and any follow up in Europe and other parts of the World. An article to share this work with colleagues in WCPA should also be published in PARKS.

Recommendation 9: IUCN NCUK should lead a process for communicating the findings of PNOTM to the World Parks Congress 2014; and also to relevant stakeholders within the UK and its constituent parts, and to colleagues within the WCPA network in Europe and beyond, within a year of this report being published.

The wider significance of this work

The above represents a challenging set of recommendations, but there are several reasons why a still wider follow up to the PNOTM work is required.

First, while PNOTM was designed to address an apparently technical question about how protected areas in the UK should be categorised, to see this work only in that light would be to miss the central point: better information is needed about the places being protected if a better job of nature conservation is to be made. Section 5 on Implications indicates the many ways in which the results of this work could be used.

Secondly, in carrying out this work, which has involved working with all the major conservation players in all countries of the UK, a more acute awareness of the many threats that face our protected areas today, and of the opportunities that protected areas offer to society, has developed. Some of these are touched on in Section 5. The three most essential matters that should be addressed are these:

- There are signs that policy in many parts of the UK shows a weakened commitment to protect the natural environment as compared with support for development. For example, 'overriding national interests' is increasingly being used to justify undermining protection. The authors of this report believe that there is a need for strong policies, applied consistently, to safeguard the protected areas that have been identified by PNOTM as meeting international standards against the damaging impacts of development.
- Despite all the efforts of the many partners engaged in PNOTM, it is clear that nature is still in retreat in general, and indeed in many protected areas as well. The continuing loss of biodiversity is evidence of a serious failure in our collective efforts to protect special places; so are the many threats to the ecosystem services which protected areas help to provide. Now that PNOTM has established which areas meet IUCN's international standards, there should be redoubled effort to ensure their effective protection.

 On the more positive side, it is considered that the data from PNOTM should be used to provide a boost to the many efforts underway or planned to develop ecological networks across the broader landscape in all parts of the UK. Protected areas should be the basis for such networks. Using the results of our work in this way, at the landscape scale, should help to resolve many of the tensions between development proposals and nature protection.

Finally, the designation status, management category and governance type are only a means to an end. Without effective management, the classification work would be pointless as protected areas' objectives could not be met. IUCN has published a Management Effectiveness Framework (Hockings et al., 2006), parallel advice to its 2008 Guidelines on categories. Having clarity on which areas meet the protected area definition and the focus of management outlined by the management category provides the baseline for a national assessment of the quality of management of protected areas in the UK. The IUCN management effectiveness advice should be used to develop an assessment process suitable for the UK context; the recommended procedures have been widely accepted and implemented around the world, by 2013 at least 46 per cent of all countries worldwide had assessed at least 30 per cent of their protected area estate (Coad et al., 2013), but not, so far, in the UK. Of course, effectiveness evaluation systems exist already, for example government targets for the favourable condition of SSSIs and Natura 2000 sites. Nevertheless, statutory agencies should consider establishing systems of protected area management effectiveness assessment, based on the IUCN methodology.

This wider agenda goes beyond the scope of PNOTM. However, it is very much within that of the IUCN NCUK. The final recommendation is, therefore, addressed to the national committee:

Recommendation 10: The IUCN NCUK should use the results of PNOTM, and follow up its support for the project, in developing a Programme of Work for UK Protected Areas. This should, like PNOTM, engage both the official and NGO sectors, in all parts of the UK, and aim to:

- Secure a better understanding of the factors that are undermining the effectiveness of protected areas.
- Develop the case for the importance of protected areas in land use and development planning, as well as environmental policy, in the UK and its constituent parts.
- Propose what needs to be done to strengthen the protection given to UK protected areas.
- Show how their management effectiveness should be monitored and improved, using IUCN guidance.

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Page x: Eager visitors viewing a While-tailed eagle nest protected by the Forestry Commission on Mull, Scotland © Lindsay Crofts

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IUCN PROTECTED AREA DEFINITION, MANAGEMENT CATEGORIES AND GOVERNANCE TYPES

IUCN defines a protected area as:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

The definition is expanded by six management categories (one with a sub-division), summarized below. **Ia Strict nature reserve:** Strictly protected for biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values **Ib Wilderness area:** Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition **II National park:** Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities

III Natural monument or feature: Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove
 IV Habitat/species management area: Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category

V Protected landscape or seascape: Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values
 VI Protected areas with sustainable use of natural resources: Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims

The category should be based around the primary management objective(s), which should apply to at least three-quarters of the protected area – the 75 per cent rule.

The management categories are applied with a typology of governance types – a description of who holds authority and responsibility for the protected area. IUCN defines four governance types.

Governance by government: Federal or national ministry/agency in charge; sub-national ministry/agency in charge; government-delegated management (e.g. to NGO)

Shared governance: Collaborative management (various degrees of influence); joint management (pluralist management board; transboundary management (various levels across international borders)

Private governance: By individual owner; by non-profit organisations (NGOs, universities, cooperatives); by for-profit organisations (individuals or corporate)

Governance by indigenous peoples and local communities: Indigenous peoples' conserved areas and territories; community conserved areas – declared and run by local communities

For more information on the IUCN definition, categories and governance type see the 2008 *Guidelines for applying protected area management categories* which can be downloaded at: www.iucn.org/pa_categories

Putting Nature on the Map project IUCN National Committee UK

Grosvenor Villa, Village Road Rhosesmor, Mold Flintshire CH7 6PJ UK

chris@cmeweb.co.uk www.iucn-uk.org

sh Natural Heritage has Nádair na h-Alba

The Sothorp Trust