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Parks is published to strengthen international collaboration among protected area professionals and to enhance their role, status and activities by:

- maintaining and improving an effective network of protected area managers throughout the world, building on the established network of WCPA;
- serving as a leading global forum for the exchange of information on issues relating to protected area establishment and management;
- ensuring that protected areas are placed at the forefront of contemporary environmental issues such as biodiversity conservation and ecologically sustainable development.

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Cover:

Clockwise: Serengeti National Park, Tanzania. Photo: Sue Stolton. Lundy Island, off the west coast of England, is surrounded by the UK's first Marine Nature Reserve, Category IV. Photo: Adrian Phillips. Participants of the Speaking a Common Language workshop, held in the Cotswolds, UK in 2003. Photo: Adrian Phillips. Hosky Island and Reef lie off the coast of Gladstone and are situated in a green zone of the Great Barrier Reef Marine Park, Australia. Photo: GBRMPA.

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Editorial

ADRIAN PHILLIPS



PROTECTED AREAS COME IN ALL SHAPES AND SIZES, and with a bewildering variety of management systems, ownership and governance patterns. More than 25 years ago, IUCN developed a preliminary system of protected area management categories to help make sense of the world's growing protected areas network, aiming both to define and record the growing number of areas identified specifically for the conservation of nature and natural resources. Between 1984 and 1992, the IUCN Commission on National Parks and Protected Areas (now the World Commission on Protected Areas – WCPA), reviewed and updated this preliminary system. In 1992, the IVth World Parks Congress in Caracas confirmed a number of changes, including the addition of a category of extractive reserves, and the IUCN General Assembly approved the current categories in 1994.

The *Guidelines for Protected Area Management Categories* was published in a joint English, French and Spanish document by IUCN and the World Conservation Monitoring Centre in the same year. This gave an introduction to the system, explained each category in turn and set out a number of worked examples relating to existing protected areas. Since then, IUCN and its partners have published additional guidance on application of the categories, for example within Europe, and IUCN has taken part in a number of national and regional events to consider how the categories system can be applied in different parts of the world. In recent years there has been an active debate about its significance in setting standards for such matters as mining and forestry operations affecting protected areas.

The *Speaking a Common Language* project was initiated in 2002 to assess the ways in which the IUCN protected area management categories have performed to date, whether conditions have changed and if new inputs are required. It was timed to report back ten years after the current system was established and to feed into deliberations at three key events: the 2003 Vth World Parks Congress (WPC), the 2004 7th Conference of the Parties to the Convention on Biological Diversity (CBD), and the IUCN 3rd World Conservation Congress, also held in 2004. The project was carried out jointly by a team from Cardiff University (Kevin Bishop and Adrian Phillips) and Equilibrium (Sue Stolton and Nigel Dudley), working with IUCN (Pedro Rosabal) and the UNEP World Conservation Monitoring Centre (Jerry Harrison and Stuart Chape).

Work was supported financially by a consortium of NGO and industry sponsors, including Shell International, BP plc, the International Council on Mining and Metals, Conservation International, WWF and IUCN. To oversee the work, there was a steering committee consisting of the sponsoring organisations and representatives from IUCN and UNEP-WCMC, which met several times during the two years that the project continued. The sponsors were involved in the steering committee on the understanding that they had no power to direct the final outcome of the research, nor its recommendations, which remain the responsibility of the research team. The mixture of sponsors, all of whom had strong opinions about the IUCN categories, was in some ways challenging but also meant that the debates that the research team were seeking to encourage were at the heart of the project. We are deeply grateful to all the sponsors not only for their financial support, without which the project would not have taken place, but also for the time and energy they gave to addressing the questions that the project raised.

The objectives of the project were to:

- Establish the impact and effectiveness of the 1994 IUCN guidance, and the earlier version, in terms of the adoption and influence of the categories system, nationally, regionally and internationally;
- Examine what was required to develop and promote the objectives-based system of protected area categories itself, and consider how it should be linked to other initiatives in protected area planning and management;
- Involve a wide range of stakeholders in the work, notably through the World Parks Congress (Durban, South Africa, September 2003) and other related events;
- Guide the programme of work on protected areas of the CBD; and
- Provide technical advice on the Category System to a proposed programme of work on protected areas for IUCN.

The project was structured around 18 case studies looking at different applications of the categories, and questions raised about their use and future. These ranged from a very detailed report on legal aspects, prepared by Benita Dillon at the Environmental Law Centre in Bonn, to shorter analyses written by the research team. Many other individuals and specialists were involved in commenting on and, in some cases, contributing to the case studies, which were then mined for a series of more general messages that were condensed into a report. Key analytical work and the development of recommendations took place at a workshop in the Cotswolds in England in May 2003. These were further discussed at workshops at the WPC and CBD. The results are therefore not just the thoughts of four individuals but a synthesis that benefits from contributions from a wide cross-section of opinion throughout IUCN, its members and partners.

The recommendations of *Speaking a Common Language* have been well received. The key findings were included in the *Durban Action Plan* that emerged from the World Parks Congress and some were reiterated in the *Programme of Work on Protected Areas* adopted by the Parties of the CBD. The research findings were also reported to, and in broad terms endorsed by, the 2004 World Conservation Congress.

This issue of *Parks* draws upon some of most important discussions, case studies and conclusions brought to light in the *Speaking a Common Language* project. Adrian Phillips starts with a history of the categories, to explain succinctly how and why they were developed and have changed over time. Benita Dillon summarises the detailed work on legal aspects of categories prepared for the project by the Environmental Law Centre. Application in the marine environment has caused particular concerns and an article by Jon Day and Sue Wells looks at this, updating and extending the case study that appears in the *Speaking a Common Language* report. We present two industry perspectives, by David Richards and Andrew Parsons of the International Council on Mining and Metals, and Sachin Kapila of Shell International. An essay on how the categories have been applied in Vietnam, by Sue Stolton, Nguyen Thi Dao and Nigel Dudley, shows the issue in a national context. Stuart Chape of UNEP-WCMC looks at the critical issue of assigning categories and then the research team, in cooperation with Jerry Harrison and Pedro Rosabal, look at emerging issues and ways forward. All the writers express their own opinions, which are not necessarily those of IUCN.

This issue provides only a taste of some of the material within the complete report. There is no space here, for example, to look at the application of the category system in relation to multiple-use protected areas, transboundary protected areas, issues relating to forests, governance, NGO use or the critical issue, well covered by the project, of implications for indigenous and traditional peoples, and community-based initiatives. Readers interested in further information should consult the complete report – including all 18 case studies – which can be accessed on the WCPA website: <http://www.iucn.org/themes/wcpa/theme/categories/categories.htm> or ordered at the online IUCN bookstore: <http://www.iucn.org/bookstore/>

As the extensive list of topics covered in the report makes clear, the *Speaking a Common Language* project touched on the heartland of many of IUCN's concerns. The implications of its recommendations are therefore wide and substantial. However, the report marks only the beginning of a process. Following the endorsement of this work by the CBD and the WCC, it is to be hoped that IUCN will give priority to developing the categories system along the lines proposed in the *Speaking a Common Language* report. As a first step, the World Commission on Protected Areas is setting up a task force to make sure that the recommendations emerging from the programme develop from ideas into action.

Kevin Bishop, Nigel Dudley, Adrian Phillips and Sue Stolton.

The history of the international system of protected area management categories

ADRIAN PHILLIPS

There are now more than 100,000 protected areas. They have been set up for many different reasons, vary greatly in size, are given many different names at the national level, and derive from diverse national legislation and other initiatives. Many different interests manage and own protected areas. There is therefore great potential for confusion in this complex, fast changing situation. A first attempt to address this by categorising protected areas was made by IUCN in 1978. In 1994, IUCN adopted a revised system of six management categories. This system is now being widely used and has recently been endorsed by the parties to the Convention on Biological Diversity.

THE ORIGINS OF THE MODERN SYSTEM of protected area management categories adopted by IUCN in 1994 can only be understood in the context of the history of protected areas themselves.

Protected areas are cultural artefacts and their story is entwined with that of human civilisation. Over 2,000 years ago, some areas were set aside by royal decree in India for the protection of natural resources (Holdgate and Phillips, 1999). In Europe, hunting grounds were protected for the rich and powerful for a thousand years. And the idea of protection of special places is universal: it occurs among the traditions of communities in the Pacific (“tapu” areas) and in parts of Africa (sacred groves), for example.

The origins of “modern” protected areas are to be found in the nineteenth century. The English poet, William Wordsworth, wrote in 1810 of his vision of the Lake District as “a sort of national property”. In 1832, the American poet, explorer and artist, George Catlin, pointed to the need for “...a nation’s park, containing man and beast, in all the wild and freshness of their nature’s beauty”. In 1864, with the Yosemite Grant, the US Congress gave a small part of the present Yosemite National Park to the State of California for “public use, resort and recreation”. The first true national park came in 1872 with the dedication of Yellowstone by United States law “as a public park or pleasuring ground for the benefit and enjoyment of the people”.

This idea of beautiful places protected for the public emerged in several other countries around the same time. In 1866, the British Colony of New South Wales in Australia took the first steps in creation of the modern Blue Mountains National Park, and in 1879, Royal National Park was created in the wilds south of Sydney. In 1885, Canada gave protection to hot springs in the Bow Valley of the Rocky Mountains, part of which became the Banff National Park. Several forest reserves were set up in South Africa in the last years of the nineteenth century. In 1887 a Maori Chief offered the Crown 2,400 ha of the sacred summits of Tongariro, Ngauruhoe and Ruapehu: these became in time part of Tongariro National Park in New Zealand.

Thus the modern protected areas movement had nineteenth century origins in the then “new” nations of North America, Australia, New Zealand and South Africa, but other countries were quick to follow suit. During the twentieth century the idea spread around the world, though the driving force has been different in different regions. For example, in Africa, a number of large game parks were created; in Europe, landscape protection was more common. But everywhere a remarkable expansion in the number and types of protected areas has taken place over the past century. The growth in the number and extent of protected areas is shown graphically in Figure 1.

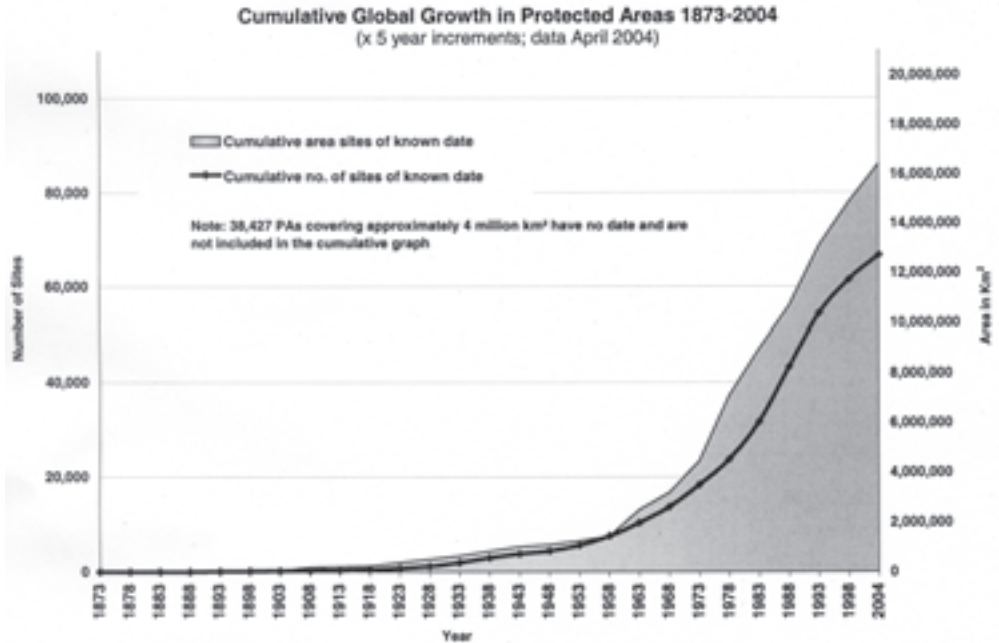


Figure 1. Growth in protected areas, by total area and number. UNEP-WCMC.

By now, nearly every country has adopted protected area legislation and designated sites for protection. Many organisations in the public, private, community and voluntary sectors are active in creating areas for protection. And many different terms are used at the national level to describe protected areas: hundreds of names in all, with – for example – about 50 in Australia and some 12 in the UK. There are also international networks of protected areas at the global level (e.g. those under the World Heritage and Ramsar Conventions) and regional level (e.g. Natura 2000 in Europe). In all, there are well over 100,000 sites that meet the IUCN definition of a protected area (see below). Together, these cover nearly 11.7% of the land surface of the planet (data source: UNEP/WCMC).

Already this very short history hints at some of the issues that gave rise to the development of the categories system. Thus protected areas:

- have been set up for different reasons;
- exist in wilderness areas and in long-settled landscapes;
- are present in forests, savannahs, grasslands, mountains, deserts, wetlands, ice caps, lakes and at sea;
- vary greatly in size;
- have been given many different names at the national level;
- are based on national legislation or international agreements of many kinds;
- came about through various types of governmental and other initiatives;
- are owned by different interests; and
- are run by different kinds of organisations.

The start of an international framework for protected areas

As protected areas were set up in one country after another, each nation developed its own distinct approach, and there were initially no common standards or terminology. If there was a shared idea, it was only that the best scenic, wildlife or outdoor recreation areas of each country should be identified and protected for the public good.

The first effort to clarify terms was made in 1933, at the International Conference for the Protection of Fauna and Flora, held in London. This recommended four protected area categories (national park, strict nature reserve, fauna and flora reserve, and reserve with prohibition for hunting and collecting), which were widely used by colonial powers in Sub-Saharan Africa. In 1942, the Pan American Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere also incorporated four types: national park, national reserve, nature monument and strict wilderness reserve (Brockman, 1962).

The emergence of a world-wide conservation movement after the Second World War encouraged the idea of a global framework for protected areas. This has been led by the IUCN network – or commission – of volunteer experts on protected areas. The International Commission on National Parks was established in 1960 under the leadership of Hal Coolidge. It soon became the Commission on National Parks and Protected Areas of IUCN (CNPPA); since 1996 it has been the World Commission on Protected Areas (WCPA).

A 1959 resolution of the 27th session of the United Nations Economic and Social Council (ECOSOC) recognised that “national parks and equivalent reserves are important factors in the wise use of natural resources”. In response, IUCN’s new protected areas commission compiled a 300-page “World List of National Parks and Equivalent Reserves”. This – the first version of the now familiar “UN List” of protected areas – was published in 1961 and presented at the Seattle First World Conference on National Parks in 1962 (Ravenel and Redford, 2001). At this meeting, the first proper debate about the ‘nomenclature’ of protected areas, which was based on a paper by C.F. Brockman, took place (Brockman, 1962).

The ECOSOC decision was endorsed by a resolution of the 16th Session of the General Assembly of the United Nations (December 1962), on ‘Economic Development and Nature Conservation’ (IUCN/WCMC, 1998). In 1966, IUCN published the second version of the list, prepared by Sir Hugh Elliott, under the guidance of the new chair of the Commission on National Parks, Jean-Paul Harroy (a French version was published a year later). In it, a simple classification system was used: ‘national parks’, ‘scientific reserves’ and ‘natural monuments’ (Holdgate, 1999).

The IUCN General Assembly in New Delhi in 1969 defined ‘national park’ as: “a relatively large area where one or several ecosystems are not materially altered by human exploitation and occupation”. The assembly called on countries “not to describe as national parks” those areas that did not meet the definition.

IUCN’s Senior Ecologist, Dr Ray Dasmann, wrote a paper on the Development of a Classification System for Protected Natural and Cultural Areas for the Second World Conference on National Parks (1972), which was published a year later (IUCN, 1973) and then in the proceedings of the congress (Dasmann, 1974). Dasmann proposed the following system of protected areas:

1. Protected Anthropological Areas (Natural Biotic Areas, Cultivated Landscapes, Sites of Special Interest)
2. Protected Historical or Archaeological Areas (Archaeological Sites, Historical Sites)
3. Protected Natural Areas (Strict Natural Areas, Managed Natural Areas, Wilderness Areas)
4. Multiple Use Areas
5. National Parks
6. Related Protected Areas (Provincial Parks, Strict Nature Reserves, Managed Nature Reserves, National Forests and Related Multiple Use Reserves, Anthropological, Archaeological or Historical Reserves).

The 1972 2nd World Conference on National Parks recommended that IUCN, “taking into account existing terminology in international treaties and in close consultation with governments concerned (to):

- Define the various purposes for which protected areas are set aside; and
- Develop suitable standards and nomenclature for such areas” (Elliott, 1974).

IUCN published further editions of the UN List between 1971 and 1975, and the World Directory of National Parks and Protected Areas in 1975.

By the mid-1970s, several trends were apparent:

- More protected areas were being set up (see Figure 1);
- IUCN publications documented this growth in the number and extent of protected areas, but also revealed confusion over the meaning of terms like 'national park' and 'nature reserve'.
- Some people favoured a focus on national parks; other types of protected areas were covered by catch-all phrases like 'equivalent reserves' or 'other protected areas' which indicated that they were thought of as being of secondary importance.
- Other conservationists advocated a variety of approaches to protected areas to complement the attention on strictly protected areas.
- New international programmes and treaties were making an impact (e.g.: the Man and Biosphere Programme, initiated in 1971; the Ramsar Wetlands Convention, 1971; and the World Heritage Convention, 1972).
- A debate was underway on developing an agreed international terminology for all kinds of protected areas.

The 1978 IUCN Report on Categories, Objectives and Criteria for PAs

This was the background to the decision taken by CNPPA in 1975 to develop a categories system for protected areas, which was also a response to the request of the 1972 conference. The work was funded by the Rockefeller Foundation and led by Dr Kenton Miller, chair of the CNPPA Committee on Criteria and Nomenclature. Its final report was published in August 1978. Though issued as a "discussion paper", in fact it quickly became seen as IUCN guidance, offering clarification where there had previously been much confusion (IUCN, 1978).

The committee incorporated the agreed 1969 New Delhi definition of national park, but recognised that this was only one approach among many to protected areas conservation. "The national park was the most common method for the management of conservation areas ...(but it) can be complemented by other distinct categories, which when taken together, can provide land managers and decision makers with a broad set of legal and managerial options for conservation land management" (ibid, page 5). It advocated using a range of categories, based on management objectives rather than national names. These categories of land were to be thought of as "members of one family, free from dominance one by another".

The report envisaged that this categorisation system would:

- show how national parks can be complemented by other categories;
- help each nation to develop management categories to reflect its needs;
- ensure that "regardless of nomenclature used by nations or consistent to particular languages, a conservation area can be recognised and categorised by the objectives for which it is in fact managed" (ibid, page 6);
- help to remove ambiguities and inconsistencies due to different "administrative, institutional, legal and political mechanisms among nations" (ibid, page 6);
- help IUCN collect and analyse information on protected areas, which could then be "stored, recalled, updated and printed" (ibid, page 7);
- give the scientific community access to better data on conservation;
- give the tourism sector data on protected areas of importance to tourism;
- help IUCN play its part in international initiatives, such as the World Heritage Convention;
- help CNPPA to work with the other IUCN Commissions, e.g. in the legal and policy fields, or in relation to species protection;
- assist IUCN in securing the support of "development banks and development institutions" by showing how various conservation tools could address both conservation and development needs; and

- provide the basis for more informative versions of the IUCN directory of national parks and other protected areas.

The key points to note about the 1978 system are these:

- it involved ten categories (see Box 1);
- apart from Group C, the categories derive from the objectives for which areas are managed;
- all categories were considered important; no category is inherently more valuable than another;
- it encouraged governments to develop systems of protected areas based on using a range of appropriate categories;
- the system assumed that land in certain categories was likely to be owned or managed by government, but recognised that other interest groups might also be involved; and
- the system sought to influence land use planning within areas not previously considered as protected.

But limitations in the system soon became apparent:

- It did not contain a definition of a protected area as such, so the 'universe' covered by the categories as a whole was not clear;
- The scope of what was to be covered by the system was not clear, because it used several terms to describe the entire suite of ten categories: 'categories for conservation management', 'conservation areas' and 'protected area categories';
- It included two international categories (IX and X), while acknowledging that many such sites might be classified under a previous category. As the categories were not always to be considered discrete, this was confusing;
- Some of the distinctions between the categories were unclear; and
- The system was terrestrial in its concepts and language; more explicit references to the marine environment were needed to make it universally applicable.

The adoption of the 1994 system of Protected Areas Management Categories

Although the 1978 system enjoyed only a provisional and consultative status, it was used in compiling the 1993 UN list of protected areas (which set out protected areas under Categories I–V). It was also taken up in some national legislation – see Article in this edition of Parks by Scanlon and Dillon. However its shortcomings, indicated above, soon became evident. In 1984, therefore,

Box 1. The protected areas categories system advocated by IUCN in 1978.

Group A: categories for which CNPPA will take special responsibility

- I Scientific Reserve
- II National Park
- III Natural Monument/National Landmark
- IV Nature Conservation Reserve
- V Protected Landscape

Group B: other categories of importance to IUCN, but not exclusively in the scope of CNPPA

- VI Resource Reserve
- VII Anthropological Reserve
- VIII Multiple Use Management Area

Group C: categories that are part of international programmes

- IX Biosphere Reserve
- X World Heritage Site (Natural)

CNPPA established a task force under Hal Eidsvik to consider updating the categories system. It had to take on board not only concerns about the 1978 system but also subsequent resolutions on relevant topics like wilderness areas, indigenous peoples, and protected landscapes and seascapes passed at the IUCN General Assemblies in 1988 and 1990. The task force conducted a wide-ranging debate, initially amongst Commission members, then more extensively. It reported to CNPPA members in 1990, advising that a new system be built around Categories I–V of the 1978 system, whilst abandoning Categories VI–X (Eidsvik, 1990). The report was adopted by CNPPA at its meeting in Perth (27 November, 1990) and tabled for information at the IUCN General Assembly a day later. It was however referred by CNPPA to the next World Parks Congress for review before any action was taken upon it.

A three-day workshop took place at the Fourth World Congress on National Parks and Protected Areas (a title that suggests that even then national parks were seen as somewhat different from other protected areas) in Caracas, Venezuela¹. This addressed the task force's recommendations, and was informed also by a paper from an IUCN consultant (Foster, 1992).

Acting on the workshop's conclusions, the Caracas Congress adopted Recommendation 17, urging CNPPA and the IUCN Council to: endorse a system of *six* protected area categories based on management objectives; recommend this to governments; and explain it through guidelines. In fact, the IUCN Council referred this matter to a higher level. Thus in 1994, ten years after the review of the 1978 system had begun, the IUCN General Assembly, meeting in Buenos Aires, approved the new system, commended it to governments and called on CNPPA to finalise guidance to explain it.

Later in 1994, IUCN and the World Conservation Monitoring Centre (WCMC) published *Guidelines for Protected Area Management Categories*, in English, French and Spanish (IUCN/WCMC, 1994). The guidelines provide an introduction to the system, explain each category in turn and set out a number of worked examples of the application of the system to existing protected areas.

The 1994 guidelines summarised

Introducing the 1994 guidance, the then Chair of CNPPA, P.H.C. (Bing) Lucas wrote: "These guidelines have a special significance as they are intended for everyone involved in protected areas, providing a common language by which managers, planners, researchers, politicians and citizens groups in all countries can exchange information and views". This idea of the system as a common language is shown in Figure 2.

Figure 2. Talking the Same Language.



1 Note that during the 1990s this remaining use of "national parks and (other) protected areas" was progressively removed from: the title of CNPPA, which became in 1996 the World Commission on Protected Areas; the *UN List of National Parks and Protected Areas*, which became the *UN List of Protected Areas* in 1998; and the title of the international parks congresses, since the event in 2003 was called the 'Fifth World Congress on Protected Areas'.

The purposes of the Guidelines are developed further in the main body of the text:

- “to alert governments to the importance of protected areas;
- to encourage governments to develop systems of protected areas with management aims tailored to national and local circumstances;
- to reduce the confusion that has arisen from the adoption of many different terms to describe different kinds of protected areas;
- to provide international standards to help global and regional accounting and comparisons between countries;
- to provide a framework for the collection, handling and dissemination of data about protected areas; and
- generally to improve communication and understanding between all those engaged in conservation.”

Note that the system was not originally intended to set or drive up management standards, nor to lay down a precise template to be applied at the national level. Indeed the guidance states that the system was not to be used as a “driving” mechanism: protected areas should first be established to meet national or local needs and then be “labelled with an IUCN category according to the management objectives”.

Part I of the Guidelines sets out a definition of a protected area:

An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

This definition forms the foundation of the system, as it defines the ‘universe’ to which the categories system applies. If an area does not meet this definition, it is not a protected area as far as IUCN is concerned and is not covered by any protected area category; but any area that is recognised under this definition should be capable of being assigned to a category.

The following should be noted about the definition of protected area:

- it explicitly applies to the marine as well as the terrestrial environment;
- it requires that there should always be a special policy for conservation of biodiversity;
- but it also allows for conservation of natural resources, and those cultural resources which are associated with these (but not cultural sites *per se*); and
- it requires that a management regime be in place (but it is understood that this may be done effectively through tradition or ownership rather than through formal legal means).

The Guidelines include an analysis of the main purposes for which protected areas – as thus defined – have been established, based upon a refinement of an earlier matrix in the 1978 version. Based on this, it goes on to recommend six categories, see Box 2.

Box 2. The PA categories system advocated by IUCN since 1994.

Areas managed mainly for:

- I Strict protection – i.e. a) Strict Nature Reserve, and b) Wilderness Area
- II Ecosystem conservation and protection – i.e. National Park
- III Conservation of natural features – Natural Monument
- IV Conservation through active management – i.e. Habitat/Species Management Area
- V Landscape/seascape conservation and recreation – i.e. Protected Landscape/Seascape
- VI Sustainable use of natural resources – i.e. Managed Resource Protected Area.

The first five categories equate broadly to the first five of the 1978 system, whereas Category VI embodies some of the ideas from former Categories VI, VII and VIII. It should also be noted that, while the new Guidelines give prominence to the numbers and related objectives, they do not bury the names attached to the categories entirely. This might be thought inconsistent with the need to develop a common terminology that is quite independent of that used in so many different ways at the national level. The decision to retain names for the categories, albeit in a subordinate way, represented the outcome of an uneasy compromise between the traditionalists, who were opposed to the loss of all mention of national parks in particular, and others who wanted to move to entirely “neutral” titles for different kinds of protected areas as far as the international classification system was concerned.

A number of important principles are set out in the 1994 Guidelines to help explain the system:

- the basis of categorisation by primary management objective assignment is not a commentary on management effectiveness;
- the categories system is international;
- national names for protected areas may vary;
- all categories are important; and
- a gradation of human intervention is implied (see Figure 3 below).

A chapter in Part I of the 1994 Guidelines deals with the application of the categories system and provides some basic rules for its interpretation. Many of the questions that are often asked about the system are answered here. The main points are summarised in Box 3 (over) but – for a definitive explanation – readers should refer to the original text.

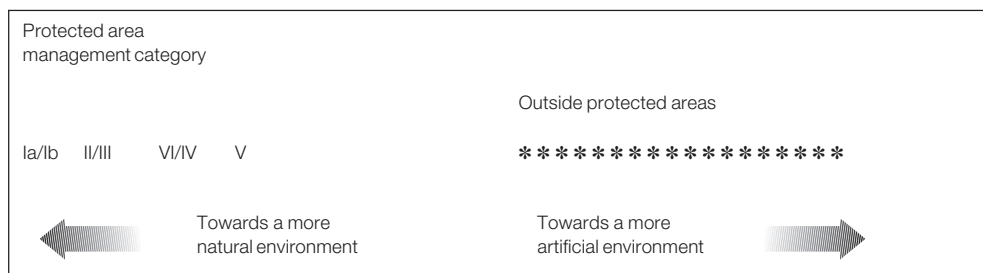
Part II of the 1994 Guidelines set out the following for each category:

- A Definition;
- Objectives of Management;
- Guidance for Selection;
- Organisational Responsibility; and an
- Equivalent Category in 1978 System.

Compared to the 1978 system there are some interesting developments in thinking:

- Whereas the definitions etc. used in the 1978 system implied that human occupation or resource use were unwelcome or unacceptable in Categories I–IV, the 1994 system explicitly recognises

Figure 3. IUCN protected area categories and degree of environmental modification.



NB. This diagram is a schematic representation to illustrate the extent to which the natural environment is likely to have been modified in each category of protected area. It does not mean that in every case one category will relate to another as shown. Nor, of course, is it meant to imply that the environment of protected areas is invariably less modified than that to be found outside protected areas.

Box 3. Rules for application of the categories system.

- **The management unit** is the protected area for the purposes of the categories system: usually this will be a separate legal entity.
- **Size** is not a relevant factor in assigning the categories, though the size should be sufficient for the area to fulfil its objectives.
- **Zoning** within protected areas may allow for uses that would not be accepted throughout: but at least 75% of the area should be managed for the primary purpose.
- **Management responsibility** may rest with the public, private, community or voluntary sectors, regardless of category.
- **Ownership of land** may similarly be in the public, private, community or voluntary sectors, regardless of category.
- **Regional flexibility** is intended to be a feature of the application of the system.
- **Multiple Classifications** may arise when several protected areas in several different categories are contiguous; or surround one another.
- **International designations** are to be considered as quite separate from the categorisation exercise.

that some permanent human presence – albeit very slight in certain cases – may occur in all categories except Ia (Strict Nature Reserve) (Ravenel and Redford 2001).

- The 1978 system is fairly prescriptive about the type of agency etc. that would normally manage each category. The 1994 system allows for more flexibility in this sense.
- The 1978 system assumes all protected area categories as managed for the broader public good. The 1994 guidance recognises that the values of indigenous peoples and other local groups should also be taken account of.

The introduction of Category VI came in response to a concern among many developing country participants at the Caracas Congress that protected areas should include places where resources are conserved in essentially their natural condition as a basis for sustainable use. But some feared that this category might be used to include large commercially worked forests etc. So the Guidelines lay down some qualifying considerations to apply in the case of Category VI, which must not only fit within the overall definition of a protected area (see above), but also be managed for the long term protection and maintenance of biodiversity. At least two-thirds of the area must be, and remain, in 'an essentially natural state' (this is defined). Large commercial plantations are excluded.

Part III of the 1994 Guidelines contain 40 case studies, showing how the categories have been applied in 33 countries. These pen portraits vary from a short paragraph to a full page with accompanying photograph. All the longer descriptions include a final paragraph setting out the reasons for assigning the area to a particular category.

Developments since 1994

Since the publication of the Guidelines, IUCN and WCPA have sought to promote the understanding and use of the categories system in many countries and international fora. Examples include:

- **National level workshops designed to explore how to apply the Guidelines in a local context**, e.g. in Australia, UK, New South Wales, Finland, Canada and China.
- **Publications on how to apply the Guidelines in specific geographical or other contexts**, e.g. for Europe (EUROPARC and IUCN, 1999), for Australia (ANCA, 1995), in relation to Biosphere Reserves (Bridgewater *et al.*, 1996) and the marine environment (PARKS, 1998).

- **References to the 1994 system have been made in numerous IUCN/WCPA publications.** Especially relevant are the publications in the IUCN/Cardiff University Best Practice Protected Area Guidelines Series, which promotes the use of the system in all eleven volumes published to date, including specific guidance on Category V (Phillips, 2002).
- **The publication of the United Nations List of Protected Areas** (1997 and 2003 versions) which classifies individual protected areas by the management category to which they have been assigned (IUCN/WCMC, 1998 and Chape *et al.*, 2003).
- **A position statement on mining and protected areas**, developed by WCPA 1998, which argued that governments and others should ensure that mining operations of all kinds were excluded from protected area Categories I–IV. This principle was taken up in a recommendation (number 2.82) adopted by the IUCN World Conservation Congress in Amman (2000) – see articles by Kapila, and Parsons and Richards.
- **Endorsement of the system by the Convention on Biological Diversity:** at the 7th Conference of the parties to the CBD in Kuala Lumpur (February 2004), governments accepted that the system provided a basis for reporting and recording, and encouraged governments and others to assign protected areas to categories.

Conclusion

Protected areas represent an immense investment around the world in looking after our environment. With so much now at stake, nationally and internationally, it is increasingly important that action and dialogue about these special places are well informed and based upon a shared understanding among all the various interests involved. This is the background to the idea of categorising protected areas by their objectives. After some limited initiatives by a few IUCN protected area experts in the 1960s, a pioneer effort was launched in 1978. The definitive version was issued in 1994, and has lately received intergovernmental recognition. WCPA and IUCN have thus brought a much-needed measure of order and systematisation to national and international work on protected areas. However, it is clear from developments since 1994, and in particular from the work of the *Speaking a Common Language* project, that the system of protected area categories continues to evolve and that new things are expected of it. Therefore, while the history of this topic may be interesting in itself, the future promises even more.

References

- Australia Nature Conservation Agency. 1995; *Application of the IUCN Management Categories – draft Australian Handbook*, ANCA, Canberra, Australia.
- Bridgewater, P., Phillips, A., Green, M. and Amos, B. 1996; *Biosphere Reserves and IUCN System of Protected Area Management Categories*, ANCA, Canberra, Australia.
- Brockman, C.F. 1962; *Supplement to the Report to the Committee on Nomenclature* In: A.B. Adams, (ed.) *First World Conference on National Parks*, National Park Service, Washington, USA.
- Chape, N., Blyth, S., Fish, L., Fox, P. and Spalding, M. (compilers) 2003. *2003 United Nations List of Protected Areas*, IUCN, Gland, Switzerland and UNEP-WCMC, Cambridge, UK.
- Dasmann, R.F. 1974; *Development of a Classification System for Protected Natural and Cultural Areas* In: H.B. Elliott, (ed.) *Second World Conference on National Parks, Proceedings*, IUCN, Morges, Switzerland.
- Eidsvik, H. 1990; *A Framework for Classifying Terrestrial and Marine Protected Areas – Based on the Work of the CNPPA Task Force on Classification*, IUCN/CNPPA (Unpublished).
- Elliott, H.B. (ed.) 1974; *Second World Conference on National Parks, Proceedings* IUCN, Morges, Switzerland.
- EUROPARC and IUCN. 1999; *Guidelines for Protected Area Management Categories – Interpretation and Application in Europe*, EUROPARC, Grafenau, Germany.
- Foster, J. 1992; *Framework Paper on an International Review System for Categorising Protected areas, their Management Effectiveness and Threats to Them*, IUCN/CNPPA (Unpublished).
- Holdgate, M. 1999; *The Green Web*, Earthscan, London, UK.
- Holdgate, M. and Phillips, A. 1999; *Protected Areas in Context* In: M. Walkey, I. Swingland and S. Russell, (eds.) *Integrated Protected Area Management*, Kluwer Academic Publishers, Boston, USA.
- Ravenel, R.M. and Redford, K.H. 2001; *Changing Views of Human Habitation in IUCN Protected Area Categories*, Unpublished draft paper.
- IUCN/WCMC. 1998. *1997 United Nations List of Protected Areas*, IUCN Cambridge, UK and Holdgate and Phillips (1999); op cit.
- IUCN. 1974. *Classification and Use of Protected Natural and Cultural Areas*, IUCN Occasional Paper No. 4, IUCN, Morges, Switzerland.

IUCN. 1978. *Categories, Objectives and Criteria: Final Report of the Committee and Criteria of the CNPPA/IUCN*, Morges, Switzerland.

IUCN. 1998. *United Nations List of Protected Areas, 1997* IUCN Cambridge, UK.

IUCN. 1998. *PARKS*, 8(2), June 1998, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.

IUCN/WCMC. 1994; *Guidelines for Protected Area Management Categories*, IUCN Cambridge, UK.

Phillips, A. 2002; *Management Guidelines for IUCN Category V Protected Areas* IUCN Cambridge, UK.

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The use of the categories in national and international legislation and policy

BENITA DILLON¹

As part of the *Speaking a Common Language* project, the World Conservation Union's (IUCN) Environmental Law Centre (ELC) was asked to research legal and policy frameworks for protected areas to see whether these have been influenced by the IUCN system of protected area management categories. Over 320 pieces of legislation were examined, including 124 adopted since the 1994 guidelines were published. Over 10% of legislation in this latter group has been strongly influenced by the IUCN guidance, including that for several major States, such as Australia and Brazil. The categories have also been influential in terms of protected area policy. At the international level they have been incorporated into the African convention and recently endorsed by the CBD. The article argues that it is important that information relating to the use of the categories in law and policy be further researched, collated and published.

AS PART OF THE SPEAKING A COMMON LANGUAGE PROJECT, the Environmental Law Centre (ELC) of IUCN – The World Conservation Union, was asked to research legal and policy frameworks for protected areas to see whether these have been influenced by the IUCN system of protected area management categories.

Methodology

A classification system was developed for the project to gauge the degree, or 'level', to which legislation and policy frameworks have been influenced by the IUCN system of protected area management categories. Four levels were determined:

1. 'Protected area management categories are incorporated into instruments exactly and IUCN is specifically mentioned' (specifically mentioned and followed);
2. 'Very similar categories to those of IUCN are used and/or IUCN is not specifically mentioned' (strong influence with very similar categories);
3. 'Contains concepts that are similar to the IUCN categories' (few similar categories with no clear or direct influence), and
4. 'No similarities seem to exist between the protected areas established and IUCN categories' (no apparent influence).

A variety of information was sourced during the project, primarily the ELC literature and legislation libraries and ECOLEX (incorporating FAOLEX)². Information was also gathered, and verified, through searching the Internet and by consulting with country experts from around the world.

There are a number of factors to take into consideration when interpreting the results included in this article. They include:

- The research was focused on protected area information dated from 1978 onwards, which is when the first IUCN categories system was published (see article by Phillips in this issue of PARKS).
- Due to limitations of time and resources, effort was targeted at national protected area legislation. Other types of legislation, such as land use planning, have not been actively sought or reviewed. Such legislation may be relevant in some cases.

¹ The author wishes to thank John Scanlon for his assistance in preparing this article.

² A comprehensive and up-to-date legislative database holding a large electronic collection of environmental agreements, laws and regulations from IUCN, UNEP and the Food and Agriculture Organisation (FAO) (www.ecolex.org/).

- Information was substantially limited to what was made available to ELC. Generally speaking, only those documents or abstracts originally produced in English, or available as English versions, formed the basis for the review. Gaps are inevitable.
- Only those countries with protected areas listed on the World Database for Protected Areas were included in the statistics (see also article by Chape in this issue of PARKS).
- Draft legislation was not actively sought and was only reviewed when it was made available.
- Applying the four-point classification levels involved making an informed judgement, using a level of subjectivity.
- A scientific officer, not a legal officer, undertook the research, though working within a team of lawyers.
- This is an initial review and should be up-dated as additional information becomes available.

Results

The results outlined in this article are presented at different scales including global, regional³ (i.e. multi-national) and national levels. Sub-national information was not actively sought during the project and has been omitted from this article.

Global documents and processes

There are a multitude of global documents and processes that relate to protected areas around the world, most of which were adopted before the 1994 IUCN Protected Area Management Categories were published.

Since 1994, some global programmes have undertaken work to integrate the IUCN protected area management categories. Examples include the Intergovernmental Forum on Forests⁴ and Biosphere Reserves and the IUCN System of Protected Area Management Categories (Bridgewater *et al.* 1996).

Other than these programmes, the IUCN categories had little impact until recently on key instruments at a global level. But early in 2004, the Convention on Biological Diversity (CBD) adopted a Programme of Work on Protected Areas, which endorses the categories system and supports the *Speaking a Common Language* project – see Box 1. This marks a significant development in the promotion of the categories through a global instrument.

Box 1. The Convention on Biological Diversity 1992 (Level 1).

Although the protected area categories are not specifically mentioned in the Convention on Biological Diversity (CBD), the 7th Conference of the Parties to the Convention on Biological Diversity (CBD/CoP7), meeting in Kuala Lumpur, Malaysia in February 2004, adopted a Programme of Work on Protected Areas (Decision VII/28) that contains an important paragraph in which CBD/CoP7 endorses the categories system and supports the *Speaking a Common Language* project. This was included following advice from the Vth World Parks Congress in Durban (September 2003).

The Programme of Work on Protected Areas states that the CoP: **Recognises the value of a single international classification system for protected areas and the benefit of providing information that is comparable across countries and regions and therefore welcomes the on-going efforts of the IUCN WCPA to refine the IUCN system of categories and encourages Parties, other Governments and relevant organisations to assign protected area management categories to their protected areas, providing information consistent with the refined IUCN categories for reporting purposes.**

Source: The full text of the CBD/CoP7 decision VII/29 can be found on <http://www.biodiv.org/decisions/default.aspx?m=CoP-07&id=7765&lg=0>

³ Throughout this article the term 'regional' means multi-national within a geographical region.

⁴ www.un.org/documents/ecosoc/cn17/2000/ecn172000-14.htm

Regional Conventions and Agreements

Thirty-five regional Conventions and Agreements were reviewed and of these only two were found to have used the IUCN categories. The *Conservation of Arctic Flora and Fauna (CAFF) Circumpolar Protected Areas Network (CPAN) Strategy and Action Plan 1996* specifically mentions the IUCN categories (Level 1) and the *Revised African Convention on the Conservation of Nature and Natural Resources 2003* [see Box 2 below] uses the IUCN categories (Level 1).

National legislation

National legislation relating to protected areas exists in most countries around the world. Legislation varies greatly between countries, as does environmental legislation in general. Generally speaking, countries have developed their own systems of protected area categories, and their legislation has incorporated these in many ways.

Research on national legislation was the major focus of this project and the information gathered is fairly comprehensive with 192 countries having been reviewed. Of these, 164 countries have been included in the statistics; 28 countries either had legislation that pre-dated 1978 or did not make enough information available to make possible a sensible judgment on content and hence the influence of the categories.

A total of 439 pieces of national legislation were reviewed and of these 322 have been included in the statistics. Verification of the information has been undertaken by contacting relevant

Box 2. The revised African Convention on the Conservation of Nature and Natural Resources 2003 (Level 1).

The IUCN categories had a strong influence on the development of the revised Convention. An Interagency Taskforce initially endorsed the use of the IUCN guidelines. This was submitted to a group of African governmental experts who modified the text in a few instances to suit the African situation.

Article XII of the Convention states that the: *“Parties shall establish, maintain and extend, as appropriate, Conservation Areas ... The aim of this is conserve those ecosystems which are most representative and peculiar to each jurisdiction, or are characterised by a high degree of biological diversity. It is to ensure the conservation of all species and particularly of those which are only represented in areas under each jurisdiction, threatened, or of special scientific or aesthetic value and of the habitats that are critical for the survival of such species ... The Parties shall seek to identify areas critically important to include as Conservation Areas, taking into consideration the work of competent international organisations in this field.”*

Article V, defines a “Conservation Area” as any protected area designated and managed mainly or wholly for one of the following purposes:

- i) Science or wilderness protection (Strict Nature Reserve/Wilderness Areas);
- ii) Ecosystem protection and recreation (National Parks)
- iii) Conservation of specific natural features (National Monuments)
- iv) Conservation through management interventions (Habitat/Species Management Areas)
- v) Landscape/seascape conservation and re-creation (Protected Landscapes/Seascapes);
- vi) The sustainable use of natural ecosystems (Managed Resource Protected Areas)

The definitions and management objectives of these categories are contained in Annex 2 to this Convention and these are virtually the same as the 1994 IUCN guidelines for protected area management categories.

Source: Pers. comm., Francoise Burhenne-Guilmin, IUCN Environmental Law Centre, Bonn.

experts from as many countries as was possible in the time available. The results of the study on national legislation are summarised below in Table 1. The results of legislation developed from 1994 onwards are presented in Table 2.

The study revealed that countries that had national legislation that reflects directly, or is very similar to the 1978 IUCN categories included:

- Argentina (*Law of National Parks and Reserves and Natural Monuments (National Law No. 22.351 1980)*);
- Belize (*National Parks Systems Act 1981*);
- Cambodia (*Regulations on the Creation and Designation of Protected Areas 1993*);
- Guatemala (*Law for the Protection and Improvement of the Environment 1986, Law of Protected Areas 1989 and Regulation to the Protected Area Law 1990*);
- Philippines (*National Integrated Protected Area Systems Act 1992*);
- Spain (*Conservation of Natural Areas and Wild Flora and Fauna Act 1989*); and
- Turkey (*National Park Act 1983*).

The research reviewing the extent to which the 1994 IUCN guidelines have been incorporated into the new wave of national legislation, shows that 10% appear to have used the IUCN categories (1.6% Level 1 and 8.7% Level 2)⁵. These were:

- Australia (*Environment Protection and Biodiversity Conservation Act 1999*);
- Brazil (*Law No. 9.985 establishing the National System of Protected Areas Management 2000*);
- Bulgaria (*Protected Areas Law 1998*);
- Cambodia (*Law on Environmental Protection and Natural Resource Management 1996 and Proposed Legislation*);
- Cuba (*Decree Law 201 National System of Protected Areas 1999*);
- Georgia (*Law on the System of Protected Territories 1996*);
- Hungary (*Act No. LIII. of 1996 on Nature Conservation in Hungary 1996*);
- Kuwait (*Protected Area Law 1999*);
- Mexico (*General Ecology Law 1996*);
- Niger (*Fixant le régime de la chasse et de la protection de la faune 1998 and Portant loi-cadre relative a la protection de l'environnement 1998*);
- Slovenia (*Nature Conservation Law 1999*);

Table 1. Level of influence of IUCN Categories on National Legislation.

Type	Level 1	Level 2	Level 3	Level 4	Total
No. National Legislation	2	20	114	186	322
Percentage (%)	0.6%	6.2%	35.4%	57.8%	100%

Note: This table includes information from 1978 onwards and does not include information from countries that have been excluded from the statistics.

Table 2. Level of influence of IUCN Categories on National Legislation developed from 1994.

Type	Level 1	Level 2	Level 3	Level 4	Total
No. National Legislation (1994 onwards)	2	11	45	68	126
Percentage (%)	1.6%	8.7%	35.7%	54.0%	100%

NB: This table does not include information from countries that have been excluded from the statistics.

5 Of the 126 pieces of legislation reviewed from 87 countries developed since 1994.

- Uruguay (*Draft National System of Protected Areas* (Law No. 17234) 2000); and
- Vietnam (*Regulation of Special Use Forests, Protection Forests and Production Forests, which are Natural Forests* (Decision No 08/2001/QĐ-TTg of January 11 2001). (NB this was a retrospective exercise to relate a pre-existing category system to the IUCN categories).

Australia (see Box 3) and Georgia are the only two countries that specifically mention IUCN and have directly incorporated the categories into their legislation (Level 1). Other countries listed above have very similar categories indicating a strong influence (Level 2). In most cases, countries have interpreted the categories to suit their local situation. The categories appear to be a good starting point for discussions and seem to be providing the ground rules and a framework to begin reviewing or developing legislation for protected area systems.

National policy

Environmental policy provides guidance and direction for issues related to protected areas and protected area management. Policy is also used for raising awareness, capacity building and as an educational tool, and is often the basis for new or revised legislation.

Many countries have protected area policies or strategies that are more up-to-date in concept than their legislation. It is therefore not surprising that several countries have incorporated the IUCN protected area management categories into policy documents but not into legislation. The countries found to have protected area policy that has used the IUCN categories (Level 1 and Level 2) include Argentina, Australia, Brazil, Bulgaria, Ecuador, Guatemala, Guinea Bissau, Hungary, India, Kuwait, Russia, Saint Lucia, Saudi Arabia, Slovenia, Spain and Ukraine. The study showed that Ecuador, Guinea Bissau, India, Russia, Saint Lucia, Saudi Arabia and Ukraine have used the IUCN protected area management categories in their policies but have not incorporated them into national legislation.

Discussion

It should be said at the outset that it was never a declared purpose of the 1994 category system that it should form the basis of national legislation for protected areas. Indeed in his Introduction to the guidance, the then WCPA Chair, P.H.C. (Bing) Lucas emphasised that “these categories must in no way be considered as a ‘driving’ mechanism for governments or organisations in deciding the purposes of potential protected areas. Protected areas should be established to meet objectives consistent with national, local or private goals and needs ... and only then labelled with an IUCN category according to the management objectives developed herein”. Thus the adoption of the categories in law and policy may be considered as an unintended consequence of the publication of the system.

In light of this, it is perhaps surprising that the research found that the IUCN Protected Area Management Categories have had a significant influence on some protected area policy and legislation internationally and nationally, though in most cases, the categories system has been adapted to suit national or sub-national circumstances.

Relatively few global and regional documents/processes have been developed or revised since the IUCN categories were published; therefore there has been little opportunity to incorporate them. However the two regional examples given in the report (Conservation of Arctic Flora and Fauna (CAFF) Circumpolar Protected Areas Network (CPAN) Strategy and Action Plan, the revised African Convention on the Conservation of Nature and Natural Resources) provide evidence that the IUCN categories are now beginning to have an impact. Their advocacy in the recent Programme of Work on Protected Areas of the CBD is an even more significant development that may be expected to impact at the national and regional level in the years ahead.

Similarly at the national level, protected area legislation in many countries was established or developed before the IUCN guidelines were introduced. It is a long process to develop and

Box 3. Australia: Environment Protection and Biodiversity Conservation Act (EPBC) 1999 (Level 1).

In the mid-1990s after the revised IUCN guidelines were published, the Australian Commonwealth Government embarked on a process involving the State and Territory Governments of developing a national approach to the implementation of the categories in Australia. This process produced a draft set of benchmarks that provided guidance on the use of the IUCN categories in Australia.

A Collaborative Australian Protected Area Database was developed. This allows all jurisdictions to contribute information on their protected areas, classifying it against the IUCN categories. The database assists in reporting on the status of protected areas in Australia.

In 1999, all States and Territories agreed (through the Australian and New Zealand Environment and Conservation Council) to the Australian Guidelines for Establishing the National Reserve System. Under these guidelines, Protected Areas must be classified using the IUCN categories. During the development of the *Environment Protection and Biodiversity Conservation Act* (EPBC Act) 1999, the then Minister for Environment, Senator Robert Hill, successfully formalised the use of the categories by embedding them into this new legislation.

The EPBC Act came into force on 16 July 2000. It promotes biodiversity conservation by ensuring the protection of matters of national environmental significance. The Act requires that each Commonwealth Reserve be assigned to one of the categories and that these reserves must be managed in accordance with the Australian IUCN Reserve Management Principles for that category – principles that have been strongly influenced by the IUCN management guidelines and criteria. The EPBC *Regulations* set out the Australian IUCN Reserve Management Principles for each IUCN category. When a management plan is prepared for a Commonwealth reserve, or a particular zone of a reserve, the plan must be consistent with these Australian IUCN Reserve Management Principles. The Act also provides that Commonwealth Reserves may be divided into zones, and each zone may be assigned an IUCN category.

The major benefits of incorporating the IUCN categories in the EPBC Act include:

- each Commonwealth Reserve that is proclaimed must be assigned a particular IUCN category;
- assignment of an IUCN category makes the primary management purpose for the reserve clear to all stakeholders, at the time of proclamation;
- in the absence of a management plan, the assigned IUCN category is important in governing the management of the reserve; and
- the assigned category is important in guiding the development of the management plan for the reserve, its future use and management.

Australia undertook a great deal of work and consultation in understanding how the international categories system might work before it was enshrined into national legislation. A lot of experience has been gained in the application of the categories system, some of which could be applied outside Australia.

The IUCN protected area management categories concept is slowly filtering down into Australian State and Territory legal and policy frameworks and is also beginning to be implemented in the field and incorporated into park management plans.

Source: Pers. comm. Wayne Fletcher, Legislation Policy Section, Environment Australia and www.ea.gov.au/epbc/about/index.html. The *Environment Protection and Biodiversity Conservation Act Regulations 2000*: scaleplus.law.gov.au/html/pastereg/3/1619/top.htm

adopt legislation and it is unrealistic to expect the IUCN guidelines, published in 1994, to have an immediate influence. The data suggest that where new or revised legal frameworks are developed, reference is often made to the IUCN categories. Countries that have used the categories system in their legislation had experts with a good understanding of the IUCN categories system involved in the legislative process.



Tierra del Fuego National Park, Argentina. Photo: Sue Stolton.

Box 4. Argentina: National Strategy on Protected Areas, 1999 (Level 1).

The National Strategy on Protected Areas aims to achieve the conservation of Argentina's natural heritage, and to contribute to the sustainable development of the country. The policy specifically mentions the IUCN category system and aims *"To homogenise the different management categories of Protected Areas used at present in the 25 jurisdictions, adapting them to the international terminology that was established by the World Commission on Protected Areas of the World Conservation Union (IUCN)"*.

Source: <http://200.9.244.58/gnb/Areasprotegidas/gnbareasprotegidas2.htm>

There is also evidence that some countries are undertaking a retrospective exercise, without altering their legislation, to relate or rationalise their pre-existing category system to the IUCN categories. This underscores the relevance of the categories system. Regardless of whether national legislation incorporates the IUCN categories, there is a critical need for consistent understanding of the meaning of the various categories, and the manner in which they are internationally reported. This need is formally reflected in the CBD Programme of Work on Protected Areas, which speaks of *'the value of a single international classification system for protected areas'*.

As part of the verification exercise, consultees suggested several reasons for not adopting the IUCN classification system, including:

- the national category system pre-dates the IUCN categories and it is difficult to amend a system that exists and is up and running;
- IUCN categories may change, thus rendering the legislation out-of-date; therefore categories should only be incorporated into policy documents; and
- IUCN categories are difficult to interpret.

It is clear from this initial review that the categories are being referred to, and used in making policy and legislation. It is important that this use of the category system is documented; and that every effort is made by IUCN, and its Commissions on Environmental Law and on Protected Areas, to ensure that those who use the categories system in making policy and/or legislation have a full understanding of it.

As it was not a specific intention of the 1994 guidelines that the IUCN categories system should be used in this way, but to provide an international framework for dialogue about protected areas, its adoption in policy and legislation, by countries individually or in international processes, is not in itself a measure of the success of the system, nor even necessarily of IUCN's influence. However, it may be thought of as an unexpected bonus and a tribute to the robustness of the system. It also highlights the need to provide better guidance on the categories system to everyone involved in the development of protected area policy and legislation.

Conclusion

This study was an initial review of the extent to which legal and policy frameworks may have been influenced by the IUCN categories. It is recommended the research is continued, collated and published.

There are opportunities to showcase models used in different countries to demonstrate how the IUCN category system can be used for guidance and direction. This may assist other countries which are intending to review policy and/or legislation relating to protected areas.

While the concept has progressed in the past decade, and will continue to do so in future, education and capacity building are required to develop a better understanding of this international classification system for protected areas.

References

- Bridgewater, P., Phillips, A., Green, M. and Amos, B. 1996. *Biosphere Reserves and the IUCN System of Protected Area Management Categories*. ANCA, Canberra, Australia.
- Dillon, B.J. 2004. *Working Paper on the Influence of IUCN Protected Area Management Categories on National, Regional and International Legal and Policy Frameworks*. IUCN, Environmental Law Centre, Bonn, Germany.

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Categorising protected areas in Vietnam

SUE STOLTON, NGUYEN THI DAO AND NIGEL DUDLEY

Vietnam's protected areas systems are still evolving in terms of both coverage and institutional arrangements. Over the past few decades, there have been a series of attempts to categorise Vietnam's protected areas and the Government has deliberately drawn on the IUCN classification system. However misunderstanding of the system which can be traced back in part to lack of clarity in the ways in which the categories have been presented, has led to some confusion. The Vietnamese experience, which this article discusses, helped the team working on the *Speaking a Common Language project* to clarify ideas about how the guidance to the IUCN categories might be modified to reflect the needs of those setting up new protected area networks. In particular, there is a need to translate the IUCN Categories into many more languages – and for these translations to involve the participation of in-country specialists who are familiar with the issues, thus ensuring that translation is as precise and relevant to the local context yet as technically correct as possible.

VIETNAM IS A COUNTRY WITH EXCEPTIONALLY HIGH LEVELS OF BIODIVERSITY, containing many rare and endemic species, particularly in its forests. In the last few years, several large mammal species have been discovered in the country including most spectacularly the saola, *Pseudoryx nghetinhensis*, a bovine genus first described in 1992. The country also contains important populations of species such as the large-antlered muntjac, *Muntiacus vuquangensis*, the near endemic red-shanked douc, *Pygathrix nemaeus*, tigers, Asian elephants and one of two remaining populations of the Javan rhinoceros, *Rhinoceros sondaicus* in Cat Tien National Park. Much remains un-surveyed and new discoveries are expected. For example, scientific survey teams have yet to see a single saola in the wild and only two individuals have ever been photographed using remote camera technology.

Despite the ecological richness, the country's biodiversity faces serious pressures. Humans have substantially altered most of the land area, often over millennia, for agriculture, primarily rice cultivation. Much of the centre and north was heavily defoliated by aerial application of herbicides during the America/Vietnam war and the side effects of these pollutants are still being experienced today. Development is intensifying, particularly with new road links to Lao PDR and Thailand, and around the route of the 'Ho Chi Minh highway', which goes through a series of protected areas, including Vietnam's first National Park, Cuc Phuong, inaugurated by Ho Chi Minh himself back in 1962. Increased access is adding pressure to protected sites across the country. This is likely to increase poaching to supply the region's booming wildlife trade. A major reforestation programme is focusing almost entirely on plantations of exotic species, which have very low biodiversity value, and remaining forests are often fragmented and degraded; very little of the forest remains unaltered although significant areas of rich semi-natural forest can be found, particularly in the central provinces such as Thua Thien Hue and Quang Nam, and in parts of the south.

The Government of Vietnam is committed to the protection of the country's biodiversity, is a signatory of the Convention on Biological Diversity and has set up a substantial number of protected areas, some of which are of global significance. Vietnam's protected areas systems are still evolving in terms of both coverage and institutional arrangements. Currently, the protected areas decreed by the government are primarily 'Special Use Forests' but include a Ramsar site (Xuan Thuy Wetland National Park – this area is also a Special Use Forest). There are also four UNESCO Man and Biosphere Reserves (Can Gio mangroves, Cat Tien National Park, Red River Delta and Cat Ba National Park) and Ha Long Bay and Phong Nha-Ke Bang National Park are both Natural World Heritage sites. Existing protected areas are mainly forests but there are also a small number of wetland sites and marine areas, mostly additional to the original forest designation.



Man with buffalo in the Cuc Phuong National Park, Vietnam. Photo: IUCN Photo Library © Jim Thorsell.

Over the past few decades, there have been a series of attempts to categorise protected areas throughout the country and the Government of Vietnam has deliberately drawn on the IUCN classification system, partly as result of advocacy efforts of WWF and other international conservation interests. However misunderstanding of the system, which can be traced back in part to lack of clarity in the ways in which the categories have been presented, has led to some confusion. The Vietnamese experience helped the *Speaking a Common Language* team to clarify ideas about how the guidance to the IUCN categories might be modified to reflect the needs of those setting up new protected area networks.

Early protected area legislation

The first protected areas set up in Vietnam were termed ‘prohibited forests’, and they aimed to provide strict protection. Many of these are now called national parks: for example Cuc Phuong National Park (1962), Cat Tien National Park (1978), Con Dao National Park (1984) and Cat Ba National Park (1986).

Later the term Special Use Forest was used instead. The principal legal and regulatory framework for Special Use Forests was contained in the 1986 Decision (Decision 1171/QD) of the Minister of Forestry, which categorised three types of protected areas: ‘National Park’, ‘Nature Reserve’ and ‘Cultural, Historical and Environmental Area’. By 1986, a year in which the majority of the country’s current protected areas were designated, seven National Parks had been declared, along with 49 Nature Reserves and 31 Cultural, Historical and Environment Areas. Nature reserves tended to cover smaller areas and had less strict conservation objectives.

This categorisation system was based on the 1978 IUCN Protected Area Management Categories (see article by Phillips in this issue of PARKS), adapted to suit Vietnam’s requirements. However, it is said (Williams, pers. comm.) that at this stage the interpretation of the IUCN categories was primarily based on *name* rather than on the *management objectives* that were being applied to the protected areas. Thus, ‘nature reserves’ were defined as protected areas with scientific value, protecting functions of animal and plant genetic resources, and as places for scientific studies, but where tourism services or other cultural demands were not permitted; whilst ‘national parks’ were defined as protected areas with all-round value in nature conservation, scientific study, protection of cultural relics and tourism services (Vu Van Dung *et al.*, 2002).

Developing the protected area system

In June 1997, the Ministry of Agriculture and Rural Development (MARD) issued a formal Decision to expand the system of protected areas from 1 million ha to 2 million ha and in November 1997, the Forest Protection Department (FPD), the body within MARD with responsibility for protected areas, held a national meeting to discuss proposed decrees and policies on the management of protected areas in Vietnam. The meeting concluded that the existing network of protected areas (Special Use Forests) was not adequately protecting the breadth of biodiversity in Vietnam for a number of reasons. Important habitats were missing from the protected areas network. Some areas had been encroached on so badly that they were no longer effective as protected areas, while a number of forests had changed status from being “Special Use Forest” to “Catchment Protection Forest”. Of particular relevance here, the legal framework was found to be outdated in relation to the management of the various types of protected areas as now established, and did not follow the IUCN definitions for protected area classification. The objectives and strategies for managing protected areas remained unclear and management approaches did not always fit the needs for biodiversity conservation under the broader ecosystem approach starting to be promoted by the Convention on Biological Diversity. As a result the report concluded that “The institutional framework, mandates, responsibilities and financial mechanisms for managing protected areas are no longer sufficient in relation to the present protected area system (Anon, 1999)”.

In response, the FPD proposed a draft decree to expand the protected area network and develop four classifications of protected areas, with targets for the number and area to be declared as follows:

- National Park (ten covering 254,807 ha);
- Nature Reserves (53 covering 1,441,159 ha);
- Species and Habitat Reserves (17 covering 488,746 ha; although none was officially gazetted until 2001); and
- Landscape Protected Areas (21 covering 112,859 ha) (Anon, 1999).

In January 2001, the Prime Minister promulgated new regulations for the management of Special Use Forests (Decision No. 08/QD-TTg). Article 7 of Decision 08/2001 clarifies the situation with regard to tourism in Vietnam’s protected areas and provides for national parks and nature reserves to be further divided into three sub-zones: strictly protected; ecological rehabilitation areas; and service and administrative – this last sub-zone providing working and living facilities for management, research facilities, tourism and recreation, and entertainment services. It further clarifies that tourist services may be established in national parks and nature reserves provided that they are included in the corresponding feasibility study approved by the competent authority. For example, both Cat Tien National Park and Song Thanh Nature Reserve have a range of staff, visitor and research facilities in designated zones within the protected area.

The process of protected area designation is continuing, with for example extensions planned around Cat Tien National Park in the south of the country, following biodiversity surveys in surrounding forest areas, and for specific saola conservation areas in central Vietnam (Hardcastle *et al.* 2005).

Clarifying the role and categorisation of protected areas

Despite the rapid growth of the protected area network, questions about classification and zoning remained. The Government of Vietnam asked the WWF Indochina Programme in Hanoi for technical and financial assistance in revising the framework for protected area management in Vietnam (Article 7 of Decision 08/2001). This resulted in the WWF project ‘Strengthening Protected Area Management in Vietnam’ (SPAM), funded by the Danish Environment and Disaster Relief Fund (DANIDA), which started work in 2000 to support the FPD to develop

improved management objectives and institutional, regulatory and financial frameworks for the protected areas system in Vietnam. The project came to an end in 2003.

The strategy, which provides strategic direction for implementing agreed objectives for an integrated approach to biodiversity conservation in protected areas, was finalised in October 2002 (Anon, 2002) and enacted under the Prime Minister's decree in April 2004. It includes a section on the 'Categorisation of protected areas' (Annex 6) which suggests a new categorisation system for protected areas as envisaged by the FPD in the draft decree of 1997, using the 1994 IUCN Guidelines document as a template. It details definitions, management objectives, criteria for selection and organisational responsibility for each of the four new categories; it also identifies which IUCN category the corresponding Vietnamese category most closely resembles. The system has been developed by a group of experts in the nature conservation field. One of its aims is that it should be "based on the IUCN's 1994 protected area categories", but it is made clear that this has been "adapted to meet Vietnam's requirements". The system aims to deal with the problems raised by the current categorisation system, whilst maintaining the values inherent to the IUCN system.

The system consists of four types of protected area categories. Objectives are:

- **Category I. National Park:** Protected area managed mainly for ecosystem protection, research, environment education and recreation. Equivalent category to IUCN Category II – National Park.
- **Category II. Nature Reserve:** Protected area managed mainly for ecosystem or species protection, research, monitoring, recreation and environmental education. No direct equivalent to an IUCN category.
- **Category III. Habitat and Species Management Area:** Protected area managed mainly for environment and biodiversity conservation through management intervention (with increased provisions for co-management of resources). Equivalent category to IUCN Category IV – Habitat/Species Management Area.
- **Category IV. Protected Landscape/Seascape:** Protected area managed mainly for landscape or seascape conservation and recreation. Equivalent category to IUCN Category V – Protected Landscape or Seascape.

The difference between the categories of National Park and Nature Reserve does not necessarily correspond to different objectives. Nature reserves are generally smaller and less prestigious than national parks; the latter often have higher levels of tourism. New development for visitors in national parks will in theory be limited to park boundaries and buffer zones (Anon, 2002), although this is not always well respected in practice. Decentralisation means that management and categorisation of both national parks and nature reserves often fall under provincial administration where understanding of IUCN categories sometimes remains low. It seems likely that a comprehensive categorisation system is still some way away and that Vietnam would benefit from capacity building in this respect.

Lessons learned

Defining the protected areas system by nomenclature rather than on management objectives led to some problems in the management and structure of the protected areas system in Vietnam. Because the 1986 regulation was based on the use of IUCN Categories Ia and II, activities that could have been used to generate incentives for local stakeholders to support protected area management were prohibited, i.e. management regulations prohibited the collection of non-timber forest products (including firewood) or the development of tourism in nature reserves. The result was that there were few incentives to comply with the 1986 regulations, few alternatives to continuing patterns of forest resource use, and limited law enforcement capacity at the local level. Perhaps not surprisingly, unmanaged access to the forest resources of Special-use Forests has been the norm (BirdLife International and the Forest Inventory and Planning Institute, 2001).

The designations have also been difficult to implement in practice. For example, several communities still live within Cat Tien National Park, despite the government in theory having decided to relocate them as long ago as the mid-1970s. It is likely that at least some of these communities will be allowed to remain in the park if they wish. It is possible that some existing protected areas should be re-categorised to reflect more accurately their management objectives, but in addition more areas might be suitable for designation as Category V or VI protected areas, thus increasing the national network whilst not displacing local communities or undermining livelihoods.

The clear understanding, interpretation and translation of the six IUCN Protected Area Management Categories are essential for their correct adoption. The IUCN categories system tries to provide order to a protected area estate which has developed in many different ways with different names around the world. However, using terms such as 'wilderness', 'national park' and 'nature reserve' so prominently in the definitions of the six categories has encouraged some countries to develop and classify their protected areas systems more by reference to the existing names associated with each category rather than the definitions and objectives which are intended to present the clear distinctions between the categories. In the case of Vietnam – and this is by no means a unique situation – the problem arises because IUCN's published advice is not available in local languages and the wording of the English language version was sufficiently complicated to make it hard to understand by non-native English speakers.

Clearly there is a need to translate the IUCN Protected Area Management Categories into many more languages – and for these translations to involve the participation of in-country specialists who are familiar with the issues, thus ensuring that translation is as precise, relevant to the local context yet as technically correct as possible. More specifically, the experience in Vietnam suggests that the continuing use of names with the categories should be seriously reconsidered if they continue to cause confusion. This is especially the case in Vietnam where the language is not adequate to convey the concept of a Nature Reserve or a National Park, corresponding roughly (literal translation) as 'Area for Protection' and 'National Garden' respectively. Lastly, the guidance on the use of the categories might be further amplified by a distillation of recent thinking on zoning, networks of protected areas and landscape approaches to conservation, so that those countries setting up protected area networks can draw on the full range of management objectives available.

References

- Anon. 1999. *Final Project Document for the Strengthening Protected Area Management in Vietnam project*. Produced by the Forest Protection Department, Ministry of Agriculture and Rural Development, WWF Denmark and WWF Indochina Programme: Hanoi, Vietnam.
- Anon. 2002. *A management strategy for a protected area system in Viet Nam 2002 – 2010. Final draft*. WWF IndoChina office and Ministry of Agriculture and Rural Development: Hanoi, Vietnam.
- BirdLife International and the Forest Inventory and Planning Institute. 2001. *Sourcebook of existing and proposed protected areas in Vietnam*. BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute: Hanoi, Vietnam.
- Hardcastle, J. (ed.) 2005. '*National Species Action Plan for the Conservation of the Saola Pseudoryx Nghetinhensis' 2005 to 2010*'. Final Draft. Ministry of Agriculture and Natural Resources and Forest Protection Department: Hanoi, Vietnam.
- IUCN. 1978. *Categories, objectives and criteria for protected areas*. IUCN-The World Conservation Union, Gland, Switzerland.
- Vu Van Dung, Tran Quoc Bao and Tran Lien Phong. 2002. *Categorization and allocation of Protected areas in Vietnam*. Paper written for the Strengthening Protected Area Management in Vietnam. WWF IndoChina Office: Hanoi, Vietnam.
- Williams, K. Chief Technical Officer SPAM project, WWF Indochina Office, Hanoi, Vietnam, 2003.

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Application of the IUCN protected area management categories in the marine environment

SUE WELLS AND JON DAY

It is often suggested that marine protected areas (MPAs) do not fit comfortably into the IUCN protected areas management categories system, and that the system has been poorly used for this group of protected areas. However, evidence shows that there has been good uptake of the categories for MPAs, and that some countries are finding the system useful for the development of MPA networks. Many of the problems encountered in applying the categories to MPAs are found also with terrestrial protected areas. Nevertheless there are some issues that are specific to MPAs, and an urgent need to increase understanding by MPA practitioners of the functions of the category system. This paper examines these issues and offers some recommendations as to how the IUCN categories can be applied more effectively and usefully to MPAs.

ALTHOUGH THE IUCN CATEGORIES SYSTEM is explicitly intended for all protected areas (i.e. both terrestrial and marine), the application of it to marine protected areas (MPAs) has been of concern both at the policy level and in practical terms (Kelleher, 1998; WWF, 1998). Some people feel that the categories and their definitions were developed primarily by those with experience of terrestrial protected areas, and need revision to suit MPAs. There is also a lack of understanding in many agencies of the purpose of the categories and how they should be applied, a problem that applies equally to marine and terrestrial protected areas. For example, those involved in establishing and setting policy for marine Special Areas of Conservation under the EU Habitats Directive are not fully informed of the categories and there is no clear process for assigning them to these sites. In some countries, MPAs are administered by Fisheries Departments, which may not have close relationships with the main national terrestrial protected area agency or good knowledge of the IUCN categories system – but the same problem arises where protected areas are administered by Forestry Departments.

An explanation of the system, and definitions of the six categories, were set out in the IUCN guidelines on this topic (IUCN/WCMC, 1994) and are summarised in the article by Phillips in this number of PARKS. The categories are based on the management **objectives** of the protected area (i.e. not on the approach used to manage it, nor the activities allowed or prohibited within it, nor again on the effectiveness of its management) and all categories are considered to be of equal importance. Endorsed in 2004 by the 7th Conference of the Parties to the Convention on Biological Diversity (see article by Dillon in this number of PARKS), the system provides, among other things:

- a framework for the collection of data on protected areas; and
- a set of international standards that allows comparison across countries.

The category system is of particular value given the very varied terminology used to describe different types of protected areas in different countries. MPAs, for example, include marine parks, marine reserves, wilderness areas, no-take zones, marine sanctuaries and numerous other national designations. The use of these terms often differs between countries; for example, marine reserves in some countries are no-take areas, in others they are MPAs with restricted fishing, and in others again they are multiple use sites. The categories, being based on objectives, provide a means of grouping and analysing the diverse array of managed areas that meet the definition of MPA (see Box 1) regardless of the names given to them in national law.

Three issues of particular relevance to MPAs are examined in this paper, as these have caused problems in the assignment of categories:

- multiple-use MPAs, and the related question of zonation and categories;
- no-take (no-fishing) areas and no-fishing zones within MPAs as some people feel that it should be possible to equate such areas with a category; and
- other managed areas that for various reasons may not be recognised as protected areas.

Current application of the categories to MPAs

The World Database on Protected Areas (WDPA) (see article by Chape in this number of PARKS), listed 4,526 MPAs (i.e. protected areas with a marine component) in February 2005. A total of 3,731 of these, or 82% of the total number of MPAs, have been assigned an IUCN category (Table 1).

Table 1. Comparison of category assignments for MPAs and other protected areas.

IUCN category	No. of MPAs	%	Total other protected areas	%
Ia	430	9.5	5,056	5.0
Ib	79	1.7	1,286	1.3
II	773	17.1	3,220	3.2
III	168	3.7	19,651	19.6
IV	1,441	31.8	25,924	25.8
V	596	13.2	7,885	7.9
VI	244	5.4	3,733	3.7
Unassigned	795	17.6	33,645	33.5
Total	4,526		100,400	

Source: WDPA, UNEP-WCMC, February 2005.

Box 1. Defining marine protected areas

IUCN's definition of a protected area, an "Area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means" explicitly covers land and sea areas (IUCN/ WCMC, 1994), but it was felt that a clear but related definition for MPAs was also needed, particularly in order to clarify if sites with intertidal habitat only should be considered 'marine'. Following the submission of draft resolutions to IUCN's General Assembly in 1988 and 1994, a more specific definition of an MPA was adopted: "Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment" (Kelleher, 1999).

Despite concerns by some users (e.g. Nijkamp and Peet (1994) who noted that the reference to 'terrain' could be interpreted to mean seabed only, rather than marine 'waters') this definition is still widely used, and is followed in this paper. It should be noted however, that the CBD uses the term Marine and Coastal Protected Area (MCPA) in order to emphasise that marine biodiversity protection applies to coastal areas as well as the sea, and defines an MCPA as "any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings." (CBD, 2002). The IUCN definition is preferable in discussions about sites that specifically include marine waters, as the CBD definition also covers terrestrial protected areas that lie adjacent to the shore, with their seaward boundary lying at or above high tide level and thus with no marine waters (either inter-tidal or subtidal) included.

Although it has been suggested that categories are often not applied to MPAs (Bishop *et al.*, 2004), the proportion (82.4%) of *assigned* sites is in fact greater than it is for other protected areas (of which only 66.5% have a category). This suggests that there may be no special difficulty in assigning categories to MPAs. However, as with other protected areas, there is always the possibility that they have been incorrectly assigned if the national agencies and the staff responsible have not fully understood the criteria and guidelines. Until recently, UNEP-WCMC and IUCN/WCPA have in many cases allocated categories where the national bodies failed to do so, and it is now recognised that these assignments too have not always been consistent. This problem of inaccurate assignments, which affects protected areas of all types, is discussed further elsewhere in this volume (Chape).

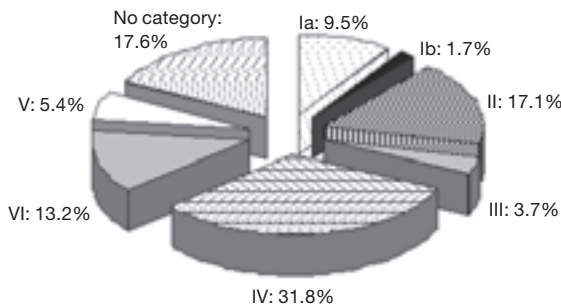
Among both MPAs and other protected areas, more sites are assigned to Category IV (managed for conservation through management intervention): 32% for MPAs and 26% for non-marine PAs. The smallest proportions of sites for both are Category Ib (managed for wilderness protection) (1.7% for MPAs, 1.3% for other protected areas).

A greater proportion (17.5%) of MPAs have been assigned to Category II (managed for ecosystem protection and recreation) than is the case with other protected areas, perhaps because many MPAs are expressly established with the dual objectives of conservation and recreation. The proportion of MPAs assigned to Category V (managed for landscape/seascape conservation and recreation, such as the areas of Heritage Coast in the United Kingdom,) and Category Ia (managed for science – i.e. under a regime of strict protection) is also slightly higher than is the case for non-marine areas (see also discussion below under no-take areas).

Only 3.7% of MPAs have been assigned to Category III (managed for conservation of natural features, i.e. natural monuments) compared to over 19% for other protected areas. This is because ‘natural features’ are less frequently considered in the marine context. The number of MPAs designated with this objective in mind might however increase as our knowledge and understanding of features, such as deep sea vents and sea mounts, grows.

The February 2005 dataset for MPAs from the WDPA has not yet been analysed in terms of area. However, an analysis of a slightly smaller set of MPAs (4,116 MPAs with a total area of marine water of 1,577,883 km²) in Mulongoy and Chape (2004), shows that the area covered by different categories of MPAs is rather different. MPAs assigned to Category VI (Managed Resource Protected Area) account for 51% of the area covered by all MPAs that have been assigned to categories, although Category VI accounts for only 5% in terms of numbers of MPAs. This reflects the generally large size of such MPAs, although the figure is skewed by two very large sites (the GBRMP and the Northwest Hawaiian Islands Coral Reef Ecosystem which together make up over 40% of the entire MPA estate). Category IV and II sites account for 19% and 17% respectively of MPAs by area. Category Ia perhaps surprisingly accounts for as much as 12% by area, considerably more than Categories V (5%), Ib (.4%) and III (0.2%).

Figure 1. Proportion of MPAs by number in different categories. (UNEP-WCMC, 2005).



Difficulties in applying the categories to MPAs

1. Zoned multiple-use MPAs

One concern about the use of the IUCN system is common to all protected areas – how to categorise those areas which contain zones that are managed for different purposes? In the marine environment, this is particularly important as zoning is recommended in the IUCN best practice guidelines on MPAs as the best way of managing multiple-use marine areas (Kelleher, 1999; Day 2002). The fluid and dynamic nature of marine ecosystems, and the high diversity of habitats and species that may occur within an area, including migratory species, often requires multiple objectives and diverse management schemes. Multiple-use MPAs are generally zoned, each zone type having different objectives, with some allowing greater use and removal of resources than others. For example, a critical habitat may be zoned for strict protection and thus potentially be assigned Category Ia; it may be surrounded by an area managed for broader objectives, e.g. recreation, which would meet criteria for Category II; and this in turn might be surrounded by an area managed for a range of uses which would meet the requirements of Category VI.

All protected areas are treated as a single unit and currently assigned a single category in the *UN List of Protected Areas*. Thus the entire Great Barrier Reef Marine Park (GBRMP)¹ is assigned to Category VI, although all the zones within it are determined by a process stipulated in the primary legislation (i.e. the *Great Barrier Reef Marine Park Act 1975*) which creates in effect separate, clearly delineated individual protected areas (Day, 2002). The zoning plan is a statutory document, with specific provisions and boundary descriptions for each zone, and is approved by a specific legislative process before it comes into effect. The zones therefore may be considered in this case as meeting the conditions for a protected area as laid out in the IUCN guidelines and could therefore qualify for assignment to different IUCN categories. Thus Preservation Zones and Scientific Research Zones equate to Category Ia, and Marine National Park Zones to Category II. All these are ‘no-take’ zones, and – as shown in Table 2 – under the new zoning plan which came into effect in 2004, they cover 1,153,950 ha (GBRMPA, 2004). This is over 33% of the GBRMP, or equivalent to an area approximately three-and-a-half times the size of Belgium. Assigning all these areas to Category VI in the *UN List of Protected Areas* creates a misleading picture and it would be more appropriate if the entry for the GBRMP included information on how the zones equate to different categories and the area that each of these cover.

Table 2. Zones of the GBRMP and equivalent IUCN categories.

Equivalent IUCN Category	GBRMP zone type	Area (ha) (NB 100 ha = 1 km ²)	%
Ia	Preservation Zones	7,100	
	Scientific Research Zones	1,550	
	<i>Total</i>	<i>8,650</i>	<i>0.3</i>
II	Marine National Park Zones	1,145,300	33.3
IV	Buffer Zones	98,800	
	Conservation Park Zones	51,600	
	<i>Total</i>	<i>150,400</i>	<i>4.3</i>
VI	Habitat Protection Zones	972,500	
	General Use Zones	1,165,300	
	Commonwealth Islands	1,850	
	<i>Total</i>	<i>2,139,650</i>	<i>62.1</i>
<i>Total all zones</i>		<i>3,444,000</i>	

1 A total of 344,400 km² – or nearly as large as Germany, and accounting for one-third in extent of all Australia’s protected areas.

Like the GBRMP, though of course far, far smaller, Mafia Island Marine Park, in Tanzania, is Category VI, but has 'Core Zones' with strict protection (no-take) covering about 10% of the Marine Park, as well as 'Specified Use Zones' and a 'General Use Zone'. These zones have not been assigned separate categories. For many of the smaller MPAs, it would in fact be difficult and impractical to assign categories according to each zone. Also many such zones derive from the management plan and can readily be changed – whereas in the GBRMP, the Zoning Plan requires a statutory process, including Parliamentary consent, to amend.

WCPA has given attention to the problem of handling zones in the categories system. In 2001 its Steering Committee adopted a recommendation which allows for single management units to be separately reported on, and accounted for, in the case of MPAs if:

- the areas concerned were defined in the primary legislation setting up the protected area;
- these areas are clearly defined and mapped; and
- the management aims for the individual parts are unambiguous, allowing assignment to a particular protected area category.

Recommendations in the *Speaking a Common Language* project support this approach though believing it should apply to all protected areas, marine and terrestrial (Bishop *et al.*, 2004). However, some uncertainty still remains, in particular whether the approach should be applied only to large multiple use areas, and if so how such areas are defined; and whether a minimum proportion should be set, below which a zone may be ignored for the purposes of calculation; and how to avoid double counting in the calculations. There is clearly some further work to do in this field.

Notwithstanding the difficulties encountered over the assignment of large, multiple use MPAs, there is evidence that the categories can be applied meaningfully to different zones of some MPAs by the national agencies. Here are three such examples from Australia:

- During the management planning phase for Lord Howe Island Marine Park, a 300,510 ha MPA lying in Commonwealth waters and protecting deep sea structures associated with a seamount system, it was proposed that the Park be assigned to Category IV (Habitat Protection Zone) and that set drop-line fishing be prohibited throughout. This generated considerable public concern, and so zonation was introduced. About 70% of the MPA is now assigned to Category IV and in this zone drop-lining by island residents is permitted, subject

Wreck Island lies in a pink (preservation) zone of the Capricorn area of the Great Barrier Reef Marine Park, Australia. Photo: GBRMPA.



to certain strict controls. The remaining 30% of the Park has been assigned to Category Ia (as a Sanctuary Zone) in which all forms of fishing are prohibited.

- Tasmania Seamounts Marine Reserve was declared to protect a sample of the cone-shaped remnants of a range of extinct volcanoes which support rich benthic communities with a high level of endemism. A major question in assigning an IUCN category was the impact of pelagic fishing on the benthic community, most available evidence indicating that it was insignificant. The MPA was thus divided into two *vertically* stratified zones: a Managed Resource Zone, from the sea surface to a depth of 500 m, assigned to Category VI, in which pelagic long-line fishing is allowed; and a Highly Protected Zone from 500 m depth to 100 metres above the seabed, assigned to Category Ia in which fishing is prohibited. It has yet to be shown, however, if this arrangement can be enforced. Furthermore, the linkages between benthic and pelagic species are not fully understood, and so careful monitoring will be necessary to ensure that the exploitation of the surface or midwater fisheries does not affect the underlying benthic communities.
- Ashmore Reef National Nature Reserve and Cartier Island Marine Reserve are located some 800 km west of Darwin in the remote Timor Sea and protect a range of tropical marine ecosystems and threatened species. Both MPAs are assigned to Category Ia and are strictly protected. However, the islands have been visited by traditional fishers from the Indonesian region for over 300 years, and so a small part of Ashmore Reef has been zoned to allow access for fresh water, shelter, visits to grave sites and some limited fishing for immediate consumption, and is assigned to Category II.

2. No-take areas

No-take areas have become an important tool for both marine biodiversity protection and fisheries management (Palumbi, 2002; Roberts and Hawkins, 2000). They may comprise a whole MPA or be a core zone within a multiple-use MPA. Within them any removal of marine species and modification, extraction or collection of marine resources (e.g. through fishing, harvesting, dredging, mining or drilling) are prohibited. Other forms of human disturbance may also be restricted.

Depending on its objectives, a no-take area or zone often fulfils the criteria for Categories Ia or II. Leigh Marine Reserve in New Zealand has been assigned to Category Ia, as a scientific reserve, although access for recreational activities is in fact also allowed. As explained above, no-take zones in the GBRMP are assigned to Category Ia if they are Preservation and Scientific Research zones, or to Category II if they are National Park zones. Heard Island and MacDonald Islands Marine Reserve, an area of 64,700 km² was declared to protect the World Heritage values of the region, and is assigned to Category Ia since no fishing is allowed (with the agreement of the Australian licensed fishers in the area). This is one of the largest no-take areas in the world. The Kenyan Marine Parks are assigned Category II, because in addition to being no-take areas, they have an important objective in promoting recreation and tourism.

However, no-take MPAs often have a range of objectives, allowing for access and a variety of non-extractive activities, and thus they may be assigned to other categories. For example, the Ngerukewid Islands Wildlife Preserve in Palau has been assigned to Category III on account of its unique limestone islands which constitute in effect a 'national monument'. However, the main objective of the protected area, particularly for the marine component, is strict biodiversity protection.

Recent research demonstrating the role of no-take areas in increasing fishery stocks and their importance as key elements in the ecosystem approach to marine biodiversity protection has stimulated efforts to create such areas. Commitments made at the World Summit on Sustainable Development² in relation to no-take areas have also encouraged the establishment of no-take areas.

2 "establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds" (para. 31).

For example, the UK designated its first No Take Zone in 2003, within the Lundy Island Marine Nature Reserve, a multiple use MPA designated in 1986 and one of 64 marine Special Areas of Conservation under the European Habitats Directive. The MPA is currently assigned to Category IV.

A number of people have argued that it would be helpful if the category system could be used to measure progress towards targets for no-take MPAs. However, the system is based on management objectives, and not on the tools and regulations used to manage the area, e.g. the uses (or 'non-uses') of an area. Therefore, the category of a terrestrial protected area does not determine – for example – whether hunting or culling is allowed; and the same would apply in the marine environment. Thus the category of a MPA alone would not be expected to determine whether fishing or removal of any other marine species is allowed. For effective management, it may be necessary periodically to review regulations, allowing removal of some species in an area that was previously no-take if circumstances change and the protected area is threatened (e.g. if a population of a species was to increase to such an extent that it threatened the integrity of the ecosystem).

3. Other marine management areas

3.1. Fishery management areas

Areas managed primarily for fisheries purposes, rather than for conservation may not be recognised as protected areas in the IUCN sense, if their primary objective is not conservation. This has raised some concerns as it could mean that no-fishing zones within fishery management areas would not be recognised as MPAs. Further review of such areas, in relation to their objectives and management approaches, would be necessary before any recommendations could be made but the following three examples demonstrate the types of area being referred to.

Some sites, such as fish spawning aggregation areas or migratory routes, are critically important and the species concerned are extremely vulnerable at specific and predictable times of the year, while for the rest of the year they do not need any greater management than surrounding areas. For this reason, the EU has allowed for the establishment of conservation 'boxes' within which seasonal, full-time, temporary or permanent controls are placed on fishing methods and/or access. The Irish Sea Cod Box, for example is designed to conserve cod stocks in the Irish Sea by restricting fishing activities during the spawning period, and a similar 'box' has been established for fisheries management in the waters of the Shetland Islands (Gubbay, 2004).

The entire inshore waters of the three northern Districts of Tanzania lie within six Collaborative Management Areas (CMAs) that have been developed jointly by coastal communities and the District administrations. Within each CMA, bye-laws are passed to regulate various fishing activities, and certain reefs are designated as no-take areas. The management plans for the CMAs are approved by the Fisheries Department but are not considered as part of the Tanzania national MPA system, except where specific areas are gazetted as Marine Reserves (as is the case with one no-take area).

In the Turks and Caicos, the MPA network includes a fishery reserve, the East Harbour Lobster and Conch Reserve, which is managed primarily for restoring populations of these two species and has not been assigned an IUCN category (McManus *et al.*, 2004).

3.2. Marine mammal sanctuaries

The International Whaling Commission (IWC) has a mandate to establish whale sanctuaries which essentially provide permanent no-take zones for cetaceans (Phillips, 1996; WWF, 1998). Three now exist (Mediterranean, Indian Ocean and Southern Ocean) but are not recognised as MPAs, as their objectives address only the capture of certain species and they



Lundy Island, off the west coast of England, is surrounded by the UK's first Marine Nature Reserve, Category IV.
Photo: Adrian Phillips.

are not considered legally 'permanent' (they are subject to regular review). They are thus treated more like fishery management areas than biodiversity conservation sites, and are not assigned to a category.

3.3. Community managed areas

Many small community-managed MPAs have now been set up in the Pacific and Philippines. These are not always recognised as MPAs by the national agencies and thus may not feature on national or international lists, or have categories. This issue was raised by King and Faasili (1998) in the case of Western Samoa, where a network of over 50 small village fish reserves have been established under the Village Fisheries Management Plan (Sulu *et al.*, 2002). The categories are intended to apply to any kind of management authority, and there is no reason why appropriate community-managed protected areas – terrestrial and marine – should not be recognised as protected areas and categorised according to the management objectives (see also Borrini-Feyerabend *et al.*, 2004).

Using the categories in the development of national MPA networks

There is growing understanding that the categories can be used in the development of national protected area systems, helping to ensure that the system covers a representative range of sites and issues. A few countries already provide examples of how the categories can be used specifically for MPA systems.

In Australia, the *Environment Protection and Biodiversity Conservation Act 1999* requires that an IUCN category must be assigned when any protected area is declared by the national government. The legislation includes, for each category, a set of 'Australian IUCN Reserve Management Principles', based on the 1994 IUCN guidelines for assigning categories, as well as a set of general principles to assist the process. Reserves may be multiple-use, in which case each zone is assigned an appropriate category.

In 1992, the seven provincial level governments and the national government of Australia agreed to cooperate to establish a National Representative System of Marine Protected Areas (NRSMPA). Since then, there has been a major acceleration in the establishment of MPAs, with 78 new ones declared, resulting in about 6% of the total Australian marine jurisdiction now included in MPAs. Each jurisdiction has agreed to determine IUCN categories for MPAs proposed for addition to the NRSMPA and to report on these periodically to the Collaborative

Australian Protected Area Database. The full range of IUCN Categories is used, and one of the agreed principles is that the NRSMPA will aim to include some highly protected areas (Categories Ia, Ib or II) in each bioregion. A national MPA coordination committee made up of representatives from all the jurisdictions helps to ensure consistency of interpretation and application of the categories. The examples in the sections above illustrate how the categories are being used.

While the categories were found to be useful in setting the broad management objectives of Australian MPAs, it has also become evident why they cannot easily be used as a prescriptive tool for defining the management of specific activities. In Australia, marine-based industries want to know before declaration of an MPA what activities will be allowed or prohibited within it, so that they can fully engage in the design and declaration process. Initially an attempt was made to define these activities for each category but this was found to be unworkable as it meant that there was then no opportunity to assess the particular impacts of an activity against the conservation values of the MPA. Another problem was the lack of capacity to take into account technological advances in industry activities that may significantly affect impacts. The issue was resolved by negotiating a process with industry where the Australian IUCN Reserve Management Principles were used as a basis for an objective-based, case by case assessment of the impacts of proposed activities on the conservation values to be protected.

The Cayman Islands, a dependent territory of the UK, has a comprehensive Marine Park system, established in 1986 and comprising five different types of MPA, all of which have been assigned IUCN categories (Table 3) (McManus *et al.*, 2004). The system includes a number of fishery management zones, notably grouper spawning areas and replenishment zones, but also zones specifically designed to address recreational objectives.

The Bahamas is developing a similar national MPA system comprising both the more traditional, previously designated forms of MPA (mainly assigned to Category II and considered national parks) and newer no-take fishery reserves, for which categories have not yet been assigned (Dahlgren, 2004).

Discussion

It now appears that many of the problems previously associated with applying the categories to MPAs (Kelleher, 1998; WWF, 1998; Bishop *et al.* 2004) are perhaps more to do with lack of understanding of the role of the categories, rather than any inherent problems associated with their use in the marine environment. There are considerable benefits in having a single category system for terrestrial and marine protected areas. In Australia, there is a perception that MPAs are in some senses not real protected areas compared with the National Parks of the terrestrial system. Establishing a separate classification system for MPAs would feed this perception. There is also the very practical problem of how to deal with protected areas that straddle the terrestrial and marine environments.

Table 3. Cayman Islands Marine Park System and IUCN categories.

Zone type	Regulations	IUCN Category
Environmental Zones (1)	No-take and no-entry	Ib
Marine Park Zones (10)	Line fishing for fish from shore or beyond the drop-off for personal use allowed; no other fishing permitted	II
Replenishment Zones (15)	Minimum sizes and bag limits; no fish traps, nets or spearguns; no line fishing except from shore or beyond the drop-off; no taking of lobster and conch	IV
Grouper spawning areas (8)	Seasonal closures	IV
No Dive Zones (2)	Mesh size limits	IV
Open Zone	Mesh size limits	

As demonstrated from the Australian examples described above, the assignment of IUCN categories imposes a requirement for clarity and, in stating the objectives of an MPA, provides consistency across the system of MPAs. The category definitions and the Australian IUCN Reserve Management Principles were found to be useful in the negotiating process, although a concerted effort to help stakeholders understand the category system and how it is applied was required. Including the whole range of categories was also beneficial as it provides an opportunity for the negotiation of innovative options which can lead to stakeholders adding important information to the process (e.g. on fisheries habitats by the fishing industry, and on environmental issues by the oil and gas industry), and providing better mechanisms for conflict management. An additional benefit of the IUCN categories in Australia is that it allows comparisons across eight jurisdictions that use very different nomenclature for their MPAs. The flexibility of the category system is also demonstrated in the Australian example, where the water column in the Tasmanian Seamounts Marine Reserve is categorised vertically. It may be useful to explore other possibilities such as IUCN categories being assigned temporarily (e.g. in seasonal closure situations where an MPA may impose restrictions on certain activities during breeding seasons) or spatially (e.g. where protection regimes move with a migrating pelagic species).

Perhaps the main problem, as for terrestrial protected areas, is distinguishing the different objectives that define the categories. If the IUCN categories are to be accepted as a global standard for classifying all protected areas, and are to provide a basis for data collection at the global level, the categories need to be applied in a standardised manner to protected areas in all countries and all biomes. In relation to improving the use of the categories for MPAs, the following recommendations are made (they also appear in Bishop *et al.*, 2004):

- Guidelines for the application of the IUCN categories to MPAs should be produced, taking into account current marine scientific and management knowledge. The guidelines should include: clarification of terms and reiteration of the objective-based approach of the categories in relation to uses of MPAs; guidance on which types of fishery and other management areas qualify as MPAs; and a range of practical examples showing how categories are being assigned to MPAs. The points covered in this article could provide a starting point, combined with the work undertaken by WCPA-Marine to analyse objectives for MPAs in order to develop methods for assessing management effectiveness (Pomeroy *et al.*, 2004).
- The relevance of IUCN categories to MPAs should be promoted and their roles, functions and the process by which they are applied made clear to all those involved in MPA establishment and management. Specific activities that could assist with this include UNEP-WCMC's initiative to update the MPA database.
- The guidance developed by WCPA on applying the categories to multiple-use areas should be further refined and disseminated to all those involved in establishing and managing multiple-use MPAs.
- Any new edition of the 1994 guidelines for the IUCN categories should be careful to avoid the use of terms that apply only to the terrestrial environment, or that have different meanings or customary interpretations between land and sea, when the topic under discussion relates equally to the marine environment (for example, the term 'land-use' is often used to mean the entire range of human activities that impact the natural environment).
- Further examination of the categories system could be undertaken to determine whether it can help to provide data on no-take areas (whether as single entities or as zones within multiple use MPAs), in view of the need for estimates of national, regional and global coverage of this type of MPA.

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References

- Bishop, K., Dudley, N., Phillips, A. and Stolton, S. 2004. *Speaking a Common Language: the uses and performance of the IUCN System of Management Categories for Protected Areas*. Cardiff University/IUCN-The World Conservation Union/UNEP-The World Conservation Monitoring Centre, Gland, Switzerland and Cambridge, UK.
- Borrini-Feyerabend, G., Kothari, A. and Oviedo, G. 2004. *Indigenous and Local Communities and Protected Areas – Towards Equity and Enhanced Conservation*. IUCN, Gland, Switzerland and Cambridge, UK.
- Convention on Biological Diversity 2002. *Summary Report of the Ad Hoc Technical Expert Group on Marine and Coastal Protected Areas to the Subsidiary Body on Scientific, Technical and Technological Advice on the Marine and Coastal Biodiversity: Review, Further Elaboration and Refinement of the Programme of Work*, UNEP/CBD/SBSTTA/8/9/Add.1, 27 November 2002.
- Dahlgren, C.P. 2004. *Bahamian Marine Reserves – past experience and future plans*. Chap 9. In: J.A. Sobel and C.P. Dahlgren, (eds). *Marine Reserves: a guide to science, design and use*. Island Press, Washington/Covelo/London.
- Day, J.C. 2002. Zoning – Lessons from the Great Barrier Reef Marine Park. *Ocean and Coastal Mgt* 45: 139–156.
- GBRMPA 2004. New GBR Zoning. Great Barrier Reef Marine Park Authority website <http://www.gbrmpa.gov.au/corp_site/management/zoning/index.html>
- Gubbay, S. 2004. *Marine Protected Areas in the context of Marine Spatial Planning – discussing the links*. Report to WWF-UK, Godalming, UK. 22 pp.
- IUCN/WCMC. 1994; *Guidelines for Protected Area Management Categories*, Gland, Switzerland.
- Kelleher, G. (ed). 1998. Special issue on MPAs, *Parks* 8:2, IUCN, Gland, Switzerland.
- Kelleher, G. 1999. *Guidelines for Marine Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK.
- King, M. and Faasilii, U. 1998. A network of small, community-owned village fish reserves in Samoa. *Parks* 8(2): 11–16.
- McManus, E., Green, E. and Lacabra, C. 2004. *Review: Fishery Restricted Areas of the Wider Caribbean*. Draft report, UNEP-World Conservation Monitoring Centre.
- Mulongoy, K.J. and Chape, S. 2004. *Protected Areas and Biodiversity: an overview of key issues*. UNEP-WCMC/CBD, Cambridge, UK.
- Nijkamp, H. and Peet, G. 1994. *Marine protected areas in Europe*. Report of a study within the BioMar Project commissioned by the LIFE programme of the Commission of European Communities, AIDEnvironment, Amsterdam, March 1994.
- Palumbi, S.R. 2002. *Marine reserves: a tool for ecosystem management and conservation*. Pew Oceans Commission, Arlington, Virginia, USA. 45 pp.
- Phillips, C. 1996. *Conservation in practice: agreements, regulations, sanctuaries and action plans*. Chap. 18. In: M.P. Simmonds and J.D. Hutchinson (eds). *The Conservation of Whales and Dolphins*. Pp. 447–465. John Wiley and Sons Ltd.
- Pomeroy, R.S., Parks, J.E. and Watson, L.M. 2004. *How is your MPA doing? A Guidebook. Biophysical, Socioeconomic and Governance Indicators for the Evaluation of Management Effectiveness of Marine Protected Areas*. IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- Roberts, C.M. and Hawkins, J. 2000. *Fully Protected Marine Reserves: a guide*, World Wildlife Fund, Washington D.C. USA.
- Sulu, R., Cumming, R., Wantiez, L., Kumar, L., Mulipola, A., Lober, M., Salini, S., Poulasi, T. and Pakoa, K. 2002. *Status of coral reefs in the Southwest Pacific to 2002: Fiji, Nauru, New Caledonia, Samoa, Solomon Islands, Tuvalu and Vanuatu*. In: C. Wilkinson, (ed). *Status of Coral Reefs of the World: 2002*.
- WWF 1998. *Marine Protected Areas: WWF's role in their future development*. WWF International Discussion Document. 56 pp.

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International Council on Mining and Metals perspective on the IUCN protected areas management category system¹

DAVID RICHARDS, RIO TINTO, AND ANDREW PARSONS, ICMM

ICMM has demonstrated a commitment to leadership by improving the mining industry's performance in delivering conservation outcomes, not least through poverty alleviation and the recognition of the role of protected areas. These objectives need to be complemented by assessments at the landscape level and decision-making processes involving the collaboration of all stakeholders. If the IUCN category system is to be used as a tool to influence management standards and land-use decisions, it will need to be strengthened in a number of areas, which are described in the paper.

THE WORLD'S BIODIVERSITY is under threat. This is as much due to root causes such as poverty, social change and lack of government capacity, as to the more obvious proximate causes, including habitat loss, invasive species and pollution (Wood *et al.*, 2000).

Many of the most acute conservation problems occur in biodiversity-rich developing countries that are also facing pressing human development needs. The challenge of sustainable development is to alleviate poverty in these countries while sustaining the environmental foundations of their economies. It is clear that without economic development there can be no poverty reduction. Experience also shows that without economic development there can be little improvement in environmental protection.

Worldwide systems of protected areas will need to be strengthened in order to conserve biodiversity and natural and cultural heritage. However, as recent analysis of gaps in protected area coverage has shown (Rodrigues *et al.*, 2003), much of the most threatened biodiversity lies outside protected areas. This suggests that a broader approach to *in-situ* conservation, involving a wide range of stakeholders, is needed.

The World Summit on Sustainable Development, the World Parks and Conservation Congresses and the Convention on Biological Diversity have called for fresh innovative and integrated approaches to reduce the unacceptably high rate of biodiversity loss. These fora have also highlighted the need for a people-centred approach. The important role of business in advancing this agenda has been increasingly recognised by governments and the conservation community. At the 3rd IUCN World Conservation Congress in Bangkok (November 2004), two resolutions were passed calling on the IUCN to develop ways to work more closely with and to influence the private sector (IISD, 2004).

Responsible mining operations can be part of the solution to biodiversity loss and poverty by being an engine of economic and social development and by contributing directly to biodiversity conservation activities, while minimising social and environmental impacts (Carter, 2004). ICMM recognises the role of properly designated and managed protected areas in conservation strategies and that, in some cases, exploration and mining development may be incompatible with the objectives for which protected areas are designated. It also acknowledges that mistakes have been made in the past and that the industry's commitment to sustainable development and society's expectations demand that performance needs to improve continually. These points and others confirming ICMM's interest in and engagement with the issues surrounding protected

1 This paper draws heavily on the papers by Richards and Houston (2003) and Dudley *et al.* (2004).

areas and mining were made to the plenary session of the Vth World Parks Congress in 2003 by Sir Robert Wilson, then Chairman of the ICMM (ICMM, 2003a).

ICMM has been engaged with IUCN in a dialogue on mining and biodiversity since 2002, and work on protected areas has been a central element of the joint work programme throughout. In this paper, some of the results of this collaboration are discussed, together with areas for future work.

Key questions

The recent *Speaking a Common Language* report (Dudley *et al.* 2004) lists the following questions in the debate around mining, protected areas, and IUCN's Amman recommendation. Further detail is given in the report.

- How much land are we talking about?
- Are the categories assigned correctly and consistently?
- Can categories be challenged?
- Are protected areas managed effectively?
- Are mineral companies being singled out?
- Do protected area designation criteria adequately identify compatible and incompatible land-uses?
- Will establishment of protected areas be used as a tactic to stop mining?
- Do conservation organisations risk loss of protected areas altogether if they persist in trying to prevent mining?
- How rigid is the Amman Recommendation (see below)?
- Can mines help to sustain protected areas?
- Does a broader-scale approach to conservation help?
- What happens in protected areas in Categories V and VI?
- Where are governments in this debate?

The report also identifies two other issues which ICMM considers to be particularly significant:

- What should be done about protected areas that were established without adequate stakeholder consultation?
- What should be done about protected areas that have significant mineral potential that was unknown when the area was originally designated?

We consider all these questions to be central to the debate, and will attempt to answer here those that are relevant to ICMM.

ICMM's 'no-go' pledge

To give formal effect to its recognition of the importance of protected areas, ICMM announced its landmark 'no-go' pledge in August 2003 (ICMM, 2003b). In this, ICMM's corporate members undertook 'not to explore or mine in World Heritage properties' and to take all possible steps to ensure that operations are not incompatible with the outstanding universal values of these properties. ICMM members also undertook to respect all legally designated protected areas.

This decision signals ICMM's commitment to engage with the conservation community on the contentious issue of 'no-go' areas. It also contains a number of important undertakings that establish key precedents not only for the mining industry but also other extractive industries. ICMM recognises the role of properly designated and managed protected areas in conservation strategies and that, in some cases, exploration and mining development may be incompatible with the objectives for which areas are designated.

The position statement from ICMM was a forward looking initiative by the mining industry in an arena that had been characterised by acrimonious debate and conflict for many years with little or no progress. Large parts of the conservation movement believed that the mining industry

saw the entire earth's surface as potential mining ground, so the most important aspect of the statement was its explicit recognition that conservation through protected areas should at times override development potential. This marks a change in parts of the mining industry in the past 5–10 years: leading companies are committed to meeting more of society's expectations as well as its need for minerals.

The challenge for ICMM's member companies is to demonstrate by their social and environmental performance that mining can be compatible with conservation, even when it occurs within multiple use protected areas, or indeed near any protected area.

Amman recommendation and the IUCN categories

Many in the conservation community believe that recommendation 2.82 of the 2nd World Conservation Congress in Amman (the Amman recommendation) should be the starting point for industry's 'no-go' policy. However, it must be recognised that the Amman recommendation is aimed at governments, not industry, and that some governments have not applied or effectively used the IUCN category system. Moreover, what national legislation and the Amman recommendation say about restrictions on mining in protected areas may conflict. If responsible companies adopt the Amman recommendation and thereby exclude themselves from protected areas in IUCN Categories I–IV, and if national legislation allows the government the right to permit mining in some or all of these areas, there will be a risk that mining will be undertaken by companies that are less willing or able to match ICMM members' commitments and performance.

It might be informative to establish from IUCN member governments why many of them have not acted upon the Amman recommendation. Competition for space in the legislative programme is one possible reason, but it is also conceivable that some governments wish to retain the flexibility necessary to make their own balanced decisions on the priorities for land use. If true, this would draw attention to the need to strengthen formal assessment procedures such as social and environmental impact assessment (SEIA) so that they reliably constitute a full evaluation of the options in regard both to protected areas establishment and commencement of mining projects.

Rotary air blast rig in the Sperrgebiet of Namibia, showing how low impact activities can be managed in sensitive areas. Photo: Anglo American plc.





Part of the Huntley mine in 1980 (top) and the same view in 2001 (below), showing restoration of valuable ecosystems after mining's temporary land use. Photo: Alcoa Inc.

It would also suggest that the sooner collaborative progress can be made on developing models for landscape scale assessments and land-use decision-making processes the better.

There are several application issues associated with the IUCN categories. In categorising national protected areas, the current IUCN category system has been inconsistently interpreted and applied by governments both within and between countries, often in processes that are neither transparent nor inclusive. The final international category assignment of protected areas can also differ from national assignments. For example, a multiple use protected area at the national level can be assigned a Category II status at the international level, based on the interpretation of the management objectives of the site. The problem of “paper parks”, i.e. parks that exist in terms of legislation but do not actually protect anything, seriously undermines the category system.

Furthermore, some countries have found that the IUCN categories do not meet their national requirements. Clearly, it is difficult to conceive of a system that meets the needs of all countries, but the system does need to be more flexible to address the needs of those countries that have explicitly decided not to use it. Another flexibility issue is the concept of zoning, whereby a park has zones where different levels of protection apply, from strict protection to limited use. As the *Speaking a Common Language* report recognises, the system should be able to cater better for such an approach, which is being used successfully around the world (Bishop *et al.*, 2004).

ICMM recognises that national and global systems for the evaluation, designation, classification and management of areas listed for protection are needed to ensure consistency of approach to land access decisions. However, if the IUCN category system is to be used as a tool to influence management standards and land-use decisions, it will need to be strengthened in a number of areas including:

- Ensuring that conservation and resource use strategies are developed in the context of broad, regional land-use planning frameworks, in which protected areas are considered as one of an array of tools that can be employed to achieve conservation and resource use objectives.
- Ensuring transparency in the protected area/IUCN category assignment process, including a dispute resolution mechanism, involving industry and other stakeholders.
- Developing clear, broadly agreed criteria that define the circumstances under which it is appropriate to use each type of protected area category.
- Establishing systems of verification/certification to ascertain whether a protected area has been assigned to the correct category and the site is being effectively managed.
- Establishing a ‘Protected Areas In Danger List’ to identify where degradation of conservation values occurs due to poverty or other reasons, make provision for the protected areas in question to be reclassified when appropriate (e.g. IUCN Category V or VI) and encourage governments in close consultation with stakeholders to explore available development options (e.g., mining, ecotourism, oil and gas, etc.) to address the causes of biodiversity loss.

Despite its shortcomings, the IUCN system remains the only viable international system for categorising protected areas, and the system is robust, internationally recognised and scientifically meaningful. Moreover, its standing was strengthened when the 7th Conference of the Parties to the Convention on Biological Diversity in Kuala Lumpur (February 2004) endorsed its use by countries. For these reasons, ICMM is committed to working with IUCN to improve the system so that it can better reflect realities on the ground and can be a better and more widely applicable tool for governments, conservationists, communities and industry. ICMM has already participated in the work of the IUCN/Cardiff University/UNEP-WCMC project *Speaking a Common Language* on the uses and performance of the IUCN system. This project developed proposals, including those to revise the IUCN guidelines on protected area management categories, which were supported by the Vth World Parks Congress (Bishop *et al.*, 2004) and broadly approved by the 3rd IUCN World Conservation Congress (WCC).

Transparent, informed and fair decision-making processes

The ICMM pledge demonstrates that industry accepts the principle of 'no-go' areas. What is of vital concern are the decision-making processes used by governments in establishing land-use priorities and protected areas, generally, and 'no-go' areas more specifically. From the industry's perspective, much needs to be done, principally by governments.

Society's ever increasing demand for minerals will require industry to have access to large amounts of land for exploration, though the area retained for advanced exploration and mining is only a small fraction of what was originally explored². New exploration leases are increasingly located in isolated places, including some in biodiversity-rich and socially sensitive areas. This could bring mining into greater competition with alternative land-uses, including protected areas.

ICMM considers that more strategic approaches are needed to assist governments to resolve different land-use, conservation and development objectives. Such approaches need to be transparent, equitable, informed by mineral development potential assessments, among others, based on the principles of sustainable development, reviewed on a regular basis (probably every five to ten years) and must take into account the opinions of, and consequences for local communities – including indigenous peoples – and the regions involved. Such long-term, holistic approaches are essential if piecemeal decisions, which neglect cumulative impacts, are to be avoided. Consultative processes are obviously also important in order to address the concerns and optimise the outcomes for neighbouring communities. The analysis of options needs to be carried out at a landscape scale in order to minimise the potential for conflict over small areas of land and to allow for governments to make difficult decisions between development options and conservation objectives. IUCN's members endorsed this approach at the 3rd IUCN World Conservation Congress in resolution 38.

SEIAs are a key component of such decision-making processes at the individual project level. Governments should require that SEIAs are carried out before any major development project commences to ensure that all potential impacts are properly considered. The 'no-go' option should be a part of SEIAs. Indeed, the SEIA should be an integral part of mitigation planning and social and environmental reviews after development starts.

During 2005, ICMM expects to publish a scoping paper as part of its dialogue with IUCN. It intends also to bring together other interested organisations (e.g. international organisations, governments, other industry sectors, environment and development NGOs) to discuss the development of decision-making models and assessment tools that better integrate conservation and mining into land-use planning strategies and regional development plans. Such work would only be a first step in a concerted programme of international cooperation that is required to help build government capacity in developing countries and economies in transition. Ultimately, such collaboration will seek to develop clear and equitable rules for land access as well as establish the basis for determining 'no-go' areas for exploration and mining activities.

Conclusion

ICMM members are committed to providing leadership aimed at improving the industry's performance and enhancing the contribution of mineral development to poverty alleviation and biodiversity conservation objectives. ICMM commitments offer governments and other stakeholders a clear basis for choice when they consider how to translate mineral potential into sustainable development outcomes. They also set industry standards that can be used to influence better performance in other parts of the mining industry.

Advancing conservation and development objectives will require close cooperation between governments, multi-lateral organisations, industry, communities, including indigenous peoples, and NGOs. The recognition of this imperative in IUCN and among its members was made clear at

² Only about one in 1,000 exploration targets results in mine development. Also, the total land disturbed to mine a body of ore (a measure of the likely direct impact on biodiversity) is relatively small compared to other land-uses.

the 3rd IUCN WCC in Bangkok, in which closer co-operation with the private sector was a prominent element of the speeches by both departing and incoming Presidents of IUCN and in two congress resolutions, 46 and 47 (IISD, 2004, *ibid.*) Partnership opportunities with companies offer environmental NGOs considerable potential to achieve on-the-ground conservation outcomes. Governments can foster real progress by adopting clear criteria for project outcomes, including biodiversity conservation and community development results, when seeking commercial partners in mineral development projects or when inviting bids on new mining licences.

Collaboration is required to assist in the development of decision-making models and assessment tools that integrate conservation and mining into land-use planning strategies. A concerted programme of international cooperation will also be required to build government capacity to implement these tools and ensure the application and enforcement of equitable rules regarding land access.

ICMM wishes to minimise potential confrontations over land use with the conservation community, and will continue to work with IUCN to strengthen its system of protected area categorisation. ICMM members recognise that sufficient reform of the system will lead to recognition of categories of protected areas as 'no-go' areas and others with a multiple-use designation. Clear and equitable rules for categorisation of parks will make it easier for the industry to do business, and to ensure that livelihoods, fauna and flora are properly protected and that sustainable development is fostered.

References

- Bishop, K., Dudley, N., Phillips, A. and Stolton, S. (eds.). 2004. *Speaking a Common Language*. Cardiff University, IUCN-The World Conservation Union Gland, Switzerland and Cambridge, UK and UNEP-World Conservation Monitoring Centre, Cambridge, UK.
- Dudley, N., Phillips, A. and Stolton, S. 2004. *The categories, mining and the Amman recommendation*. In: Bishop, K., Dudley, N., Phillips, A. and Stolton, S. (eds.). *Speaking a Common Language*. Cardiff University, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge and UNEP-World Conservation Monitoring Centre, Cambridge, UK. 150–161.
- International Council on Mining and Metals 2003a. *Address by Sir Robert Wilson, Chairman Rio Tinto and Chairman ICMM, to the plenary session of the World Parks Congress: The extractive industries and protected areas*, Durban, South Africa, 16 September 2003. www.icmm.com/news/161WPC-RPWpresentation160903.pdf, ICMM, London, UK.
- International Council on Mining and Metals 2003b. *ICMM Position Statement on Mining and Protected Areas*. www.icmm.com/publications/497ICMMPositionStatementonMiningandProtectedAreas.pdf, ICMM, London, UK.
- International Institute for Sustainable Development 2004. *Summary of the 3rd World Conservation Congress: 17–25 November 2004*. ISSD, New York, NY, USA.
- Richards, D. and Houston, S. 2003. *Protected areas and mining – Scope for conservation and development*. In: Biodiversity issues for consideration in the planning, establishment and management of protected area sites and networks. CBD Technical Series no. 15. Secretariat of the Convention on Biological Diversity, Montreal, Canada. 132–137.
- Rodrigues, A.S.L., Andelman, S.J., Bakarr, M.I., Boitani, L., Brooks, T.M., Cowling, R.M., Fishpool, L.D.C., da Fonseca, G.A.B., Gaston, K.J., Hoffman, M., Long, J., Marquet, P.A., Pilgrim, J.D., Pressey, R.L., Schipper, J., Sechrest, W., Stuart, S.N., Underhill, L.G., Waller, R.W., Watts, M.E.J. and Xie, Y. 2003. *Global Gap Analysis: towards a representative network of protected areas*. Advances in Applied Biodiversity Science Number 5. Conservation International, Washington, D.C., USA.
- Stewart Carter, A. 2005 (in press). *Extractive Industries and Protected Areas*. In: J.A. McNeely, (ed.), *Friends for Life: New Partners in Support of Protected Areas*. IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- Wood, A., Stedman-Edwards, P. and Mang, J. 2000. *The Root Causes of Biodiversity Loss*. Earthscan, London, UK.

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The International Council on Mining and Metals (ICMM) is a CEO-led organisation dedicated to sustainable development. ICMM comprises many of the world's leading mining and metals companies as well as regional, national and commodity associations, all of which are committed to improving their sustainable development performance and to the responsible production of the mineral and metal resources society needs. ICMM's vision is a viable mining, minerals and metals industry that is widely recognised as essential for modern living and a key contributor to sustainable development.

Shell's perspective on the IUCN protected areas management category system

SACHIN KAPILA, GROUP BIODIVERSITY ADVISER, SHELL INTERNATIONAL LTD

This paper highlights Shell's position on protected areas and a number of issues presented by the IUCN Categories System that Shell considers important. Though this paper takes a critical look at the IUCN Categories System, it should be made clear at the outset that Shell appreciates the value of having an internationally recognised category system for protected areas with clear rules for all stakeholders. In addition, Shell fully supports the work of the 'Speaking a Common Language' project, concurs with its recommendations and looks forward to their implementation.

AT SHELL, PROTECTED AREAS are explicitly highlighted in our Group Biodiversity Standard, published in July 2001, and the first to emerge from an energy company. We then continued to work to define exactly what we will and will not do with respect to such areas and announced a number of further commitments in 2003:

- Shell will not explore for, or develop, oil and gas resources from within natural World Heritage Sites. This is the first time an energy company has stated in public where it will *not* operate. We recognise the outstanding value that these sites represent for society;
- we will further upgrade our operational practices wherever we operate in IUCN Category I–IV protected areas or where an environmental, social, health impact assessment (ESHIA) indicates high biodiversity values. We strive to become involved in spatial/regional planning exercises, will assess our secondary impacts, implement Biodiversity Action Plans, and conduct appropriate baseline and monitoring studies;
- we will publicly report on our activities in IUCN Categories I–IV; and
- we will work with IUCN and others to develop and pilot ways of strengthening the management effectiveness of protected areas through the provision of key skills, creation of sustainable livelihoods and by exploring options for sustainable financing.

Consistency of application

It is well documented that the IUCN Protected Area Management Categories System was established to provide a common language "by which managers, planners, researchers, politicians and citizens groups in all countries can exchange information and views" (IUCN 1994). The system also aimed to ensure consistency in the way in which protected areas were described, both within and between countries. The system recognises that the management *objectives* of the area may differ significantly from the management reality on the ground (see discussion of management objectives vs. management effectiveness below). The result is that the IUCN Categories do not yet provide a globally consistent indication of sensitivity of an area for companies. Thus companies rely on a country-by-country approach of working with government and key stakeholders to assess whether or not operations within a protected area may be legal and/or appropriate.

It should be noted that the system was not originally intended to set or drive up management standards, nor to lay down a precise template to be applied at the national level. Indeed IUCN/WCMC specifically advised that it was not to be used as a "driving" mechanism, but that protected areas should first be established to meet national or local needs and then be "labelled with an IUCN Category according to the management objectives" (IUCN, 1994, page 1).



Western Grey Whale with the Molicpak platform in the background. Photo: Dave Weller.

Review, audit and verification procedures

The process of assigning categories appears to be weak. Currently, the process, as we understand it, is as follows:

- each country defines for itself its own priorities regarding the establishment of a protected area system;
- when it comes to the nomination and designation of any new protected areas within that system, that country will conduct its own assessment, and then submit the requisite information to UNEP-WCMC for that area to be registered within the World Database on Protected Areas (WDPA) and published in the UN List of Protected Areas;
- within that submission, the country also declares what IUCN Management Category it should be assigned to, based on its interpretation of the 1994 IUCN Category Management System Guidelines; and
- only in cases where UNEP-WCMC determines that there is a discrepancy between the protected area management objectives and the proposed category, is the situation further investigated, often in consultation with IUCN (through its World Commission on Protected Areas – WCPA) who may conduct a field-based review for verification purposes.

The process is limited by the resources available to the two institutions and may therefore result in some protected areas with inappropriately assigned categories (or no categories at all – see below). One problem with this method of assessment is the reliability and consistency of input data from national sources – especially with regard to assigning categories to protected areas. For the 2003 List, UNEP-WCMC received updates from 103 countries (only 56% of all countries) (Chape *et al.*, 2003).

Furthermore, it appears that a globally consistent (or globally applied) process for auditing and verifying protected areas is lacking after they have been assigned a category classification. Thus, changes in use and management objectives may not be reflected in changes in categories. It is, of course, important to recognise that the limited resources of the institutions would be stretched should such a system of verification and auditing be put in place – especially should it be applied retroactively to approximately the 70,000 protected areas already assigned categories (67% of the total number and 81% of the area) (*ibid.*, page 21). This situation creates uncertainties around the validity of the Category assigned.

Furthermore, not all protected area agencies or other organisations have assigned IUCN categories to their sites. Some people may argue that this does not really matter and each government should be left alone to decide for itself how it wants to categorise its protected areas. In 2004, however, the 7th Conference of the Parties to the Convention on Biological Diversity recognised the IUCN Categories System as the universal system for assigning categories to protected areas and encouraged governments to use it accordingly. In 2004, the WDPA included 102,530 designated sites covering over 18 million km² or 12.7% of the Earth's land surface. Of these, 68,540 sites, about 67%, have been categorised – representing nearly 10% of global land area. This means that almost 34% (covering some 4 million km²) of the world's protected areas currently have not yet been assigned an IUCN management category. The task of assigning all relevant sites to an IUCN category is urgent, but it is also a mammoth one – the issue is further discussed in the article by Chape in this number of PARKS.

From published research (Dudley *et al.*, 2004), it is clear that the demands on those involved in providing data for the WDPA, and in particular the assignment of categories to the protected areas listed on the database, are great. It is also clear that these demands are likely to grow as initiatives such as the Amman Recommendation on mineral extraction promote the categories system as a means of regulating decisions on activities which can be carried out in protected areas, as opposed to being simply a system of international categorisation and data gathering.

The governance framework

As noted, the IUCN Categories are currently applied by countries and reviewed by UNEP-WCMC, accompanied by a little used process of dispute resolution by WCPA on behalf of IUCN. The categories themselves are 'owned' by WCPA and IUCN and its members, having been adopted by the IUCN General Assembly in 1994 (Resolution 19.4), which was in turn advised by the Fourth World Congress on National Parks and Protected Areas. As the globally authoritative body on protected areas (demonstrated by its role, for example, as the statutory Advisory Body to the World Heritage Committee on natural heritage under the World Heritage Convention), it is appropriate for IUCN (through WCPA) to be the originators of the categories. However, since a more formal governance structure (such as an international convention) is lacking, as well as associated guidelines and procedures, the categories are only sometimes enacted in national legal frameworks and may not even be reflected in national law. Without clearly defined technical tools and legal structures there is little or no authority for ensuring consistency and valid implementation of the Categories.

The inclusiveness, transparency and openness of the process

The current process for assigning Categories to protected areas does not appear to require openness, transparency or inclusiveness. Categories may (depending on the country) be assigned without due consideration to alternate options for land use and without consultation with key stakeholders such as local communities, government agencies or industry; they may also be assigned without due attention to the published guidance.

Procedures for challenging a category

To further complicate the issue, there is no formal recourse by which industry, local communities or stakeholders may challenge the category assigned to a protected area. Also formally established procedures for resolving disputes over protected area boundaries are often lacking, though the principles for such a challenge are outlined in *Amman Recommendation 2.82* which "Urges that proposed changes to the boundaries of protected areas, or to their categorisation, to allow for the exploration or localised extraction of mineral resources, should be subject to procedures at least as rigorous as those involved in the establishment of the protected area in the first place".

The basis of management objectives vs. management effectiveness

Finally, and perhaps most fundamentally, the design of the IUCN category system around management objectives means that assignment ignores questions of management effectiveness. In fact in many countries protected areas are not meeting their management objectives. In some cases, this is a temporary situation due to a short-term crisis – which is fine, so long as measures are taken to remedy the situation. The “World Heritage In Danger” list is an example of a process designed to bring focused attention to the need to address a situation that is eroding the values for which the site was designated. But in other cases protected areas languish under years of ineffective management. The result is a protected area, which no longer holds the values for which it was originally designated. The problem is made more serious because there are often no satisfactory processes for auditing or validating the categorisation of a protected area. And because the management objectives were not effectively implemented, protected areas are sometimes assigned a category, which is no longer compatible with its intended condition.

IUCN categories as a determinant for land-use

Amman Recommendation 2.82 is being used by some institutions to help determine the acceptability of specific forms of land-use, namely the extractive industry. They argue that mining and hydrocarbon extraction should remain outside all IUCN Category I–IV protected areas on the basis of their categorisation. But, as has been seen, this was not how the categories system was intended to be used. In fact it was designed to provide a nomenclature around protected areas based on their management objectives, and not for determining whether one type of land-use is preferred over another, and whether some areas should become no-go areas for certain land uses.

Conclusions

Protected areas are an important component of the conservation agenda, delivering *in situ* conservation objectives as set out in international conventions such as the Convention on Biological Diversity. Shell recognises the importance of protected areas and the hard work invested in their establishment and maintenance. But because of the procedural and governance issues outlined above, it is Shell’s view that if IUCN is asking national governments to prohibit activities based on the use of the protected area categories, then the categories system needs a stronger, more transparent and inclusive framework for application, methods of dealing with disputes, and some independent means of verifying that the correct category has been applied.

More specifically, Shell believes that, in strengthening the Categories system, the focus should be on:

- clear definitions and guidelines for the designation of Categories;
- the decision-making and governance frameworks for assignment of particular categories of protected areas, so as to create a more systematic and transparent structure with clear lines of communication and appeal;
- broader advice about what is and is not acceptable within particular categories of protected areas, drawing on the views of a wide range of stakeholders, either as supplementary guidance to the categories or as a part of a revised version of the categories guidelines;
- a joint NGO-industry initiative (perhaps starting with a workshop) to look at the conditions under which exploration and/or extraction activity can be integrated into ecosystem conservation management approaches at ecoregional or landscape scale;
- guidelines on acceptable practice for hydrocarbon extraction in IUCN Categories V and VI; and
- more comprehensive and public information concerning protected areas, including information about their values, objectives and management systems within the WDPA.

References

- Chape, N., Blyth, S., Fish, L., Fox, P. and Spalding, M. (compilers) 2003. *2003 United Nations List of Protected Areas*, IUCN-The World Conservation Union, Gland, Switzerland and UNEP-WCMC, Cambridge, UK.
- Dudley, N., Phillips, A. and Stolton, S. 2004. *The categories, mining and the Amman recommendation*. In: K. Bishop, N. Dudley, A. Phillips and S. Stolton. (eds.). *Speaking a Common Language*. Cardiff University, IUCN -The World Conservation Union, and UNEP-World Conservation Monitoring Centre, Cambridge, UK. (pp 150–161).
- IUCN, 1994. *Guidelines for Protected Area Management Categories*. IUCN -The World Conservation Union, Gland, Switzerland and WCMC, Cambridge, UK.

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Systematic assignment of protected area management categories: an opportunity for achieving a measurable framework

STUART CHAPE

There are currently almost 105,000 sites in the World Database on Protected Areas that are established protected areas, and more than 67% have been assigned IUCN management categories. The value of the category system for developing protected area systems is well established, if not yet consistently applied. Recent inclusion of protected areas in global environmental monitoring and reporting processes, and endorsement of the category system in the CBD Programme of Work on Protected Areas have strengthened the argument for more universal adoption and effective implementation of the system. This, in turn, provides an opportunity to use the system as a coherent framework for measuring not only effectiveness in meeting protected area management objectives but also for national and regional reporting for global assessments. However, before such a framework can be effectively achieved, categories need to be properly assigned at country level. This will require a more systematic approach by WCPA and its partners to support countries in category assignment.

The need for a systematic approach

During the early stages of the protected area movement there were relatively few designations or types of protected areas (National Park, Game Reserve, etc.) established under national legislation. However, with the massive growth in the global estate of protected areas, it was inevitable that legal and administrative regimes for protected areas would be developed by governments appropriate for situations in their own countries. Over 1,000 different terms are now known to be used at national level to designate protected areas, reflected in the plethora of site designations in the World Database on Protected Areas (WDPA) maintained by the UNEP World Conservation Monitoring Centre (UNEP-WCMC). These terms are usually defined in national legislation with respect to objectives and legal protection for the area in question. Sometimes there may be only marginal differences between countries for essentially the same type of protected area; in other cases, the same term used in different countries means something very different. (For a fuller account of the background and history of the IUCN protected area management category system, see the article by Phillips in this issue of PARKS).

Protected areas are increasingly recognised for their role as indicators for global commitments to conservation and environmental sustainability. In 2004, the 7th Conference of the Parties (CoP7) of the Convention on Biological Diversity (CBD) endorsed protected area coverage as an indicator for immediate testing in relation to the adopted target of significantly reducing the rate of biodiversity loss by 2010 (SCBD 2004a). The Millennium Development Goals (MDGs) also use protected areas as a key indicator for Goal 7 – Ensuring Environmental Sustainability, Target 9: Integrating the principles of sustainable development into country policies and programmes and reversing the loss of environmental resources. Indicator 26 is a measurement of “land area protected to maintain biological diversity”. Both the 2010 targets and the MDGs currently use *coverage* of protected areas as their indicators, and data on this are provided from the WDPA for global reporting. However, measures of the area under protection are of themselves insufficient to assess progress towards these important global goals. At best they provide an indication of political and social intent, but they do not tell us whether protected areas are achieving their conservation objectives, nor do they reveal important information about gaps in protected area

networks. If protected areas are to be effective tools for measuring achievement of global initiatives such as the 2010 targets and the MDGs, then a suite of indicators are needed that relate both to completing protected area systems and ensuring the biodiversity effectiveness of protected areas (Chape *et al.* in press).

Protected area management categories potentially have an important role in such a comprehensive approach. By providing a common international framework, the IUCN categories make it possible to compare protected areas in terms of their management objectives. If uniformly adopted and consistently applied, the categories can also assist in the evaluation of management and conservation effectiveness. Already, the categories provide a useful framework for comparing the pursuit of different types of protected area management objectives. However, the key to using management categories in this way clearly depends on their accurate assignment.

Developing and applying the categories

As noted in the article by Phillips, the United Nations first endorsed the preparation of a periodic list of 'national parks and equivalent reserves' in 1962, handing the mandate to collect the data to IUCN and the then International Commission on National Parks (now WCPA). Thus, protected areas were the impetus for one of the earliest (if not the first) global environmental reporting procedures. Since 1981, data for this List have been collected by WCMC (now UNEP-WCMC), in partnership with IUCN and WCPA, on behalf of the UN. This 'UN List' process has driven the systematic collection of global protected area data, and has been the primary mechanism for gathering official information from national government agencies. Although the List is the 'driver' for the periodic updating of the database, protected area data have also been provided from non-government sources, notably since 2002 when a WDPA Consortium¹ of international organisations was formed to strengthen data input. The protected area data collected as part of this process over the past 25 years form the core of the WDPA, which holds records on almost 105,000 sites covering 19.6 million km² or 13.2% of the Earth's land surface (Table 1).

Throughout its history, various criteria have been used for inclusion of sites on the UN List, such as minimum size limitations. After decades of debate on an international nomenclature and classification system for protected areas, in 1994 IUCN published its *Guidelines for Protected Area Management Categories*, defining the currently used six-category system based on protected area management objectives. In discussing the assignment of categories, the guidelines stated:

Table 1. Protected areas in the WDPA (February 2005).

IUCN PA Management Category	No of PAs	Area (km ²)	% Global land surface
Ia	5,486	4,602,806	3.1%
Ib	1,365	2,390,385	1.6%
II	3,993	2,973,103	2.0%
III	19,819	272,269	0.2%
IV	27,365	4,477,846	3.0%
V	8,481	617,089	0.4%
VI	3,977	1,004,865	0.7%
No category	34,440	3,308,963	2.2%
Total	104,926	19,647,326	13.2%

1 The WDPA Consortium was established in 2002 to expand participation and leadership on the development of the protected areas database. It brings together international conservation organisations that have agreed to ensure that information on protected areas is maintained on a cooperative basis and used to monitor the effectiveness of global conservation agendas. Membership includes: IUCN, UNEP-WCMC, Conservation International, The Nature Conservancy, American Museum of Natural History, Fauna & Flora International, BirdLife International, WWF and Wildlife Conservation Society.

It...follows from the international nature of the system, and from the need for consistent application of the categories, that the final responsibility for determining categories should be taken at the international level. This could be IUCN, as advised by its CNPPA² and/or the World Conservation Monitoring Centre (e.g., in the compilation of the UN List) in close collaboration with IUCN.

However, meeting this responsibility has proved to be difficult with the growth in global protected area numbers. The 1997 UN List (IUCN/WCMC 1998) undertook an assessment process based on the new categories, with an explanatory notification to 512 national protected area agencies and a request that they assess their protected areas using the new system. Thirty-five percent of the agencies responded, and UNEP-WCMC staff followed up with other agencies and WCPA members. The resulting List used the IUCN protected area categories as the basis of reporting on 12,754 sites, although information on unassigned sites was also made available. A minimum size limitation of 1,000 hectares was also applied. While following the same basic procedure for seeking information, the 2003 UN List (Chape *et al.* 2003) reported on all sites – with or without assigned categories and with no size limitation. The List reported on 102,102 protected areas, of which almost 67% of the number of sites (and more than 80% of the area protected) had been assigned a category. Even allowing for the effect of including unassigned sites and those of all sizes, it was clear that there had been a significant global increase in the number and extent of protected areas. The task of verifying and/or undertaking category assignment “at the international level” has increased enormously.

However, since the current category system was adopted in 1994 there has been a shift from this notion of international assessment and verification of the categories to a greater focus upon the application of the system at the national level. A number of countries apply the IUCN category system with rigour. For example, Australia has incorporated the category system into its Federal Environmental Protection and Biodiversity Conservation Act (1999), and State agencies use the category system. A number of countries have held national level workshops to examine application of the categories, such as Australia, Finland, and Canada, as well as China in 2004 (Phillips 2004). Support for the system in Africa received a boost in 2003, when the African Heads of State Meeting in Maputo strengthened the *African Convention on Nature and Natural Resources* (Algiers Convention 1968), including amendments relating to the consistent application of IUCN protected area management categories. However, the system has received probably its most comprehensive endorsement within the CBD Programme of Work on Protected Areas (PoWPAs) adopted by 188 Contracting Parties at CoP7 in 2004. The full text of the relevant parts of Decision VII/28/31 appears in the article by Dillon and Scanlon in this issue of PARKS, but a key message is a call to “Parties, other Governments and relevant organisations to assign protected-area management categories to their protected areas, providing information consistent with the refined IUCN categories for reporting purposes.”

The challenge remains to ensure that national agencies and non-government protected area agencies understand how to apply the categories effectively and consistently.

Current WDPA status of category designation

Of the 104,926 protected areas currently held in the WDPA, 67.2% have been assigned categories. This relatively high percentage appears to indicate widespread support for the categories, but in fact categories in a number of countries have been assigned since 1994 by IUCN/WCPA and/or UNEP-WCMC, based on available information on protected areas – and in accordance with the 1994 Guidelines. While countries have had the opportunity in 1997 and again in 2003 formally to review category assignments, the respective response rates of 35% and 47% suggest that many

2 The Commission on National Parks and Protected Areas, now WCPA.

Table 2. Category assignment percentage classes by number of countries.

% of categories assigned	Number of countries and territories (231)	
	by number of PAs	by area of PAs
99–100%	59	76
91–99%	29	29
81–90%	34	22
71–80%	11	18
61–70%	12	11
51–60%	9	9
41–50%	12	8
31–40%	8	11
21–30%	10	5
11–20%	15	7
1–10%	20	2
0%	11	12

countries do not yet verify their data in the WDPA. The question of who should assign categories is discussed below.

The number of protected areas and status of category assignment in 231 countries and territories (dependent territories with no protected areas included) is presented in the Annex. Table 2 shows the extent of category assignment by percentage class and number. Fifty-nine countries have 99–100% of their protected areas categorised, and 76 countries have 99–100% of their area protected assigned to categories. The difference between number and area categorised is most evident at the country level (see Annex). It can be seen most strikingly in the case of Finland – 5.5% of the number of protected areas (189 of 3,466) but 95.3% of the area protected – and in a number of African countries. Clearly, many countries have assigned categories to their highest priority and largest conservation areas. There are also a few countries where the ratio is reversed and the area categorised is less than the number (for example, Honduras 77.4% : 27.6% respectively, and Poland 83.4% : 31%).

Figures 1 and 2 show the distribution of protected area numbers and area by management category. The two graphs present an almost inverse relationship between numbers and area, with the most striking examples being Categories II and VI. Although representing only 5.7% of the total number of categorised sites, Category II has 27.4% of the total area. Similarly, Category VI

Figure 1. Number of global protected areas assigned categories.

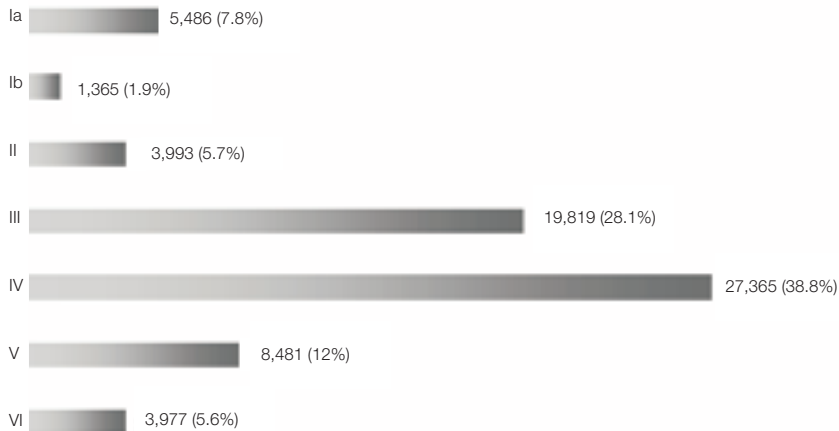
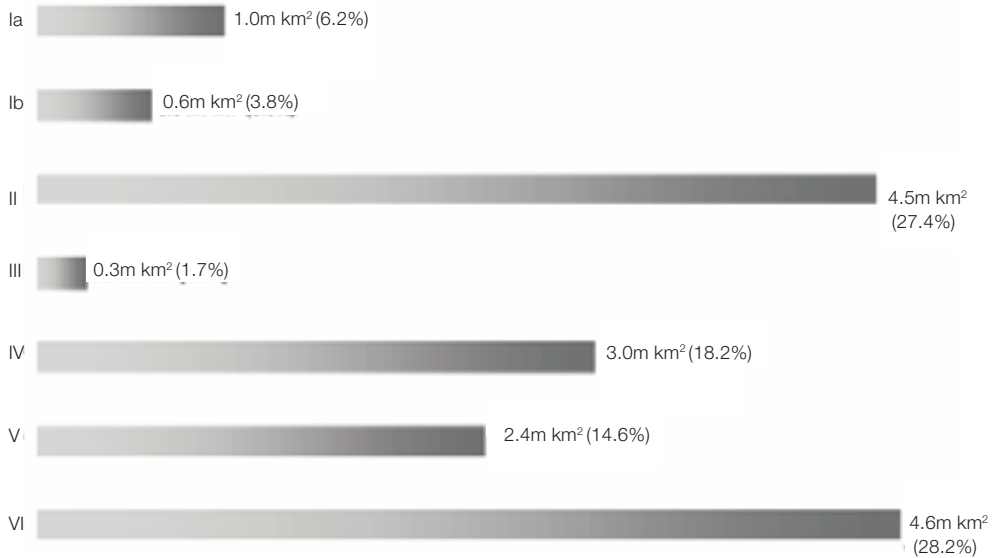


Figure 2. Global area of protected area assigned categories (million km² rounded).



has 5.6% of the global number but occupies 28.2% of the total area. Together, these two categories account for almost 60% of the global area assigned categories. Conversely, the high numbers of Category III areas cover relatively little area – understandably, since this category applies to natural monuments rather than extensive ecosystems and landscapes. Of particular note, considering its relatively recent introduction in 1994, is the growth in extent of Category VI, with its emphasis on sustainable use objectives. It is now the most extensive of all the categories, covering 4.6 million km².

Developing a more systematic approach

Although, as noted above, in past years UNEP-WCMC and IUCN/WCPA have allocated management categories based on reviews of legislation, regulations, management plans and consultation with national agencies, it is not a practical approach that will yield reliable results because of the large number of protected areas involved and the resource constraints within the concerned organisations. This is especially so if countries fail to provide feedback to UNEP-WCMC on categorisation that was undertaken externally as part of the UN List or other update processes. Although assignments were made for the 1997 *UN List*, the report noted:

A major undertaking, completed as part of the preparation for this edition of the UN List, has been the application of the new IUCN Management Categories ... Application of the new Management Categories system has been a lengthy and challenging process, requiring the management objectives of each national designation to be reviewed in relation to the criteria and guidelines established for the application of the new categories ... It is likely, therefore, that not all protected areas have been allocated to the most appropriate category.

In updating information for the 2003 UN List, a conscious decision was subsequently made not to attempt further category assignments centrally, except through requests to national agencies and other reliable sources. The report noted:

It is not possible for UNEP-WCMC and IUCN physically to undertake the assessment of thousands of non-categorised protected areas, and no new assignments have been made for non-categorised protected areas for the 2003 UN List. To deal effectively with this issue will require the collaborative effort of all

parties: national agencies and other protected area owners, IUCN, WCPA, UNEP-WCMC and other conservation organisations.

UNEP-WCMC, IUCN and other members of the WDPA Consortium are well aware that the category information in the WDPA needs review and updating for many countries. A substantive example is China. A recent review indicates that in fact the assignment of categories to China's protected areas in the WDPA (assigned externally) does not accurately reflect reality. Most of China's more than 2,000 protected areas are legally designated 'Nature Reserves', with an additional 500 'Scenic Interest Areas' and 1,000 'Forest Parks' (Rao 2004). Within the Chinese system, nature reserves are further divided into three national categories and nine different types. However, "the management prescriptions applicable to all these categories and types are the same, as prescribed under the 1994 regulations on nature reserves. In other words under the [national] 1994 regulations, these various categories and types, as ordered by the national standards, are not distinguishable on the basis of their objectives of management and hence, there is a disconnect between these two policy/legal instruments" (Rao 2004). Despite having a large number and area of protected areas, the lack of clarity in management objectives currently makes assignment of protected areas in China problematic. This was noted by a recent meeting of the China Protected Areas Task Force on application of the categories (CCICED 2004):

Applying the system...in the sense of categorising China's many hundreds of existing protected areas can be difficult. This is because of confusion over objectives, lack of clarity in the 1994 guidance and a particular problem...over how to categorise nature reserves with buffer zones.

Resolution of these kinds of issues (and China is not alone) is best undertaken at the country level by national agencies, other stakeholders and non-government protected area managers (such as tribal corporations, community groups, conservation trusts, etc.), with support from IUCN, WCPA, UNEP-WCMC and other countries that have implemented the categories, as appropriate. Fundamentally, this means ensuring that countries have a full understanding of the categories system and a sense of ownership of the outcome of the assignment process. The rationale for such an approach is based on these considerations:

- national protected area management agencies, organisations and communities are most familiar with the areas in question;
- many countries do have clearly defined management objectives in legislation, policies and plans, but have not articulated these relative to the categories;
- national-level assignment could encourage more consistent approaches to monitoring management effectiveness related to management objectives – and the adoption of international best practice standards at the national level; and
- this, in turn, would encourage countries to undertake more effective national reporting for global assessments and monitoring that include protected areas.

In addition to this rationale, there are two key principles for category assignment:

1. there should be involvement, shared ownership, inclusiveness, openness and transparency in the whole process of assignment involving national agencies and other stakeholders; and
2. all stakeholders need to agree the full range of roles for the IUCN categories, including advocacy in international conservation debates.

Increasing the effectiveness of the WDPA

UNEP-WCMC, as custodian for the WDPA, and its WDPA Consortium partners are very much aware of the need to improve the quality of information, including accurate category assignment. Key issues under review include improving the quality of the WDPA statistical data on protected areas by:

- accurately differentiating between terrestrial and marine parts of single protected areas;
- developing the means to record accurately different management zone categories within single, large multiple use protected areas without double counting, along lines agreed to for marine protected areas by WCPA in 2001 (for a fuller discussion of the issues, see the article by Day and Wells in this number of PARKS); and
- including within the WDPA (or linking to it) data on management effectiveness.

However, technical improvements are only one part of improving overall data quality – it is essential that accurate category assignment and verification is first undertaken at the national level and timely information transmitted to UNEP-WCMC. Accurate assignment and verification will ensure that protected area designation reliably reflects management objectives, and thereby enable the categories to contribute to a more comprehensive approach to using protected areas as indicators for achieving global biodiversity targets. An accurately assigned system will also contribute to current debates on appropriate uses in protected areas *vis-à-vis* such issues as implementation of the IUCN Amman resolution on mining (see Parsons and Richards in this issue of PARKS) by providing a verifiable framework for evaluation.

Conclusion

In its 2004 report, the *Speaking a Common Language* (Bishop *et al.* 2004) project articulated a vision for a more effectively understood and implemented IUCN protected area category system. At the same time, protected areas have received further international endorsement for their role in conserving the Earth’s remaining natural species, ecosystems and landscapes through decisions of CBD CoPs. As noted above, one of these decisions specifically encourages use of the management category system. There is currently a window of opportunity to affirm the protected area category system as the international framework for evaluating and reporting on protected areas.

The task is now to ensure that categories are accurately assigned and recorded in the WDPA. For many countries this will require capacity building to:

- ensure accurate national assignment and reporting through an active outreach process;
- develop national protected area databases that are compatible with the WDPA; and
- create awareness of the categories system, its benefits and application, among a wider group of stakeholders.

Such support will also require guidance on the inclusion of areas that are not now held in the WDPA because they are managed under governance and ownership arrangements that do not rely heavily on the role of the State. Examples are private reserves and community owned areas, which should be included where these meet the definition of a protected area. Advice is needed on how these should be reported to UNEP-WCMC. Support for such capacity building and guidance needs to come from a range of stakeholders, guided by an active World Commission on Protected Areas and its partners.

See Annex 1. *Current Status of IUCN Protected Area Category Assignment by Country*, over.

Annex 1. Current Status of IUCN Protected Area Category Assignment by Country.
(WDPA data for 231 countries and territories at February 2005).

Country	PAs in WDPA	PAs assigned categories	% Total number of PAs	% Total area protected
Afghanistan	7	7	100%	100%
Albania	52	52	100%	100%
Algeria	25	18	72%	99.9%
American Samoa	13	7	54%	92%
Andorra	2	0	0%	0%
Angola	16	14	87.5%	53%
Anguilla	8	0	0%	0%
Antigua and Barbuda	13	11	84.6%	Area for only 5 sites
Argentina	328	317	96.7%	99.6%
Armenia	28	28	100%	100%
Aruba	4	1	25%	6.3%
Australia	5,655	5,653	99.9%	99.9%
Austria	1,087	1,087	100%	100%
Azerbaijan	37	35	94.6%	99.2%
Bahamas	45	38	84.4%	51.2%
Bahrain	4	2	50%	14.2%
Bangladesh	18	12	66.7%	89.6%
Barbados	6	6	100%	100%
Belarus	904	903	99.9%	99.2%
Belgium	618	60	9.7%	79.4%
Belize	84	78	92.9%	97.2%
Benin	59	5	8.5%	47.8%
Bermuda	132	100	75.8%	99.5%
Bhutan	9	9	100%	100%
Bolivia	32	23	71.9%	69%
Bosnia and Herzegovina	31	21	67.7%	99%
Botswana	71	12	16.9%	60.2%
Bouvet Island	1	1	100%	100%
Brazil	1,281	804	62.8%	36.2%
British Indian Ocean Territory	6	6	100%	100%
Brunei Darussalam	47	36	76.6%	41.3%
Bulgaria	754	717	95.1%	53.2%
Burkina Faso	83	13	15.7%	74.5%
Burundi	15	15	100%	100%
Cambodia	30	30	100%	100%
Cameroon	35	20	57.1%	90.7%
Canada	5,357	4,567	85.6%	96.1%
Cape Verde	51	0	0%	0%
Cayman Islands	48	46	95.8%	No area for n/c sites
Central African Rep.	69	14	20.3%	74.2%
Chad	32	9	28.1%	96%
Chile	95	86	90.5%	99.7%
China	2,027	2,024	99.9%	No area for n/c sites
Christmas Island	1	1	100%	100%
Cocos (Keeling) Is.	1	1	100%	100%
Colombia	412	109	26.5%	28.6%
Comoros	1	1	100%	100%
Congo	22	13	59.1%	77.1%
Cook Islands	13	2	15.4%	13.9%
Costa Rica	183	130	71%	75.8%
Côte d'Ivoire	325	12	3.7%	37.3%
Croatia	200	200	100%	100%
Cuba	70	70	100%	100%

Annex 1... continued. Current Status of IUCN Protected Area Category Assignment by Country. (WDPA data for 231 countries and territories at February 2005).

Country	PAs in WDPA	PAs assigned categories	% Total number of PAs	% Total area protected
Cyprus	19	10	52.6%	85.1%
Czech Republic	1,768	1,768	100%	100%
DR Congo	84	43	51.2%	87.6%
Denmark	339	339	100%	100%
Djibouti	2	2	100%	100%
Dominica	7	7	100%	100%
Dominican Republic	62	52	83.9%	97.1%
East Timor	15	1	6.7%	0.4%
Ecuador	140	27	19.3%	87.5%
Egypt	51	34	66.7%	90.7%
El Salvador	76	2	2.6%	22.6%
Equatorial Guinea	13	13	100%	100%
Eritrea	3	3	100%	100%
Estonia	2,342	1,975	84.3%	45.3%
Ethiopia	40	39	97.5%	99.9%
Falkland Islands	35	34	97.2%	98%
Fiji	54	25	46.3%	76.2%
Finland	3,466	189	5.5%	95.3%
France	1,327	1,262	95.1%	98.7%
French Guiana	34	22	64.7%	99.5%
French Polynesia	12	12	100%	100%
Gabon	22	3	13.6%	14.6%
Gambia	72	6	8.3%	39.9%
Georgia	36	35	97.2%	96.7%
Germany	7,242	7,241	99.9%	99.9%
Ghana	321	16	5%	34.4%
Gibraltar	1	1	100%	100%
Greece	147	123	83.7%	71.3%
Greenland	7	7	100%	100%
Grenada	2	1	50%	84.9%
Guam	16	12	75%	No area for n/c sites
Guatemala	86	76	88.4%	97.9%
Guinea	150	2	1.3%	3.3%
Guinea-Bissau	9	0	0%	0%
Guyana	3	3	100%	100%
Haiti	9	8	88.9%	99.9%
Heard & McDonald Is.	2	2	100%	100%
Honduras	93	72	77.4%	27.6%
Hong Kong	102	46	45.1%	82.5%
Hungary	236	188	79.7%	98.9%
Iceland	79	79	100%	100%
India	661	612	92.6%	98.1%
Indonesia	1,162	938	80.7%	77.9%
Iran, IR	143	129	90.2%	97.5%
Iraq	8	8	100%	100%
Ireland	90	87	96.7%	99.9%
Israel	288	185	64.2%	72.5%
Italy	752	324	43.1%	32.8%
Jamaica	168	143	85.1%	78.4%
Japan	961	293	30.5%	66.2%
Jordan	36	12	33.3%	94.2%
Kazakhstan	77	74	96.1%	No area for n/c sites
Kenya	348	68	19.5%	60%

Annex 1... continued. Current Status of IUCN Protected Area Category Assignment by Country. (WDPA data for 231 countries and territories at February 2005).

Country	PAs in WDPA	PAs assigned categories	% Total number of PAs	% Total area protected
Kiribati	14	12	85.7%	71.5%
Korea, DPR	31	31	100%	100%
Korea, Republic of	44	40	90.1%	99.5%
Kuwait	7	5	71.4%	45.7%
Kyrgyzstan	93	85	91.4%	85.1%
Lao PDR	27	22	81.5%	94%
Latvia	542	536	98.9%	85.8%
Lebanon	24	2	8.3%	51.2%
Lesotho	1	1	100%	100%
Liberia	16	2	12.5%	11.7%
Libyan Arab Jamahiriya	12	8	66.7%	78.3%
Liechtenstein	10	10	100%	100%
Lithuania	297	295	99.3%	99.2%
Luxembourg	63	19	30.2%	84.4%
Macedonia	83	83	100%	100%
Madagascar	60	54	90%	98.7%
Malawi	130	9	6.9%	54.6%
Malaysia	807	212	26.3%	16.5%
Maldives	25	0	0%	0%
Mali	12	11	91.7%	99.8%
Malta	93	93	100%	100%
Marshall Islands	6	3	50%	No area for n/c sites
Martinique	16	16	100%	100%
Mauritania	9	9	100%	100%
Mauritius	26	25	96.2%	97.8%
Mayotte	8	7	87.5%	No area for n/c site
Mexico	187	168	89.8%	99.9%
Micronesia, FS	20	2	10%	70.6%
Moldova, Republic of	63	63	100%	100%
Monaco	2	2	100%	100%
Mongolia	51	50	98%	96.3%
Montserrat	18	18	100%	100%
Morocco	34	13	38.2%	65.8%
Mozambique	42	12	28.6%	89.4%
Myanmar	55	38	69.1%	82.9%
Namibia	173	21	12.1%	91%
Nepal	22	18	81.8%	90.2%
Netherlands	1,596	85	5.3%	61.5%
Netherlands Antilles	15	9	40%	87.2%
New Caledonia	79	66	83.5%	64.8%
New Zealand	3,891	3,505	90.1%	99.2%
Nicaragua	93	73	78.5%	73.3%
Niger	6	6	100%	100%
Nigeria	1,009	31	3.1%	62.9%
Niue	5	1	20%	99%
Norfolk Island	1	1	100%	100%
Northern Mariana Is.	11	9	81.8%	65.6%
Norway	1,795	177	9.9%	No area for n/c sites
Oman	6	6	100%	100%
Pakistan	208	83	39.9%	49.7%
Palau	22	9	40.9%	18.5%
Panama	61	33	54.1%	51.9%
Papua New Guinea	75	34	45.3%	69.5%

Annex 1... continued. Current Status of IUCN Protected Area Category Assignment by Country. (WDPA data for 231 countries and territories at February 2005).

Country	PAs in WDPA	PAs assigned categories	% Total number of PAs	% Total area protected
Paraguay	37	31	83.8%	77.6%
Peru	65	35	53.9%	35.7%
Philippines	205	180	87.8%	97.1%
Poland	1,822	1,519	83.4%	31%
Portugal	68	63	92.7%	No area for n/c sites
Puerto Rico	59	24	40.7%	47.2%
Qatar	13	4	30.8%	Area for only 11 sites
Réunion	29	27	93.1%	85.2%
Romania	181	157	86.7%	88.5%
Russian Federation	11,207	10,837	96.7%	79.6%
Rwanda	5	5	100%	100%
Saint Kitts and Nevis	2	2	100%	100%
Saint Lucia	52	52	100%	100%
Saint Vincent and the Grenadines	28	25	89.3%	No area for n/c sites
Samoa	14	12	85.7%	97.9%
San Marino	0	0	0%	0%
Sao Tome and Principe	no record	no record	no record	no record
Saudi Arabia	81	78	96.3%	99.4%
Senegal	14	14	100%	100%
Serbia and Montenegro	178	103	57.9%	87.4%
Seychelles	21	20	95.2%	100%
Sierra Leone	55	6	10.9%	47.3%
Singapore	6	6	100%	100%
Slovakia	1,176	1,111	94.5%	29.4%
Slovenia	46	45	97.8%	No area for n/c sites
Solomon Islands	6	5	83.3%	No area for n/c sites
Somalia	16	10	62.5%	No area for n/c sites
South Africa	565	355	62.8%	86.4%
South Georgia and the South Sandwich Is.	3	2	100%	100%
Spain	602	327	54.3%	88.2%
Sri Lanka	307	106	34.5%	60.1%
St Helena	25	24	96%	Area for only 20 sites
St Pierre and Miquelon	6	0	0%	0%
Sudan	28	27	96.4%	99.4%
Suriname	15	15	100%	100%
Svalbard and Jan Mayen Islands	24	22	91.7%	No area for n/c sites
Swaziland	8	5	62.5%	No area for n/c sites
Sweden	5,005	2,339	46.7%	97.7%
Switzerland	2,190	2,189	99.9%	No area for n/c site
Syrian Arab Republic	28	0	0%	0%
Taiwan, Province of China	49	49	100%	100%
Tajikistan	23	23	100%	100%
Tanzania, United Republic of	810	98	12.1%	70.3%
Thailand	290	236	81.4%	99%
Togo	93	9	9.7%	34%
Tokelau	3	1	33.3%	No area for cat. site
Tonga	14	13	92.9%	No area for n/c site
Trinidad and Tobago	86	25	29.1%	95.3%
Tunisia	42	7	16.7%	17.7%
Turkey	474	85	17.9%	37.5%

Annex 1... continued. Current Status of IUCN Protected Area Category Assignment by Country. (WDPA data for 231 countries and territories at February 2005).

Country	PAs in WDPA	PAs assigned categories	% Total number of PAs	% Total area protected
Turkmenistan	29	24	82.8%	95.2%
Turks and Caicos Islands	34	32	94.1%	100%
Tuvalu	1	1	100%	100%
Uganda	747	54	7.2%	73.6%
Ukraine	5,198	5,182	99.7%	99.9%
United Arab Emirates	18	2	11.1%	No area for 1 cat. site
United Kingdom	7,723	571	7.4%	67.8%
United States	7,883	3,493	44.3%	99%
United States minor outlying islands	7	6	85.7%	97.8%
Uruguay	29	12	41.4%	49.7%
Uzbekistan	24	24	100%	100%
Vanuatu	42	2	4.8%	34.4%
Vatican City State (Holy See)	0	0	0%	0%
Venezuela	237	195	82.3%	84.4%
Viet Nam	146	103	70.6%	73.8%
Virgin Islands (British)	35	29	82.9%	40.3%
Virgin Islands (US)	17	7	41.2%	99.7%
Wallis and Futuna Islands	2	1	50%	28.6%
Western Sahara	1	0	0%	0%
Yemen	3	0	0%	0%
Zambia	683	77	11.3%	75.9%
Zimbabwe	249	68	27.3%	81.7%

References

- Bishop, K., Dudley, N., Phillips, A. and Stolton, S. 2004. *Speaking a Common Language: Final Report: The uses and performance of the IUCN System of Management Categories for Protected Areas*. Cardiff University, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK, and UNEP World Conservation Monitoring Centre, Cambridge, UK.
- Chape, S., Harrison, J. Spalding, M. and Lysenko, I. (in press). Measuring the Extent and Effectiveness of Protected Areas as an Indicator for Meeting Global Biodiversity Targets. *Philosophical Transactions: Biological Sciences*, Royal Society, London.
- Chape, S., Blyth, S., Fish, L., Fox, P. and Spalding, M. (compilers) 2003. *2003 United Nations List of Protected Areas*, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK and UNEP-WCMC, Cambridge, UK.
- China Council for International Cooperation on Environment and Development (CCICED) 2004. *Report on a meeting on the application of the IUCN Protected Areas Management Categories: China, Suzhou, China, 6 July 2004*. Internet: www.chinabiodiversity.com/protected-area/categories-en.htm.
- IUCN/WCMC 1998. *1997 United Nations List of Protected Areas*, IUCN Cambridge, UK.
- Phillips, A. 2004. The history of the international system of protected areas management categories. In *Speaking a Common Language: Final Report: The uses and performance of the IUCN System of Management Categories for Protected Areas*, K. Bishop, N. Dudley, A. Phillips and S. Stolton. Cardiff University, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK, and UNEP World Conservation Monitoring Centre, Cambridge, UK.
- Rao, K. 2004. *Applying the IUCN Protected Area Category System in China*. Report to the Protected Areas Task Force under the Biodiversity Working Group of the China Council for International Cooperation on Environment and Development. Beijing, China. Internet: www.chinabiodiversity.com/protected-area/categories-en.htm.
- Secretariat of the Convention on Biological Diversity (SCBD) 2004a. *Decisions adopted by the Conference of the Parties to the Convention on Biological Diversity at its Seventh Meeting*. UNEP/CBD/CoP/7/21, SCBD Montreal, Canada.
- Secretariat of the Convention on Biological Diversity (SCBD) 2004b. Decision VII/28: protected areas. In: *Decisions adopted by the Conference of the Parties to the Convention on Biological Diversity at its Seventh Meeting*. UNEP/CBD/CoP/7/21, SCBD Montreal, Canada.

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Issues that arise for the categories in a changing world

SUE STOLTON

The IUCN categories were originally mainly developed as a 'common language', to help communications and reporting on protected areas. In the decade since publication of the six category system in 1994, several things have happened to stretch and perhaps sometimes distort this original aim. First, the number of protected areas has continued to increase rapidly, as have pressures on these precious places. So questions relating to the categories cover many more issues, and refer to a far larger area, than in 1994. Secondly, in the absence of any other international framework, the IUCN categories have been used in ways that their original architects did not fully foresee; for instance as the basis for legislation or for attempting to control land use within existing protected areas. As the uses of the categories have expanded, so too has the intensity with which they have been scrutinised. What began as a simple classification exercise has assumed greater political and policy importance. This article reviews the original aims of the categories as published in 1994 and then considers some new challenges facing the categories in coming years.

THE AIMS OF THE IUCN protected area management categories

The 1994 guidelines identified six purposes for the categories system:

1. To alert governments to the importance of protected areas
2. To encourage governments to develop systems of protected areas with management aims tailored to national and local circumstances
3. To reduce the confusion that has arisen from the adoption of many different terms to describe different kinds of protected areas
4. To provide international standards to help global and regional accounting and comparisons between countries
5. To provide a framework for the collection, handling and dissemination of data about protected areas
6. And generally to improve communication and understanding between all those engaged in conservation.

Of these aims, four of the six are discussed in detail below, as the first is considered to be very general and the last is really a summation of the whole list.

Encouraging national protected area systems

"A system plan is the design of a total reserve system covering the full range of ecosystems and communities found in a particular country. The plan should identify the range of purposes of protected areas, and help to balance different objectives." (Davey, 1998).

This purpose – to *"develop systems of protected areas with management aims tailored to national and local circumstance"* – really has two distinct aims: that protected area systems should wherever feasible include the diversity of protected area types and associated management regimes as suggested in IUCN's categories system; and that management regimes should reflect national and local realities. This purpose reinforces the overall goal of the categories to provide a global framework rather than a series of prescriptive management objectives to be imposed on national protected area systems.

The wealth of experience behind the design of the categories system make it a valuable tool for developing regional and national protected area systems. Indeed, the volume on protected area systems development in the WCPA best practice series recommends that governments

consider establishing protected areas using the IUCN system as a means to implement Article 8a of the Convention on Biological Diversity (which calls on States Parties to develop systems of protected areas) (Davey, 1998). It is advice that takes on an added significance in light of the decision of CBD in 2004 to encourage States to use the categories system (see article by Dillon in this number).

Research by IUCN's Environmental Law Centre (ECL) shows that several countries have used the system of categories as a basis for developing or reviewing their national (and provincial) system of protected areas (see Dillon). However, although the ELC maintains records of environmental legislation, there is no central information resource monitoring environmental policy, and so the degree to which the categories have been used is hard to assess.

Reducing confusion about terminology

Confusion has arisen from the adoption of the many different terms at national level to describe different kinds (or even the same kind) of protected areas. While the 1994 Guidelines give prominence to the numbers and related objectives of protected area management (i.e. Categories I to VI), they also retain the names traditionally attached to protected areas (e.g. Strict Nature Reserve and National Park), even though they are often used at the national level to encompass protected areas with very different management objectives. To retain the names may therefore be considered as somewhat inconsistent with the aim of developing a common language that is independent of the variable terminology used at the national level – see also the article by Phillips.

Nevertheless, the system has apparently been successful in encouraging at least some governments to consider the management objectives of individual protected areas when reporting them internationally, whatever their name. For instance, 'national parks' existed long before the system and some such areas had very different objectives from those defined under Category II. As a result some countries have categorised their national parks under other IUCN categories, whilst keeping the name 'national park' (see Table 1 below).

In other cases, however, retaining names such as national park in the international system has undoubtedly caused confusion, both legally and culturally. For instance in Vietnam, where the category system was used as the basis for the protected areas' legal and regulatory framework, the initial interpretation of the IUCN categories was primarily based on name rather than on the management objectives of the country's protected areas (see the article by Stolton, Nguyen and Dudley). In Australia, when the categories system was used in developing a system of Indigenous Protected Areas, questions were raised over the title and definition of Category Ib (Wilderness), as from the perspective of indigenous people no 'wilderness' areas exist since there is no landscape entirely without people or cultural significance.

Another way to ensure harmony in the way protected areas are classified internationally is to provide awareness raising and capacity building for all those using the categories system. First steps in this direction have been made with the publication of notes on interpretation and

Table 1. *Examples of National Parks in each IUCN Category.*

Category	Name	Location	Size (ha)	Date established
Ia	Dipperu National Park	Australia	11,100	1969
II	Guanacaste National Park	Costa Rica	32,512	1991
III	Yozgat Camligi National Park	Turkey	264	1988
IV	Pallas Ounastunturi National Park	Finland	49,600	1938
V	Snowdonia National Park	Wales, UK	214,200	1954
VI	Expedition National Park	Australia	2930	1994



Snowdonia National Park, Wales. Photo: Nigel Dudley.

application of the system in Europe (EUROPARC and IUCN, 1999) and draft guidelines in Australia (Australian Nature Conservation Agency (undated)). WCPA's Best Practice series has published a volume specifically on Category V, which develops principles and guidelines for the planning and management of this category (Phillips, 2002). The *Speaking a Common Language* research revealed that there is an urgent need for similar advice for other categories, but particularly on Category VI.

Providing international standards

The fourth purpose outlined in the 1994 categories is to provide international standards to help global and regional accounting and comparisons between countries. The system of categories is increasingly being used to provide standards for a range of initiatives, from the assessment of the effectiveness of protected areas by governments and NGOs, to institutions in the private sector using them to promote corporate environmental standards.

At the 1992 IVth World Parks Congress, in Caracas, Venezuela, most discussion focused on the creation of new protected areas. Far less attention was paid to the need for a systematic approach to assessing and raising the effectiveness of management of existing areas. In the years since, the emphasis has changed dramatically and a number of new developments mean that protected area quality is assuming ever greater importance.

This is largely because many protected areas are being damaged or are under threat; a trend that is bound to focus attention on the management effectiveness of protected areas. To set standards, and to assess and guarantee effectiveness, the protected area management objectives need to be clear. The IUCN system of protected area management categories should help to achieve this, and examples exist of its use. The WCPA Framework for Assessing Management Effectiveness offers some advice on distinguishing between different management categories in assessments (Hockings *et al.*, 2000), and there is a proposal from WCPA in Europe to develop a certification system for application of the categories system to protected areas. There is also interest in the development of standards for protected area management, including a WCPA project to agree basic standards and discussions about ways of guaranteeing management effectiveness, ranging from danger lists to certification systems.

In other areas the category system remains poorly reflected in situations where it seems ideally suited to contribute. For example, the movement towards certification of good forest management,

which has emerged since the categories system was agreed and overlaps with many protected areas, does not consider the implications of the category system. The same is true for other environmental certification systems such as organic farming and the Marine Stewardship Council. Efforts to set standards for good environmental management still tend to judge protected areas as single management entities rather than as a suite of quite different management systems. An assessment of the various regional criteria and indicator processes to encourage good forest management, found that they ignored the categories, and a superficial analysis of similar approaches in other biomes suggests that this is indicative of a more general lack of awareness (the issue is explored further in a case study in the *Speaking a Common Language* report, Bishop *et al.*, 2004, pages 123–127).

Creating a framework for handling data

The fifth purpose for the category system given in the 1994 Guidelines, and perhaps the most pressing at the time, was provision of a framework to standardise protected area data collection, handling and dissemination. During the 1990s, the political profile of protected areas rose dramatically as NGOs and civil society clamoured for protection of fragile habitats. IUCN's call for at least 10% of the world to be in protected areas gave rise to many associated campaigns and targets. It also meant that governments were under pressure to prove their conservation credentials. One inevitable result was a great amount of confusion as to the precise facts about the area of land and water under protection.

The system of categories aimed to provide a transparent and credible framework for reporting on protected areas. This is reflected most clearly in the World Database on Protected Areas (WDPA) maintained by the UNEP-World Conservation Monitoring Centre (UNEP-WCMC), and in the reporting of the categories in the 1998 and 2003 editions of the UN List of Protected Areas (Chape *et al.*, 2003). The wide uptake of the system by national governments in their reporting to UNEP-WCMC shows that in this respect the categories system has been highly successful (see article by Chape).

Unfortunately, while reporting needs created a major spur for development of the system of categories, it also created problems. Perhaps the broad philosophy behind the system does not always mesh well with the needs for precision in reporting. For example, when the UN Economic Commission for Europe (UNECE) asked countries to report on forest protected areas for its Temperate and Boreal Forest Resource Assessment 2000, information was requested on the IUCN categories. The results were confusing as, for example, it was not clear whether plantations in Category V protected areas should be considered as 'forest protected areas' or when forests managed for avalanche control or watershed management became 'forest protected areas'. Therefore the statistics using the IUCN categories do not always provide wholly reliable data in respect of forests. As a result, the UNECE and the Ministerial Conference on the Protection of Forests in Europe created an alternative set of definitions, which although compatible with the IUCN categories, also contain many 'protective forests' which do not meet IUCN's definition of a protected area.

There is also confusion about whether different zones within a protected area can be assigned to different categories, an issue that has particular relevance to marine protected areas. For instance, many marine protected areas contain zones that are more strictly protected than others (no take zones). Although there are precedents for addressing this (e.g. in Australia), many protected area agencies find this issue difficult and are looking for further guidance (the issue is further discussed in the article by Wells and Day in this volume).

More fundamentally, there have been problems in assigning categories and in some cases understanding the system of categories – especially when those assigning categories do not fully understand English, French or Spanish, the languages of the 1994 Guidelines (although translations have been made into several other languages).

Evaluating the new uses of the IUCN categories

As well as being used for purposes in-line with the original aims outlined in the 1994 Guidelines, the research work undertaken for the *Speaking a Common Language* project revealed that the IUCN categories have developed a variety of new roles as follows:

Interpreting or clarifying land tenure and governance

The presumption of many of the people creating the earliest protected areas was that these would be set aside entirely for wildlife and scenery: indeed, human communities were often expelled to maximise the perceived values of these areas, which were at that time primarily aesthetic – particularly the preservation of so-called ‘wilderness’. Over the past few decades, such perspectives have gradually changed. The creation of protected areas in populated landscapes – particularly the Category V protected areas in Europe – showed that protection need not be incompatible with the presence of people. Research has shown that many existing protected areas in other regions also contain people; for example it is estimated that over 80% of national parks in Latin America contain permanent settlement (Amend and Amend, 1995).

Managers of protected areas are increasingly recognising the rights, needs and desires of indigenous and local peoples. Management agencies of protected areas that once excluded people have in some case rethought their policies and are opening up these areas for traditional sustainable uses, such as the regulated collection of non-timber forest products or controlled game hunting. For many new protected areas, agreements with local communities are reached before final decisions are made on location, management plans and protected area aims.

The IUCN categories system accepts a range of tenure and governance regimes. However, legal and political regulations at the national level on issues like ownership and statutory powers within protected areas may not be responsive to the needs of the categories system. For example,

Temperate forest in the Swiss Jura Mountains. Photo: Nigel Dudley.



categories with the highest potential to respond to indigenous peoples' claims, like V (Protected Landscapes/Seascapes) and VI (Managed Resource Protected Areas) tend to be under-utilised and poorly understood. Often countries rely on public ownership of lands within protected areas, assuming that other land cannot qualify for protected area status. Sometimes, national protected areas legislation does not provide for any private or communal property to exist within protected areas in any category, and indeed may require the expropriation of land for the purposes of declaring, expanding, or consolidating areas or systems (Pérez, 1995).

By separating the ownership of land and resources from the requirements and objectives of management, including questions of land ownership, the 1994 version of the IUCN system of categories allows for a range of models of protected areas to ensure that both indigenous and other traditional peoples' rights can be respected and also that conservation objectives can be achieved. Furthermore, the recognition of private lands (of communities, individual or corporations) in the category system should allow some Community Conserved Areas to be recognised as protected areas under the IUCN definition. This relationship is discussed in new IUCN best practice guidance publication "Indigenous and Local Communities and Protected Areas" (Borrini-Feyerabend *et al.*, 2004). One result is that the system is sometimes used as a tool for interpreting or clarifying land tenure and different governance regimes in protected areas, for instance as a way of both defining and in some cases creating sanctuaries for indigenous or traditional peoples.

In recent years, attention has been focused on how the categories system can be used to help promote a range of governance types in protected areas, and specifically to develop the role (in management, access to resources, etc.) of people in protected areas. A proposal was made at the Vth World Parks Congress to incorporate reference to 'governance types' in the categories system. This would not be done by altering the existing six objectives-based categories, but by adding a governance dimension. To this end a draft matrix for detailing the governance of protected areas has been developed, which could help in assessing and strengthening national protected area systems, by 'recognising' new elements (see Borrini-Feyerabend, 2004, page 25). It has been proposed that the governance dimension would be listed in the database alongside the existing category system.

The IUCN categories as a tool for bioregional planning

Lobbying for an increase in coverage of protected areas is taking place in the wider context of a more comprehensive and planned approach to conservation, which has grown over the last decade and involves both large NGOs and a number of governments. Three developments are critical:

- **Prioritisation:** there is a need to prioritise within global conservation, so as to focus most attention on areas that have the greatest biodiversity richness, biodiversity intactness or which are under most threat. Important global prioritisation exercises include the IUCN/WWF/Kew 'Centres of Plant Diversity', BirdLife International's 'Endemic Bird Areas of the World', Conservation International's 'Biodiversity Hotspots', the World Resources Institutes 'Frontier Forests' and WWF's 'Global 200 Ecoregions'.
- **Broad-scale conservation:** development of larger scale approaches to conservation, which consciously plan conservation interventions over a large area, such as an ecoregion or bioregion, based around an agreed biodiversity vision and involving a mosaic of protected areas and other forms of sustainable land use. Amongst NGOs, The Nature Conservancy, WWF and Conservation International have been the most active, and governments as diverse as Australia, Canada and the Netherlands, have made broader-scale commitments to conservation. The CBD is promoting the ecosystem approach, which reflects many of these values.

- Integration of conservation and development objectives in land-use planning and regional development strategies, based on ecosystem approach.

Focusing on ecoregion conservation within priority countries and regions means looking beyond individual sites, at a whole land or water mosaic, aiming to build up a mixture of protected areas of various categories, linked and buffered by various other types of sustainable land use, including land within Category V and VI protected areas (use of land outside protected areas is generally less well developed in current ecoregion conservation plans). One of the most ambitious examples of this, currently under development, is the MesoAmerican Biological Corridor, a set of reserves and sustainable use areas stretching over seven countries and involving negotiations with literally hundreds of communities, organisations and businesses along the way.

The categories system can play a role in both planning and measuring the success of these initiatives. For example, The Nature Conservancy notes that one important measure of conservation status of ecoregions is “*area and percentage under conservation management designation categories*”, and that “*the classification system needs to be updated in many plans to correspond with globally applicable IUCN categories*” (TNC Measures and Audits Group, 2003). However, while there is much theoretical debate, the extent to which it has been translated into reality is unclear: most ecoregional plans still focus almost exclusively on protected areas in Categories I–III or perhaps IV and few distinguish different categories in ecoregional plans.

Helping to regulate activities

On a number of occasions, the system of categories has been used as a tool for controlling major changes in land use within protected areas. This has created tension, partly because some of those affected are unconvinced that the categories are assigned with enough care, or sufficient stakeholder participation, to support such significant policy positions or legislation.

Many people would assume that a category system for protected areas would require that certain activities should not take place in some categories. And in fact since 1994, challenges to the categories system have encouraged WCPA and IUCN to refine and develop guidance relating to particular categories or to certain issues raised by stakeholders. Guidance has been developed in three main ways:

- Detailed technical guidance from WCPA: prepared with the participation of the protected area community (but not always of wider stakeholders); for example, the technical guidance on Category V protected areas gives some advice about appropriate land uses in these areas.
- Stakeholder-driven clarification: where groups have formally proposed clarification on key issues, such as the recommendation to governments to ban mining in Category I–IV protected areas, passed by the 2000 World Conservation Congress in Amman, Jordan (see articles in this volume by Parsons and Richards, and by Kapila).
- Emergency responses: prepared by WCPA in response to urgent policy issues, and thus with less stakeholder input; for example the clarification of the role and limitations of industrial timber production in protected areas prepared as a result of proposals from Ontario, Canada (Phillips, 1998).

Three issues emerge from this debate:

- Does designation of a ‘protected area’ automatically mean that some activities are prohibited?
- If so, is the IUCN system of categories a strong enough foundation upon which to base these decisions?
- Should such decisions be made based on management objective or management effectiveness?

There is no doubt that the existence of a protected area implies restrictions on management activities, otherwise the concept is meaningless. There also seems to be little opposition in

principle to the idea that the IUCN system of categories might be used as a basis for such decisions. The question about management effectiveness is more controversial but reflects concerns that the objectives for each category do not always adequately reflect the situation on the ground. The issues above could thus be restated:

- How are decisions made about which activities should be prohibited in protected areas, who is involved in making these decisions and how are such decisions integrated into land-use planning and regional development strategies?
- How are IUCN categories assigned, who is involved in assignment and how can categories be challenged once assigned, if at all?
- How should issues relating to management effectiveness be reflected in discussions about activities prohibited in protected areas?

If category assignment is to have major implications for land use, it becomes even more important that categories are applied correctly and consistently. It also raises the question whether there should be systems for verifying and challenging particular choices of category. In some cases, assignment has been undertaken by junior civil servants who may not fully understand the system, and without adequate consultation with relevant stakeholders. And in the past some assignments were made by UNEP-WCMC with little knowledge of the situation on the ground. Clearly, neither approach is appropriate, particularly since the resulting categorisation may be used to make decisions which have significant development implications for a country (see also the article by Chape).

It is sometimes the case that protected areas may have been reassigned (e.g. from Category II to V) on grounds of deficiencies in protection. But this confuses questions of management objectives with those of management effectiveness – and thus goes against the idea of an objectives-based system. If management is found lacking, the technical question is how to record the effectiveness of management; and the policy question is how to improve management (rather than change the management objectives and thus category assigned to the protected area).

The debate on using the categories system to regulate activities in protected areas is ongoing, but has already raised questions about assignment of categories that need to be addressed with some urgency if the system is to be strong enough to carry the weight of wide-ranging management decisions. One positive outcome is that stakeholders previously not involved in protected area issues are now engaging fully with governments and NGOs on the issue of assignment. These stakeholder dialogues should be expanded and new stakeholders engaged, although this in turn creates challenges and potential problems for the protected area community.

Providing a basis for legislation

Although not one of its original intentions, the IUCN categories have been used by some governments as the basis for their protected area legal frameworks (see the article by Dillon). Opinions differ as to whether IUCN should actively promote the use of the categories system in legislation. However, there is general agreement that the issue should be monitored and that more advice is needed on the category system and legal issues relevant to its use in national legislation.

Conclusions

Whilst the IUCN categories have been true to their original aims, there is clearly a need to respond to new challenges. The *Speaking a Common Language* project has made a number of suggestions to IUCN in relation to these needs. The recommendations, which are elaborated in the concluding article in this volume, focus on the provision of more guidance in the use of the categories (including the preparation of a new version of the explanatory guidelines); greater

awareness-raising and capacity building, and the further monitoring and research of the uses and application of the categories.

References

- Amend, S. and Amend, T. 1995; National Parks Without People? The South American experience, Parques Nacionales y Conservación Ambiental, Quito, Ecuador.
- Australian Nature Conservation Agency (undated, but after 1994); Application of IUCN Protected Area Management Categories – draft Australian handbook, ANCA, Canberra, Australia.
- Borrini-Feyerabend, G., Kothari, A. and Oviedo, G. 2004. *Indigenous and Local Communities and Protected Areas – Towards Equity and Enhanced Conservation*, IUCN, Gland, Switzerland and Cambridge, UK.
- Bishop, K., Dudley, N., Phillips, A. and Stolton, S. 2004. *Speaking a Common Language – the Uses and Performance of the IUCN System of Management Categories for Protected Areas*. Cardiff University and IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- Chape, S., Blyth, S., Fish, L., Fox, P. and Spalding, M. (compilers) 2003. 2003 *United Nations List of Protected Areas*, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK and UNEP-WCMC, Cambridge, UK.
- Davey, A.G. (1998); *National System Planning for Protected Areas*, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- EUROPARC and IUCN 1999. *Guidelines for Protected Area Management Categories – Interpretation and Application of the Protected Area Management Categories in Europe*. EUROPARC and WCPA, Grafenau, Germany.
- Hockings, M. with Stolton, S. and Dudley, N. (2000); *Assessing Effectiveness: A Framework for assessing management effectiveness of protected areas*. Cardiff University and IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- Pérez, E. 1995. *Derecho Ambiental y de los Recursos Naturales*. IDEA, Quito, Ecuador.
- Phillips, A. 1998. Protecting protected areas, editorial, *Arborvitae* 10, WWF and IUCN, Gland, Switzerland.
- Phillips, A. 2002. *Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/Seascapes*. IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- TNC Measures and Audits Group. 2003. *Measuring the Conservation Status of Ecoregions: A Summary of Proposed Standards and Recommendations for Establishing an Ecoregion Measures Program*, TNC.

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The future development of the categories system

NIGEL DUDLEY, JEREMY HARRISON AND PEDRO ROSABAL

February 2004 was a significant month for the long-running discussion on protected area management categories, as an intergovernmental meeting, the CBD Conference of Parties, promoted use of the categories by countries in the management and reporting of information on protected areas.

However, the *Speaking a Common Language* project found that IUCN's protected area categories are used in ways not envisaged when they were first adopted by IUCN. In consequence, the system needs to be strengthened.

A task force has therefore been formed by the IUCN World Commission on Protected Areas to advise the Commission on implementation of the recommendations, focusing on Improved guidance on use of the system, awareness-raising and capacity building, and monitoring and research.

This article explores these issues and concludes with a vision for the categories in 2013.

THE DEFINITIONS AND PURPOSES of the categories

It should be recalled first that the foundation of the 1994 protected areas categories system is the IUCN definition of a protected area: "*An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means*". Protected areas can then be categorised based on their objectives of management.

The recognition of an area as a protected area and the assignment of a category form a unidirectional sequence: **an area that appears to fulfil the requirements of one of the categories but does not meet the overall definition is not a protected area as defined by IUCN**. The definition of a protected area is therefore critical to the process of category assignment, and is generally accepted by the international community (for a fuller background, see article by Phillips).

Reviewing the use of categories

The article by Phillips records the original purposes for the categorisation of protected areas by IUCN, as set out first in 1978 and then in a more definitive version of guidance in 1994. Stolton's article records that the *Speaking a Common Language* project has revealed that in fact the system of categories is now being used in several additional ways not anticipated in 1994.

The project also identified a series of important challenges relating to the efficient and effective use of the IUCN protected area management categories. While it found plenty of strengths, and a general willingness by protected area agencies to engage with IUCN and its categories system, the focus of this article is on outlining the work that remains to be done to improve use of the categories.

As conservation is increasingly integrated into the mainstream of society, it follows that conservation practice must grow and mature to meet the extra obligations. If protected areas are to play the central role increasingly demanded of them in conservation and sustainable development strategies, they must reflect the multiplicity of needs of different stakeholders, ecosystems and socio-economic and political environments. It is these underlying considerations that help to explain why the demands on the categories system are greater than they were in 1994, and which require that the categories be used more effectively in future.

It is clear that the categories and their supportive framework (guidance, explanation, capacity building and so on) are already failing to address some of the new demands. The project identified six main areas requiring further consideration:

- clarifying the definition of a protected area and the purposes of the categories system;
- collection, analysis and dissemination of data about protected areas and their categories;
- assigning categories to protected areas;
- responsibility for the application of the categories system;
- the relationship between zoning and categories; and
- outreach, and integrating the categories into other statistical and management systems.

Initial outcomes of the review and imperatives for follow-up

The key messages of the project have already been incorporated into the outcomes and activities arising from both the Vth World Parks Congress (WPC) (September 2003) and the 7th Conference of Parties to the Convention on Biological Diversity CBD CoP7 (February 2004).

The Durban Action Plan from the WPC includes calls for a new WCPA task force on the categories with a number of actions, including to “prepare an updated version of the 1994 IUCN Protected Areas Management Categories guidance. This should include a better reflection of the interdependence of cultural and natural assets, and of various governance models (including community conserved areas, related types of natural resource protection and management, and indigenous-owned, designated and managed protected areas)”.

As noted in the article by Dillon, the CBD/CoP7 Decision VII/28 specifically recognised the value of a single international classification system for protected areas, and the benefits of providing information that is comparable across countries and regions. It welcomed the work of the *Speaking a Common Language* project, and encouraged all concerned to assign protected-area management categories to their protected areas, and to report on them using this system. While the Durban meeting gave endorsement to the categories system by protected areas professionals, the decision of the CBD CoP7 is an endorsement of the use of categories by governments. This raises the importance of the issues discussed in the next section.

Key issues in using the categories

Assignment of categories, and the collection and dissemination of information

The need for thorough and accurate information on protected areas, including on their management category, is increasing all the time, and has been given additional impetus by the decision of the CBD CoP7. From the perspective of information providers, these demands have created a major and growing challenge, as the number of protected areas continues to increase, and tenure and governance forms become more varied. There are now well over 100,000 protected areas covering an area approaching 20 million km² around the world. The global efforts to compile information on them in a consistent and reliable manner are described elsewhere (see the article by Chape). A key problem in this task is the accurate assignment of categories.

When the categories were just a means of data collection for preparation of the UN List and other international assessments, the question of assignment was not particularly controversial (and was in consequence not always taken very seriously). As they have assumed greater political significance – for instance because a particular category is linked to international advocacy or proposed controls on land use, such as for mineral or oil/gas exploration and exploitation – then questions of who decides on the category and whether or not they are accountable to anybody rapidly rise in importance.

This has now become a major preoccupation of many stakeholders and was an issue that emerged constantly during the *Speaking a Common Language* project – the particular perspective of extractive industries is developed in the articles by Parsons and Richards, and by Kapila. They and others ask if the system is technically robust, sufficiently systematic, transparent and verifiable. It is clear that there are a number of shortcomings:

- Information sent from governments is not always of the necessary quality and does not always emerge from a rigorous process of assignment.
- There is usually no clear process at either national or international levels by which a decision to assign a particular category can be appealed against by any stakeholder who feels that they have been unfairly penalised by an inaccurate decision, nor are there arrangements for verification of assignments.
- UNEP-WCMC, which compiles the data globally, does not have the resources to follow up with governments where no information is forthcoming or to assign categories in the absence of reliable data.
- The current system of assigning a category to a particular protected area within the World Database on Protected Areas is operated almost entirely through dialogue between governments and UNEP-WCMC, and to some extent WCPA.

The *Speaking a Common Language* project ran a workshop in the Cotswolds, in England, in May 2003 which developed proposals for a series of principles for assignment of categories (see Box 1 below) and made some preliminary suggestions about the basis for these principles.

To date these remain proposals. They need to be subject to much wider scrutiny and comment and then, if the idea of principles is generally accepted, refined and made operational.

Box 1. Some implicit and proposed principles for assignment of the system of categories.

Five distinct characteristics can be identified in the 1994 guidelines that may be regarded as principles underlying the system itself. The categories system is:

- objectives-led;
- international;
- flexible;
- clear, consistent and logical; and
- comprehensive, with all categories being equally important.

In addition, some 'key words' are identified which could become principles for the implementation of the categories system at the national level:

- Participatory – all key stakeholders are able to play their part.
- Accountable – those responsible for providing, storing, analysing and publishing data can be expected to account for accuracy and quality control of the data they are providing.
- Equitable – all interests are equally well served by the system.
- Transparent – everyone can see how decisions are made.
- Performance-led – standards are set and pursued.
- Part of a continuum of responses – collection of data on categories is part of a wider process of data collection on protected areas carried out in the context of the planning and management of national protected area systems.
- Rights-based approach – the system is applied with due regard to the rights of individuals and groups.

In general there should be shared ownership, inclusiveness and openness in the whole process of assignment involving national agencies and other stakeholders. Also all stakeholders need to agree the full range of roles that protected areas are performing, including advocacy in international conservation and development debates.

Stakeholders in assigning and using protected area categories

Following Decision VII/28 of the CBD, it is even more important that Government bodies at federal, national and sub-national levels should be closely involved in the proper application of the full range of categories. This is necessary both in the planning of protected areas systems and individual protected areas (to help ensure that protected areas fulfil all their functions and deliver a variety of goods and ecological services “beyond their boundaries”), and in information management and reporting (to ensure accurate reflection of national data on protected areas).

The IUCN membership as a whole, which includes both government and non-governmental members, also has a direct stake in questions related to the protected area categories, especially as the system is recognised as a leading product of the Union – but then so too does the United Nations, as the instigator and publisher of the global database, and UNEP-WCMC as the body responsible for compiling the information.

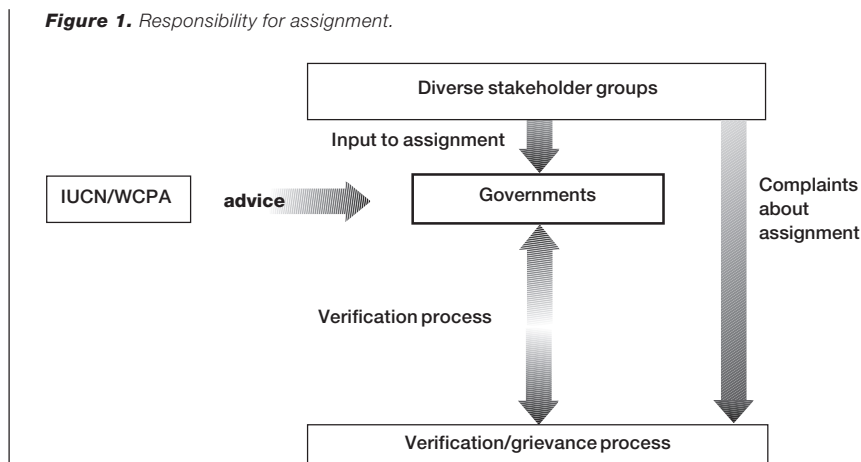
Ultimately IUCN is the body responsible for the integrity and intellectual development of the categories system. There are three key areas of special concern:

- provision of technical and policy advice for the assignment of protected areas to individual categories at the national level;
- contributing to reporting data – and quality control as required – about protected area categories; and
- reviewing and updating the system as a continuous process for ensuring that protected areas can adapt and respond to global challenges.

Increasingly other stakeholders are demanding a say. Examples are the mining sector concerned about loss of mineral rights, organic farmers interested in exploring the options for sustainable agriculture in Category V and VI protected areas, local communities and indigenous peoples who are directly impacted by protected areas or benefit from goods and services provided by them, or civil society in general, since the wider public is expected to shoulder many of the direct costs of managing the global protected area network through taxation.

There is clearly a desire and a need for stakeholders other than governments to be more closely involved in assignment issues, and there is a view among some that assignment should to a greater or lesser extent be the subject of negotiation. In the case of Community Conserved Areas, the local or indigenous groups have a clear interest in being involved. In the case of private protected areas, the individuals or organisations who own them should also have a major stake in their assignment. Other stakeholders are demanding the right to have some more formal way of verification. Figure 1 summarises how these responsibilities might be related.

Figure 1. Responsibility for assignment.



The conclusion is clear: it is no longer possible for IUCN to manage the categories system in isolation, arguing that it is merely a technical issue; nor should governments exclude other interests from questions that arise from the system's application. Both IUCN and governments need to be more inclusive in the future in matters relating to the categories.

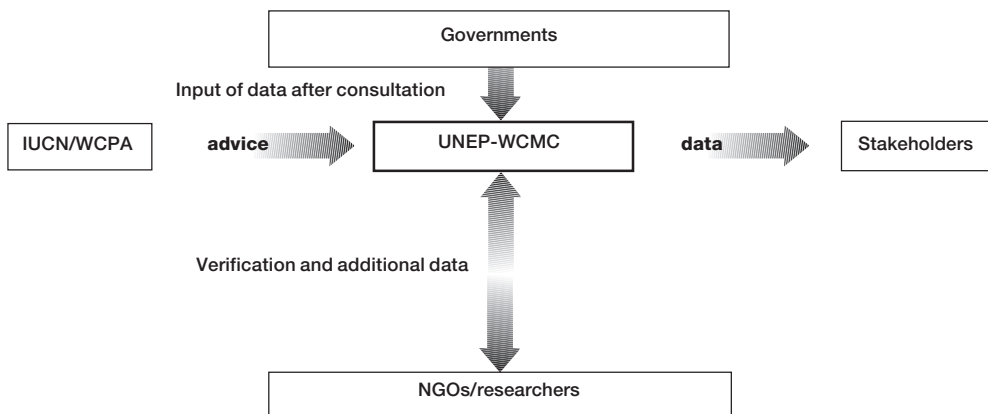
Reporting data about protected area categories

In the same way as assignment must ultimately remain the role of governments, responsibility for recording data should remain with UNEP-WCMC as the custodian for the World Database on Protected Areas. This is consistent with what is required under paragraphs 4.3.3 and 4.3.4 of CBD CoP7 Decision VII/28 on Protected Areas. However, to be effective, the centre relies on help from governments and perhaps from other institutions, which currently only happens in a rather haphazard and partial manner. Recording and reporting of protected area category information could be further strengthened by:

- **Convention on Biological Diversity:** following the adoption of the Programme of Work on Protected Areas at CBD CoP7, the Convention has recognised the central role played by the UN List of Protected Areas and the WDPA. Parties should now be encouraged to report protected areas information to UNEP-WCMC as part of the requirements under the Convention.
- **Governments** should provide protected areas data to UNEP-WCMC in accordance with the decisions of the CBD CoP7 (and the resolutions arising from the WPC); and develop a process on assigning categories that involves all key stakeholders.
- **Non-governmental organisations, research institutions etc.** should contribute data on any sites owned and/or managed by them, and should also seek opportunities to work with governments to review protected areas data and provide additional information for the database (biological information, effectiveness etc.).
- **WDPA Consortium¹:** all members should develop supportive positions on the use of the categories system in terms of information, liaison with governments etc.
- **IUCN/WCPA:** should develop the capacity to check protected areas data, particularly through members and regional groups.

The relationship might be illustrated as follows in Figure 2:

Figure 2. Responsibility for reporting and recording.



1. For details of the consortium, see Chape in this volume, footnote 1.

The particular case of marine protected areas

The particular issues relating to categories in the marine environment are analysed in detail by Wells and Day in this number. Addressing these will be an important part of the follow up to the *Speaking a Common Language* report.

Zoning and the categories

Zoning is a strategy for combining human use with biodiversity protection, by allowing the setting of varying management objectives and graded intensity of uses in zones within a single protected area; in the areas around a protected area; or as a strategic framework for the planning of a group of protected areas.

Zoning can be applied at a variety of scales – from quite a small site right up to landscape or ecoregional conservation approaches, where a series of protected areas of different categories form a mosaic, which may include other areas of compatible land management.

Within protected areas there may, for instance, be zones designated for intensive use and others managed for very limited public access. Often there is a core area – a strict reserve or no-take area – which protects critical habitat and species, surrounded by a buffer zone which allows for more uses but insulates the core.

Categories are increasingly being used to help define management zones to facilitate, for example, management of marine resources (see the article by Wells and Day), non-timber forest products collection and traditional hunting etc. This is particularly so in the case of Categories V and VI, which provide a means to the management of natural and cultural resources, but many Category II–IV protected areas have also evolved to allow these uses.

Although zoning is an integral and recognised part of protected area management, experience with the 1994 Guidelines to the IUCN Categories suggests that there is a need for further guidance on how to address this issue building on current experience. The principal difficulties that need to be addressed are these:

- It is not clear how to classify single large protected areas containing a range of zones, each with different management objectives. This problem is especially acute in relation to large marine protected areas where ecosystem scale management is sought (see Wells and Day).
- Where one protected area lies within another (e.g. where a strict reserve – Category Ia – exists within a broader landscape or seascape protected area – Category V), “double counting” may occur.

A strategy for strengthening the categories

WCPA Task Force on Categories

The issues brought to light by the *Speaking a Common Language* project are more complex and challenging than had been anticipated at the outset of the research. By looking at the way in which protected areas are classified, more fundamental questions have emerged, for example, about what protected areas are for, who should decide how they are managed, and how they should fit into planning and managing wider landscapes and seascapes. Of course, the IUCN protected area categories system cannot answer these questions, but it can provide a powerful tool in helping to plan, assess and interpret protected area systems, and thus in providing a reliable and accepted framework in which such issues can be discussed and decided.

It follows that IUCN should build on its success in developing the global system of protected areas categories by drawing upon the detailed research work undertaken over the past two and a half years. Following publication of the final report of the SaCL project and its endorsement at the World Conservation Congress, a task force in WCPA was established to help implement some of the project recommendations, focusing on three main areas of work:

- guidance in use of the categories, including preparation of a new version of the explanatory guidelines;
- awareness-raising and capacity building; and
- monitoring and research.

New guidance for the protected area category system

The *Speaking a Common Language* project recommended that the new uses for which the system is now being applied, coupled with the continuing confusion about some of the original uses of the guidelines published by IUCN in 1994, suggest that updated guidelines are required. This proposal was explicitly supported in the recommendations from both the Fifth World Parks Congress and the 2004 World Conservation Congress. While the fundamental aspects of the system – a six category, objectives-based classification based upon an agreed definition of a protected area – should remain, updated and more thorough guidance is needed that will:

- **Clarify the principles:** e.g. include a set of criteria and principles for the categories system and its application; build on the existing objectives set out for each category, including developing improved summary definitions; and consider removing generic names of protected areas and using only management objectives and numbers for each category (see also article by Stolton, Nguyen and Dudley).
- **Address difficult issues of interpretation:** e.g. present a redesigned version of the “Matrix of Management Objectives and IUCN Protected Area Management Categories” that appears in the 1994 edition; explain how zoning policies within, around and between protected areas should be reflected in the application of the categories; and explain how to avoid ‘double counting’ on reporting and assessments.
- **Show how the objectives-related system relates to other aspects of protected areas:** e.g. to the organisation responsible for their governance; to the management effectiveness framework and projects; and to the degree to which protected areas both retain their naturalness and effectively cover all biodiversity elements.
- **Give more emphasis to the way that emerging issues are addressed in relation to the categories:** examples are how the category system relates to ecological networks, wider regional planning and broadscale conservation initiatives; the special aspects of marine, freshwater and forest protected areas (possibly in the examples and case studies used); the links between protected areas and sustainable livelihoods; and greater recognition of the cultural and spiritual values of protected areas.
- **Clarify the implications of the categories:** e.g. develop the criteria to be used in determining what activities and land uses might be excluded from particular categories of protected areas.
- **Clarify assignment procedures and responsibilities:** including reference to the principles of assignment, and to responsibilities for assignment, reporting and data handling, analysis and recording.

These revised guidelines should be available in IUCN’s official languages² and also in other languages as permitted by available resources. Principles for translation should be agreed, and better use made of technical glossaries.

In addition to the overall guidelines, the *Speaking a Common Language* project recommends that additional advice be issued in the form of separate publications addressing particular aspects of the category system:

- **Biomes:** IUCN should develop more specific advice on the application of the system in specific biomes, particularly focusing on forest, freshwater and marine protected areas.

2. English, French and Spanish – though the 1994 Guidelines have been translated into Chinese, German and Russian.

- **Categories:** IUCN should develop more detailed advice on at least some of the categories (building on the Category V guidelines issued in 2002), starting with Category VI, but possibly also including Category Ib (wilderness) and Category III (natural monuments, with specific reference to sacred sites).
- **Improving the assignment procedure:** IUCN should develop and promote guidance on an open, inclusive and transparent in-country procedure for assignment, including a ‘grievance’ procedure. This should be supported by advice on verification process and a process for resolving any disputes in relation to assignment.
- **Legal use:** The IUCN Environmental Law Centre and the IUCN Commission on Environmental Law should consider developing a manual for governments and others, which would deal with the possible incorporation of the system of categories into legislation at different levels; and advice on how this could be achieved.
- **Best practice:** There is scope to promote better management practice in relation to activities in different categories, for example on sustainable collection of non-timber forest products by local communities, or for extractive industries in Categories V and VI. This might also explore links between the categories and certification systems (e.g. for forestry, fisheries).
- **Reporting:** A manual should be developed by UNEP-WCMC and WCPA to help governments to collect protected areas data, review its quality with stakeholder input and report adequately to the World Database on Protected Areas (WDPA).

Though this may appear a long list of supplementary advice, its production can be phased over a number of years. Nor need all the work be led by WCPA or the protected areas programme of IUCN.

Awareness-raising and capacity building

One problem in implementing the system of categories, and more generally in building effective protected area networks, is a lack of detailed understanding of the system and limited technical, institutional and financial capacity to implement it. The *Speaking a Common Language* team therefore urged IUCN to invest in awareness raising and capacity building, in collaboration with partners such as UNEP-WCMC and the CBD Secretariat. Specific interventions might include:

- **Providing advice to governments on request:** Working with governments and development agencies, IUCN should support national governments in key areas such as: 1) legal advice (this is a role for the IUCN Environmental Law Centre); 2) protected areas information and national databases (for example along the lines of IUCN Strengthening Protected Areas Management project in Vietnam); and 3) assignment procedures.
- **Strengthening the World Database on Protected Areas:** UNEP-WCMC and other consortium partners should strengthen the WDPA by including more reliable data on the categories, so that it is better placed to assist governments through the CBD process, as well as all parts of IUCN.
- **Extending awareness:** IUCN should develop publicity material and other means of raising awareness about the system of categories more generally. As far as possible, IUCN should make all its advice relating to the categories – not just the updated 1994 guidance – available in all official languages, and in other languages wherever practicable.

Monitoring and research

IUCN is also giving consideration to developing a monitoring and research programme around the use of the categories, giving particular attention to:

- **Indigenous and local community issues:** The implications of the categories system for indigenous and community rights, including protected areas established for indigenous peoples, and/or those protected areas established by indigenous people.

- **Policy and law:** The use made of the categories system by governments in policy and law (see recommendations in the article by Dillon).
- **Management effectiveness:** The fuller integration of the system of protected areas management categories with the WCPA framework on management effectiveness of protected areas.
- **Certification and assessment:** The use made of the categories in relation to environmental certification (e.g. forest, farming, fisheries and tourism), and to environmental and social criteria and indicator processes (e.g. Ministerial Conference on the Protection of Forests in Europe, Natura 2000).

These recommendations are wide-ranging and addressed to many audiences, though principally to IUCN. They may seem over-ambitious, yet the adoption of the categories system by the CBD in 2004, and the recommendations on categories from the 2003 World Parks Congress and 2004 World Conservation Congress, should make them a priority for IUCN. Only through an integrated programme of advice, capacity building, research and monitoring can IUCN hope to ensure that the categories system is sufficiently robust to meet the expectations now placed upon it by governments.

A vision for the categories

If the expectations of IUCN in respect of the categories system are considerable, so too is the prize. To show how the system might be strengthened over the coming years, the *Speaking a Common Language* project developed a vision for the IUCN protected area categories which is reproduced below. This vision can be realised if the above recommendations are acted upon.

Box 2. A vision for the IUCN Protected Area Management Categories.

By the time of the next World Parks Congress in 2013: the IUCN definition and management categories of protected areas are respected as the practical and philosophical framework for planning, managing and monitoring protected areas. They are widely understood and are used as an important tool in protected area management by national agencies, international bodies such as the Convention on Biological Diversity, the business sector, NGOs and many local communities.

As such, they provide accepted guidance to help plan protected area networks in the broader context of sustainable development across the whole landscape and seascape. They also help to make rational decisions about issues of policy that affect protected areas.

Because of their management implications, designation of IUCN protected area categories is an important part of any protected area planning process. The system is increasingly decided with the full involvement of stakeholders, who can draw on a wide range of tools to help them in the form of agreed principles, material in local languages and additional guidance on use in particular situations.

Questions and disagreements are addressed through a globally-agreed grievance system and some national protected area agencies already use independent assessors working to a certification system, to ensure that categories have been successfully assigned.

The IUCN WCPA provides support for the categories system, ensuring that guidance is up to date, helping to build capacity within countries and coordinating research, developing additional advice and monitoring use of the system.

Data on protected areas are stored, analysed and made widely available by the UNEP-WCMC, providing a global information source not only on the size, location and management aims but also the success of the protected area in terms of management effectiveness, information about its governance and values and reference material such as management plans. The database is maintained by national agencies working directly with UNEP-WCMC.

Jeremy Harrison works at the UNEP World Conservation Monitoring Centre, where his work is primarily concerned with the Convention on Biological Diversity and with harmonisation of reporting and information management for international treaties and programmes. He has also worked with the IUCN World Commission on Protected Areas for many years, including leading the WCPA Task Force on categories.

Nigel Dudley graduated with a joint honours degree in zoology and botany from the University College of Wales, Aberystwyth in 1976, after which he worked for the Nature Conservancy Council and spent four years at the Centre for Alternative Technology, a renewable energy research centre in Wales. Since 1981, he has worked as a consultant and writer, increasingly concentrating on environmental policy research and latterly, on issues relating to forest quality, protected areas and landscape approaches to conservation. From 1983–1992, Nigel Dudley was a consultant with Earth Resources Research, an environmental research group and charity based in London. During the 1980s, he was also closely connected with The Soil Association, Britain's leading organic farming organisation, both as a council member and later by holding a number of positions with the organisation, including that of Executive Director. In 1991, he set up Equilibrium with Sue Stolton. Nigel Dudley, Equilibrium, 47 The Quays, Cumberland Road, Bristol BS1 6UQ, UK. Telephone/fax: +44 (0)117-925-5395; e-mail: equilibrium@compuserve.com

Pedro Rosabal is a Geographer and has an MSc in Landscape Ecology, with nearly 25 years of experience in the field of protected area planning and management. He was involved in protected area projects in Cuba and from 1989 to 1994, co-ordinated protected areas as part of the National Commission for Environment of Cuba. After three years with the Caribbean Environment Programme of UNEP, he joined the staff of IUCN as a Programme Officer in the Programme on Protected Areas/WCPA in 1994. Since then he has been centrally involved in IUCN's protected areas work, ranging from the World Parks Congress to the World Heritage Convention.

Résumés

L'histoire du système international des catégories de gestion des aires protégées

ADRIAN PHILLIPS

Il y a à présent plus de 100 000 aires protégées. Elles ont été créées pour des raisons très différentes, elles sont de tailles très variées et sont appelées différemment à l'échelle nationale, et leur création a été suscitée dans le cadre d'outils juridiques nationaux et d'initiatives diverses. Les aires protégées sont gérées et appartiennent à toutes sortes d'intérêts différents. Par conséquent, cette situation complexe est en perpétuel changement et très sujette à confusion. L'UICN a été à l'origine d'une première tentative en 1978 pour apporter une réponse à cette situation. En 1994, l'UICN a adopté une révision du système comportant six catégories de gestion. Ce système est maintenant largement utilisé et a été approuvé récemment par les parties de la Convention sur la diversité biologique.

L'utilisation des catégories dans les législations et les politiques nationales et internationales

BENITA DILLON

Le Centre du droit de l'environnement (CDE) de l'Union mondiale pour la nature (UICN) a été chargé, dans le cadre du projet " Parlons la même langue ", de faire des recherches sur les cadres juridiques et politiques des aires protégées afin de déterminer si ces derniers avaient été influencés par le système des catégories pour les aires protégées de l'UICN. Plus de 320 textes juridiques ont été examinés, dont 124 textes qui ont été adoptés depuis la publication des Lignes directrices en 1994. Parmi ce dernier groupe de textes, 10% ont été fortement influencés par les indications données par l'UICN, ce pourcentage comprenant des textes de plusieurs Etats majeurs sur la scène internationale comme l'Australie et le Brésil. Les catégories ont également permis d'influer sur les politiques en matière d'aires protégées. Au niveau international, elles ont été incorporées dans la Convention africaine et approuvées récemment par la CBD. Cet article soutient que des recherches plus approfondies doivent être menées sur les informations existantes concernant l'utilisation des catégories dans les domaines juridiques et politiques et que ces informations doivent être collationnées et publiées.

L'établissement des catégories pour les aires protégées au Viêt-Nam

SUE STOLTON, NGUYEN THI DAO ET NIGEL DUDLEY

Le système des aires protégées du Viêt-Nam est encore en pleine évolution, tant en ce qui concerne son extension géographique que les dispositions institutionnelles qui les régissent. On a pu constater durant les dernières décennies l'existence d'une série de tentatives pour établir des catégories pour les aires protégées du Viêt-Nam, dont le Gouvernement a cherché volontairement à s'inspirer du système de classification de l'UICN. Cependant, ce système, dont la présentation des catégories laisse un peu à désirer du point de vue de sa clarté, a été mal compris, ce qui a entraîné une situation confuse. L'expérience vietnamienne, discutée dans cet article, a permis à l'équipe de "Parlons la même langue" d'éclaircir leurs idées concernant la façon dont les lignes directrices de l'UICN devraient être modifiées pour tenir compte des besoins de ceux qui mettent en place de nouveaux réseaux d'aires protégées. Il est notamment nécessaire de traduire les Catégories de l'UICN dans beaucoup plus de langues et que des spécialistes des pays concernés au courant de ces questions participent aux travaux de traduction, pour assurer que la traduction soit aussi précise et adaptée au contexte local que possible, tout en tentant d'être la meilleure traduction d'un point de vue technique.

Application des catégories de l'UICN pour la gestion des aires protégées au milieu marin

SUE WELLS ET JON DAY

Il a souvent été suggéré que les aires marines protégées (les AMP) ne s'inséraient pas très bien dans le système des catégories pour la gestion des aires protégées de l'UICN, et que l'utilisation de ce système pour ce groupe d'aires protégées laissait beaucoup à désirer. Cependant, les faits montrent que les catégories ont été bien adoptées pour les AMP et que certains pays estiment que le système de l'UICN est utile pour le développement de réseaux d'AMP. De nombreux problèmes qui surgissent à propos de l'application des catégories aux AMP se retrouvent également dans leur application

aux aires terrestres protégées. Néanmoins, certaines questions ne concernent que les AMP et il est urgent que les professionnels de la gestion des AMP sur le terrain améliorent leur connaissances au sujet des fonctions du système des catégories. L'article étudie ces questions et propose des recommandations pour augmenter l'efficacité et la pertinence de l'application des catégories de l'UICN aux AMP.

Le point de vue du Conseil international sur l'exploitation minière et les métaux sur le système des catégories pour la gestion des aires protégées de l'UICN

DAVID RICHARDS, RIO TINTO, ET ANDREW PARSONS, ICMM

L'ICMM a démontré qu'il s'engageait à être en première place lorsqu'il s'agissait d'améliorer l'efficacité de l'industrie minière à obtenir des résultats en matière de conservation, le soulagement de la pauvreté et la reconnaissance du rôle joué par les aires protégées comptant parmi les moyens les plus importants que le conseil a mis en oeuvre pour ce faire. Il faut que ces objectifs soient complétés par des évaluations à l'échelle des paysages et des procédures de prise de décisions qui font participer toutes les parties prenantes. Pour que le système des catégories de l'UICN soit utilisé comme un outil capable d'avoir une influence sur les pratiques normalisées de gestion et les décisions relatives à l'utilisation des terres, il faudra qu'il soit renforcé dans un certain nombre de domaines, décrits dans l'article.

Le point de vue de Shell sur le système des catégories pour la gestion des aires protégées de l'UICN

SACHIN KAPILA, GROUP BIODIVERSITY ADVISER, SHELL INTERNATIONAL LTD

Cet article donne des éclaircissements sur la position de Shell sur les aires protégées et sur une série de questions posées par le système des catégories de l'UICN que Shell juge importantes. Même si cet article fait la critique du système des catégories de l'UICN, il faut néanmoins souligner dès le départ que Shell accorde de l'importance à l'existence d'un système de catégories pour les aires protégées qui soit reconnu au plan international, et qui définit des règles claires pour toutes les parties prenantes. De plus, Shell apporte tout son soutien aux travaux réalisés dans le cadre du projet "Parlons la même langue", approuve ses recommandations et envisage leur mise en oeuvre d'un bon oeil.

L'attribution systématique des catégories pour la gestion des aires protégées : une occasion de mettre en place un cadre quantifiable

STUART CHAPE

Il y a actuellement 105 000 sites dans la Base de données mondiale sur les aires protégées qui sont des aires protégées établies, dont plus de 67% ont été désignées sous une des catégories de gestion de l'UICN. La valeur du système des catégories pour le développement de systèmes d'aires protégées est bien reconnue, même s'il n'est pas encore appliqué de manière cohérente. La récente inclusion des zones protégées dans les processus de contrôle et de reddition de comptes sur l'environnement mondial, et la ratification du système des catégories dans le Programme de travail sur les aires protégées de la CDB sont venues étayer l'argument en faveur d'une adoption plus universelle et d'une mise en place plus efficace du système. Il en découle une occasion d'utiliser le système comme cadre de référence cohérent non seulement pour mesurer le degré d'efficacité avec lequel les objectifs de gestion des aires protégées sont atteints mais encore pour rendre compte au niveau national et régional dans l'optique d'une évaluation globale. Cependant, avant qu'un tel cadre puisse fournir une formule efficace, les catégories doivent être attribuées correctement au niveau national. Cela exige de la CMAP et de ses partenaires une stratégie de soutien plus systématique des pays tombant sous le coup d'une catégorie.

Problèmes qui se posent pour les catégories dans un monde en changement

SUE STOLTON

À leur origine, les catégories UICN avaient été créées principalement en vue de 'parler la même langue', pour faciliter la communication et l'échange de comptes rendus sur les zones protégées. Dans la décade qui a suivi la publication du système à six catégories en 1994, plusieurs choses se sont produites qui en ont élargi voire peut-être faussé l'objectif premier. En premier lieu, le nombre de zones protégées a continué à croître rapidement, et les pressions sur ces lieux précieux aussi. Si bien que les questions liées aux différentes catégories recouvrent un nombre considérablement accru de

problèmes, s'appliquant à une étendue beaucoup plus importante qu'en 1994. Ensuite, faute de tout autre cadre international, on a utilisé les catégories UICN dans des conditions que leurs auteurs n'avaient pas pleinement anticipées; par exemple à des fins législatives ou pour tenter de contrôler l'emploi des terres en zones protégées. Avec un usage accru des catégories est venu une intensité correspondante dans leur remise en question. Ce qui n'était originellement qu'un simple exercice de classification a pris de l'importance au niveau de la politique et des positions de principe. Cet article étudie les objectifs premiers des catégories telles qu'elles furent publiées en 1994 avant de se tourner vers les nouveaux défis qui les attendent dans les années qui viennent.

Évolution future du système des catégories

NIGEL DUDLEY, JEREMY HARRISON ET PEDRO ROSABAL

Février 2004 fera date dans la discussion prolongée sur les catégories de gestion des aires protégées, puisqu'une assemblée intergouvernementale, la Conférence des Parties de la Convention sur la Diversité Biologique (CBD), y a plaidé pour l'usage des catégories par pays pour la gestion et le retour d'information sur les zones protégées.

Cependant, le projet Parler une même langue montre que les catégories d'aires protégées de l'UICN sont utilisées dans des conditions qu'on n'envisageait pas lors de leur adoption par UICN. Il en résulte que le système doit être renforcé.

Un groupe de travail a été créé par la Commission Mondiale des Aires Protégées de l'UICN pour conseiller la Commission sur la mise en place des recommandations, en mettant l'accent sur l'amélioration d'un 'mode d'emploi' du système, la sensibilisation et le renforcement des capacités, et les contrôles et la recherche.

Cet article explore ces problèmes et conclue sur une vision pour les catégories en 2013.

Resúmenes

La historia del sistema internacional de administración de las áreas protegidas

ADRIAN PHILLIPS

En la actualidad hay más de 100.000 áreas protegidas. Éstas han sido creadas como resultado de razones muy diferentes, varían enormemente de tamaño, se les dan diferentes nombres a nivel nacional y son la consecuencia de diversas legislaciones nacionales y otras iniciativas. Existe, por lo tanto, un gran potencial para la confusión en esta situación que cambia tan rápidamente. El primer intento para atacar este problema a través de la categorización de las áreas protegidas fue hecho por la UICN en 1978. En 1994, la UICN adoptó un sistema corregido de seis categorías de administración. Este sistema se usa ahora ampliamente y ha sido ratificado recientemente por las partes que pertenecen a la Convención de la Diversidad Biológica.

El uso de las categorías en la legislación y en las políticas nacionales e internacionales

BENITA DILLON

Como parte del proyecto Hablando un lenguaje común se solicitó al Centro de la Ley del Medio Ambiente de (ELC), de la Unión Mundial para la Naturaleza (UICN) que investigara los marcos legales y políticos de las áreas protegidas para ver si éstas han sido influenciadas por el sistema de categorías administrativas de las áreas protegidas de la UICN. Se examinaron más de 320 piezas legislativas, incluyendo 124 adoptadas desde que se publicaron las pautas de 1994. Más del 10% de la legislación en este último grupo ha sido fuertemente influenciada por la guía de la UICN incluyendo aquellas de varios Estados importantes tales como Australia y Brasil. Las categorías han ejercido influencia en términos de la política de las áreas protegidas. A nivel internacional, han sido incorporadas dentro de la Convención Africana y han sido revalidadas por la CBD. El argumento de este artículo es que es importante que la información relacionada al uso de las categorías en cuanto a la ley y la política debe ser investigada más profundamente, compilada y publicada.

Categorizando las áreas protegidas de Vietnam

SUE STOLTON, NGUYENTHI DAO Y NIGEL DUDLEY

Los sistemas de áreas protegidas de Vietnam están todavía en desarrollo tanto en lo que se refiere a la cobertura como en los arreglos institucionales. En las últimas décadas, se han hecho una serie de intentos para categorizar las áreas protegidas de Vietnam y el Gobierno se ha basado deliberadamente en el sistema de clasificación de la UICN. Sin embargo, la interpretación errónea del sistema, cuyo origen puede remontarse en parte a la falta de claridad de la forma en que las categorías han sido presentadas, ha causado cierta confusión. La experiencia vietnamita, que se presenta en este artículo, ayudó al equipo de Hablando un Lenguaje Común, a clarificar las ideas acerca de cómo la guía de las categorías de la UICN podría ser modificada para reflejar las necesidades de aquellos que establecen nuevas redes de áreas protegidas. En particular, es necesario traducir las categorías de la UICN a muchas más lenguas, y en estas traducciones se debe incluir la participación de especialistas de los distintos países que están familiarizados con las cuestiones, y así asegurarse de que la traducción es exacta y relevante dentro del contexto local y también tan correcta técnicamente como sea posible.

La aplicación de las categorías administrativas de las áreas protegidas en el medio ambiente marino

SUE WELLS Y JON DAY

Se sugiere frecuentemente que las áreas protegidas marinas (APMs) no se acomodan de modo confortable dentro del sistema de categorías administrativas de las áreas protegidas de la UICN, y que el sistema no ha sido usado correctamente en este grupo de áreas protegidas. Sin embargo, la evidencia muestra que ha habido una buena adopción de las categorías para las APMs y que algunos países encuentran que el sistema es útil para el desarrollo de las redes de APMs. Muchos de los problemas que se encontraron cuando se aplicaron las categorías de APMs pueden encontrarse también en las áreas protegidas terrestres. Sin embargo, hay algunas cuestiones que son específicas de

las APMs y existe la necesidad urgente de que los practicantes incrementen el entendimiento de las funciones del sistema de categorías. Este artículo examina estas cuestiones y ofrece algunas recomendaciones de cómo las categorías de la UICN pueden aplicarse más efectivamente para el provecho de las APMs.

La Perspectiva del Consejo Internacional de Minería y Metales del sistema de categorías administrativas de las áreas protegidas

DAVID RICHARDS, RÍO TINTO Y ANDREW PARSONS, ICMM

El ICMM ha demostrado su compromiso de liderazgo a través de la mejora del funcionamiento de la industria en la entrega de resultados en cuanto a la conservación, sobre todo a través del alivio de la pobreza y el reconocimiento del papel de las áreas protegidas. Estos objetivos tienen que ser complementados a través de evaluaciones a nivel de paisaje y de procesos de acuerdos que incluyen la colaboración de todas las partes interesadas. Si el sistema de categorías de la UICN es usado como una herramienta para influenciar los modelos administrativos y las decisiones sobre el uso del terreno, va a necesitar ser reforzado en un número de áreas que se describen en el artículo.

La perspectiva de Shell en cuanto al sistema de categorías administrativas de las áreas protegidas

SACHIN KAPILA, ASESOR DEL GRUPO BIODIVERSIDAD, SHELL INTERNATIONAL LTD

Este artículo enfatiza la posición de Shell con respecto a las áreas protegidas así como un número de cuestiones que presenta el sistema de categorías de la UICN y que Shell considera importantes. Aunque este artículo asume una posición crítica del sistema de categorías de la UICN, es necesario clarificar desde el comienzo que Shell aprecia el valor de un sistema de categorías para las áreas protegidas reconocidas internacionalmente con reglamentos claros para todas las partes interesadas. Más aún, Shell apoya totalmente el trabajo del proyecto Hablando una Lengua Común, está de acuerdo con sus recomendaciones y espera su implementación.

La asignación sistemática de las categorías administrativas para las áreas protegidas: una oportunidad de lograr un marco mensurable

STUART CHAPE

En la actualidad hay casi 105.000 sitios en la Base Mundial de Datos de las áreas protegidas que están ya establecidos y a más del 67% se les ha asignado categorías de manejo de la UICN. El valor del sistema de categorías para desarrollar los sistemas de áreas protegidas está bien establecido aún cuando no se aplique con consistencia. La inclusión reciente de las áreas protegidas en el monitoreo global del medio ambiente y en los procesos de reportes periódicos, y el apoyo que se le ha dado al sistema de categorías en el programa de trabajo de las áreas protegidas del CBD han fortalecido el argumento a favor de una adopción más universal y una implementación efectiva del sistema. Esto a su vez provee una oportunidad para usar el sistema como un marco coherente para medir no sólo la efectividad para lograr los objetivos de manejo de las áreas protegidas sino también para informar regional y nacionalmente acerca de las evaluaciones globales. Sin embargo, antes de que tal marco pueda ser logrado de modo efectivo, las categorías necesitan ser asignadas a nivel de país. Esto requerirá una aproximación más sistemática por parte de la CMAP y sus asociados para apoyar a los países en la asignación de categorías.

Cuestiones que surgen de las categorías en un mundo cambiante

SUE STOLTON

Las categorías de la UICN fueron desarrolladas en su origen y en gran parte como un "lenguaje común", para ayudar en las comunicaciones e informes sobre las áreas protegidas. En la década desde la publicación del sistema de seis categorías en 1994, han pasado varias cosas que han extendido y tal vez distorsionado el objetivo original. Primero, el número de áreas protegidas ha seguido aumentando de manera rápida y también se han incrementado las presiones en estos lugares valiosos. Por lo tanto los asuntos relacionados con estas categorías cubren muchas más cuestiones y se refieren a un área muchísimo más grande que en 1994. En segundo lugar, en la ausencia de otros marcos internacionales, las categorías de la UICN han sido usadas de un modo que sus arquitectos originales no pudieron prever totalmente, por ejemplo como bases para legislación o para intentar el control del uso de la tierra dentro de las áreas protegidas existentes. Así como los usos de las categorías se han extendido también lo ha hecho la intensidad con la cual han sido escudriñados. Lo que

comenzó como un simple ejercicio de clasificación ha asumido una importancia política más grande. Este artículo reseña los objetivos originales de las categorías como fueron publicadas en 1994 y luego considera algunos de los nuevos desafíos que las categorías enfrentan en los próximos años.

El futuro desarrollo de los sistemas de categorías

NIGEL DUDLEY, JEREMY HARRISON Y PEDRO ROSABAL

El mes de febrero de 2004 fue un mes significativo para la prolongada discusión sobre las categorías de manejo de las áreas protegidas, pues una reunión intergubernamental, la Conferencia de los Estados Partes de la CDB, promovió el uso de las categorías por países para el manejo e la información periódica sobre las áreas protegidas.

Sin embargo, el proyecto Hablando un Lenguaje Común encontró que las categorías de áreas protegidas de la UICN son usadas de modos no previstos cuando fueron inicialmente adoptadas por la UICN. Como resultado, el sistema necesita ser fortalecido.

Por lo tanto la Comisión Mundial de Áreas Protegidas de la UICN ha creado un grupo especial de trabajo para la implementación de las recomendaciones, enfocado particularmente en mejorar los lineamientos para el uso del sistema, un aumento de conocimiento, la el desarrollo de capacidades y un incremento del monitoreo y la investigación.

Este artículo explora estas cuestiones y concluye con una visión de las categorías en el año 2013.

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WCPA is the largest worldwide network of protected area managers and specialists. It comprises over 1,300 members in 140 countries. WCPA is one of the six voluntary Commissions of IUCN – The World Conservation Union and is serviced by the Protected Areas Programme at the IUCN Headquarters in Gland, Switzerland. WCPA can be contacted at the IUCN address above.

The WCPA mission is to promote the establishment and effective management of a worldwide network of terrestrial and marine protected areas.

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Afin de sauvegarder les ressources naturelles aux plans local, régional et mondial, l'Union mondiale pour la nature s'appuie sur ses membres, réseaux et partenaires, en renforçant leurs capacités et en soutenant les alliances mondiales.

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La Unión Mundial para la Naturaleza fortalece el trabajo de sus miembros, redes y asociados, con el propósito de realizar sus capacidades y apoyar el establecimiento de alianzas globales para salvaguardar los recursos naturales a nivel local, regional y global.

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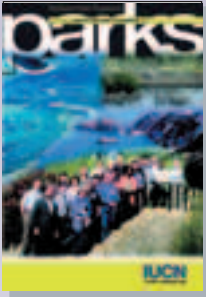
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