

Editorial

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

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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*

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.



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

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;

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 Not that the URI of the 1994 system is the same as that of the 1978 system. The 1994 system is based on the 1978 system, but with some changes. The 1978 system had 10 categories (I-X), while the 1994 system has 6 categories (I-VI). The 1994 system is based on management objectives, while the 1978 system was based on land use. The 1994 system is based on the 1978 system, but with some changes. The 1978 system had 10 categories (I-X), while the 1994 system has 6 categories (I-VI). The 1994 system is based on management objectives, while the 1978 system was based on land use.

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;
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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;

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

IUCN 1995 *Categories, Objectives and Criteria: Final Report of the Committee and Criteria of the CNPPA/IUCN*, Morristown, Switzerland

IUCN 1997 *United Nations List of Protected Areas, 1997 IUCN Categories*, UK

IUCN 1998 *PARKS, A World Heritage Series*, IUCN-The World Conservation Union, Gland, Switzerland and Cambridge, UK

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

Phillips, A. 2000 *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

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As part of the *Speaking a Common Language* project, the World Conservation Union (IUCN) Environmental Law Centre (ELC) was asked to search the policy framework works or protocols that exist which have been influenced by the IUCN system of protocols and standards. Over 300 pieces of legislation were examined, including 14

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 are used in the Convention on the Conservation of Nature and Natural Resources 2003. The Convention is a treaty between African States. Article XII of the Convention states:

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.

Number of countries	Level 1	Level 2	Level 3	Level 4	Total
No. of countries	0	114	16	3	
Percentage	0.6%	6%	35.4%	57%	100%

Note: This table includes information from 150 countries and does not include information from countries that have no legislation from the statistics.

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

Number of countries	Level 1	Level 2	Level 3	Level 4	Total
Number of countries	11	45	6	16	
Percentage	1.6%	8.7%	35.9%	54.0%	100%

Note: This table does not include information from countries that have no legislation from the statistics.

⁵ Only 16% of countries have legislation 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.

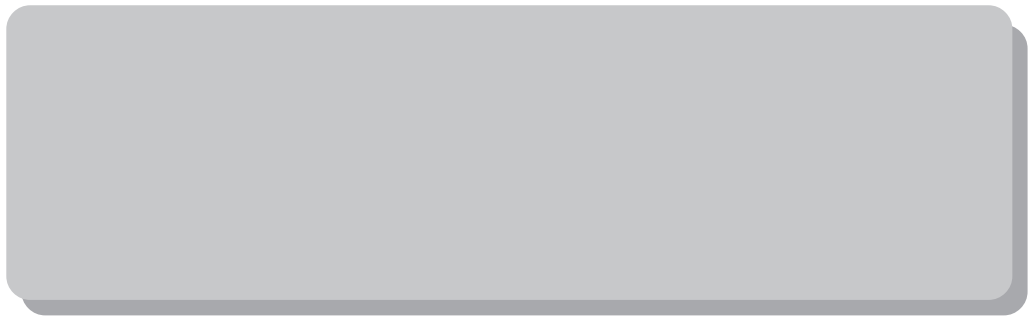
Discussion

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




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

Categorising protected areas in Vietnam

SUE STOLTON, NGUYEN THI AN, NIGEL ULEY

Vietnam's protected areas systems are still evolving in terms of both coverage and institutional arrangements. Over the past few years, there have been serious attempts to categorise Vietnam's protected areas according to the Government's newly revised Law on the IUCN classification system. However, misuse of the system which can be traced back in part to a lack of clarity in the ways in which the categories should be presented, has led to some confusion. This Vietnam experience, which this article discusses, helps to inform work on the *Speaking a Common Language* project to clarify and set out how the IUCN categories might be used in the field. It also shows the steps to be taken to set up protected areas networks. In particular, there is a need to translate the IUCN categories into more local languages – and for this translation to involve the participation of in-country specialists who are familiar with the issues, thus ensuring that translation is as precise as relevant to the local context and 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



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

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

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

SUE WELLS, N ION AY

It is not surprising 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 an uptake of the categories or MPAs, and that some countries are integrating the system into their development of MPA networks. Many of the problems encountered in applying the categories to MPAs are also common with terrestrial protected areas. Nevertheless, there are some issues that are specific to MPAs, and a number of issues used to be raised by MPA practitioners on the usefulness 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. Categories of marine protected areas (MPAs) and their distribution.

IUCN category	No. of MPAs	%	Total other protected areas	%
Ia	430	5	5,056	5.0
Ib	5	0.1	1,600	1.3
II	593	13	3,000	3.0
III	16	0.4	1,651	1.6
IV	1,441	31	5,400	5.4
V	56	1.2	9,500	9.5
VI	44	1.0	3,933	3.9
Unclassified	95	2.1	33,645	33.5
Total	4,526		100,400	

Source: WDPA, UNEP-WCMC, February 2005.

Box 1. Defining marine protected areas

IUCN defines marine protected areas (MPAs) as areas of land and sea reserved and managed for the protection and maintenance of specific natural resources, including species diversity and ecological processes (IUCN/WCMC, 1994). The IUCN defines an MPA as an area of land and sea reserved and managed for the protection and maintenance of specific natural resources, including species diversity and ecological processes (IUCN/WCMC, 1994). The IUCN defines an MPA as an area of land and sea reserved and managed for the protection and maintenance of specific natural resources, including species diversity and ecological processes (IUCN/WCMC, 1994).

[(D) 5J5k [IUP] TJ /F1] (MCPA, 1999)

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).

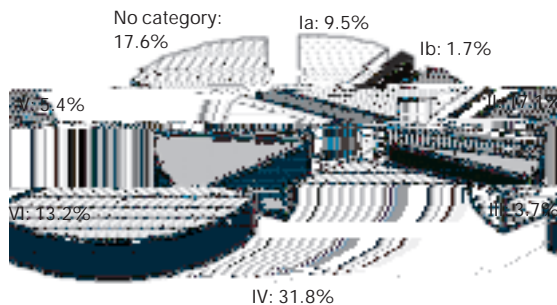
Among both MPAs and other protected areas, more sites are assigned to Category IV (managed for conservation through management intervention): 32% for MPAs and 26% for non-marine PAs. The smallest proportions of sites for both are Category Ib (managed for wilderness protection) (1.7% for MPAs, 1.3% for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

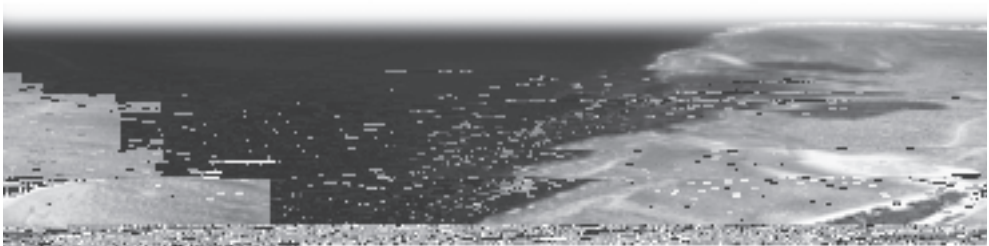


Difficulties in applying the categories to MPAs

1. Zoning of 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

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



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

For example, the UK designated its first No Take Zone in 2003, within the Lundy Island Marine



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

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.

Acknowledgements

This paper is based on two case studies produced for the *Speaking a Common Language* project, one by Sue Stolton, Nigel Dudley, Sue Wells and Adrian Phillips, and the second by Sue Stolton, Adrian

Phillips and Jon Day. The first case study was commented on and added to by Meriwether Wilson, Richard Kenchington, Edmund McManus of UNEP-WCMC, Scott Smith of TNC and by staff based at the National Oceanic and Atmospheric Administration (NOAA) in the USA; the second by Graeme Kelleher, Nigel Dudley and Jerry Harrison. Information on Australia was provided by Peter Taylor, Director, Marine Protected Areas, Environment Australia. The

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.

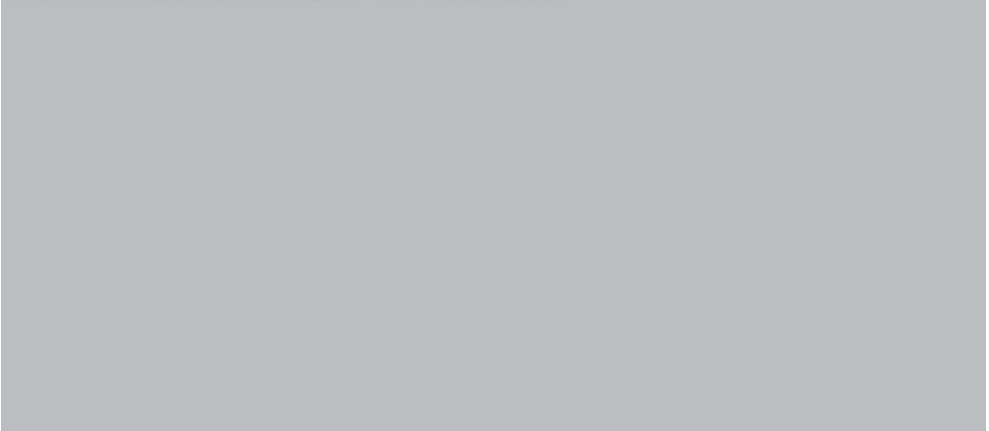
Amman recommendation and the IUCN categories

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: Rio Tinto plc





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 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



Western Grey Whale with the Molicpak platform in the background Photo © W II r

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

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

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 (WDPA) established protected areas, and more than 67% have been assigned IUCN management categories. The value of the category system developed for protected areas systems will be established, in order to consistently apply the conclusions of protected areas in order to improve monitoring and reporting processes, and also to inform the category system in the CoP7 Programme of Work on Protected Areas. However, the current system is not uniform and more uniformity is needed in order to improve the system. This, in turn, provides an opportunity to use the system as a coherent framework for monitoring and reporting on the systematic management of protected areas. The objective is to develop a system of management categories for protected areas, which will be used to monitor and report on the progress of the system. This will require a more systematic approach by WCA and its partners to support countries in their reporting.

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 PA	Area (km ²)	% Global
Ia	5,46	4,60,06	3.1%
Ib	1,365	3,03,35	1.6%
II	3,3	93,103	0%
III	1,1	9,6	0%
IV	9,365	4,477,46	3.0%
V	4,1	617,0	0.4%
VI	3,77	1,004,65	0.9%
No category	34,440	3,30,63	%
Total	104,926	19,647,326	13.2%

¹ The WDPA Consortium was established in 2002 to expand participation and leadership of the development of the protected area data. It brings together the reporting and data collection organisations that have agreed to submit information on protected areas in a cooperative basis and used to monitor the activities of the global conservation efforts.

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

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

Number of countries	Category assignment percentage classes	
	Number of countries	Percentage of countries
1	1	100%
2	2	100%
3	3	100%
4	4	100%
5	5	100%
6	6	100%
7	7	100%
8	8	100%
9	9	100%
10	10	100%
11	11	100%
12	12	100%
13	13	100%
14	14	100%
15	15	100%
16	16	100%
17	17	100%
18	18	100%
19	19	100%
20	20	100%
21	21	100%
22	22	100%
23	23	100%
24	24	100%
25	25	100%
26	26	100%
27	27	100%
28	28	100%
29	29	100%
30	30	100%
31	31	100%
32	32	100%
33	33	100%
34	34	100%
35	35	100%
36	36	100%
37	37	100%
38	38	100%
39	39	100%
40	40	100%
41	41	100%
42	42	100%
43	43	100%
44	44	100%
45	45	100%
46	46	100%
47	47	100%
48	48	100%
49	49	100%
50	50	100%
51	51	100%
52	52	100%
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59	59	100%
60	60	100%
61	61	100%
62	62	100%
63	63	100%
64	64	100%
65	65	100%
66	66	100%
67	67	100%
68	68	100%
69	69	100%
70	70	100%
71	71	100%
72	72	100%
73	73	100%
74	74	100%
75	75	100%
76	76	100%
77	77	100%
78	78	100%
79	79	100%
80	80	100%
81	81	100%
82	82	100%
83	83	100%
84	84	100%
85	85	100%
86	86	100%
87	87	100%
88	88	100%
89	89	100%
90	90	100%
91	91	100%
92	92	100%
93	93	100%
94	94	100%
95	95	100%
96	96	100%
97	97	100%
98	98	100%
99	99	100%
100	100	100%

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

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

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
Albania	0	0	100%	100%
Algeria	5	5	100%	100%
Algeria	5	1	0%	0%
American Samoa	13	0	54%	0%
Andorra	16	14	0%	53%
Anguilla		0	0%	0%
Antigua and Barbuda	13	11	46%	100%
Argentina	3	319	69%	6%
Armenia			100%	100%
Australia	4	1	5%	63%
Austria	5,655	5,653	0%	0%
Austria	1,000	1,000	100%	100%
Azerbaijan	39	35	46%	0%
Bahrain	45	3	44%	51%
Bahrain	4		50%	14%
Bangladesh	1	1	669%	6%
Barbados	6	6	100%	100%
Barbados	04	03	0%	0%
Belgium	61	60	0%	0%
Belize	4	0	0%	0%
Belize	5	5	5%	49%
Bermuda	13	100	0%	5%
Bhutan			100%	100%
Bolivia	3	3	0%	6%
Bosnia and Herzegovina	31	1	69%	0%
Botswana	0	1	16%	60%
Boutou Island	1	1	100%	100%
Brazil	1, 1	04	6%	36%
British Indian Ocean Territory	6	6	100%	100%
Brunary Islands	49	36	0%	413%
Bulgaria	0	0	51%	53%
Burkina Faso	3	13	15%	0%
Burundi	15	15	100%	100%
Cameroon	30	30	100%	100%
Cameroon	35	0	59%	0%
Canada	5,359	4,569	56%	61%
Cape Verde	51	0	0%	0%
Cayman Islands	4	46	5%	No area or c sites
Central American Rep	6	14	0%	0%
Chad	3		1%	6%
Chile	5	6	0%	0%
China	0	0	0%	No area or c sites
Christmas Islands	1	1	100%	100%
Cocos Keel Islands	1	1	100%	100%
Colombia	41	10	65%	6%
Comoros	1	1	100%	100%
Costa Rica	13	13	51%	0%
Cook Islands	13		154%	13%
Costa Rica	13	130	0%	0%
Cote d'Ivoire	35	1	39%	393%
Croatia	00	00	100%	100%
Cuba	0	0	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	1	10	5.6%	5.1%
Czech Republic	1,96	1,96	100%	100%
Croatia	4	43	51.2%	9.6%
Cuba	33	33	100%	100%
Dominica	1	1	100%	100%
Dominican Republic	6	5	3.3%	9.1%
East Timor	15	1	6.7%	0.4%
Ecuador	140	9	1.3%	9.5%
Egypt	51	34	66.7%	0.9%
El Salvador	96	6	6.3%	6%
Equatorial Guinea	13	13	100%	100%
Eritrea	3	3	100%	100%
Estonia	34	1,95	4.3%	45.3%
Ethiopia	40	3	9.5%	1%
Falkland Islands	35	34	9.7%	1%
Fiji	54	5	46.3%	9.6%
Finland	3,466	1	5.5%	5.3%
France	1,39	1,6	5.1%	9.7%
French Guiana	34	64	9.7%	5%
French Polynesia	1	1	100%	100%
Ghana	1	3	13.6%	14.6%
Gambia	9	6	3%	3.3%
Ghana	36	35	9.7%	6.9%
Grenada	9,4	9,41	1%	1%
Ghana	3.1	16	5%	34.4%
Gibraltar	1	1	100%	100%
Greece	149	1.3	3.9%	9.13%
Greenland	9	9	100%	100%
Guatemala	1	1	50%	4.1%
Guam	16	1	9.5%	No data or category
Guatemala	6	96	4%	9.7%
Guinea	150	1.3%	1.3%	3.3%
Guinea-Bissau	0	0%	0%	0%
Guyana	3	3	100%	100%
Haiti			1%	1%
Honduras	3	9	9.4%	9.6%
Hong Kong	10	46	45.1%	5%
Hungary	36	1	9.9%	1%
Iceland	9	9	100%	100%
Iceland	661	61	6%	1%
Iceland	1,16	3	0.9%	9.9%
Ireland, IR	143	1	0.7%	9.5%
Ireland			100%	100%
Ireland	0	9	6.9%	1%
Israel		1.5	64.1%	9.5%
Italy	95	3.4	43.1%	3.1%
Jamaica	16	143	5.1%	9.4%
Japan	61	3	30.5%	66%
Kenya	36	1	33.3%	4.1%
Kazakhstan	99	94	6.1%	No data or category
Kyrgyzstan	34	6	1.5%	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	1	5.7%	1.5%
Korea, PR	31	31	100%	100%
Korea, R public o	44	40	0.1%	5%
Kuwait	9	5	14%	45.9%
Kyrgyzstan	3	5	1.4%	5.1%
Laos, P, R	9		1.5%	4%
Latvia	54	536	%	5.7%
Lebanon	4		3%	51.7%
Lesotho	1	1	100%	100%
Liberia	16		1.5%	11.9%
Liyao, A, r, o, k, am, ahiriya	1		66.9%	9.3%
Liechtenstein	10	10	100%	100%
Lithuania	9	5	3%	%
Luxembourg	63	1	30.7%	4.4%
Macedonia	3	3	100%	100%
Madagascar	60	54	0%	9%
Malawi	130		6.7%	54.6%
Malaysia	09	1	6.3%	16.5%
Mali	5	0	0%	0%
Mali	1	11	1.9%	%
Malta	3	3	100%	100%
Marshall Islands	6	3	50%	No area or c sites
Martinique	16	16	100%	100%
Mauritania			100%	100%
Mauritius	6	5	6.7%	9.7%
Mayotte		9	9.5%	No area or c sites
Mexico	1.9	16	%	%
Microsia, FS	0		10%	90.6%
Moldova, R public o	63	63	100%	100%
Moldova			100%	100%
Moldova	51	50	%	6.3%
Montserrat	1	1	100%	100%
Morocco	34	13	3.7%	65.7%
Mongolia	4	1	6%	4%
Myanmar	55	3	6.1%	%
Namibia	193	1	1.1%	1%
Nepal		1	1.7%	0.7%
Netherlands	1,56	5	5.3%	61.5%
Netherlands, till s	15		40%	9.7%
New Caledonia	9	66	3.5%	64.7%
New Zealand	3, 1	3,505	0.1%	%
Nicaragua	3	93	9.5%	93.3%
Niger	6	6	100%	100%
Nigeria	1,00	31	3.1%	6.7%
Niue	5	1	0%	%
Norfolk Islands	1	1	100%	100%
North Mariana Is	11		1.7%	65.6%
Norway	1,95	199	%	No area or c sites
Oman	6	6	100%	100%
Pakistan	0	3	3.7%	4.9%
Pakistan			40%	1.5%
Pakistan	61	33	54.1%	5.1%
Papua New Guinea	95	34	45.3%	6.5%

Paraguay

37

31

3 1/2

~~55~~ 6%

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Issues that arise for the categories in a changing world

SUE STOLTON

The IUCN categories for protected areas have developed as a common language, to help communication and reporting on protected areas. In the case of public information, the six categories system in 1994, several things have happened to stretch the perhaps somewhat distorted original intention. First, the umbrella of protected areas has become tied to criteria that, perhaps, have pressure to be precise places. Secondly, the original intention to the categories covers many more issues, and the original intention is that in 1994. So clearly, in the case of a youth rights and environment work, the IUCN categories have been used in ways that their original intention is not. The original intention is to be used as a basis for classification or to attempt to control us with existing protected areas. The original intention is to be used as a basis for classification, so too has the intensity with which they have been scrutinised. What is a simple classification exercise has assumed a rather political and policy importance. This article reviews the original aims of the categories as published in 1994 and the consequences of which the categories are commonly used.

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



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

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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

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:

I *i* *l* *e* *c* *a* *d* *a* *i* *a* *e* *a* *c*

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 cases 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: Ni | l | y



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.

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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*”

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:

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

References

The future development of the categories system

NIGEL U LEY, JEREMY HARRISON, N PE RO ROS & L

February 2004 was a significant month for the IUCN in its discussion of protected areas management categories, as a
 international meeting, the Co-ordinating Committee, promoted us on the categories system. The
 management reports of the IUCN

However, the *Speaking a Common Language* project found that IUCN's protected areas categories were used in ways
 not envisaged when they were first adopted by IUCN. In consequence, the system is still struggling
 to meet the task of the IUCN World Commission on Protected Areas to assist the Commission
 to implement the other recommendations, especially to improve the effectiveness of the system, and to
 capacity building, and monitoring and research.

This article explores these issues and discusses with a view to the categories system. 013

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).

Relevance

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.

I l a d i c e s e i a a i s e e d l -

The key messages of the project have already been incorporated into the outcomes and activities arising from both the Vth World Parks Congress (WPC) (STD[teголо2003cf tarktes to phe pongvnt on ofn B

State of the World's Biodiversity

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:

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.

R e s p o n s i b i l i t y a n d c a p a c i t y

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.

- 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.

N a c • • c a a c a • s s

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**

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- **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).
-

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Résumés

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

1 R. N. PHILLIPS

Il y a plus de 100 000 aires protégées dans le monde. Elles sont créées pour diverses raisons, mais elles ont toutes un objectif commun : protéger la biodiversité. Le système international des catégories de gestion des aires protégées a été développé pour répondre à ce besoin. Ce système est basé sur six critères : l'objectif de l'aire protégée, le statut de l'aire protégée, le type de gestion, le niveau de protection, le statut de l'aire protégée et le statut de l'aire protégée.

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

2 ENITH ILLON

Le Comité directeur de l'Union mondiale pour la nature (UICN) a développé le système international des catégories de gestion des aires protégées pour répondre à ce besoin. Ce système est basé sur six critères : l'objectif de l'aire protégée, le statut de l'aire protégée, le type de gestion, le niveau de protection, le statut de l'aire protégée et le statut de l'aire protégée.

Aux fins de la stratégie de la Commission européenne, le rapport de la Commission européenne sur la gestion des aires protégées de l'UICN, publié en 2014, a été adopté par le Conseil international sur l'exploitation minière et les métaux (ICMM) en 2015. Le rapport de la Commission européenne sur la gestion des aires protégées de l'UICN, publié en 2014, a été adopté par le Conseil international sur l'exploitation minière et les métaux (ICMM) en 2015.

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

VI RICHARD S. RIO TINTO, ET AL. REW. PERSONS, ICMM

L'ICMM a travaillé avec les gouvernements et les entreprises minières pour améliorer la gestion des aires protégées de l'UICN. Le rapport de la Commission européenne sur la gestion des aires protégées de l'UICN, publié en 2014, a été adopté par le Conseil international sur l'exploitation minière et les métaux (ICMM) en 2015.

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

SHIN PI, GROUP UNIVERSITY, VISER, SHELL INTERNATIONAL

Cet article de Shell International a été publié dans le rapport de la Commission européenne sur la gestion des aires protégées de l'UICN, publié en 2014. Le rapport de la Commission européenne sur la gestion des aires protégées de l'UICN, publié en 2014, a été adopté par le Conseil international sur l'exploitation minière et les métaux (ICMM) en 2015.

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 protégés de l'UICN dans le monde. Le rapport de la Commission européenne sur la gestion des aires protégées de l'UICN, publié en 2014, a été adopté par le Conseil international sur l'exploitation minière et les métaux (ICMM) en 2015.

Resúmenes

La historia del sistema internacional de administración de las áreas protegidas

A N PHILLIPS

En la actualidad hay más de 100 000 áreas protegidas establecidas como resultado de los movimientos, variaciones y cambios en las leyes y reglamentos nacionales y los acuerdos y las convenciones internacionales. El establecimiento de otras iniciativas existe, por lo tanto, una potencial para la cooperación y el intercambio de información. El primer intento para establecer un sistema internacional de áreas protegidas se hizo por la UICN en 1974. En 1984, la UICN adoptó un sistema de categorías de conservación. Este sistema se ha ampliado y ha sido reconocido por las partes que participan en la Convención de las Áreas de Biosfera.

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

SENITT ILLON

Las PMS y el sistema de categorías de uso de los recursos terrestres y el medio ambiente de las unidades del sistema de categorías. Este artículo examina estas cuestiones y ofrece un análisis crítico de los cambios de categorías de la UICN que se aplican más activamente para proteger las PMS.

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

ÁVI RICHARDS, RIO TINTO Y AN REWARDS, ICMM

El ICMM ha demostrado su compromiso de trabajar con las organizaciones de la industria minera para lograr resultados que permitan a las comunidades locales mejorar sus vidas. Los resultados de los cambios de categorías de uso de las PMS y el Ocost ma

como un simple ejercicio clasificatorio o un importante instrumento. Este artículo
resalta los objetivos orientados a las categorías como un rol público de 14 y luego los
u otros sistemas de categorías rta los próximos años

El futuro desarrollo de los sistemas de categorías

IUCN – The World Conservation Union

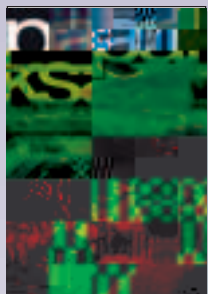
Founded in 1948, The World Conservation Union brings together States, government agencies and a diverse range of non-governmental organisations in a unique world partnership: over 1,000 members in all, spread across some 139 countries.

As a Union, IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

The World Conservation Union builds on the strengths of its members, networks and partners to enhance their capacity and to support global alliances to safeguard natural resources at local, regional and global levels.

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Protected Areas



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