

## Rethinking protected area categories and the new paradigm

HARVEY LOCKE<sup>1</sup> AND PHILIP DEARDEN<sup>2\*</sup>

<sup>1</sup>Canadian Parks and Wilderness Society, 11 Glebe Road East, Toronto, Canada, and <sup>2</sup>Department of Geography, PO Box 3050, University of Victoria, Victoria, British Columbia, Canada V8W 3P5

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### SUMMARY

The World Conservation Union (IUCN) plays a global leadership role in defining different types of protected areas, and influencing how protected area systems develop and are managed. Following the 1992 World Parks Congress, a new system of categorizing protected areas was developed. New categories were introduced, including categories that allowed resource extraction. Since that time there has been rapid growth in the global numbers and size of protected areas, with most growth being shown in the new categories. Furthermore, the IUCN has heralded a 'new paradigm' of protected areas, which became the main focus of the 2003 World Parks Congress. The paradigm focuses on benefits to local people to alleviate poverty, re-engineering protected areas professionals, and an emphasis on the interaction between humans and nature through a focus on the new IUCN protected area categories. The purpose of this paper is to examine critically the implications of the new categories and paradigm shift in light of the main purpose of protected areas, to protect wild biodiversity. Wild biodiversity will not be well served by adoption of this new paradigm, which will devalue conservation biology, undermine the creation of more strictly protected reserves, inflate the amount of area in reserves and place people at the centre of the protected area agenda at the expense of wild biodiversity. Only IUCN categories I–IV should be recognized as protected areas. The new categories, namely culturally modified landscapes (V) and managed resource areas (VI), should be reclassified as sustainable development areas. To do so would better serve both the protection of wild biodiversity and those seeking to meet human needs on humanized landscapes where sustainable development is practised.

*Keywords:* biodiversity, international categories, national parks, protected areas, wilderness

### INTRODUCTION

The World Parks Congress organized by the World Conservation Union (IUCN) is an important event in the pro-

ected areas (PAs) field. It is held only every 10 years and seeks to provide direction for global initiatives for the subsequent decade. Some strange things happened as we approached the World Parks Congress in South Africa in September 2003. Publications of the IUCN began to characterize rice terraces, potato fields, Hyde Park and extractive reserves as 'protected areas' (Phillips 2002). A paper that was intended to help set the agenda for the Congress by the former head of the World Commission on Protected Areas (WCPA) of the IUCN, called for a 'new paradigm' for protected areas, the characteristics of which would see 'new, more people-focused protected areas legislation' as well as 'the re-engineering' of protected areas people; the re-education of politicians and the public so they understand the new model of protected areas; and the reorientation of development assistance policies so as to integrate protected areas into poverty reduction strategies' (Phillips 2003a, pp. 20–21).

The opening plenary sessions at the Congress featured several speakers who advocated for IUCN protected area categories V (protected landscape) and VI (managed resource areas) as the main focus for protected area activity in the future. The IUCN Bulletin (IUCN 2003a) summarizing the Congress declared 'A new era for protected areas', an article in it stating 'by the time we met in Durban it was evident that a wholly new paradigm of a protected area, and of its management, had emerged' (Phillips 2003b, p. 7).

The issue is of more than semantic interest. International treaties such as the Convention on Biological Diversity (CBD 1999) require signatory nations to establish PA systems as a response to the erosion of wild biodiversity (the CBD identifies domesticated and cultivated species as a subset of biodiversity, which are the focus of other conservation measures but not protected areas, see articles 9, 10). This is the main purpose of PAs. However, under the new categories and supported by the 'new paradigm', PAs are being recast as tools for social planning and income generation. The amount of land in PAs is rising rapidly, but we suggest these new directions compromise their effectiveness as tools for the conservation of wild biodiversity. Furthermore, the Seventh Conference of the Parties of the CBD, dealing specifically with the role of protected areas in biodiversity conservation urged member countries to adopt a 'single international classification system for protected areas' (United Nations Environment Programme [UNEP] 2004, point 33) and welcomed the efforts of IUCN in this regard. This is a sound direction, but it also emphasizes the need to have a thorough and open examination of the category system. IUCN has foreseen this

\* Correspondence: Professor Philip Dearden Tel: +1 250 721 7335 Fax: +1 250 721 6216 e-mail: pdearden@office.geog.uvic.ca

need and a useful set of background papers were generated on the topic prior to the World Parks Congress and recently consolidated in a report (Bishop *et al.* 2004). However, few conservation scientists or conservationists seem to be aware of the implications of the directions that have emerged regarding PA classification or the new paradigm. The purpose of this paper is to examine the new paradigm, its relationship to the IUCN PA category system and its implications for protected areas and wild biodiversity.

The paper opens with a clarification of PA purpose and discusses the IUCN PA categories, particularly categories V and VI. It then proposes that these categories distort the meaning of PA and discusses the negative implications of the new paradigm for wild biodiversity. The paper closes with a proposed solution of reclassifying protected areas to include only those focused on wild biodiversity and reclassifying IUCN category V and VI PAs as sustainable development areas.

## THE DEFINITION AND PURPOSE OF PROTECTED AREAS

The purpose of PAs is to protect all non-domesticated elements of living nature and the processes and places they depend on. The IUCN is an international non-government organization whose WCPA is the leading forum for PA professionals in the world. The WCPA definition of a PA is 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' (IUCN 1994). The idea of PAs being established to protect domesticated biodiversity was never proposed during discussions prior to implementation of the definition. The additional attribute of associated cultural resources adds a dimension to the primary objective of wild biodiversity conservation where it is appropriate, but it obviously does not supplant the primary objective of protecting wild biodiversity.

The IUCN has stated clearly that all its categories of protected areas must meet its own definition of a PA (IUCN 1994, p. 7). Despite the clarity of definition and purpose for PAs, the IUCN has begun to stray in its work. A visit in 2003 to the heading 'Protected Areas' on IUCN's website (URL <http://www.iucn.org/themes/wcpa/>) revealed a marked departure from a focus on areas especially dedicated to the protection and maintenance of biological diversity. Under the heading 'Facts' it was stated that '45% of the world's major protected areas are heavily used for agriculture'. Later, under the heading 'Benefits Beyond Boundaries' was the statement 'Protected areas come in all shapes and sizes, ranging from the green lawns of London's Hyde Park to the vast plains of the Serengeti National Park in Africa. Whatever their characteristics, all protected areas have one thing in common, they have value to society.'

The IUCN's definition of a PA is not some vague 'value to society'. The manicured lawns of Hyde Park are patently not especially dedicated to the protection and maintenance of wild

**Table 1** IUCN protected area categories (IUCN 1994).

<i>Category</i>	<i>Description</i>
Ia Strict Nature Reserve	Protected area managed for science
Ib Wilderness Area	Protected area managed mainly for wilderness protection
II National Park	Protected area managed mainly for ecosystem protection and recreation
III Natural Monument	Protected area managed mainly for conservation of specific natural features
IV Habitat/Species Management Area	Protected area mainly for conservation through management intervention
V Protected Landscape/Seascape	Protected area managed mainly for landscape/seascape conservation and recreation
VI Managed Resource Protected Area	Protected area managed mainly for the sustainable use of natural ecosystems

biodiversity. Neither are lands heavily used for agriculture. To understand how this confused state of affairs came to pass, it is necessary to examine the history of IUCN's categories of PAs, and the role of the 'new paradigm'.

## IUCN'S CATEGORIES OF PROTECTED AREAS

IUCN (1994) created six management categories of PAs (Table 1). Categories I–IV fit comfortably within the definition and purpose of PAs; they are focused on wild species and their ecosystems. But neither Hyde Park's lawns nor lands heavily used for agriculture could fit within categories I–IV, rather they are examples of category V and VI PAs.

### Category V

The definition of a category V PA (IUCN 1994, p. 22) is an: 'Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.' This category was created to deal with an anomaly, the English national park system, which did not fit well into categories I–IV.

The problem with creating new categories to recognize anomalies is that the exception can be abused. The English national park system has little in the way of wilderness qualities by global standards, but has natural values of importance and specific culturally valued landscapes. The objectives of English national parks are to conserve the natural beauty, wildlife and cultural heritage of the parks and to promote public understanding and enjoyment of the parks' special qualities. In the event of conflict, the natural, wildlife and cultural objectives override. Provided that, in the event of a conflict among the three primary objectives, the cultural objectives do not override the wildlife objective, the IUCN definition of a

PA is met by the English national parks because they are 'especially dedicated to the protection and maintenance of biological diversity.' However, they narrowly meet the mark.

As the English parks example shows, Category V can have legitimacy as a PA category when its management framework is true to the definition of a PA. It is in use in other European countries and elsewhere. Many countries in Europe, like Switzerland, Austria, Italy and Spain, also have category II PAs demonstrating that a higher degree of protection is possible even in densely populated countries. However, when areas without the clear framework of the English national parks are proposed for Category V, careful scrutiny is needed to be sure the primacy of biodiversity protection is not lost.

Instead of being exclusively used for these clearly defined cases, Category V has been used or proposed for use in a manner that tortures the notion of PA so badly as to make it unrecognizable. This is discussed in more detail later.

### Category VI

The definition of a category VI PA (IUCN 1994, p. 23) is an: 'Area containing predominantly unmodified natural systems, managed to ensure long term protection of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.' This category was created at the 1992 World Parks Congress to give recognition to efforts in developing countries to link conservation and sustainable resource use, even though 'Hitherto they would not have been regarded as protected areas in the conventional sense, but they now find recognition within the IUCN category system' (Phillips 1999, p. 210). Category VI's proponents urge widespread use of this new category: 'It is to be hoped that that the new category VI will be widely adopted as a means of linking conservation and development, particularly within developing countries' (Phillips 1999, p. 210). The sentiment behind this development was not unreasonable. The problem has become how this category has evolved in practice.

One oft-cited example of category VI lands is extractive reserves in Brazil. The origins of such reserves lie in the efforts of the National Council of Rubber Tappers, who in 1985 advocated 'the creation of extractive reserves as a means of implementing agrarian reform for extractive workers, [who] started to defend them as territorial areas for sustainable use and the conservation of renewable resources' (Pinzon & Feitosa 1999, p. 217). Pinzon and Feitosa (1999) also stated that a required measure for such areas was 'a balance between development, environmental conservation and social justice' (p. 217). These are laudable goals in a sustainable development agenda, but they are not the goals of a PA that, by definition, is especially dedicated to the preservation of biological diversity. Such areas would be better classified as sustainable development areas, not PAs, even if their sustainability has been found to be wanting by some researchers (for example Coomes 1995).

Another problem with classifying extractive reserves as PAs is that the category is very much open to abuse. British Columbia, Canada, for example, has legislation requiring that timber harvesting be sustainable and that there be special practices for the protection of biodiversity. More than 80% of British Columbia's forest cover has not been cut, and may never be, as it is in areas that are too high, too steep, too inaccessible or too unproductive. Using category VI, a case can be made that all the public lands in the province, an area four times the size of the entire UK and internationally famous for clear-cut logging, could be described as a 'protected area'.

The forest industry in Canada is pursuing this line of argument. The Forest Products Association of Canada (FPAC) has a media campaign claiming that 'Canada has the largest area of protected forest on the planet' (billboards) '... with more protected forest than any other country on the planet...' (television). The Sierra Legal Defense Fund (SLDF) has challenged these claims. FPAC (personal communication 2003, URL <http://www.fpac.ca/> or <http://www.forestinformation.com>) issued a justification for continuing to run these advertisements, writing that the: 'SLDF has requested that we distinguish between forests protected for logging and those that are protected for conservation. A tall order, considering even WRI [World Resources Institute] does not do so.'

The Canadian Forest Service is also pursuing this line of argument. Neave and Neave (2003) noted that most recognition of biodiversity in Canada's forests remains focused on the percentage of forest legally protected in park status, but that other forested lands outside parks also contribute to biodiversity conservation. Neave and Neave (2003) argued that Canada should receive greater international recognition for these lands by using category VI to a greater extent, and use the public forested lands near Fort Nelson, British Columbia, as an example of an area entitled to recognition as a PA. Only 21% of the productive (commercial) forest there is designated for harvest. In their view, this was a 'commitment' to maintain the forest base, allow limited logging, and retain biodiversity which 'deserves greater recognition' in Canada's PA accounting (Neave & Neave 2003, p. 22). This has several problems. First, there is no guarantee that this land would not be logged in the future. Second, it downplays the impact on wild biodiversity of road infrastructure and habitat transformation that comes with logging on adjacent areas. Finally, that very same area is being heavily exploited for oil and gas. This includes clearing seismic lines, constructing well sites and building access roads into previously wild areas. Yet these lands that are subject to all this industrial extraction could be counted as a PA under category VI.

This situation is not only a Canadian problem. Several countries taking part in the United Nations Economic Commission for Europe Temperate and Boreal Forest Assessment listed all their forests as being 'protected area' under Category VI. The USA, for example, included all its National Forests, including areas that were heavily logged and used for mining and oil and gas extraction, as category VI areas. The result

is that the US has almost 40% of its forest area classified as 'protected'. These figures do not reflect reality (Bishop *et al.* 2004), and are being used by anti-conservation forces to make the case that there is too much protected area in the USA (see Patrick & Harbin 1999).

We are not arguing that statutory forestry sustainability standards in British Columbia, National Forest management standards in the USA, and extractive reserves in Brazil are unimportant. They are better than the absence of standards and represent a societal effort to reconcile resource extraction and conservation. They certainly contribute to the conservation of nature across the landscape. But they are lands managed primarily for exploitation, not 'especially dedicated to the protection and maintenance of biological diversity'. Quite simply, these are not PAs.

### RECENT EFFORTS TO WIDEN THE CONCEPT OF PROTECTED AREA THROUGH CATEGORY V

In the preface to the management guidelines for IUCN category V PAs, the President of the IUCN states that: 'this timely publication makes a strong case for the relevance of category V protected areas to the developing world. This could make a real contribution to widening our vision of what is meant by "protected areas" (Y. Kakabadse, in Phillips 2002, p. xv). To achieve this "widening" of the meaning of a PA, the guidelines for category V subject the definition of a PA to an exercise in linguistic gymnastics that stretches it beyond the breaking point. The author of the guidelines (Phillips 2002) wrote of the IUCN definition of protected area quoted above that the: 'Key points to note about this definition are: it requires that there should always be a special policy for the conservation of biodiversity (but it need not be the pre-eminent one . . .).'

This interpretive effort at a redefinition of PAs through the device of guidelines introduces confusion into the very purpose and role of PAs. To propose, through guidelines or otherwise, that biodiversity conservation should no longer be the pre-eminent purpose of PAs is a statement with far reaching implications. Such a drastic departure deserves serious and open discussion.

The category V guidelines contain another statement of substantive concern: 'Compared therefore to the thinking behind the establishment and management of many protected areas, where the emphasis is on protecting what is seen as "natural", the protection of the landscape puts people at the heart of the operation – and indeed requires them to be there' (Phillips 2002). This is problematic. The very purpose of PAs is the protection of wild biodiversity. Once the concept of a category V PA is uncoupled from the overriding goal of biodiversity protection, all manner of things suddenly become eligible for this category of 'protected area'. The following are some examples from the guidelines (Phillips 2002, p. 15):

- traditional farming lands of the Andes;
- traditional coffee growing areas of Central America and Mexico;

- long settled landscapes of the eastern USA and Canada; and
- rice terraces of the Philippines.

These are not PAs. They are landscapes that have been heavily modified on a regular and sustained basis to meet human needs. That these new category V areas are really about sustainable development and not conservation of wild biodiversity is made plain in the category V guidelines: 'The focus of management of category V areas is not conservation *per se*, but about guiding human processes so that the area and its resources are protected, managed and capable of evolving in a sustainable way.' (Phillips 2002, p. 10). If the focus of management is not conservation *per se* then it is not a PA at all. But we are urged in the preface to the guidelines to ignore this distinction: 'Protected areas should also include those lived in humanized landscapes where people and nature live in some kind of balance.' (Y. Kakabadse, in Phillips 2002, p. 15). If this approach were to be accepted it would create many difficulties. Any human activity that has resulted in substantial resource extraction or modification entails significant consequences for wild biodiversity (Redford & Richter 1999).

To label these farmed areas accurately, as sustainable development areas as opposed to PAs, is not to diminish their importance to the broader sustainable development mission or their relevance to PAs. It has been argued elsewhere (see Tungittiaplakorn & Dearden 2002) that PA managers may find that promoting certain kinds of agriculture outside PAs may be one of the most effective ways to preserve biodiversity within PAs, but this would not lead us into branding those outside areas as 'protected'. No person concerned with the survival of genetic diversity in the human food supply would belittle the conservation of potato diversity in the Andes. There is also recognition that shade-grown coffee benefits migratory birds, compared with the alternative. But the benefits associated with human farming practices are part of the wider agenda of sustainable development that applies across the entire landscape (see McNeely & Scherr, 2002), and should not be wedged into some newly broadened category of PA. Indeed, we can argue that to relegate them to the PA category is to treat them as mere precious legacies of a bygone era instead of vibrant examples of a better future worthy of widespread adoption.

### CATEGORIES V AND VI, AND THE PROPOSED 'NEW PARADIGM' FOR PROTECTED AREAS

Related to the concerns about the *de facto* redefinition of PAs being advanced through the guidelines and other IUCN publications, is the drive for sweeping changes in the approach to PAs in general. Phillips (2003a, pp. 19–20) states that 'in almost every respect, established ideas that prevailed even 30 years ago have been turned on their heads', creating 'a revolution in our approach to protected areas'. Categories V and VI are at the forefront of this new paradigm.

This new paradigm was said to have arisen because of 'important conceptual and operational advances in

conservation in general and protected areas in particular' and 'cultural and social awareness, the acknowledgment of human rights, political developments, . . . technological advances and economic forces' (Phillips 2003a, pp. 13 and 21). However, this is difficult to reconcile with conservation biology that has repeatedly demonstrated the need for more and bigger strict PAs, linked to each other across the landscape (Soule & Terborgh 1999; Rivard *et al.* 2000). Some of the most significant problems with the new paradigm for PAs are outlined below.

### The new paradigm as doctrine

We do not agree that PA theory and practitioners must be altered in the image of a new paradigm, as stated by Phillips (2003a) and quoted in the opening paragraph of this paper. We agree that there is a critical need for more social science inputs to build greater understanding of people and communities in PAs. However, we are not in agreement that this necessitates 're-engineering' the entire concept of PAs.

This idea of fundamentally changing the nature and expectations of PAs is especially dangerous with politicians and visitors. One of the greatest successes the conservation movement has had over the last decade is the increase in amount of PAs (but see discussions below). This has come about because of increased public and political awareness of the benefits of, and need for, some areas of our landscapes to be set aside primarily for species other than ourselves (although we willingly acknowledge that such areas can support low-impact indigenous use without losing their character). To now 're-educate' those very same supporters into a paradigm promoting humanized landscapes in PAs would be destructive and confusing.

The drive for more social science inputs is valuable, but under the new paradigm it is leading to a devaluation of biologists. For example, the Institut Français de la Biodiversité distributed a position paper at the World Parks Congress entitled 'Protected areas: combining biodiversity conservation and sustainable development' (D. Babin, personal communication 2003). In the preface, R. Barbault wrote disparagingly of conservation biology and the call by ecologists for an effort to counter the phenomena of extinction, writing: 'we call this science 'conservation biology' and the people making these arguments are still biologists, ecologists and population geneticists. This creates a harmful bias which leads to exclusion and close-mindedness . . . This cultural bias is already impeding the implementation of a sustainable biodiversity management strategy in some developed countries . . .' In a critique of the Meso American Biological Corridor (MBC), conservation biologists were marginalized as 'technicians' (Solis Rivera *et al.* 2002, pp. 47–48).

We think conservation biologists are more than technicians. They are an essential part of the collaborative effort that needs to engage other professionals like social scientists and lawyers, as well as local people and society as a whole, if biodiversity loss is to be successfully reversed. Instead of

seeking to re-engineer conservation biologists, we should be listening to them and combining their inputs with other inputs to achieve the scientifically-identified strategies necessary to achieve effective biodiversity conservation outcomes on the ground.

### The new paradigm ignores the findings of conservation biology

The new paradigm disregards the findings of conservation biology that humans must abate their destructive practices or the extinction of many more species will follow. Preservation of all components of biodiversity can only be attained if some areas are kept largely free of human alteration (Redford & Richter 1999). Strictly protected areas where nature rules are needed (Soule & Terborgh 1999; Terborgh 1999). An explicit rejection of both science and the idea that humans must leave some areas alone can be seen in writings of supporters of the new paradigm. They advocate a 'social approach' to conservation.

The MBC was a response to basic principles of conservation biology. Isolated reserves like the Monte Verde Cloud Forest in Costa Rica are losing species due to degradation of intervening habitat and other causes (Powell *et al.* 2002). In order to protect biodiversity, it is necessary to restore and maintain connectivity between habitats. Yet in their criticism of the MBC, Solis Rivera *et al.* (2002, p. 51) advocated disregarding the whole idea of an interconnected series of PAs if the local people did not want them: 'The priority for the region, more than consolidation of a biological corridor, is to develop structures that in a suitable and integral way link biological, cultural and economic matters. The development of a corridor (or the development of many corridors) should be considered as one option . . .' The fundamental problem with this is that it is not an option to eliminate connectivity for large carnivores like jaguars if the objective is to prevent their extinction in the wild. Yet this new paradigm approach has taken hold, and poverty alleviation has replaced conservation as the focus of the MBC (Carr 2004).

The new paradigm ignores scientific realities and will not lead to the successful conservation of all wild biodiversity, especially the wide-ranging larger forms that require wilderness or that graze and eat meat in competition with humans. There is little room for tigers, grizzly bears and wild bison in the humanized landscape. If it were not for the 100-year-old Umfolozi Hluhluwe Game Reserve in South Africa, the world would have no white rhinoceros. If it were not for the existence of Yellowstone and Glacier National Parks in the Western USA, the grizzly bear would have had no hope of recovery in the lower 48 states of that country. If it were not for the existence of tiger reserves in India, tigers would be in a much more precarious position in that country.

Survival of these and other species requires a sacrifice from the human species. Humans must leave some areas alone as core habitat for these species to reproduce and raise their young in secure conditions. Michael Soule (1996, p. 24) put this succinctly: 'Most of the surviving species of big tropical

animals (larger than pigeons and rabbits) will soon disappear outside of protected areas . . . These larger animals . . . often determine the physical structure and spatial distribution of other species in ecological communities. When the large animals disappear, the ecological changes are often swift and profound.' Proponents of the social approach that is the basis of the new paradigm have failed to address this basic problem.

### The new paradigm and wilderness

Implicit in the new paradigm is the post-modern idea that wilderness is a discredited concept and that the idea of protecting pristine areas free from human domination is largely passé (Soule & Lease 1995). Phillips (1997, p. 33), for example, expressed the view that more traditional approaches to the protection of nature were seriously deficient in two important respects, namely (1) the concept of wilderness areas of pristine nature was largely discredited, and (2) the importance of recognizing other areas in which nature lives alongside humanity was increasingly recognized.

More recently, Phillips (2003a, p. 21) has reframed the argument: 'Scientific understanding has . . . also shown us that the human impacts on what were previously thought of as pristine environments have often been significant, from the Amazon forest to the Australian outback, thereby to some extent undermining the power of the wilderness argument'.

We acknowledge that there are few areas on Earth that at some time have not sustained human impacts. We know that every drop of rain that falls anywhere on this planet bears the imprint of industrial society. But we also know that there are great variations in the degree of humanity's impacts on the rest of nature. The difference in human impact on nature from the practice of intensive cultivation in a humanized landscape compared to the impacts of deposition of minute traces of industrial chemicals in a wild, uncultivated and unpopulated area is not just a difference in degree, it is a difference in kind. The term wilderness captures this difference (low intensity indigenous occupation of an area through low impact subsistence activity is consistent with the wilderness concept).

The wilderness concept is far from having fallen into disuse in PA practice. The protection of wild places free of human domination remains a robust concept in many parts of the world that are helping to create new PAs. Some examples of recent wilderness protection include:

- Brazil's President signed a decree creating Tumucumaque, the world's largest tropical national park, stating 'we are ensuring the protection of one of the most pristine forests in the world . . . Plants and animals that are endangered elsewhere will continue to thrive in our forests forever' (Astor 2003).
- Canada's Prime Minister announced an action plan to create 10 new national parks, five new marine PAs and expand three existing national parks in order to protect an additional 100 000 km<sup>2</sup> of wilderness (Reuters News Service 2002).

- Gabon's government announced it would set aside 10% of its land surface in a new national park system covering 6.4 million ha, and look to conservation and tourism in the future rather than extractive resource use.
- USA President Clinton's 'Roadless Areas Conservation Initiative' protected 58.5 million acres of land on USA National Forests. He described these areas as 'a treasured inheritance – enduring remnants of the untrammelled wilderness . . .' (Clinton 1999), although his successor has sought to undermine this conservation achievement.
- Suriname set aside 1.6 million ha of pristine tropical forest in a nature reserve.
- The IUCN in 2003 created a Wilderness Task Force of the WCPA whose meetings in Durban were attended by people from all over the world.

As the global examples of wilderness protection cited above illustrate, there is no split between developed and lesser-developed countries over the utility of protecting large wilderness areas. The main split is between countries that have this option and those for whom it is largely foreclosed for physical (i.e. there is none left in their part of the world) or philosophical reasons. The fact that wilderness cannot be protected in every country does not make it an outmoded concept.

We are concerned that a re-engineered PA community will lose the opportunity to protect the world's remaining wild places. There have been various estimates of how much wilderness remains (see Hannah *et al.* 1994; Mittermeier *et al.* 2002; Sanderson *et al.* 2002). All agree on one thing, namely that there are still significant tracts of wilderness remaining, and they are quickly disappearing. In our view now is the time for the PA community to be strengthening its resolve to protect these last large wild ecosystems, instead of missing the opportunity by turning its attention to a new paradigm for PAs that features human-dominated areas as its ideal.

### The new paradigm will undermine the creation of real protected areas

Lower levels of 'protection', if sanctioned as 'protected areas', will become the lowest common denominator to which governments default when creating new 'protected areas'. In Canada, industry is already using these weakened IUCN standards to serve its own purposes as discussed above. This weakness has also been identified by the research project to examine the IUCN categories. One background paper, in discussing the international target of 10% for PA lands, states that 'as the 10 percent target became better known governments grew adept at expanding the definition of protection within the broader categories, thus achieving the target without actually expanding the area protected . . .' (Dudley 2003, p. 3).

In terms of international donor support there is already a reduction of funding for real PAs according to one recent analysis (Lapham & Livermore 2003), which suggested

that the new social approach was eroding the funding base for true conservation. 'As poverty has become the overarching focus of development assistance, biodiversity funding is increasingly framed in terms of its relationship to poverty reduction. This has placed a growing emphasis on mainstreaming biodiversity into other development sectors and promoting sustainable use. At the same time it appears to be diminishing support for shorter-term conservation investments' (Lapham & Livermore 2003, p. 4). Lapham and Livermore (2003) defined conservation as activities specifically aimed at conservation of the components of biodiversity at the gene, species and ecosystem levels. They suggested that the ramifications of this new paradigm were 'a reduced role for science in shaping biodiversity assistance priorities, decreased funding for crucial conservation activities, fewer projects with clear conservation outcomes, diminished biodiversity expertise within funding agencies, and less political attention to conservation' (Lapham & Livermore 2003, p. 20). These are interesting findings and more work is required at both the local project level and the international policy level to gain a greater understanding of the implications for biodiversity. The findings should, however, sound a warning for those for whom biodiversity conservation is a main concern.

### The new paradigm inflates protected area figures

At the World Parks Congress, UNEP issued a report (UNEP 2003) that showed a large growth in PAs over the last 10 years. In the words of the IUCN President, Yolande Kakabadse, 'the Congress celebrated the establishment of over 12% of earth's land surface as protected areas – an impressive doubling of the world's protected areas estate since the IVth World Park Congress in Caracas, Venezuela in 1992' (Kakabadse 2003, p. 3). However, 23.3% of all these PAs are category VI areas (which did not exist 10 years ago) and 19% are not categorized at all. An additional 5.6% are category V areas, many of which in our view also do not meet the definition of PA (see discussion above). Thus almost half (47.9%) of these new PAs may not be real PAs at all. This kind of progress is illusory.

There is a very real danger with this inflation of the PA estate. For example, Vandergeest (1996, p. 267) claimed that the PA system in Thailand, 'far exceeds that necessary for biodiversity conservation' and advocated dissolution, mainly to private interests. He claimed that 20% of Thailand was in the PA system, a figure that grossly exaggerated the amount of land making a valuable contribution to the protection of wild nature, as there are extensive tracts of agricultural land contained within the system (Dearden *et al.* 1998). This situation is not unique to Thailand. The IUCN web site said in 2003 that 45% of PAs are intensively used for agriculture. We should not be counting these areas as part of the PA estate. Encouraging the leadership of categories V and VI as the new paradigm for PAs will produce greatly inflated figures of the amount of land dedicated primarily to protection and maintenance of biodiversity.

### The new paradigm is people-centred only

The philosophical underpinning of the new paradigm lies in a human-centred world view that would not allow for even a small proportion of the planet to be maintained primarily for the benefit of species other than ourselves. The idea that conservation is primarily about the interaction of people and nature is popular in some countries such as England. Henderson (1992, p. 397) has noted the approach taken in England is one where 'conservation thought is characterized by an enthusiasm for environmental intervention and manipulation. The British concept of the conservation ideal is a steady state of human intervention designed to maintain a given habitat at a particular successional stage in perpetuity.' This model would not save the full range of biodiversity on Earth. It does not allow for natural processes to run their course. And Britain does not provide an optimal model for global biodiversity conservation as it has lost many of its large mammals, particularly large carnivores.

One justification used for the new paradigm is that local communities have an increased relevance to the management of PAs and are fundamental to achieving broad conservation goals like interconnected networks of PAs. This is true and, among many others, Dearden *et al.* (1996) have argued for this. But recognition of that fact does not equate to a need to jettison humanity's conservation goals. Creative thinking is required about how to work with local people to protect nature in ways that benefit them, while always striving to protect wild nature while this work is done. We do not need to replace existing methods with a new paradigm based on lesser conservation goals to do it.

Vitousek *et al.* (1997) have pointed out that humans already appropriate at least 40% of planetary primary productivity. Other species must either be able to live with this intense competition from our species or perish. PAs managed explicitly for their conservation give them a chance. A graphic example of the difficulties created when PAs become people-centred can be seen in efforts to protect the red panda (*Ailurus fulgens*) in Lantang National Park in Nepal (Fox *et al.* 1996). The red panda is a protected species that suffers high mortality rates (44% among adults and 86% among cubs) associated with disturbances caused by grazing. Over 60% of the panda habitat in the Park is heavily grazed under collective agreements managed by local villagers. While villagers accept the rules regulating pasture management and the sanctions imposed on violators, 'The problem in terms of biological diversity is not that the grazing lands are not managed, but that no one speaks for the red panda' (Fox *et al.* 1996, p. 568). The very purpose of PAs is to ensure that someone does speak for the red panda.

Most PA managers are now acutely aware of the importance of engaging local communities. Research on the trends in PA governance undertaken for the Durban World Parks Congress shows there has been a major movement towards an inclusive and participatory approach to PA management (Dearden *et al.* 2005). Including a wide range of stakeholders in helping to

meet PA management goals is now a widespread practice. But it would be a mistake to put people at the very centre of PA management (as advocated by proponents of the new paradigm) and thereby move nature to the periphery.

### The ‘new paradigm’ is an unhelpful distraction

The emphasis on a new paradigm is distracting the PA community from focusing on what it should be doing. A shared vision and the public support necessary should be being developed to protect what remains of the world’s wild places and biodiversity hotspots in category I–IV PAs. It is an urgent task. The 2003 IUCN Red List of Threatened Species reports that more than 12 000 species are facing extinction, including 24% of mammals and 12% of birds. Preliminary studies on other taxa indicate that 20–30% of reptiles, amphibians and fishes are also threatened (IUCN 2003*b*). A recent global gap analysis showed that over 20% of all threatened and endangered species had no coverage at all in PA categories I–IV (Rodriguez *et al.* 2004, p. 64).

The focus should be on good management of the world’s existing PAs and ensuring connectivity among them, while at the same time seeking to work collaboratively with others to integrate them into the broader landscape through sustainable development practices on lands outside PAs. Equally robust and widely shared goals need to be developed for a global network of marine PAs. Developing these shared goals and taking action to implement them should be the main focus of the world’s PA community. Within IUCN, other international bodies and elsewhere, there are many agencies, commissions, boards and committees tasked with sustainable development. We propose that these be fully supported, encouraged and worked with, and the main thrust of the PA agenda not be to duplicate what they do.

### A PATH FORWARD: RECLASSIFICATION OF PROTECTED AREAS AND SUSTAINABLE DEVELOPMENT AREAS

We believe the time has come to reclassify PAs. IUCN categories I–IV should remain. Category V and VI lands should not be classed as PAs. They may contain important elements of biodiversity, they may provide important buffer zone roles to real PAs, and they may add significant conservation values as part of an interconnected series of real PAs, but that does not make them PAs. Categories V and VI should be reclassified as Sustainable Development Areas (SDAs). Some of the areas currently in Classes V and VI may meet the criteria for being considered true PAs with wild biodiversity protection as the prime objective. These should be re-evaluated and included as other categories of PA, perhaps by creating a category IVa.

We agree with these words of IUCN President, Yolanda Kakabadse, from the preface to the category V guidelines: ‘These places and the communities that live within them are important in themselves and for the lessons they teach all of

us about sustainable living’ (Phillips 2002, p. xv). The PA community should recognize that importance and give these places their own status. The PA community should create a category of areas that recognize these culturally-modified areas for what they are, namely good examples of sustainable development, that are complementary to, but not the same as, PAs. These SDAs could provide living models for activities in the rest of the landscape to emulate in a way that true PAs never can (see Ogden 2003).

The unfortunate thing about the effort to widen the meaning of PAs and to change the agenda of the PA community through a new paradigm centred around categories V and VI is that it is wholly unnecessary. Good examples of humans meeting their needs today without compromising the future desperately need to be celebrated. These careful cultural and economic interactions with land that also provide some biodiversity benefits should be celebrated by IUCN as examples of sustainable development. But they should not be given a PA label that does not fit.

A reclassification of such areas to SDAs will remove the divisions that the current system has created. Many people view category V and VI areas as second class. Rather than be looked at as a weak form of PA, reclassification as SDAs will result in their being viewed as the vanguards of the future for the rest of the landscape. Not being associated with the name ‘protected’, they might readily be embraced by politicians looking for policy options who might be inclined towards creating areas with the name ‘development’ associated with them. Furthermore, the people for whom these areas are a central focus will be able to pursue that interest without being distracted by, or distracting, the PA agenda, where the prime concern will be the protection of wild biodiversity.

Properly managed, these SDAs could play a vital and complementary role to PAs in the protection of biodiversity, as well as furthering the protection of many other human values including poverty reduction, without eroding the creation and management of real PAs. Furthermore, unlike PAs that are often faced by psychological or formal ‘caps’ on the total land base that is devoted to them, the expansion of the SDA network should be virtually limitless. It would be hard to argue that there can ever be too many areas where sustainable development is the goal.

### CONCLUSIONS

PAs are a means to an end, and that end is the protection and maintenance of all forms of wild biodiversity. Many of these life forms would otherwise be eliminated from the landscape by competing human activities. Ideally, humanity should be able to accommodate these other species without formal PAs. Global experience clearly shows that this is not the case. PAs of the traditional kind are needed and, on the whole, they are proving successful in slowing down biodiversity degradation (Bruner *et al.* 2001).

There is a need for different types of PA to adjust to differing conditions and balance between objectives. This is

allowed for in categories I–IV of the IUCN system. There is also a need for compatible management of lands in adjoining areas. Reclassifying categories V and VI as SDAs would promote such complementary goals, while eliminating the confusion and distraction caused by the drive for a new paradigm for PAs. Fundamentally, all PAs should share the trait that they put the needs of other organisms over those of humans, although they can accommodate a range of human activities compatible with that overriding objective.

The vision of humanized PAs presented by the new paradigm will lead to a biologically impoverished planet. This would represent a tragic failure of the PA agenda. PA professionals, such as the WCPA, should focus efforts on the creation and effective management of true PAs while the opportunity to create them still remains.

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