

A Global Perspective on the Challenges and Opportunities for Protected Areas in Today's and Tomorrow's World – “For Life's Sake”

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INTRODUCTION

“Parkies”, people interested in parks and protected areas, like to get together every ten years. This pattern began in 1962 with the first IUCN (International Union for the Conservation of Nature) World Parks Conference, held in Seattle. A World Congress has been held every decade since, with the fifth and last held in Durban, South Africa in 2003. Regional congresses have followed the same pattern. Latin America held its second Congress in Argentina last year, ten years after the first such Congress in Columbia. Canada began a similar pattern with its first national meeting, the 1968 Banff National Park Conference, and the second such meeting ten years later. The next two decades were skipped bringing us to this Conference, “Parks for Tomorrow” 40 years since the inaugural Conference in Banff.

Each of these “once every decade” events have been invaluable for energizing “parks people”. Getting together every ten years permits people to catch up with each other, share successes, learn from failures and invariably set ambitious agendas for the future. Park employees and the variety of protected area stakeholders come together and bond over their common interest: seeing parks and protected areas succeed in their mandate.

Being well documented, these once-a-decade meetings provide us with not only a retrospective but also, to some extent, a reality check of how far we have come in our understanding of parks and protected areas. Much has been written about the initial parks and protected areas of the world and their purpose. The Yellowstone and Banff model was established primarily to serve as pleasuring grounds, places for reenergizing people as well as to yield economic returns.

Conservation objectives did not include species considered as threatening to recreational activities nor were people living within these areas considered as an integral element. This initial model evolved and expanded to be much more inclusive of not only people but also of predator species. With this change of attitude, other forms of protection, beyond national parks through equivalent reserves and/or forms of protected areas were accepted.

This paper draws on the outcomes of the past five IUCN Convened World Parks Congresses to trace trends that have affected parks and protected areas in the world. These trends helped to inform a recent meeting in early April, 2008 convened in Cape Town to review the Durban Congress of 2003 and to take stock of future opportunities and challenges. Invited delegates, through the generous support of the South African Government, deliberated for three days and set out some directions. Drawing on this meeting this paper concludes with a presentation of global challenges facing the world's protected areas and how these present opportunity for action.

IUCN World Parks Congresses – windows on protected area trends

Seattle 1962

IUCN's "First World Conference on National Parks" held in Seattle focused on bettering an international understanding of national parks and to encourage the national park movement on a worldwide scale. United States, as host country, was at the height of the outward-looking Kennedy era that had unleashed Peace Corps youth into the world armed with good will, a can-do attitude and intent to transfer knowledge and technology. The US Parks Service had an outward focus through its international cooperation section with a mandate for exchanges of personnel and learning from others. It was a heady time, with North America opening up to change and influences from abroad. Experiences from abroad

¹ First world Congress reference to add here

breached the bastion of the national park movement. While the papers presented at the Conference were centered on national parks, one of the ensuing recommendations² recognized that other forms of conservation, equivalent reserves, were a valid approach, particularly in the parts of the world that were densely populated.

This inaugural World Parks Congress reviewed some standard topics that are still relevant today. Effects of humans on wildlife; species extinction; the sacred and aesthetic significance of certain parks and wilderness; trans-boundary parks; tourism; and the research and benchmark values of national parks were all on the agenda. Marine protection was identified as a need worthy of further analysis. As in all other gatherings of parks personnel, the practical problems of park management were not overlooked. At the time of the conference, park management planning was in its infancy and the Conference passed a recommendation³ calling on IUCN to gather and disseminate best practices on the topic.

Yellowstone and Grand Teton National Parks, 1972

At the time of the second "World Conference on National Parks" in 1972, the United Nations list of national parks or equivalent reserves totalled around 1200⁴. National parks as the model for protected areas of the world continued to dominate the conference. This was not surprising given that the conference venue, Yellowstone National Park, was in the throes of celebrating its centennial since establishment.

Issues discussed were not unfamiliar to today's park management challenges. Effects of tourism, park planning and management, wildlife management, communicating park values to visitors and engendering environmental

Recommendation #9
³ Recommendation #12
⁴ Reference paper

awareness. Besides the recognition of the need to address marine issue as in the first conference, the second conference is marked by its recognition of the needs of protection of other biomes, namely wet tropical, arid, polar, sub-polar regions and mountains and islands⁵.

Capacity issues surfaced and were to be addressed through the improvement of international training opportunities. Of note, the first and the second Congresses dedicated a substantive part of their agendas to interpretation and education. And, of course, encouragement was given to expand and improve the global park systems. The second Congress called for more protected areas in the world and recommended a system of categorization, which thus launched the development of the IUCN Management Categories.

Bali, 1982

The third "World Congress on National Parks" in 1982 broke away from looking almost exclusively at national park concerns. The focus shifted onto the role of a variety of protected areas within a sustaining society and recommended that different forms of protected areas need to be established⁶. Interestingly, this was a year before the formation of the Bruntland Commission and five years before its published report "Our Common Future"⁷ that brought the term "sustainable development" into every day usage. The Bali Congress also marked a point where it was recognized that merely setting aside protected areas did not guarantee conservation success. People responsible for protected areas began looking out of their special places at how they were affecting people, and in turn, how they were affected by people's activities beyond protected areas.

The 2500 protected areas in the world⁸ at the time of the third Congress had doubled the number since the last congress. Nevertheless, the Congress

⁵ reference
⁶ reference
⁷ reference
⁸ reference

participants did not think that number was enough and called for more protected areas, and again with the marine biome being singled out as requiring specific attention. Then, adding to the previously listed priority biomes, coastal and freshwater systems were singled out for a need of protection as well.

The IUCN categorization of PAs was referenced in the proceedings and recommendations⁹. It proved useful as a frame of reference in discussing different types of protected areas and their objectives that were crucial to balancing conservation and development needs. The Categories of the day recognized special designations such as biosphere reserves and world heritage sites. The World Heritage Convention was brought into the Congress discussion¹⁰ as by then 38 sites of natural or mixed natural cultural sites had been inscribed.

Public support, financial support and capacity needs were again noted as was the need for international cooperation. Recommended tools and approaches that were new to protected area thinking at the time included: cost-benefit analysis, ecological analysis, monitoring, and using volunteer assistance.

Caracas, 1992

The "Fourth Congress on National Parks and Protected Areas: Parks for Life" in Caracas in 1992 marked a jump in attendance with 2,500 participants attending in contrast to the 350 attendees in Bali ten years earlier. The number of protected areas in the world had expanded in the ten years from 2,500 to 6,900¹¹.

The Caracas World Parks Congress, came on the heels of the negotiations and tabling of the first draft of the Biodiversity Convention. This Convention alongside the Rio Declaration on Environment and Development in June 1992 marked a moment when the state of the world's environment had captured the imagination of the world.

⁹ reference
¹⁰ reference
¹¹ reference

Surrounded by this global dialogue, the Congress responded with a recommendation that the expansion of protected areas continue as in previous decades but biodiversity was now to be given full attention¹². Specifically, sites of critical importance for the conservation of biodiversity were to be the target for the expansion of protected areas estate in the world. As well, and building on previous Congresses, there was continued support for integrating protected areas into regional-scale planning approaches. This was viewed as the only way to assure success for protected areas. The alternative of inimical land uses with degraded ecosystems surrounding protected areas would be detrimental to protected areas meeting their objectives.

Further, people were recognized as fundamental to success. The Congress emphasised that social, cultural, economic and political issues are not peripheral to protected areas but rather are central considerations. It called for community participation and equality in decision-making processes, together with the need for mutual respect among cultures.

Sustainable financing was recognized as a critical component to the success of protected areas meeting their mandate. The Congress recommended that investments in protected areas must incorporate considerations of the full benefits of protected areas, including intangible values.

Finally, the Congress recognised that support for PAs is required from all parts of society and called for a vigorous international programme in support of Protected Areas.

Durban - 2003

The fifth and most recent World Parks Congress, held in 2003 in South Africa, had as its principal theme “Benefits Beyond Borders”. Over 3000 participants gathered and celebrated the announced achievement of over 100,000 protected

¹² reference

areas established covering approximately 11.5% of the earth's land surface, - equivalent to the size of South America. Queen Noor of Jordan, one of the patrons of the Congress, noted in her opening address *"The establishment of more than 10% of the earth's surface as protected areas by sovereign governments ranks as one of the most significant collective land use decisions in history."*

Yet, despite the repeated focus over the past four decades on the need to move on marine protected areas, Durban had disappointing statistics to report. Only 0.5% of the marine biome was under a form of protection, and most of this meager area continues to be open to fishing.

The 2003 Congress was held three years after the declaration of the Millennium Development Goals¹³. The first of the seven Goals, halving extreme Poverty, helped the Congress to focus on the potential role of protected areas in alleviating poverty through the provision of ecological services, including clean water, and direct employment.

The Congress theme on Governance led to recognizing that there were more than governments creating and managing protected areas. Governance is about sharing in the process of deciding issues affecting the protected area. It broadens the power base among stakeholders and with it comes a share in the commitment to the success of conservation through protected areas. Community conserved area, indigenous protected areas and private protected areas were given legitimacy in Durban.

The Congress pointed to a range of additional needs: to increase investment, to close the gaps in unrepresented areas, to engage indigenous and local communities and young people, and the perpetual need to build up capacity of park staff. Trans-boundary protected areas were a particular focus given that 166

¹³ Millennium Development Goals

such entities existed at the time of the Congress¹⁴. While climate change was recognized as an issue its importance was however underestimated. Emerging issues of invasives and restoration were recognized as was the devastating effects of the pandemic of HIV/AIDS on conservation initiatives, particularly in Africa.

In addition to the above, two additional outcomes from Durban are worth noting here. These have subsequently dominated protected area activities globally. Firstly, management effectiveness was recognized as a critical element to improving the quality or effectiveness of existing protected areas. Of the some 100,000 protected areas in the world, over 6300 have since recorded assessments for management effectiveness¹⁵.

The second was the message to the Convention on Biological Diversity. A few months after the Congress, the Convention's signatory Parties adopted a Programme of Work on Protected Areas that was based mostly on the advice coming out of the Congress.

The CBD Programme of Work on Protected Areas (POWPA) is a decision by the signatory countries to establish and maintain by 2010 for terrestrial and by 2012 for marine areas, systems of comprehensive, effectively managed, and ecologically representative national and regional protected areas. The overall objective: to contribute to achieving the three objectives of the Convention on Biodiversity and the global 2010 target to significantly reduce the current rate of biodiversity loss.

SUMMARY OF TRENDS OVER THE PAST HALF CENTURY

¹⁴ reference to TBPA

¹⁵ Fiona Leverington, Marc Hockings and Katia Lemos Costa (2008) Management Effectiveness evaluation in protected areas – a global study, Report for the Project "Global Study into management effectiveness evaluation of protected areas", The University of Queensland, Gatton, IUCN WCPA, TNC, WWF, Australia

Congresses are influenced by their location, other global agendas and the degree of professionalism of park managers and staff. Achievements of these Congresses are many, not the least of which is the continued push for expansion of the number of protected areas. A hundred-fold expansion of the number of protected areas in the world since the first Congress is a very important achievement. The type of protection also expanded greatly, beyond national parks. A very important milestone was the recognition by international conventions and agreements of the values of protected areas. With these conventions, the broader role of people in the governance of protected areas was greatly strengthened. Yet, the distribution of benefits was not always realized, with local people often bearing the cost of global conservation achievements.

Better management, in particular through management effectiveness and planning tools is now much more prevalent. Ecological integrity and biodiversity have become principal objectives of most protected areas. But, marine protection continues to lag and financing deficits are estimated to run between \$2.5 to \$1.75 Billion¹⁶ annually. With these enhanced priorities, however education and interpretation as a global focus seemed to fade over the years.

The Present Situation

Durban+5 defined challenges

The World Commission on Protected Areas with the generous support of the South African Government convened a meeting in early April 2008 to review the current state of protected areas and the challenges faced by their staff and managers. This meeting held five years after the Durban Congress of 2003 permitted the group to not only review what had transpired since the Congress, but to also set an agenda for the future in the context of the challenges facing protected areas of the world.

¹⁶ use the SF Guideline

Parks Canada generously provided support for the review of the accomplishments since Durban¹⁷. The review yielded an overall assessment that reasonable progress has been achieved on most recommendations and that the contribution to the Convention on Biological Diversity on the Programme of Work on Protected Areas was particularly noteworthy.

The Programme of Work on Protected Areas had provided a framework to encourage concrete actions that were in line with the Durban Congress' recommendations for capacity building, enhancing financing, corridor conservation, cities, oceans, involving Indigenous/local/mobile communities, and poverty alleviation.

Though the progress in the implementation of the Programme of Work has not generally kept up with the ambitious targets, regional advances are evident. The launch of the Micronesia Challenge¹⁸ and other expansions of protected area systems are the more dramatic examples of advances. More subtly, regional implementation workshops have helped advance the understanding of the Programme of Work and provide capacity building opportunities. There is an ever-increasing interest in continuing these regional workshops, and in facilitating more specific regional technical training and capacity-building fora.

The perpetual shortfall in addressing marine protection is faced with complexity. The high seas pose a particular problem for lack of jurisdiction, resistance from the transportation industry and, of course, also corporate and national fishing interests. The fishing industry is heavily subsidised, equipped with sophisticated equipment and driven by an insatiable market for its products. Fishmeal to grow penned fish is but one of these. Concerted efforts will be required to meet the global goals related to marine protected areas¹⁹.

¹⁷ Jim Johnston, Nicole Sharma and Marc Johnson (2008) The View from Here: Reflections on Progress in Implementing the Recommendations of the Vth World Parks Congress* - Parks Canada Agency Ottawa, Canada

¹⁸ Micronesia Challenge reference

¹⁹ Marine Commitments reference

In preparation for the Durban+5 meeting a web-based survey of members of the World Commission on Protected Areas was launched seeking input on accomplishments and the future challenges for protected areas. The results were used to stimulate discussion at the Durban+5 meeting and to serve as a guide for the beginning the planning for the next world's Parks Congress expected to be held in 2013. A summary²⁰ of the results was distributed at the meeting.

In response to the question of what were three important trends in the future, the primary cluster of responses were around global climate change. Related aspects such as the potential of carbon trading were identified as a potential funding mechanism for PAs. In contrast five years previously, in Durban, climate change ranked but eighth amongst global change factors.

Protection of marine biodiversity, with particular attention given to the high seas was the next concern raised. The third issue stemmed from a concern over the growing competition for natural resources as populations increased along with the rates of consumption. The current spike in food prices is but an example of the basis of this concern²¹.

Other issues raised included a need to improve the management capacity within existing areas and a recognition of the difficulties of expansion of protected area systems in a highly populated world. Sustainable financing concerns were not forgotten. Certification was raised as a possible way through which standards could be set.

Invasives and habitat fragmentation were brought up as challenges to meeting the objectives to conservation. In response, there was a call for the use of bioregional planning and corridor conservation as a way forward but with its own set of challenges to implement.

²⁰ Phillip Dearden, Brian Dyck* and Jim Johnston** (2008) Follow up to the IUCN World Parks Congress 2003: Survey Results and Discussion *University of Victoria, British Columbia, Canada ** Parks Canada Agency, Ottawa, Canada.²¹ Reference

Many respondents also addressed the need to generate increased public support for PAs. A goodly number of respondents noted the growing alienation of people and in particular youth from the natural world: specifically noted was a resulting nature-deficit syndrome linked to human health.

Opportunities:

The global challenges are evidently many. The ability to address all of these in a systematic and equal basis is impossible. Priorities need to be set. The World Commission on Protected Areas (WCPA) is a network of volunteers with a deep-seated passion for protected areas. The passion is a good base to work from but nevertheless WCPA is limited in what it can undertake. Focusing on its convening power and recognized niche for setting standards, the following are opportunities for global protected areas: Climate Change, Capacity, and Awareness.

Climate Change:

There are two issues or opportunities associated with climate change. The first issue is building the awareness of the role of protected areas in mitigating effects of change.

There is a need to identify the critical habitats of the future: Where are species likely to move? Will migration patterns change or halt and new staging locations will develop? Birds that will continue to migrate, for example, will likely follow the creation of new wetlands as patterns of precipitation change altering water tables, and as sea levels rise. If these areas are not secure now, then we need to create protected areas to accommodate them.

More sophisticated and tailored responses are also emerging involving PA system design aimed at buffering change and facilitating wildlife movement; identifying and managing for habitat refugia; monitoring indicator species and

developing a range of other *in situ* & *ex situ* conservation responses. These require a renewal in thinking regarding conservation planning.

The second climate change issue or rather opportunity is linked to carbon trading schemes that permit trading of credits. Carbon credits are earned through various schemes which include afforestation and reforestation activities. Credits earned thusly can be sold to a carbon emitter with excessive carbon emissions. The potential of this market is viewed very positively. The Financial Times reported that US greenhouse gas emissions contracts grew 131 per cent in 2006, compared with a 31 per cent rise in worldwide futures contracts.²²

Yet, there are pitfalls. It is a volatile market as the sharp drop on the cost to emit one tonne of carbon dioxide fell from €24 to €18.50 through the course of a week in January 2008 in Europe - the location of the main over-the-counter market for trading CO². Yet the amount of carbon traded per day is staggering, recently exceeding 16m tonnes of carbon traded in one day. The potential for this market is predicted to exceed \$1 trillion within a decade from the current \$30 billion.

Part of the reason for global warming is excessive land clearing – some estimates attribute this to as much as 30% of the global emissions²³ of CO². Restoring vegetation cover through planting more forests provides a means to increase carbon absorption that can provide marketable credits. Restoring forests in protected areas provides more of a long-term benefit than reforestation for pulp wood production. Where such areas have a biodiversity that is dependent on natural disturbance cycles, these areas will need to calculate sequestered carbon amounts on a spatial and temporal scale that takes into account such cycles. Taking such a longer term and spatial approach to such

²² Raphael Minder , (March 9 2008) Breakthrough seen in emissions trading, The Financial Times Limited 2008

²³ Prentice, I. C., Farquhar, G. D., Fasham, M. J. R., 2001 The carbon cycle and atmospheric carbon dioxide, in Climate Change, The synthesis Basis (eds. Houghton, J. T., Ding, Y., Griggs, D. et al.), Cambridge: Cambridge University Press,²⁴ Includes IUNC WCPA, CBD Secretariat, The Nature Conservancy, WWF, Wildlife Conservation Society, Bird Life, UNEP WCMC, and Conservation International

calculations would yield lower carbon values, but it would nevertheless assure consideration of these areas as sinks rather than sources of carbon over time.

Capacity Building through the Convention on Biological Diversity:

With every new protected area established new capacity is needed. Every new threat to a protected area or added complexity of managing these areas calls for new capacity, and if not resources, then certainly new knowledge. More and better-trained staff is called for globally.

The Convention on Biological Diversity (CBD) recognizes the essential link between comprehensive, adequate and representative systems of well-managed protected areas in order to achieve the 2010 target contained in the Strategic Plan of the Convention, and the Plan of Implementation of the World Summit on Sustainable Development. The CBD further stresses the importance of integrating protected area objectives with development strategies (such as country assistance strategies, poverty reduction strategies and national development strategies) thereby reflecting the contributions of protected areas to sustainable development, as a means to achieve the Millennium Development Goals, in particular Goal 7 on environmental sustainability.

The time-bound targets of the CBD Programme of Work on Protected Areas (POWPA), though ambitious, provide a comprehensive framework for establishing, managing, and evaluating a system of protected areas. Unfortunately, the full capacity needed to deliver on these targets have not been provided. It falls upon countries to find the resources within their budgets or to depend on projects, often short termed, financed by donors.

Another source of assistance comes through technical support provided by an informal consortium, entitled “friends of POWPA”²⁴ formed in response to a request from developing countries with capacity constraints in the implementation of POWPA. The CBD Executive Secretary was called on to organize regional

capacity building workshops in partnerships with relevant organizations. This partnership has been working to increase governmental capacity to implement the POWPA by providing training and technical support.

The initial workshop series focused on early actions within the POWPA – assessing ecological gaps, management effectiveness, capacity needs, and sustainable finance gaps. Participants at these workshops included protected area managers and staff responsible for implementing decisions and taking action on the ground within each country.

The workshops created a national and regional level dialogue that identified specific needs in capacity building, learning tools and materials. Collaborative commitments at regional scales were an additional outcome. However, as much success as these past workshop present, the workshops unto themselves have proven to be insufficient for sustaining capacity-building success. To assure a lasting built-up capacity, follow up technical support and assistance is required.

In response, the “Friends of POWPA” consortium is proposing to develop training materials on a full suite of POWPA themes, and work with local NGOs and governments to identify the most important themes for each regional workshop and tailor the content accordingly. These workshops will continue to catalyze national action and provide concrete methods and case studies on key POWPA actions, and to encourage regional cooperation and cross-boundary dialogue.

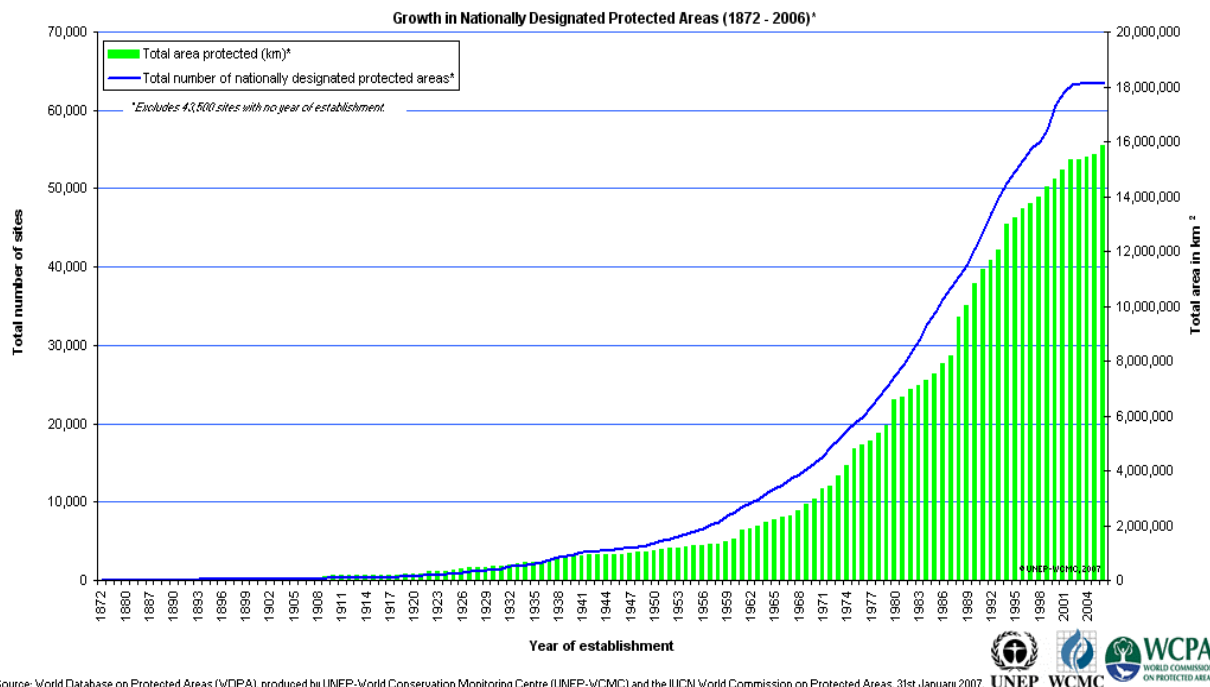
In addition, more focused technical clinics with an objective of providing technical specialists with specific hands-on training on techniques and approaches are needed to implement the POWPA. Incorporated in this thrust, short-term technical support in the form of a staff exchange, consultancy or study tour is proposed. Where necessary, secondments of thematic specialists to national protected area agencies may also be considered.

Finally, although there are many tools, methodologies and case studies that exist for many POWPA themes, there are many others for which little or no information exists.

Awareness Building

Life on Earth is disappearing. The 2007 IUCN Red List of Threatened Species now includes 41,415 species of which 16,306 (39%) are threatened with extinction. Loss of species, the cornerstones of forests, marine, grasslands and all other biomes, truncates the effectiveness of vital ecological services and the livelihoods of communities.

Yet, the unrelenting extinction crisis is countered by a conservation success story: the global growth in protected areas which over the past 40-50 years has



increased to more than 100,000 PAs covering nearly 12% of the earth's land surface. Throughout the history of protected areas the common thread is the focus on providing for life now and into the future. Indeed, the Convention on

Biological Diversity recognizes protected areas as a fundamental tool for safeguarding biodiversity, life itself. The intrinsic values of biodiversity are arguably reason enough for safeguarding life through protected areas.

As the world's population grows and the demands on natural resources increase, protected areas become both more important and more threatened. Whether or not these areas are well protected—and many are not—they increasingly face external threats that are difficult or impossible to control. These include climate change, development beyond their boundaries, water limitations and pollution, invasive species, and interrupted wildlife migration corridors. These threats will only intensify in the decades ahead.

Compounding these challenges is an increasingly youthful populace that is more focused on digital video entertainment, television, and internet-based social networking than on the natural world and outdoor activities. Half of the world's population is now under the age of 25 and their perceptions of parks, refuges, and other protected areas will define the future of these places. If the conservation ethic is not instilled in the youth of today, the protected areas of tomorrow will be subject to neglect and encroachment.

The challenge is how best to convey the importance of conservation to today's youth in view of the fact that visitation to these areas is dwindling²⁵? The promise, excitement, and ecological, social, and economic importance of protected areas must be understood by the young people of today; otherwise the will to continue to protect these areas and their societal benefits will diminish.

To build up the awareness of the values of protected areas, the Durban + 5 meeting proposed issuing a "Green List", a list to counter the negative state of play associated with the demise of species. In effect a "Green List" would have

²⁵ Oliver R. W. Pergams*† and Patricia A. Zaradic‡ Evidence for a fundamental and pervasive shift away from nature-based recreation *Department of Biological Sciences, University of Illinois, 845 West Taylor Street, Chicago, IL 60607; and ‡Environmental Leadership Program, Delaware Valley, 116 Petrie Avenue, Bryn Mawr, PA 19010

the purpose of identifying the protected areas that have undertaken an assessment of their management and made the results public. An offshoot of producing such a list would hasten the recognition of these areas as having taken steps to being well managed, and thus eligible for carbon credit recognition and open to benefiting from such a source of financing.

Conclusions

Since the First World Parks Congress in Seattle, the notion of protected areas of the world has been transformed from pleasuring grounds to a broader set of objectives. With this transformation many more protected areas have been established. Yet, there is a commonality in their primary purpose of conserving biodiversity, from which economic benefits flow to contribute to livelihoods and human well being. Different forms of governance are now recognized and people's interests are much more a consideration than half a century ago when expropriation and displacement of people occurred.

These global advances are however threatened by shifting global agendas in response to crises of, among other issues, poverty, human health, and climate change. Protected areas of the world stand to contribute directly to the alleviation of these problems. It is a matter of bringing awareness to the world of the values of protected areas and their direct relevance to solutions.

When the next World Parks Congress comes together, the challenge for all "parkies" is to be sure that when we gather we will celebrate widespread recognition that protected areas are indeed "for life's sake".