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Young Conservationists and the Future of Protected Areas Worldwide

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Young Conservationists and the Future of Protected Areas Worldwide

A Call to Discussion at the Fifth World Parks Congress, Durban, South Africa, September 2003



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INTRODUCTION

Seven months before the Fifth World Parks Congress (8-17 September 2003), we, a group of graduate students in a protected areas course at the Yale School of Forestry & Environmental Studies in New Haven, Connecticut, USA (see description on inside back cover), received permission from Congress organizers to send a survey about protected areas to young people who had applied to attend the Congress. Our purpose was to understand concerns and ideas of young conservationists from around the world regarding the future of protected areas and to begin a discussion in which their ideas and ours could be brought together. Our survey specifically targeted these young professionals because they will become the leaders in protected areas management around the globe and there is currently an urgent need to create better opportunities, frameworks, and resources for these young professionals if conservation is to succeed in the future.

The 138 people from 52 countries who responded to the survey articulated insightful ideas for improving protected areas management on many fronts, including education, communication, participation, finance, and community involvement. Their responses are tabulated and analyzed in this document. To synthesize a report to use as a starting point for broader discussion, our group then crafted these responses into recommendations for action in distinct areas, integrating our own thoughts with the survey responses.

As we discovered in our survey and our course at Yale, not all young professionals have uniform beliefs about protected areas and their management. Protected area visions, challenges, and solutions are often quite context-specific, and there is healthy

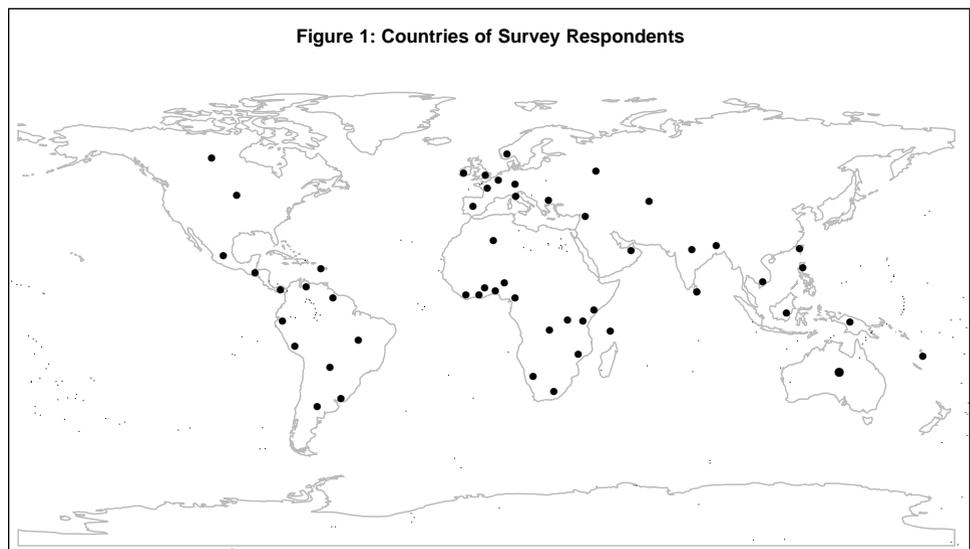
debate about directions and options. We discovered, however, that although many young conservationists have fresh ideas about protected areas management, they show a lot of understanding and respect for the work of those who came before them. They also show a strong desire to transmit their ideals to those much younger than they are and thereby forge a link across the generations to protect what they treasure.

It is our hope that this document will serve as a fruitful starting point for the discussion of young conservationists' visions for and roles in protected areas management, at the Congress and beyond, and that some of these thoughts and visions will be incorporated into the Durban Accord and Action Plan and considered by Congress attendees for implementation in individual protected areas.

SURVEY METHODOLOGY

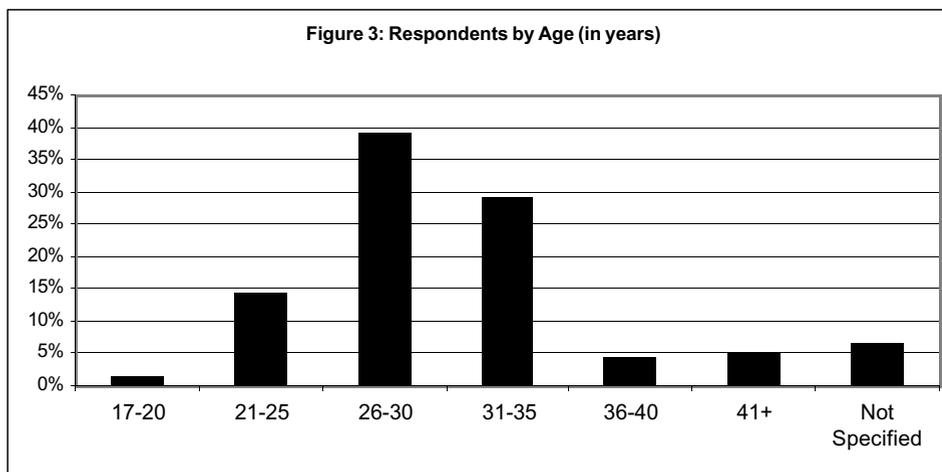
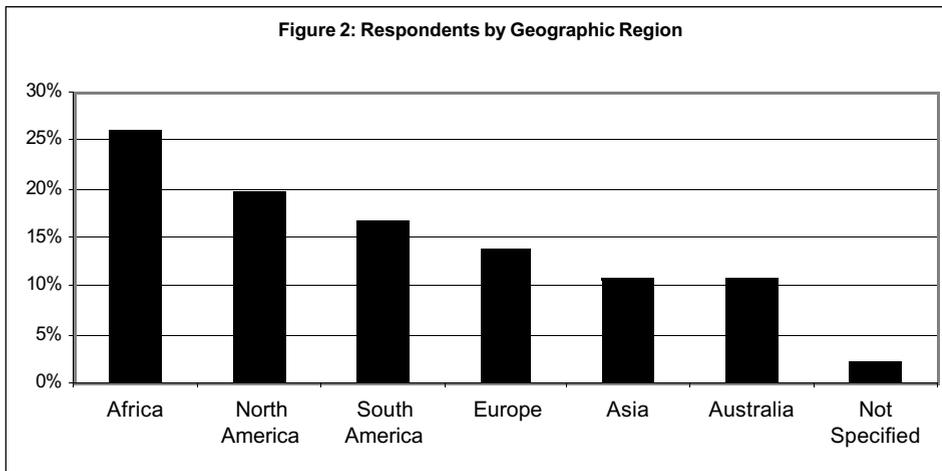
We developed our written survey in the official Congress languages of English, French, and Spanish. Organized into six questions, the survey solicited concerns and ideas of young professionals on: 1) justifications for protected areas; 2) challenges to protected areas management; 3) innovative solutions to address those challenges; 4) the role of young professionals in the management of protected areas; 5) youth involvement; and 6) successful projects involving youth and young professionals in protected areas. (Youth is defined in this case as people less than 20 years of age, and young professionals as people between the ages of 20 and 35 who work in conservation in the state, private, or non-governmental sectors).

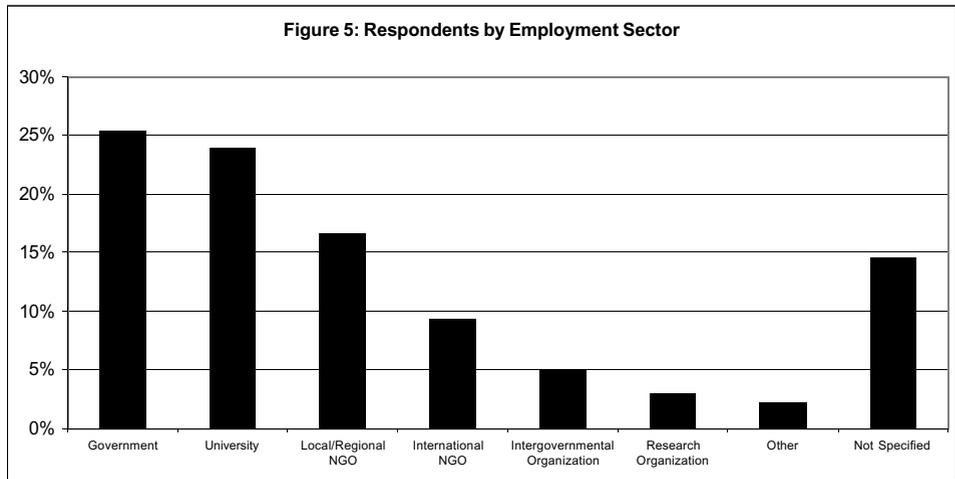
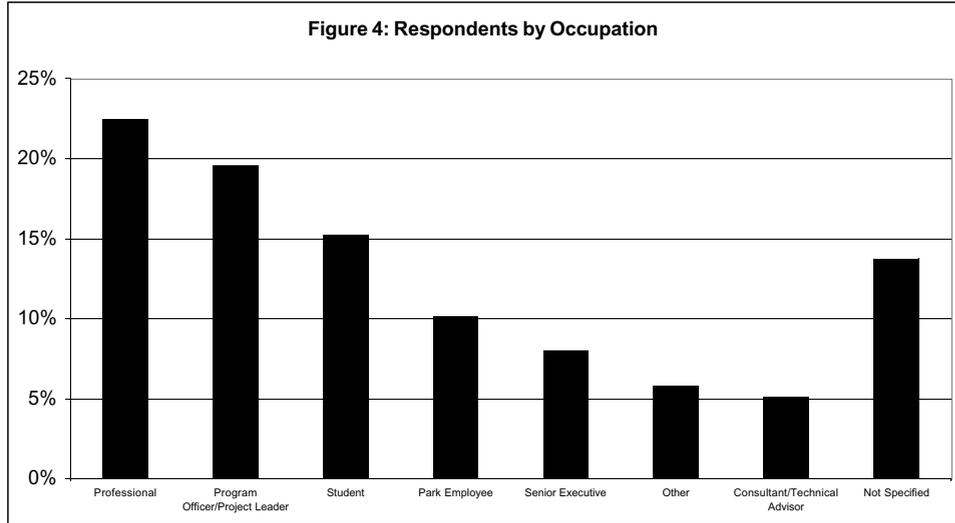
In March 2003, the survey was sent out via email to a list provided by Congress organizers of 2,128 individuals registered as nominees to attend the Congress as of February 2003. Because the database did not list the age of nominees, we asked in the survey that those recipients under the age of 35 respond and encouraged all recipients to forward the survey to other interested parties.



RESPONDENT PROFILES

By April 2003, we had received 138 completed surveys from respondents in 52 countries (figure 1) in six geographic regions (figure 2). Half the respondents had received the survey directly from us, while the other half had obtained the survey through other means, such as email forwarding. Thirteen recipients over the age of 35 responded to the survey. Respondents ranged in age from 17 to 60, with an average age of 30 (figure 3). They represented a variety of occupations and employment sectors (figures 4 and 5).





“Place value on cultural diversity and harmonious relations between humans and the environment.”
(Brazil)

SURVEY RESPONSES

Survey Question 1: Justifications for Protected Areas

What do you feel are the three most important reasons for creating and maintaining terrestrial and marine protected areas?

Our analysis of the diverse responses to this question identified eleven emerging themes justifying the existence and need for protected areas (table 1). Percentages represent the percentage of respondents who mentioned each topic as a justification for creating and maintaining protected areas.

Table 1: Survey Responses on Justifications for Protected Areas	
• To conserve biodiversity at all scales	72%
• To use land in a sustainable way that promotes effective resource management, poverty reduction, and community development	51%
• To protect essential ecosystem processes by reducing human impacts	50%
• To provide opportunities for basic scientific research and environmental education	36%
• To conserve natural resources such as fisheries, food, fuel, minerals, and medicines, and provide human beings with water, air, carbon sequestration, and other ecosystem services	36%
• To provide for income generation from the local to the national level, especially from tourism	19%
• To meet the religious and spiritual needs of human beings	19%
• To reflect the value of and need for recreation of human beings	18%
• To insure the co-existence of humans and nature, and provide for the overall physical and mental well being of human beings	17%
• To help diminish the loss of cultural heritage	14%
• To avoid postponing decision-making on critical environmental issues until scientific uncertainty is resolved, which might not occur until irreversible environmental changes are well underway	3%

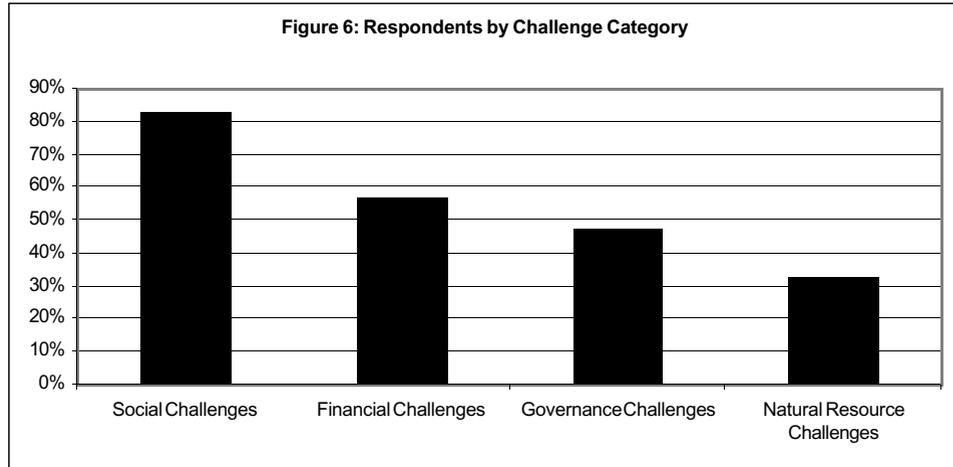
“... keep the planet a place suitable and pleasant for human life, both for the present and the future generations.” (Italy)

Survey Question 2: Challenges for Protected Areas
Please explain what you see as the three biggest challenges in protected areas management. These might include biological, cultural, economic, financial, institutional, political, social, spiritual, or other issues. Are there other challenges that you foresee in the future given current trends?

Each protected area faces unique, dynamic challenges to successful, sustainable establishment and management. Four overarching categories of challenges emerged from the survey responses (figure 6). While these categories represent the concerns of over 100 young professionals, these responses are by no means a comprehensive summary of all the challenges to protected areas management.

Social Challenges (83%)

- *Importance:* Many people do not support parks because parks often impose high costs on them and do not sufficiently advertise benefits such as watershed protection, tourism, and spiritual values.



"[Create protected areas] a precautionary approach in relation to the incalculable potential future values of our natural heritage." (South Africa)

- *Sense of Belonging*: The public can be alienated from parks by a lack of knowledge about the park, park purposes that do not meet their expectations, and by park regulations or administrators that create an unwelcoming environment.
- *Global Inequities*: Political-economic inequities in access to resources, and socio-political problems such as military conflict, limit people's capacities to meet livelihood needs. Since parks often are established on lands to which people have historically had access, these increasing social problems only exacerbate park-people conflicts over resource use.
- *Population Growth and Development*: As global population and consumption levels increase, additional stresses are put on the land, ultimately trickling down to protected areas. Development in and around protected areas may cause pollution within parks, and diminish their biological significance in altered landscapes. Often, it is not excessive local populations but rather industrial export of products for consumption in far-away places that seriously threatens park environments.

Financial Challenges (56%)

- *Income Generation*: Parks often have difficulty generating income through their activities, so parks are not able to pay for their operation costs.
- *External Support*: Funding from governments, international agencies, and other organizations is limited and spread thin across an immense protected area network.
- *Economic Incentives*: Persuading local populations to accept protected areas can be difficult when some parks create adverse economic impacts for these populations.
- *Global Inequity*: Disparate economic conditions around the world make conservation more expensive in some countries, creating an uneven distribution of protected areas management capabilities.

Governance Challenges (47%)

- *Political Will*: Political power and infrastructure play major roles in the effectiveness of park management, making buy-in from politicians exceedingly important.
- *Enforcement*: Implementation of regulations requires that park managers be provided with the authority and other tools necessary to enforce them.
- *Human-Wildlife Conflicts*: Poaching and the bush-meat trade not only destroy animal populations, but also create dangerous law enforcement situations.
- *Resource Extraction*: Using parks for logging, mining, and other extractive practices can be at odds with protected areas management goals.
- *Recreation*: Although recreational human use is one purpose of parks, large numbers of visitors cause harmful effects to the places they come to enjoy.
- *Boundaries*: The physical delineation and establishment of definitive, well-respected boundaries often proves to be difficult amidst competing land use interests.

Natural Resource Challenges (32%)

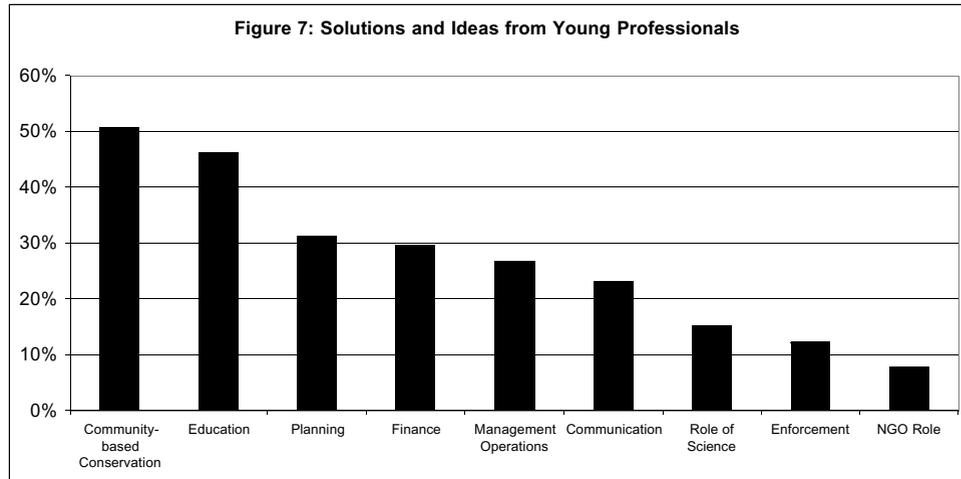
- *Research Gaps*: Effective species and ecosystem protection is often difficult due to a lack of understanding of ecological relationships such as species habitat and range requirements. The lack of relevant social research on people involved in park management also impedes successful implementation of park goals.
- *Linkages*: The importance of creating connections among protected areas through a matrix of diverse land types adds further complexity to biodiversity maintenance.
- *Invasive Species*: Organisms that can effectively invade new areas wreak havoc through successful competition with pre-established species.
- *Climate Change*: Global climate change and other extra-local factors pose dynamic threats to protected areas management that must be addressed on a local to international basis.

“... I think the landscape is a gift from God the Merciful and Wonderful ...”
(Indonesia)

Survey Question 3: Solutions and Innovative Ideas

What are the three most important solutions, ideas, suggestions or recommendations you have for addressing the challenges you see in protected areas management? These might include decision-making protocols, implementation strategies, innovative concepts, creative approaches, etc.

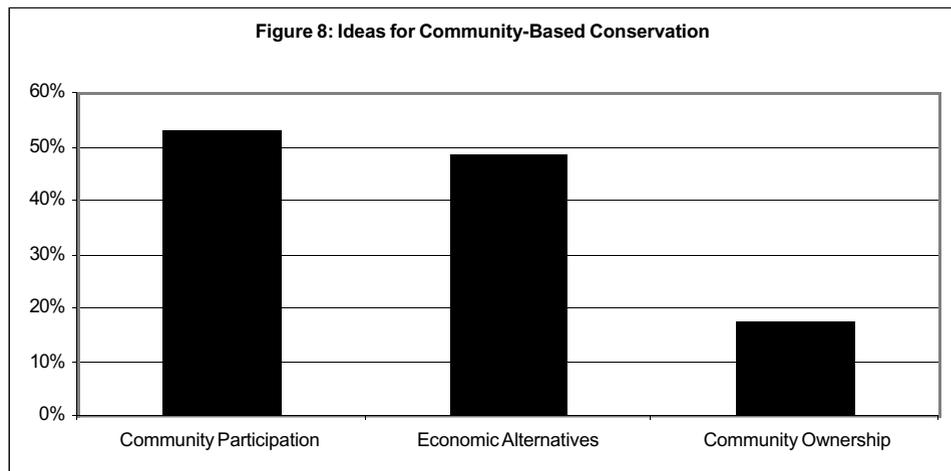
The solutions and ideas proposed by survey respondents from around the world to address challenges to the management of protected areas were organized into nine categories (figure 7).



Community-Based Conservation (51%)

The responses included in this category broadly referred to the integration and involvement of local communities in protected areas management. Among these, three major themes emerged (figure 8).

“If we want to avoid paper parks, those who live in and around protected areas should be part of the decision-making processes.” (Venezuela)



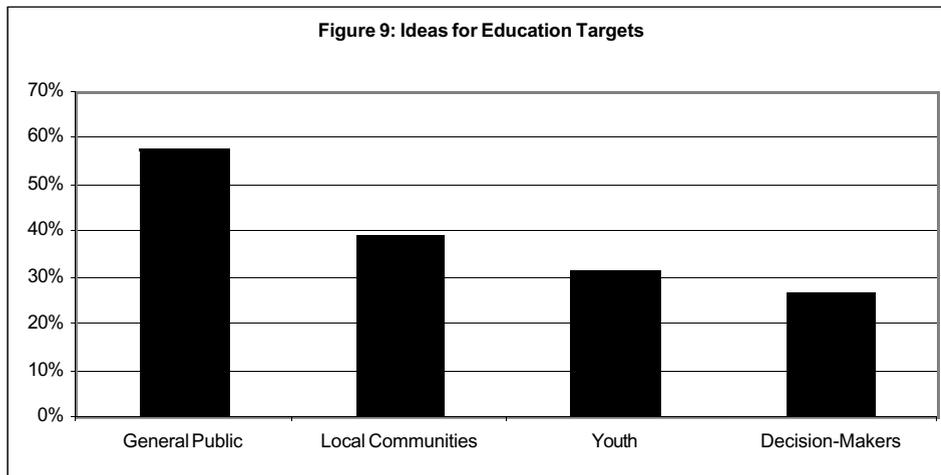
- Community Participation:** In survey responses, the term participation referred to a spectrum of activities, including information-sharing by park officials, consultation and negotiation with local populations, and employment of local residents in management positions. More than half of these respondents explicitly suggested the need for empowering local communities in management decisions, through mechanisms such as environmental education, local capacity-building efforts, negotiated protocols that provide communities with a legitimate voice in environmentally important decisions, and co-management schemes, which grant partial decision-making power to local communities.

- *Economic Alternatives:* Respondents stressed the importance of reciprocity for the sacrifices typically made by local residents living within the peripheries of protected areas. Recommendations include monetary compensation for lost resource access or other park-associated burdens, the allowance of sustainable harvesting within protected areas, and help with the development of sustainable economic alternatives to the consumptive use of natural resources. Respondents also advocated for the provision of benefits to local communities as a vital tool for building popular and political support. Eco-tourism was commonly cited as a plausible mechanism for providing local benefits; however, respondents cautioned that such operations could also have degrading influences on the environment and perpetuate existing social inequities.
- *Community Ownership:* Respondents suggested that local ownership and management of protected areas would be more appropriate than traditional top-down approaches. Proposed models included indigenous reserves and collaborative management schemes.

Education (46%)

Of those respondents recommending education-oriented solutions to protected area challenges, most designated the general public as a key target for environmental education and outreach (figure 9). Other education targets cited were local communities, youth, and decision-makers. Strikingly few respondents suggested whom the providers of such initiatives should be, although most implied the conservation community at large.

“The approach must be 100% by the community for the community.”
(Australia)



- *Educating the General Public:* Respondents suggested that the general public must be educated as to the benefits associated with protected areas and the reasons behind their existence. Others suggested a more generalized campaign to educate people on broader environmental issues, such as biodiversity protection and the finite character of the natural resources upon which we depend.

- *Educating Local Communities:* Respondents suggested that the education of local communities living within and around protected areas could promote better management of those areas. Specifically, respondents suggested that this education could help achieve meaningful local participation in park management and promote dialogue amongst local and extra-local stakeholders, thereby building constituencies for parks amongst local residents, mitigating conflicts between park management staff and local people, and building local capacity for alternative environmentally-friendly livelihoods and/or community-based management plans through extension or other means.
- *Educating Youth:* Respondents suggested that environmental education of youth through school programs and other forms of outreach could provide for a more park-friendly future worldwide. While most suggestions focused specifically on environmental education to instill ecological knowledge and values, a few respondents suggested that this type of education be complemented by curricula in the peaceful resolution of environmental conflicts.
- *Educating Decision-Makers:* Respondents commonly cited the lack of relevant knowledge, not only by politicians and other public officials, but also sometimes park managers themselves. Respondents suggested that decision-makers should be convinced of the importance of protected areas through specially designed education programs that argue for the values of ecosystem function and services. Suggestions also included the need to educate national governments on the importance of enforcing international environmental treaties, as well as the value of participation of multiple stakeholders in decision-making.
- *Disseminating Ideas:* Many respondents suggested intermediary mechanisms for the dissemination of pro-park and other environmental messages: social institutions (schools, community centers, and churches); the media (radios, newspapers, posters, television programs or other mass media); research institutions (universities, museums, zoos, aquaria, and botanical gardens); and at various levels of political leadership (local, regional, national, and international).

“There is need to provide incentives and alternative income generating activities to communities living adjacent to protected areas.” (Uganda)

Planning (31%)

The responses included in this category referred to various aspects of protected area planning and establishment. More than half of these responses emphasized the need to integrate park planning with other sectors, such as the public and private economic, development, health, social, and cultural sectors. Regional and landscape level planning (especially considerations for linkages between protected areas and ecological corridors) were also mentioned, as well as regulating economic pressures on natural resources and the importance of formally incorporating both social and ecological analyses into landscape level planning.

Finance (30%)

The most frequently cited ideas for better financing of protected areas involved spurring longer-term financing mechanisms and including the private sector. Specific suggestions included the development of longer funding cycles for environmental initiatives and longer-term government commitments, the creation of jobs around protected areas by private sector employers, public participation in fundraising activities, payment mechanisms through user fees or taxation of those receiving benefits from ecosystem services provided by protected areas, and re-allocation of financial resources from North to South.

Management Operations (27%)

Responses in this category referred primarily to staff and daily operations of protected areas, and addressed issues such as improving staff morale, increasing the number of protected area staff, and ensuring well-defined roles and responsibilities of staff. In addition, respondents noted the need for adaptive management to respond to changes in political and social landscapes and to better include results of long-term social and ecological monitoring, transparency in management practices, capacity-building of protected area staff, and use of mentoring in park organizations.

Communication (23%)

Responses specifically referred to the need for enhanced communication among professionals in protected areas management and with youth. Some suggested mechanisms included more inter-agency collaboration and information-sharing between stakeholders and at multiple scales of management.

Role of Science (15%)

Some respondents advocated for a more prominent role for scientific research in protected areas management, especially an interdisciplinary approach and a greater emphasis on social science to better inform management decisions. A common concern was that the results of scientific research often were not incorporated into management decisions, especially as is the case when research results from visiting scientists are not returned to the host country. Other respondents demanded that scientific monitoring and evaluation take place in all parks in order to encourage managers to perform adaptive management to learn from both successes and mistakes, and to communicate these lessons to other practitioners. Other suggestions included the creation of formal arrangements between scientists and park managers to insure collaboration in all phases of scientific research taking place in protected areas, from the creation of research questions to data collection and analyses.

Enforcement (9%)

Respondents highlighted the need for better enforcement of protection of resources in parks, including more comprehensive and updated laws regarding protected areas. Few respondents offered specifics on this issue, though strengthening legal frame-

"I initiated a strategy involving the youth from various villages in protected area resource control. Youth natural resource management committees were formed in each village with authority and close supervision from the village council to control encroachers and any villager contravening the agreed unanimously written constitution against illegal activities within the protected area . . . At the moment, since communities now see themselves as part of the Park's resource management committee, conflict between the sides has reduced . . ." (Cameroon)

works, and clearly defining local rights and park boundaries, were most commonly mentioned. Respondents suggested that park management institutions need to be more firm and consistent in establishing their authority, especially with respect to violations of park regulations.

NGO Role (8%)

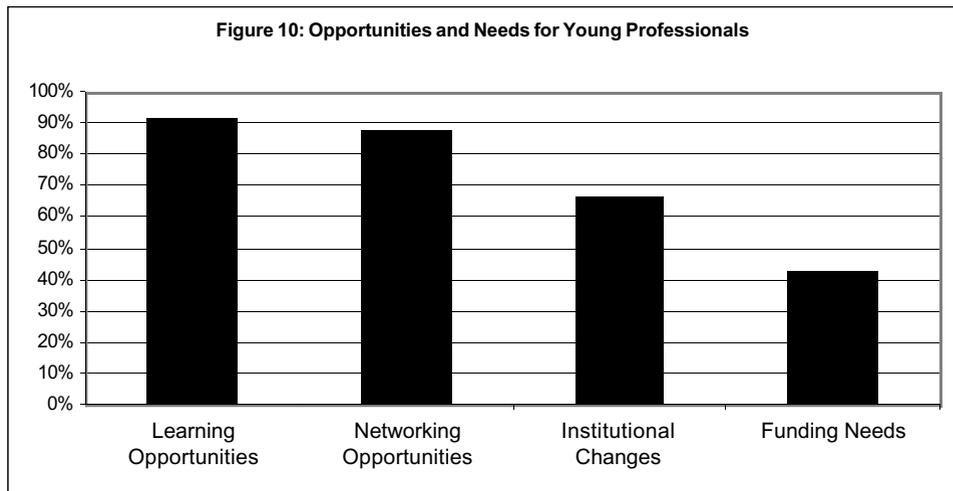
Respondents provided conflicting suggestions for roles of NGOs in park management. Most suggested that NGOs should play a stronger role in protected areas management, some even stating that management responsibilities should be transferred from governments to NGOs. However, other respondents suggested that NGOs have too powerful a role in some protected areas, and therefore advocated for devolution of authority from NGOs to local communities. The lack of consensus points to the importance of careful analyses of local contexts for determining appropriate roles of NGOs in protected areas management.

Survey Question 4: Young Professionals

What opportunities would you like to see for young people involved in protected areas management to communicate and network, to exchange ideas and experiences, and to be represented in decision-making processes? What barriers do you see which currently limit participation in protected areas management?

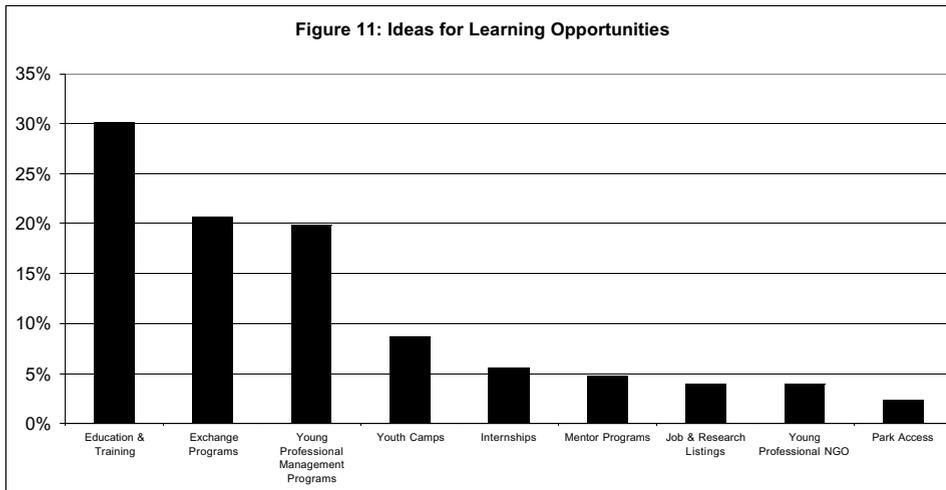
“Create opportunities for youth to visit protected zones and witness first hand the beauty, complexity, and importance that nature provides to humans and the entire earth.” (Togo)

Responses addressing opportunities and barriers for young professional involvement in protected areas management were divided into four categories (figure 10). Only one respondent felt that there were no challenges for young professional involvement in protected areas management.



Learning Opportunities (91%)

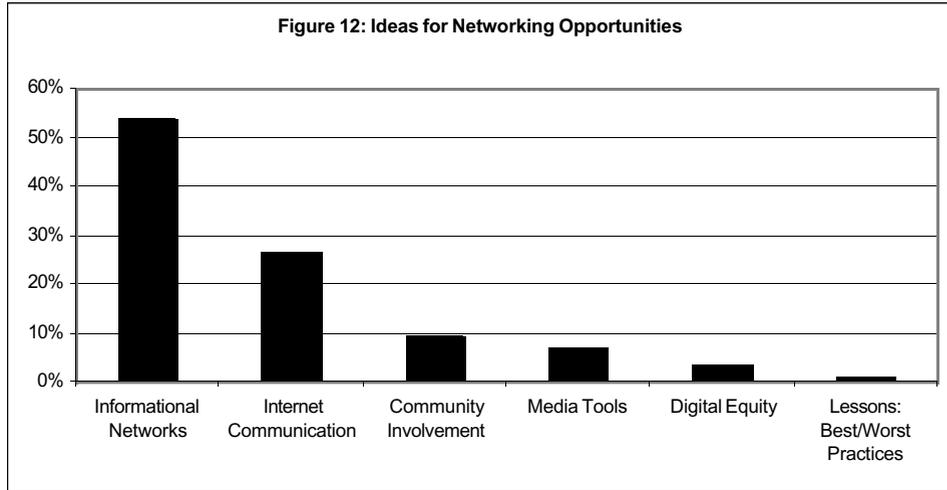
Many respondents mentioned that the creation of learning opportunities for young professionals could address some of the obstacles to their involvement in protected areas management (figure 11). Respondents most frequently cited the need for education and training, followed by the establishment of exchange programs. It was suggested that international exchanges should be made amongst protected area managers, in particular North-South and South-South exchanges, to promote learning. Respondents also mentioned the need for initiatives such as young professional management programs, youth camps, internships, and young professional NGOs. In addition, it was suggested that mentor programs be established to pair up experienced practitioners with young professionals. Another suggestion was the creation of a database of job openings and site-specific research needs in protected areas for young professionals.



“Recreational activities in natural areas are indispensable . . . they create consciousness and interest about natural places and introduce young people to the possibilities of new courses and walks of life.”
(Panama)

Networking Opportunities (88%)

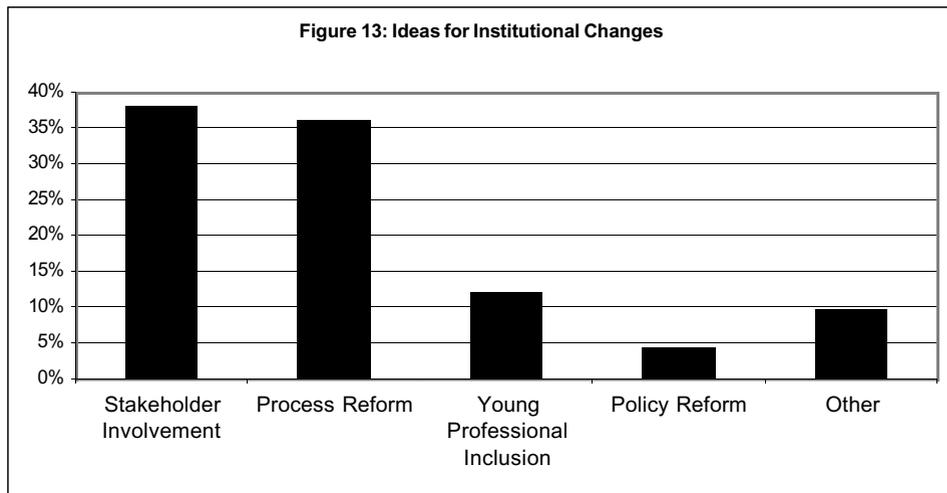
Respondents suggested creating networks for young professionals through meetings, virtual forums, and other communication tools (figure 12). The majority of respondents referred to the need for wider communications channels to reach out to young professionals, and some advocated an internet-based communication system (such as a website and email group for young professionals). However, many respondents also mentioned that although an internet-based system could be effective, many communities do not have access to modern communication technologies, and virtual equity must be a priority. A newsletter for young professionals was also suggested. Respondents also recommended that meetings (workshops or conferences) be established specifically for young professionals involved in protected areas management. A few survey participants discussed community involvement, calling upon protected area practitioners to improve communications with surrounding communities.



Institutional Changes (67%)

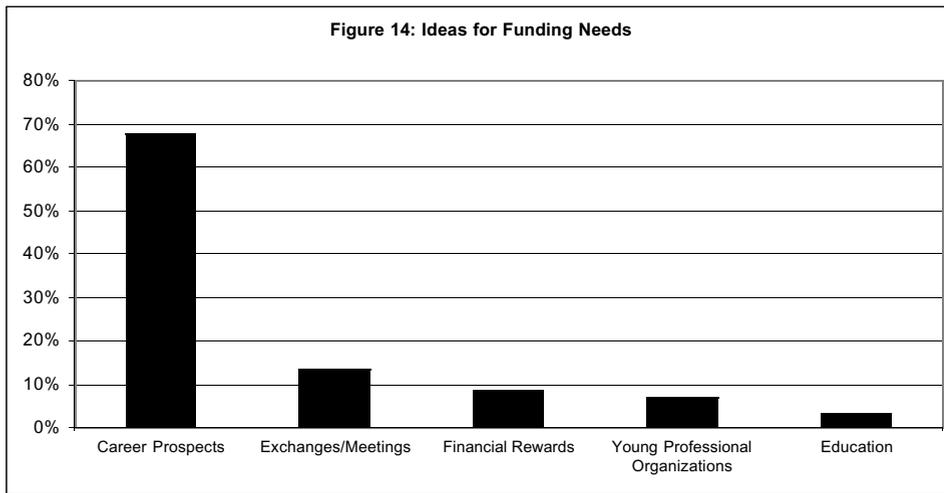
Many respondents wrote of the need to involve young professionals in decision-making processes, and referred to the structure of management hierarchies in protected areas as a major barrier for their involvement (figure 13). A few individuals called for change in the current governance system and others called for the creation of a young professionals committee or panel within the World Commission on Protected Areas to help promote this process. Some voiced the need for policies to be created to specifically address the role of young professionals in protected areas management. Although the responses ranged widely, there was a general consensus that current bureaucratic structures need to involve young professionals by giving them a forum in which to participate and be heard.

“Get them [young people] outside, working on the land, getting to know the environment and challenges of conservation, protection, and poverty first hand. I think [that] few older generations were poor land stewards. We are in for quite a surprise when tomorrow’s reality television generation is in charge.” (United States of America)



Funding Needs (43%)

Many respondents voiced their concern regarding the lack of financial support for young professional involvement in protected areas management (figure 14). While many respondents mentioned poverty in general as an obstacle to young professional involvement, some individuals made specific suggestions of areas for which additional funding is needed. It was suggested that funds be allocated towards enhancing career prospects in protected area work by offering attractive salaries for protected area managers. Other suggestions included providing financial support for travel costs to and from conferences and meetings.



“Try to disseminate as much information to as many people as possible and try to involve youngsters so that they grow up with protected areas as part of their lives rather than something they stumble upon by accident.”
(United Kingdom)

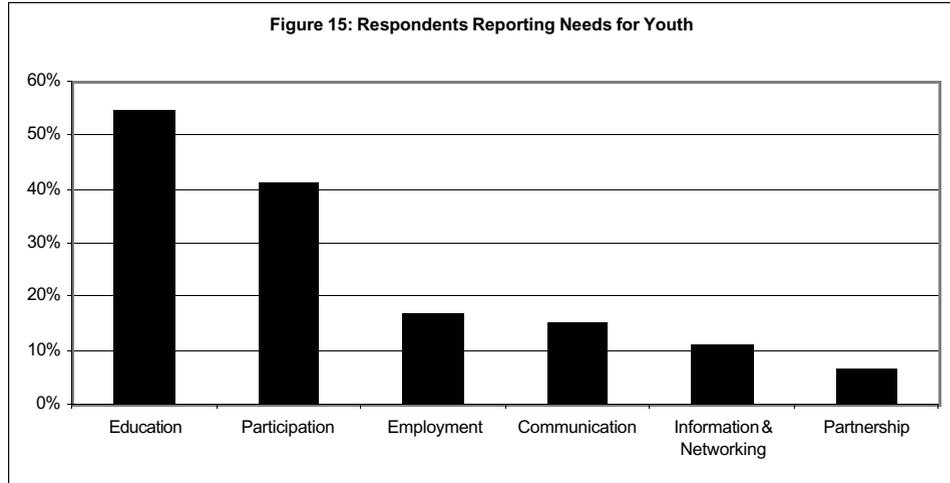
Survey Question 5: The Role of Youth

How can we, as young professionals, encourage the involvement of future generations, those under 20 years of age today, to insure that unreasonable barriers to youth involvement in protected areas do not persist?

Because the future of protected areas in the 21st century and beyond lies not with us, but with future generations, this question really asks how we can inform, educate, involve, and train young people to care about, protect, and value the world’s protected areas. Responses to this question were summarized into six categories (figure 15).

Education (55%)

The education of youth on broad conservation and environmental issues emerged as the most frequently cited theme. Respondents acknowledged that a better-educated public would be beneficial to the global environment in the long-term even if the vast majority never worked in protected areas. It was commonly stated that young people need an understanding of the environment, its benefits and services, and its role in a productive society. Respondents felt that education should extend beyond the classroom to on-the-ground opportunities to visit, learn, recreate, volunteer, and



work in protected areas. Protected areas were suggested as outdoor classrooms offering outreach to local schools, school-aged visitation programs, research programs and facilities, and partnerships with local schools to incorporate a field-based curriculum. For youth interested in environmental careers, some respondents called for additional science-based education and technical training, as well as new partnerships between academic institutions, protected areas, and environmental professionals that will combine academic and practical instruction.

“Children should be taught about the environment at a very tender age and this will help them to protect the environment throughout their ages.”
(Ghana)

Participation (41%)

Respondents replied that youth should be provided opportunities to visit protected areas and to spend their time in a range of hands-on activities such as reforestation, monitoring and protection, and guardianship efforts. Youth should be given the chance to be activists for protected areas, to campaign and organize on their behalf, to be involved in conferences and programs, and to have a voice in decision-making and management.

Employment (17%)

Respondents stated that park managers should create additional employment, internships, and work-study opportunities for youth, for example, by developing youth hiring practices and encouraging youth employment. It was suggested that partnerships with academic institutions could help in recruiting and training prospective candidates. Careers in protected areas management should be better defined and articulated, and competitive wages paid in order to attract youth to this sector. Once on the job, mentoring programs should be made available to youth to provide on-the-job training and to maximize success.

Communication (15%)

To educate and train future generations about the benefits of protected areas, respondents stated that a selective communications strategy should be developed and

targeted to youth. Mass media such as television, radio, films, and youth periodicals were suggested as platforms. It was also suggested that message placement opportunities with youth publications, affinity groups, schools, and youth associations be investigated. Messages should strive to raise awareness, instill a passion for conservation, and promote simple yet effective ways for youth to get involved.

Information and Networking (11%)

Respondents stated that information sharing among youth was vitally needed. The exchange of information on shared experiences, through formal youth exchange programs or through electronic media (internet), was cited as a critical need. Several respondents called for the creation of youth exchange programs to enable young people to visit and work at protected areas. It was also suggested that youth exchange programs could be hosted through academic institutions, summer camps, volunteer programs, and work experience (internship) programs.

Partnerships (6%)

It was noted that youth are extremely active in school, sporting, recreational, and volunteer activities. Partnerships with schools, volunteer organizations and interest groups might result in new channels of education, communication and youth involvement. Government agencies, park associations, academic institutions, and youth and recreation groups were listed as possible partners.

Survey Question 6: Goals and Activities of Successful Projects

Do you know of success stories or cases where youth or young professionals played a pivotal role in protected area issues? Please briefly describe or reference one such story or case. Who can we contact for more information about this case?

“Young professionals should try by all means to share with children the vast knowledge about ecoregions, wildlife and conservation issues through games, competitions, excursions, and tours.” (Republic of Kazakhstan)

Challenges to effectively involving youth and young professionals in protected areas management are widespread. Obstacles to involvement include institutional barriers and lack of funding. To overcome some of these obstacles requires adequate institutional structures, formulating appropriate project goals, and taking the time and energy to work toward successful implementation and output. Our survey requested that respondents share examples of successful projects that involved youth and youth professionals in multiple aspects of protected areas management. While it is not possible to share all these stories, we list the goals and activities characteristic of these projects.

Responses from 38 countries illustrated the broad characteristics of projects in which youth and young professionals served in leadership roles in government, research, NGOs, and communities. Working individually or through social groups such as schools or clubs, young people became involved in aspects of protected areas from daily management activities to international aid. The talents, skills, enthusiasm and energy of youth were applied to make real contributions to conservation. These projects also depended upon the involvement of a variety of other actors, including educators, park rangers, NGO staff, local community members, and international donors.

Examining the goals and activities of these projects reflects the multiple realities and locally specific contexts in which protected areas exist. For example, working with young children may involve schools, church groups, ecology clubs, or other means depending on the resources available. Project goals and activities mentioned by respondents can be characterized as follows:

Project Goals

- Establish new protected areas.
- Implement protected area policies and daily management activities.
- Generate local support for conservation and for specific protected areas.
- Promote collaboration and networks among constituents.
- Educate youth and general public about conservation.
- Create training and job opportunities for young professionals and local youth.
- Foster nature experiences for youth.
- Develop sustainable livelihood opportunities for local community members.
- Incorporate innovative approaches to improve management policies and practices.
- Increase scientific knowledge about social and ecological aspects of protected areas.
- Support local cultural and spiritual values regarding nature.
- Minimize human-wildlife conflicts.
- Improve relations between park staff and local residents.
- Update park management institutions to better use adaptive approaches to complex situations.

“One of the most successful stories where young people are highly involved in protected areas management and in the decision making process [is an NGO where] more than 80% of its staff are less than 35 years.”
(United Arab Emirates)

Project Activities

- Volunteer and work opportunities and/or junior ranger programs for local to international youth to assist in daily park management activities.
- Education programs for youth at research and education centers in protected areas.
- Visitor programs to bring in youth who live at a distance from protected areas.
- Youth chapters of conservation NGOs.
- Youth and young professionals working as key leaders in NGOs or government agencies.

- Involvement of schoolchildren, youth, and university students in environmental monitoring and research.
- Promoting collaboration with youth through formal contracts, annual meetings, newsletters, publications, and the internet.
- Use of activities and media that youth enjoy (for example, sports, art projects, festivals, radio programs, poetry) to promote conservation values.
- Inclusion of youth and young professionals in decision-making at local to national levels.
- Creation of job and training opportunities for youth and young professionals in protected areas, such as tourism guides, park rangers, or researchers.
- Use of youth to help educate other youth.

EMERGING PRINCIPLES FOR PROTECTED AREAS MANAGEMENT

A broad range of ideas pertaining to education, communication, participation, finance, and community involvement, among other subject areas, was articulated in survey responses. Analysis of the survey results led to the identification of five overarching principles for managing protected areas, as expressed by young professionals in survey responses:

Recognize Diverse Protected Area Values

Young professionals worldwide share a broad concern for values of protected areas that go beyond biodiversity protection to incorporate ecosystem health, cultural diversity, human rights and health, spirituality, and the pursuit of scientific inquiry. These values may serve as the basis for an evolving vision for how protected areas are created, managed, and marketed in the future, and relevant policies and economic market mechanisms should be changed to reflect these concerns. While there was no consensus on the relative importance of each of these values to biodiversity protection, their inclusion suggests that planners and practitioners should consider conservation goals in light of the complex ecological *and* social systems in which protected areas must operate. Increased attention to these ideas should not only work to build broader constituencies for protected areas amongst diverse stakeholders, it should also help improve the environmental and social quality of protected area lands and the populated landscapes in which parks exist.

Integrate Spatial and Temporal Scales

Respondents recognized the complexities of preserving natural integrity in human-dominated ecosystems, and suggested that conservation planners and practitioners should look beyond traditional boundaries that have historically delineated appropriate allies, manageable geographic areas, and convenient time scales. Indeed, protected areas managers cannot afford to ignore political, economic, resource use, and social policies and practices at local, regional, national and international scales. To

“The younger generation does not believe and/or recognize that there is a crisis in their environment. Maybe education is not a fast way, but it is definitely an essential and inevitable way.” (Taiwan)

this end, young professionals suggested that project commitments that extend beyond the typical short-term planning cycles for protected areas may be necessary to promote the invaluable development of trust and understanding between newly acquainted stakeholders. Enhanced global communication and cooperation could provide exciting opportunities for integrating protected areas management into policies and practices at broader spatial and temporal scales.

Collaborate With Partners

Young professionals advocated the need for integrating multiple partners, to develop more innovative and sustainable approaches to protected areas management. To this end, appropriate partners for protected area managers could include universities and researchers, NGOs, local communities, private industry, and various sectors of local and national governments. Rather than advocating for purely *bottom-up* or *top-down* conservation strategies, young professionals call for a more integrated, or *lateral*, approach that shares decision-making responsibilities across various types of stakeholders. Formulating more equitable linkages between the urban and rural, between the local and regional, and between the traditionally powerful and powerless may be essential to accomplish this task. Our analysis of the survey responses suggests that local communities living within and around protected areas may be the single most important stakeholders for collaboration with conservation practitioners, not necessarily because of the threats they might pose to neighboring resources, but more importantly for the unique assets and knowledge they possess in relation to those resources.

Improve Protected Areas Management Capacity

Respondents agreed that protected area institutions must have the necessary information, tools, personnel, funding, and organizational ability to manage parks in an adaptive, transparent, and capable manner. While new technologies such as Geographic Information Systems (GIS), remote sensing, and the internet have the potential to become important planning tools, budget shortfalls frequently limit an institution's ability to meet even its most rudimentary management needs. Revenue generating activities thus are a priority component of increasing the capacity of park management institutions. The structure of park management institutions themselves may provide barriers to success, and more opportunities for career advancement for park personnel should be developed to improve long-term employment conditions. Institutions need to better increase their ability to "learn" from research, participatory planning, and their own staff. Mechanisms to increase the flow of information among participants, including researchers, park staff, and local community members, need to be improved.

Build Broader Outreach for Protected Areas

Young professionals felt that environmental education and marketing strategies in support of protected areas have the potential to create common ground between parks and constituents. With careful planning and innovative messaging, the quality

of such forms of communication can be improved. Our analysis of survey responses revealed the importance of consistency of message content, cultural appropriateness, building upon participants' existing knowledge, and using appropriate social institutions, media, and opinion leaders for the diffusion of conservation messages. Survey respondents identified a wide range of outreach targets for such messages, ranging from local communities to private industries to governments. These communication efforts must go beyond crafting and disseminating conservation messages, and instead promote open dialogue among constituents. These efforts must also recognize that economic incentives and environmental education alone are not adequate to remove powerful barriers to participation in conservation activities. Issues such as historic resource use rights, land tenure struggles, and industrial resource extraction must also be addressed.

RECOMMENDED AREAS FOR ACTION

Young professionals from around the world contributed, through our survey, their thoughts, ideas, and visions for improving protected areas management practices and programs in the 21st century and beyond. A broad range of ideas – some familiar, some not – pertaining to education, integrated planning, communication, local community strategies, participation, and scientific research was articulated in their responses. Building upon these ideas, the vast literature on protected areas, and our professional experiences, we offer a list of strategies and programs, organized into ten areas for action. We offer this list in the form of brief and broad programmatic ideas, rather than detailed implementation plans, to inspire and catalyze further discussion.

Capacity Building Needs

So that protected area personnel can perform their duties well, it is important to create a work environment in which they have the security, training, and authority to successfully address the complex social and ecological realities of protected areas management. Job stability and employee promotion should depend on employee efforts toward achieving conservation goals, rather than political whim.

- Provide conflict management and other appropriate training for protected area managers to best work with the multiple stakeholders involved.
- Establish mentoring programs for seasoned employees to help train and encourage new ones.
- Promote contracts for protected area employees that allow for more secure and clearly defined jobs beyond project cycles or short-term contracts.
- Promote exchange programs among protected area employees, at national and international levels.
- Utilize different types of media for training courses, such as correspondence or online resources, and facilitate employees' ability to participate especially if they are field-based.

Communication Strategies

Without popular support at multiple scales, the sustainability of protected area networks is jeopardized. Carefully formulated communication strategies are essential to garnering such support.

- Create common ground with local publics and evoke feelings of pride by celebrating national and community cultural heritage, both past and present, as part of protected areas.
- Identify local opinion leaders as targets for outreach to enhance the rapid dissemination of positive park-related conservation messages.
- Create partnerships with culturally important institutions, such as churches, recreation centers, or schools, to help disseminate messages about parks.
- Create and give value to culturally appropriate and socially recognized symbols for protected areas. Such symbols could potentially be used in social marketing strategies (for example in the form of logos, stamps, trading cards, pins).
- Incorporate conservation themes into popular media, including television or radio programs, sporting events, and celebrity promotions.
- Build upon existing cultural values relating to the conservation of nature through education and marketing campaigns as well as park events.

Education

Educational campaigns should be conducted to increase public environmental knowledge to enhance people's values of protected areas and to promote participation in their management. These campaigns should also be implemented in a culturally sensitive manner, building upon existing environmental knowledge, and should target multiple stakeholders, including the general public, decision-makers, and local communities. Experienced protected areas managers, researchers, and community teachers should be engaged as teachers for such initiatives.

- Create programs to provide youth, seniors, and other constituents with opportunities to work and learn in protected area settings, and to contribute to daily park management activities.
- Work in collaboration with school systems and other educational institutions (zoos, botanical gardens, museums) and other existing social groups (church groups, sports clubs) to promote research initiatives in protected areas and to build broader support for protected areas management.
- Promote programs in which youth are likely to involve themselves in conservation initiatives, such as "adopt-a-park" or selling stamps for conservation.

- Educate public about the importance of ecosystem function and services; the cultural, spiritual, and aesthetic values that ecosystems instill in people; and the role of protected areas in maintaining them.

Financial Strategies

Funding for protected areas management is dependent on public funds, donor agencies and philanthropists, but remains inadequate. New approaches to funding protected areas must be identified to create long-term income generating sources, reduce short-term funding cycles, and utilize mechanisms to attract private capital.

- Share financial responsibility for minimizing the impacts of tourism among travel agencies, governments, and tourists themselves to encourage more environmentally sound recreation.
- Continue using conservation easements to protect land from development, including land concessions and land trusts.
- Provide more incentives for nations to protect more land area (for example, in exchange for carbon credits) and improve existing park management by continuing debt-for nature swaps to aid debt-ridden countries with conservation gems.
- Utilize and advertise corporate sponsorships and partnerships for protected areas, such as financial compensation from advertisements that use protected areas to promote and sell an aspect of their product.
- Redirect revenues collected from concessions and tourist fees to a fund dedicated specifically to national protected areas (rather than a general government fund).
- Increase direct income and self-financing initiatives from protected areas, such as ownership of income-generating infrastructure within and beyond park boundaries.
- Create a national or international tax for ecosystem services provided by protected areas and other lands, similar to public utility companies, and utilize funds to finance protected areas.

Integrated Regional Planning Approaches

Successful and sustainable protected areas management needs to consider land uses, local community resource use needs, property rights, institutions, and constituents operating outside their boundaries. Integrated regional planning, involving other governmental sectors as well as private sector constituents, can minimize negative ecological effects that external land uses can impose on parklands, and should be one of multiple strategies used to promote a country's conservation and welfare.

- Create partnerships between public and private landowners to manage resources in a way that minimizes negative ecological impacts to parklands.

- Dialogue with decision-makers from different planning sectors who manage lands around protected areas.
- Work to increase the national-level authority of protected area institutions and their ability to influence policy-making.
- Incorporate land use mapping and documenting beyond park boundaries into park planning.
- Work to establish new types of protected areas appropriate to the regional context, including private parks, urban parks, community reserves, and trans-boundary parks.
- Insure that fair trade practices are employed when products from protected areas and the local communities surrounding them are marketed.

Local Communities

Acknowledging property rights and spiritual values, and seeking to minimize high social costs imposed on already struggling local residents in and around parks (such as economic hardship due to limited access to resources), community-based conservation has become a widespread approach to providing actual ecological and social benefits from parks to local communities. This approach recognizes social divisions, economic inequities, and power relations within communities, and encourages community participation in park management. It recognizes local communities as opportunities rather than liabilities to more effective park management.

- Reorient the conceptual framework used to analyze park-community relations so that it better recognizes the convoluted social and ecological dynamics involved.
- Work with communities to determine their role in park management and to develop economic and other alternatives to minimize negative impacts and create positive impacts of protected areas on local well-being.
- Employ strategies to insure meaningful participation of the multiple social groups that comprise communities surrounding protected areas.
- Create partnerships with local communities to monitor and enforce access to protected areas and extraction of natural resources.
- Include local community members in training exercises for park staff.
- Establish ecological clubs and youth ranger groups for local youth.
- Create protected areas in new categories (for example, community reserves) that recognize alternative property rights and land tenure to promote community involvement.

Park Usage

People should feel welcome to visit and use protected areas, but must recognize and accept their responsibility to act in accordance with established conservation measures designed to insure adequate protection of parks.

- Reduce park access fees for home country citizens as a means of increasing their visitation and awareness, and create mechanisms to reduce access fees for people who cannot otherwise afford to come.
- Promote programs for stewardship opportunities to increase positive uses of parks.
- Create a “park passport” system, the purchase of which provides reduced user fees, travel brochures, and other benefits. This can be implemented at the national or international level to increase motivation to visit parks.
- Control visitation to high use protected areas by restricting motor vehicle use, establishing maximum visitation rates, and limiting use of sensitive areas, but not by constructing economic barriers that yield inequitable access.
- As appropriate, hold cultural festivals, sporting events, and other community activities within or near parks, to motivate different user groups to venture into parks.
- Allow for economic and livelihood alternatives based upon immediate local needs and demands but regulated to mitigate long-term environmental impacts. This will require honest and open negotiations and partnerships.

Participation Through Partnerships

Partnerships with local communities, urban constituents, youth, and public and private institutions can result in more active management collaborations, increased volunteer opportunities, additional revenue through visitation and sponsorship, and multiple levels of involvement in decision-making and planning. Existing partnerships should be strengthened to encourage active participation. New partnerships or alliances with nontraditional affinity groups and youth groups can also help broaden support for protected areas.

- Create a young professional chapter of the World Commission on Protected Areas to increase opportunities for younger protected area managers to engage in discussion, strategic planning, decision-making, and programming.
- Encourage the participation of youth and young professionals, and other constituent groups at protected area conferences and forums, and provide opportunities to present their ideas at strategic meetings and policy sessions.
- Launch a “partners in parks initiative” that will incorporate and make use of new and existing partnerships as a means of promoting collaboration, education, and communication.

- Create a worldwide volunteer network to promote volunteer opportunities to work in protected areas. Opportunities to visit protected areas and to volunteer in a range of activities such as reforestation, monitoring and protection, and guardianship efforts should be promoted.

Scientific Research

Inequitable power relationships around protected areas can be due to the possession of knowledge that provides park managers with invaluable social and ecological information. In order to promote well-informed management decisions that respect the rights of all stakeholders involved, efforts should be made to insure the unbiased creation and free distribution of scientific knowledge. Stronger linkages between scientific research and the application of its results should be encouraged.

- Create a clearinghouse on the internet or through other locally appropriate media of scientific information collected in and around protected areas that would be available to protected area managers and the general public.
- Create both local and international networks of scientists, students, local residents, park managers, and other decision-makers to generate and share relevant scientific research within and around protected areas.
- Insure that information collected within or about protected areas is repatriated to host countries and appropriate management agencies.
- Create mechanisms for efficient data management within protected areas institutions, which could allow for smoother incorporation of scientifically generated knowledge into the planning process.
- Emphasize the value of social science research in informing management decisions.
- Develop indicators for long-term monitoring which better reflect the complex ecological and social dynamics within given contexts including dynamic indicators of process as well as more traditional measurements.

Use of Information Technology

Information technology can facilitate advances in almost all aspects of protected areas management from education to policy planning to financial operations. The internet has become an indispensable tool for research, communication and training purposes. Software applications are increasingly inexpensive, reliable and available, and should be made more so.

- Utilize GIS, remote sensing image analysis, aerial photographs, management system applications, online distance learning opportunities, and other technologies in national to local level park planning and management, monitoring and evaluation.

- Encourage influential information technology companies to provide grants and through public-private partnership initiatives, to make computers, programs and training courses available at reduced or no cost to protected areas officials in countries with need.
- Create an internet-based information clearinghouse on protected areas worldwide as well as park-based informational websites, to disseminate information on managerial successes and failures in varying contexts.
- Provide reliable access to the internet for protected area staff.

CALL TO DISCUSSION

It is our hope that the thoughts and ideas expressed in this document may serve as a starting point for an intergenerational dialogue among youth, young professionals, and practitioners about how to improve protected areas management worldwide, now and in the future, and especially how to insure that future by finding more and better ways to engage young people around the world in conservation today. We invite you to join us in our scheduled discussion at the Fifth World Parks Congress in Durban, South Africa, and urge you to continue this dialogue beyond the Congress.

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**Protected Areas Issues and Practices:
Challenges for the Fifth World Parks Congress**

*Yale School of Forestry & Environmental Studies Graduate Course 772b
Spring 2003*

Course Description

The purpose of the Fifth World Parks Congress (Durban, South Africa, September 2003) is “to demonstrate the relevance of protected areas to the broader economic, social and environmental agendas for the world in the 21st century, and to examine the challenges and opportunities facing protected areas in coming decades, by bringing together the world’s foremost experts on protected areas.” This research seminar has three major objectives: 1) to enable students to explore and summarize the major issues and current practices that affect protected areas worldwide; 2) to gain an understanding of the proceedings and mechanics of a global environmental conference such as the Fifth World Parks Congress; and 3) to provide students with a unique opportunity to contribute to the preparation, proceedings, and outcomes of the Congress and to interact with leading professionals in this field.

Topics to be addressed in depth include those identified by the Fifth World Parks Congress Steering Committee: linkages between protected areas and surrounding land uses; building awareness and support; governance; capacity building; management effectiveness; finance and resources; and gaps in the system. This course also introduces students to the history of the IUCN, the development of the concept of protected areas worldwide, the challenges for protected areas in the 21st century, and the role of protected areas in alleviating poverty, contributing to security, and responding to global biophysical, economic, and social changes.

Primary and secondary (IUCN) scientific literature supplements lectures and class presentations. Participants complete a research project in one or more of the topics identified by the Congress Steering Committee, and collectively contribute to drafting a young professionals discussion paper on the future of protected areas worldwide for dissemination at the Fifth World Parks Congress. Prerequisites: practical experience or strong interest in issues related to protected areas.

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