

Parks, Peace and Partnerships Conference Abstracts

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Opening Reception – Friday September 9, 2007**7:00 pm – 10:00 pm**

Keynote Address: Monte Audenart
Rotary International Director

Together – Building Peace in our World

Opening Plenary – Monday September 10, 2007**8:30 pm – 12:00 pm**

- **Head dress Transfer Ceremony – Blackfoot Confederacy to Park Superintendents**

The Blackfoot Traditional Headdress Ceremony will be included by transferring an Eaglefeather Bonnet to each of the Superintendents from Glacier National Park and Waterton National Park. These Gifts will be bestowed in the name of PEACE and Prosperity.

The ceremony will open with a narration and call the ceremony to order. The Elders and Superintendents will sit into place and open the ceremony with incense & prayer. After the prayer, the Drummers will begin to sing a series of songs. Four Armed Services veterans will get up and begin to dance. The veteran/dancers will dance toward the Superintendents three times. On the fourth time, the veterans/dancers will [mock] capture the superintendents and deliver them to the Elders where the Bonnet transfer will take place. The drummers will begin to sing and the Elders will dance with the Superintendents around the Drum. The crowd may join in the dance as a way of showing honor and approval of the transfer. At the conclusion of this dance, the veterans will confess four deeds that gave them the right to participate in the transfer ceremony.

Officiating Elders:	Chief Reg Crowshoe, Piikani Chief Adrian Stimpson, Siksika Chief Earl Oldperson, Blackfeet Elder Leonard Bastien
Drum and singers:	Bruce Wolf Child + 3 Singers from Stand-Off, Alberta, Canada
Capture Party:	Gerald Cooper + 3 Veterans from Browning, Montana, USA
Narrator:	John Murray, Browning, Montana, USA
Special Guest:	Hon. Lyle Oberg, Alberta Minister of Finance
Welcome:	Chief Charles Weasel Head (Kainai - Blood Tribe; Grand Chief Treaty 7)

- Bill Dolan, Chief, Resource Conservation, Waterton Lakes National Park, Parks Canada
Brace Hayden, Regional Issues Specialist, Glacier National Park, Montana, USA

Waterton-Glacier International Peace Park: Cooperation in a Shared Landscape

The Waterton-Glacier International Peace Park was established in 1932 to celebrate and peace and friendship between Canada and the United States of America. The designation recognized an existing relationship between two national parks and a larger regional landscape with a shared history and sense of place. The designation of the world's first international peace park was also an important milestone in validating and promoting cooperative trans-boundary management within a complex jurisdictional milieu.

This paper will present the history of shared relationships and the international recognition afforded the two parks. Specific examples of leadership and cooperation will be presented and discussed in five broad areas: administration & planning, visitor experience, resource protection, awareness & education and working beyond park boundaries. The authors will share their thoughts on lessons learned. Constraints and opportunities around the future of the Waterton-Glacier International Peace Park will be discussed.

- Bill Hayden, Interpretive Specialist, Glacier National Park, Montana, USA
[presented by: Brace Hayden]

“Glacier Is...” An Overview of Glacier National Park – Video Presentation

- Nik Lopoukhine
Chair, IUCN World Commission on Protected Areas

International Peace Parks and Transboundary Protected Areas - a Global Perspective

Concurrent Sessions 1 – Monday September 10, 2007

1:30 pm – 3:00 pm

1A An Introduction to Peace Parks: Conservation and Conflict Resolution – PANEL

In 2007, MIT Press will release the edited volume, *Peace Parks: Conservation and Conflict Resolution*. As the first extensive treatment of the relationship between peace parks and international security, the volume examines peace parks from a number of contrasting perspectives—with individual chapters ranging from an analytical game theory approach to numerous place-based case studies. One of the fundamental goals of the volume is to move beyond the hotly contested debate over the degree to which environmental factors either cause or are associated with border conflict. Regardless of where one stands in this debate, a question that has received insufficient attention is the potential role of peace parks in harmonizing the two worthy goals of environmental protection and conflict mitigation. This volume fills this gap by portraying peace parks not as an all-encompassing panacea, but as a workable tool that could minimize conflict in an appreciable number of border regions.

- Saleem H Ali

Associate Professor of Environmental Studies, Rubenstein School of Natural Resources, University of Vermont

Peace parks: A natural connection between ecology and peace?

With the emergence of numerous peace parks across the world and the proliferation of donor interest in this phenomenon, there has been a rush to replicate efforts from one area to another. This paper will draw on the author's experience in coordinating the publication of a detailed academic anthology on peace parks (to be launched at the conference). What are the hindrances to gaining credibility within academia about structural comparisons? How might policy-makers gauge the success of a peace park effort from multiple perspectives and use those to build support for further initiatives? The lessons from preparing this volume suggest that there are indeed structural commonalities which can be used for lesson-drawing rather than approach the matter *ad hoc*. Some of these structural factors include a growing international consensus through conventions (such as the Convention on Biological Diversity) as well as the linkage between the environment and long-term conflict. However, the strategy for marketing such efforts needs to consider indigenous sensitivities and sequencing the peace park effort may need to be calibrated according to individual circumstances of the case.

- Kent Biringer, Manager, Government Relations, Sandia National Laboratories, USA
Air Marshal (retired) K. C. Cariappa, India

The Siachen Peace Park Proposal: Reconfiguring the Kashmir conflict?

One of the longest military conflicts in recent history continues high in the Karakoram Mountains at the western end of the Himalayas of South Asia. The dispute between India and Pakistan in the Siachen Glacier region of northern Kashmir began in 1984. In recent years there have been several unsuccessful attempts at dispute resolution. One goal is to achieve a military disengagement from the region, eliminating the exorbitant human and financial costs associated with this conflict and reducing the military conflict in Kashmir. There is also an environmental interest in resolving the dispute and minimizing the impacts of maintaining troops on the highest battlefield in the world. Over the last decade, an increasing set of ideas has been proposed that could provide a peaceful future for Siachen. This paper outlines some of those ideas, including Siachen Peace Park and Siachen Science Center concepts.

- Arthur G. Blundell, Natural Capital Advisors
W. Tyler Christie

Liberia: Securing the Peace through Parks

Liberia is the heart of the biodiversity hotspot in West Africa, containing globally important endemic and endangered species. Half of all the forest in West Africa is found in Liberia. But recently Liberia has also been the epicenter of conflict in the region, driven in large part by competition for natural resources. In the 1990s, Charles Taylor captured control of rural Liberia, including almost all the logging areas and an iron ore mine, which reportedly paid him \$10 million per month. Further, once Taylor became president, timber companies associated with him used private security forces composed of ex-combatants to loot and attack civilians in both Liberia and neighboring Ivory Coast. But the forested areas along the borders of Liberia are also amongst those most suitable for conservation. We argue that these areas should form the heart of a network of protected areas. Located in areas where insurgencies have traditionally formed, the parks would provide an early warning system without militarizing the borders. Thus, while critical to regional conservation, peace parks may also be critical to security within Liberia itself.

- Charles Chester
Lecturer, Brandeis University, USA
Author of *Conservation Across Borders: Biodiversity in an Interdependent World*

Shared conservation stewardship across the U.S.-Mexican border: Protecting resources to ease political tension

The Sonoran Desert straddles the U.S./Mexico border in an inverted “U” around the Gulf of California, covering an approximate total land area of 310,300 km². The U.S. National Park Service called for an international peace park over the border as early as the 1960s, and advocacy efforts for such a designation have waxed and waned ever since. Limited success was achieved through a “sister park” initiative in the 1990s, under which some coordination occurred between land managers on either side of the border. Yet mostly due to deep political and cultural tensions, the two countries were never able to agree on a “peace park” designation. In addition, a significant complicating factor has been the presence of a third sovereign entity: the Tohono O’odham Nation, with the second largest reservation in the U.S.—75 miles of which run along the border. Today, the two principal barriers to the establishment of an international peace park remain the dual problems of illegal immigration and drug trafficking. Although these activities have occurred within the Sonoran Desert for decades, the past fifteen years has seen their magnitude and violence increase dramatically. Ultimately, the best chance for designating an international peace park in the region would be to demonstrate how coordinated land management under a peace park designation could provide solutions to these specific problems.

- Belinda Sifford
Director of Institution Development and Adjunct Professor of Law, New College of California, San Francisco, California, USA

Border Crossings: Transforming Images to Capture the Power of Cross Border Conservation

With an area over 9.8 million square kilometers (3.7 million square miles) and immense borders shared with two respected nations, the United States contains numerous examples of positive and productive conservation cooperation across borders. Regrettably, the shortcomings and missteps regarding border interactions, along with sparring between the U.S. and its direct neighbors, have captured public and media attention. With the recent recognition of global environmental issues and the threats posed by climate change, the moment is timely to change negative perceptions of borderland interaction. Drawing on experiences in Big Bend, Cañon de Santa Elena, and Maderas del Carmen in the Chihuahuan Desert, coupled with numerous other efforts along both the U.S.-Mexico and U.S.-Canada borders, this presentation focuses on the challenges of border conservation but with an emphasis on past successes and the powerful potential for future transborder collaboration.

1B Education across boundaries

- Dr Lex Blood, Geology Instructor (retired), Flathead Valley Community College, Kalispell, Montana, USA
Marilyn Blair, Information and Technology Specialist, US Geological Survey, Glacier Field Station, USA

Educators Collaborating across Boundaries

The presentation will cover background, mission, and accomplishments for The Crown of the Continent Ecosystem Education Consortium - COCEEC - founded in 1995 "to bring a bioregional focus to education in the Crown of the Continent Ecosystem." As natural resource management concepts moved from a focus on small areas to watershed- and ecosystem-based management, it became apparent that educators also must move in that direction. The logical step was to present local ecological information in a broader context of the entire Crown of the Continent Ecosystem. Meeting semi-annually, the approximately 25 Participants provide a network for educators and actively develop ecosystem-focused curricula, workshops, and projects.

COCEEC's first educational resource project in 1997 was "A Map Without Boundaries." This map portrays only landforms, without political boundaries, in order to draw attention to the ecosystem as a whole. In the spring of 2000, The Wilburforce Foundation provided grant monies COCEEC used to commission the Crown of the Continent Ecosystem Profile. The Profile is a science-based description and discussion of the natural environment, history, and culture of the Crown, to be used primarily as a reference for middle, high school, and entry-level college educators, as well as interested laypersons. The Profile brings together voluminous and widely scattered material from two Canadian provinces, one U.S. state, and two federal governments in a useful, readable manner.

COCEEC's website provides Participants networking as well as educational resource information. Currently, small grants are provided semi-annually for Participants to development activities using the Map and Profile.

- Len Broberg, Program Director, Environmental Studies Program, University of Montana, USA
Michael Quinn, Associate Professor, Faculty of Environmental Design, University of Calgary, Canada

Transboundary environmental education: a graduate program case study

Since 1999, the Environmental Studies Program at The University of Montana has joined with the Faculty of Environmental Design at the University of Calgary to offer the Transboundary Policy, Planning, and Management Initiative (TPPMI). This graduate-level initiative, supported by the Henry P. Kendall Foundation, offers student research and internship support, shared courses, and faculty exchange to explore and develop the knowledge and skills necessary to manage complex issues that transcend domestic or international administrative borders in the emerging field of transboundary natural resource management. The premise of the initiative is that the administrative lines and rectilinear grids that we have imposed on the landscape for historical, political and socioeconomic purposes rarely correspond to ecological spatial patterns. The enterprise of interdisciplinary environmental management is largely an act of transcending boundaries; not just of the administrative and jurisdictional lines that appear on maps, but also the modernist divisions between the studies of nature and culture. The initiative facilitates exploration across less tangible borders such as disciplinary, pedagogical and cultural boundaries. We highlight the benefits and challenges of offering cross-border, interdisciplinary academic experiences for students and faculty. In particular, we focus on lessons learned from an annual transboundary field course offered jointly to Canadian and American students from Alberta and Montana. We offer reflections based on our experiences over the past six years with the aim of promoting further collaboration and the development of similar initiatives.

- Theresa Sowry
Peace Parks Foundation and World Wildlife Fund, South Africa

Successes and challenges that face a peace parks training and education facility

The Southern African Wildlife College (SAWC) has been training natural resource managers from conservation organizations across SADC for the past 10 years. WWF-SA was instrumental in the fundraising and establishment of this non-profit training institution. The establishment of the Peace Parks Foundation and the realization of transfrontier conservation areas (TFCAs) across Africa led to the SAWC and the Southern

African College of Tourism (SACT) becoming training institutions primarily focused on training and capacity building staff of these TFCAs. Training takes place at a number of different levels, from workforce to manager. Most of the training can be conducted in-situ or ex-situ. Training is needs driven and focuses on targeted skills development. Where necessary, training has been aligned to specific needs of these TFCAs, namely community involvement (incl. educational awareness, conflict resolution, leadership skills, community participation); animal management (incl. problem animal control, disease spread); alien vegetation management ; landscape management (as opposed to reserve management) and tourism development. Over the past 10 years, over 50 million rand has been spent on capacity building in excess of 2000 Africans from 24 different countries. Most of these beneficiaries were staff from TFCAs. This has resulted in these Colleges developing strong relationships with conservation agencies and like-minded organisations across Africa. Continual challenges faced include the diminishing pool of funding opportunities; conservation organisations having insufficient funds for training; training not considered as priority; language barriers; level of education; and different expectations from different countries. SAWC and SACT, in collaboration with the Peace Parks Foundation, strive to overcome these challenges and standardize training within TFCAs.

- Perry Brown, Dean, College of Forestry and Conservation, The University of Montana, USA
 Lisa Gerloff, RM-CESU, College of Forestry and Conservation, The University of Montana
 Kathy Tonnessen, National Park Service, RM-CESU, and The University of Montana
 Christine Whitacre, National Park Service, RM-CESU and The University of Montana

Rocky Mountains Cooperative Ecosystems Unit (RM-CESU): a Partnership to Advance Research, Technical Assistance and Education for resource managers in the Rockies

The Rocky Mountains Cooperative Ecosystem Studies Unit (RM-CESU) is a partnership of agencies and universities in the United States and Canada that has as its mission to facilitate natural and cultural resource management and science in the Rocky Mountain bioregion. Using this partnership we have been able to work across the border, especially in the Glacier-Waterton region to facilitate education and research on topics related to resource management issues and social science. Some of our activities have included: sponsorship of science symposia, internships for students to work on transboundary issues, and seed grants to allow for work on Indian cultural issues and manager communication strategies. We have worked with the Rocky Mountains Inventory and Monitoring program of the National Park Service to engage US and Canadian park managers in devising monitoring protocols that can be used to assess ecological integrity on both sides of the US/Canada border. We have also arranged for various collaborative activities between the University of Montana and University of Calgary involving the Crown Managers' Partnership and review of wildlife research studies in the Greater Yellowstone Ecosystem. The RM-CESU was also instrumental in providing a transfer of funding for water quality work in the North Fork of the Flathead River, along the international border, by a number of agencies and universities.

1C Transboundary wildlife management I

- Diane Casimir, Species at Risk Coordinator, Parks Canada
Dr. Peter A Dratch, Endangered Species Program Manager, National Parks Service, USA

Recovering trans-boundary populations of rare or endangered species in national parks

Because wildlife species usually don't detect jurisdictional boundaries, the success of recovery programs for imperiled species often depends on cooperation and collaboration among a nation's governmental agencies, non-governmental organizations, private landowners and public. International Peace Parks represent additional opportunities for trans-boundary recovery efforts, stimulating cooperation among nations. However, international recovery efforts will be greatly influenced by the status of species in different jurisdictions. For example the grey wolves, bald eagles, grizzly bears and Canadian lynx in Glacier National Park are federally listed as Threatened under the United States Endangered Species Act (ESA), whereas these same populations, and in some cases the same individuals, in Waterton Lakes National Park are federally listed as Not at Risk under the Canadian Species at Risk Act (SARA) or, in the case of the grizzly bears, have been assessed Special Concern by the Committee on the Status of Endangered Wildlife in Canada but are not legally listed under SARA. In contrast, populations of northern leopard frogs that until recently occurred in Waterton Lakes National Park are now the focus of a reintroduction program, and are federally listed as Special Concern under SARA but are Not at Risk under ESA. While not an official peace park, Cuyahoga Valley and Point Pelee National Parks have formed an international sister-park partnership and are developing collaborative recovery efforts for migratory bird species shared between the two parks. We explore challenges and opportunities for listing and recovering rare or endangered trans-boundary species and populations in Canadian and US National Parks.

- Louisa Willcox, Director, Natural Resources Defense Council Wild Bears Project
Susan-Casey Lefkowitz, Director, Natural Resources Defense Council Canada Program
Lisa Upson, Conservation Consultant, Montana, USA

Transboundary Grizzly Bear Conservation: Challenges and Opportunities for Multi-Scale Partnerships

As North American grizzly bear range continues to contract, the U.S.-Canadian border region of the west becomes a crucible for transboundary conservation. Northern U.S. grizzly populations are in danger of becoming isolated, while Canadian grizzlies are threatened in Alberta and southern British Columbia, with no legal protections. The border region is an ecological hotspot not only for grizzly bears but many other species. However, increasing human activities fragment the landscape, making it less habitable for sensitive species. Management regimes don't reflect the level of need for improved international cooperation.

We conducted a literature review and interviews of fifty ENGO, agency and Tribal members to determine what a shared vision might look like, what process-causal obstacles prevent meaningful cross-border collaboration, and how collectively we might change current patterns. We found that borders have different meanings to different stakeholders, and that narratives, or the stories people tell, play a considerable role in how problems and solutions are defined. A new larger-scale storyline rooted in values held by citizens on both sides of the border is needed.

Visions of successful transboundary conservation range from those which manifest in community-based logistical coordination to new protected areas to broad-scale regional land use planning. Clearly, transboundary conservation must involve multiple scales and partnerships at various levels between residents and professionals alike. Success stories from Washington over through the Flathead and the Peace Park demonstrate that, while there are considerable barriers, there are hopeful strategies. U.S. and Canadian citizens want grizzlies on the landscape; shared management of this shared species is our shared charge.

- Katherine C. Kendall, USGS, Northern Divide Grizzly Bear Project, Glacier Field Station, Glacier National Park, Montana, USA
 Jeffrey B. Stetz, University of Montana, Northern Divide Grizzly Bear Project, USA
 David. A. Roon, University of Idaho, USA
 Lisette P. Waits, University of Idaho, USA
 John B. Boulanger, Integrated Ecol. Research, BC, Canada

DNA-based density estimate for grizzly bears in Glacier National Park, Montana

Grizzly bear population size in Glacier National Park (GNP), Montana, was last estimated in 1971 using sightings of unmarked bears. We estimated the density of the population in 1998 and 2000 in and around GNP using hair sampling and microsatellite analysis to identify individual bears. We employed two methods concurrently to collect bear hair. We distributed baited barbed-wire hair corrals each year on a grid to systematically sample the study areas during multiple 14-day sessions. The second sampling method collected hair at 2-4 week intervals from unbaited bear rub trees along trails. In 1998 and 2000, we identified 204 and 231 individual grizzly bears, respectively on 8,100 km² in the greater Glacier area. We describe a database of grizzly bear capture histories we developed with data and genotyped biological samples from bear managers in Montana, Alberta, and British Columbia. Using these data, population density was corrected for lack of geographic closure based on the proportion of time that radio-collared bears spent on the sample grid. Grizzly bear density was highest within GNP and lower outside the park in the US where the majority of mortality occurred. Grizzly bear density in GNP is among the highest reported for interior brown bear populations in the world. This study provides baseline information important for managing one of the few remaining populations of grizzlies in the contiguous United States.

- Joseph Olumide Oseni
 Department of Agricultural Economics and Extension, Federal University of Technology, Nigeria

Ensuring Peaceful Coexistence between Man and Animals in Protected Areas in Nigeria

The conservation of wildlife is a social process involving the care and concern of man for the different wild animal species so as to maintain a harmonious existence between himself and the environment. The study revealed that the reckless killing in the game reserves not only for the hunters' consumption but also for commercial purposes may lead to the extinction of our valuable animal species. The excesses of man in this direction are also manifested in his nocturnal hunting activities. Animals that do not come out during the daytime are hunted and killed recklessly in the night. The slow moving among these nocturnal animals, especially the gastropods (snails) is collected with ease in large numbers. Additionally, man kills the wild animals not only for meat but also for their furs, feathers, skins and other precious matters (e.g. ivories from elephants), which are converted to other materials needed by man. The ecological implications of these activities of man include: extinction of valuable big animal games, emigration of these animals from our environment to where they could be safe and destabilization of the biological equilibrium which could have been established in an undistributed ecosystem. It was recommended that the various arms of government should legislate against hunting of wildlife for meat and other precious matters from them. Parks for the game reserves should be established at the local, state and national levels. These parks must be knowledgeable managed. There is need for the proper execution of laws regarding commerce in wildlife. Also, people should be constantly educated in the ways they should relate with wild animals. Publication of educational bulletins and other information media on conservation of game reserves is indispensable.

1D Establishment and implementation of peace parks

- Prof Willem van Riet, Chief Executive Officer, Peace Parks Foundation, Stellenbosch, South Africa
Mr Werner Myburgh, Peace Parks Foundation, Stellenbosch, South Africa

Procedures and processes in the establishment and development of transfrontier conservation areas in southern Africa

There is, as yet, no formal guideline or standard format for establishing and developing TFCAs in the SADC Region. However, this review has revealed certain spheres of common concerns that are essential considerations in the process of establishing TFCAs, and for ensuring that TFCAs are credible and legitimate. Although the establishment and development of each TFCAs is unique, the following generic milestones have been identified as key steps in the TFCAs process:

- (i) Demonstration of political will and support for the TFCAs concept;
- (ii) Constitution of multi-lateral planning teams consisting of government and non-government technical expertise to develop a Memorandum of Understanding (MoU) between the participating countries;
- (iii) Signing of MoU by participating governments to facilitate the establishment of the TFCAs and initiate a formal negotiation process and constitution of an institutional framework;
- (iv) Development of an International Treaty on the establishment of the TFCAs;
- (v) Signing of International Treaty and implementation of institutional framework as mandated by the Treaty such as the formation of a Joint Management Board;
- (vi) Launching/opening ceremony (formal opening of Transfrontier Park and/or Conservation Area); and,
- (vii) Implementation of accepted conservation and economic principles in order to develop the TFCAs into a sustainable entity.

Peace Parks Foundation has played a supportive role to the southern African Governments and their conservation agencies in rolling out and implementation of the above-mentioned steps. Interesting variations and adaptive organisational development changes have evolved, centred around the chronological steps outlined above. An adaptive management approach has also evolved allowing for the retention of revenue, public-private partnerships and joint management structures outside the ambit of existing national legislation within a partner country to a TFCAs, to name but a few. TFCAs have been seen as a true facilitator and catalyst for addressing often long-standing national stumbling blocks due to increase political and international recognition.

- Syed Ainul Hussain, Wildlife Institute of India, Dehra Dun, India (not attending)

Prospects of creating Transboundary Protected Areas in South Asia with India as the focal country

The creation of Transboundary Protected Areas in which two or more countries cooperate in management and conservation of ecologically important areas located in border regions is a growing trend. South Asia is one of the richest regions in terms of biodiversity; it is at the same time politically unstable. So far no Transboundary Protected Area has been declared in this region. The present paper examines the potential of various sites and prioritizes them for declaration as Transboundary Protected Areas taking India as the focal country. The idea is that this would not only lead to better conservation and also act as a means to achieve peace and regional cooperation in the region. Lying at the centre of South Asia, India has a common border with seven countries. Of the 608 Protected Areas of India, 24 are located in the border region of India. For prioritization of Protected Areas we analyzed information from 12 Protected Areas, where there were either two or more contiguous protected areas across the Indian boundary or a cluster of protected areas in India and in the neighboring countries without intervening land. These sites were spread over four major biomes viz mountain, forests, deserts and coasts. The sites were categorized on the basis of five criteria and 24 indicators with varying degrees of thresholds. The scores were given on the basis of apriori knowledge of the scorer of the site and based on literature survey. Among the 12 sites, Dibang Wildlife Sanctuary, Arunachal Pradesh bordering China and Myanmar ranked first followed by Changthang Wildlife Sanctuary bordering China, and Kanchendzonga National Park bordering Bhutan. These sites are largely mountain ecosystems. Among forested ecosystems Manas Wildlife Sanctuary and Valmiki National Park ranked first. Now, there is a need to initiate dialogue and secure political commitment from the participating countries under the auspices of World Commission on Protected Areas or other International Agencies.

- Lynda Schneekloth, Professor School of Architecture and Planning, University of Buffalo/ SUNY
Kerry Mitchell, Program Manager, Political/ Economic Relationships and Public Affairs Canadian Consulate General
Patrick Robson, Director of Community Integration, Regional Municipality of Niagara, Ontario
Robert Shibley, Director, Urban Design Project, School of Architecture and Planning, University of Buffalo/ SUNY

The Niagara Cross Border Peace Park: A Proposal

The cross-border Niagara region will soon celebrate the bicentennial of the War of 1812 which was, at least for two countries, the beginning of two hundred years of peace. The boundaries agreed upon at the closure of that engagement have both divided and connected the United States and Canada, enabling treaties, trade, cross border investment, and protection of natural resources. Two hundreds years of peace between two nations is a significant achievement.

Since early 2000, there has been an effort to explore the possibility of nominating the cross border Niagara region as a Peace Park and a significant regional conversation has ensued. The First Principle established is the protection and enhancement of the significant natural and cultural heritage of the region to include the Niagara River, Falls and Gorge, the Niagara Escarpment, the Important Bird Area, and stories of the origin of hydroelectric power, the Underground Railroad, industry, and tourism as an activity.

Deindustrialization and decline offer strong motivation for the Second Principle: to promote sustainable economic development, i.e., conserving and enhancing natural processes and places and managing growth. New plans such as the "The Greenbelt Plan," "Places to Grow Plan" out of Ontario, Canada and the Niagara National Heritage Area and Niagara River Greenway Plan in WNY substantiate the effort.

The Third Principle fosters peace and creative cooperation, a particularly daunting goal in the post-9/11 years even while the requirement for cooperation and mediation has never been greater. The strength of interactive cross border regional identification can only enhance security while increasing flow. All of this requires the Fourth Principle, education and research, and the increased recognition of the role of universities to help create and sustain resilient communities.

The imagination of a Peace Park at the Niagaras requires us to think about a large park occupied by diverse elements, activities, places, and histories. It is about placing our cities and settlements in the park, a Peace Park, that celebrates our neighborliness and our stewardship responsibilities.

- Dr. Nigel Young, Former Chair of the Peace Studies Department at Colgate University, New York, USA
Abigail Radis, Graduate Student & Assistant to Antonia Young, Chair of Balkans Peace Park Project- BPPP
UK Committee

The Role of Resource Sharing Initiatives in Peace Building

Structurally, this international relations paper consists of four parts with a commitment to the interdisciplinary needs of scholarship required for the research of peace and conflict studies. Primary research conducted in Europe and the US include interviews with scholars and practitioners as well as attendance at relevant seminars and professional conferences. Two semester-long internships with international organizations, The World Conservation Union and the International Institute for Sustainable Development- IISD, have provided valuable opportunities to observe an institutional perspective on fieldwork as well as quantitative data on the issues at hand. Both of these settings provide opportunities for "joint participation in conservation activities [which] may help build trust between adversaries" and are specifically cited as forums to this end (Saleem H. Ali).

A critique of the impact of certain representative initiatives using the Peace and Conflict Impact Assessment Model (PCIA), as applied by Anne Hammill, of the IISD, and Charles Besançon, of The World Conservation Union's World Commission on Protected Areas provides evidence that this model "refuses to accept peace-building projects at their self-described face value" (Hammill and Besançon). Obstacles that hinder the process of resource sharing initiative development will be outlined.

A discussion of the comparative research of older water sharing initiatives and trans-boundary protected areas

(i.e. the oldest trans-boundary protected area, Waterton Glacier International Peace Park) with the BPPP, which is in the beginning stages of development, is provided. Methods of comparison have been facilitated through project development and conference attendance with Dr. Nigel and Antonia Young who launched the initiative for this Balkan Peace Park in 1999.

- Martín Alcalde Pineda
Executive Director, Fundación Peruana para la Conservación de la Naturaleza, Pronaturaleza, Lima, Peru

Ichigkat Muja - A park for peace and conservation in the Cordillera del Cóndor Mountain Range.

The Cordillera del Cóndor Mountain Range is a physical and ecological unit that straddles de Perú-Ecuador border. This is a relative isolated mountain range located in the eastern area of the Andes that lies in a highly significant global conservation zone, hosting the most diverse flora and fauna, very restricted to the region. These diverse fauna and flora area key elements in the great hydrological cycle of the Marañón River, the major tributary of the Amazon River. This region has been a sacred place for the indigenous populations of the Jivaroan ethnic groups, such as the Shuar, Achuar, Awajun and Wampis groups. These groups have lived in this region for more than 100 years. Likewise, the border of Peru and Ecuador, has witnessed territorial conflicts for more than 150 years due to the gold deposits and other mineral but in 1998, after intense negotiation a final agreement resolved the border conflicts and put an end to any difference between these two brother countries.

This case study summarizes the work done for over three years in the Project: “Paz y Conservación en la Cordillera del Cóndor Ecuador-Perú”, the same that was developed thanks to the financial support of the International Tropical Timber Organization (ITTO). This initiative is one of the most important initiatives that were carried out between both countries as a result of the peace and conservation agreements between them creating an environment for long-lasting peace. The project also presents the strategies that were carried out in order to develop a participative process jointly with the Awajun and Wampis groups of the Peruvian component and their importance in order to define the proposal of the Ichigkat Muja National Park.

Finally, the work includes the efforts and current actions that the indigenous populations have been promoting among the national authorities.

1E Indigenous peoples and transboundary conservation

- Elliot Fox
Director of Land Management, Blood Tribe (Kainai) Administration, Stand Off, Alberta, Canada

Establishing a Baseline of Cultural and Renewable Resources on Blood Indian Reserve #148A (Blood Timber Limit) through Co-operative Transboundary Research and Information Sharing

The Blood Indian Reserve #148A (Blood Timber Limit) is a 1,938 Ha (4,790 acres) parcel of Federal (Canada) Indian Reserve land located in the upper Belly River watershed in southwest Alberta, Canada and is situated primarily in the Sub-Alpine and Montane Eco Subregions on the northeast edge of the Crown of the Continent Ecosystem. The Blood Timber Limit is one of two parcels of land that comprise the Blood Indian Reserve, that was set aside for the use and benefit of Kainai (the Blood Tribe) in 1882, subsequent to the terms of Treaty #7, between Canada and five (5) First Nations, including the Blood Tribe, in 1877. Blood Indian Reserve lands are jointly governed by the Kainai (Blood Tribe) Chief and Council and the Government of Canada, Department of Indian Affairs. Commercial development on the Blood Timber Limit since its establishment has been limited to major construction for public transportation and natural gas extraction purposes and minor construction of small buildings to facilitate small business and recreational and spiritual experiences. The majority of the Blood Timber Limit remains undeveloped and in a wilderness state and its location, being adjacent to the significant protected wilderness area of the Waterton-Glacier International Peace Park, has resulted in the ecological integrity of this area to be maintained to a very high degree. Until recently, active management of the Blood Timber Limit by the Government of Canada had been minimal, although sustainable utilization of cultural and natural resources in and around this area has continued by the Blood Tribe since Treaty #7. In the early 1990's, due to concerns over increased development, resource conservation and compliance with evolving environmental legislation, various cooperative research and management initiatives involving transboundary agencies and the Blood Tribe commenced, with a focus on quantifying existing cultural and ecological resources in the area of the Blood Timber Limit. The interest of the Blood Tribe in these initiatives was to establish and compile baseline data reflecting existing cultural and renewable resources on the Blood Timber Limit, to assess the current state of those resources and continue their sustainability. Prior to this, technical information in possession of the Blood Tribe was minimal. Also in the early 1990's, interest by some Blood Tribe members in resource conservation and science increased, which resulted in the completion of post-secondary education programs by those members and improvements in the collective knowledge and understanding of "Western Science" by the Blood Tribe. As a result of those cooperative transboundary research and management initiatives, baseline data now exists for various significant resources on the Blood Timber Limit and the Blood Tribe employs members in natural resource administration and management capacities that are formally educated in Earth and Information Science. The combination of these two factors integrated within the framework of existing traditional knowledge and administration of the Blood Tribe, has facilitated improvements in sustainable utilization and management of the Blood Timber Limit. The presentation will highlight key transboundary research initiatives, results and agencies involved.

- Dorothy T. First Rider
Blood Tribe Tribal Government Senior Researcher and Traditional Land Use Coordinator, Stand Off, Alberta, Canada

Role of Indigenous Peoples in Transboundary Conservation

The recognition of the role of Indigenous Peoples in Transboundary Conservations has been a very slow process. Only now have Indigenous people and more specifically First Nations people have been included as an essential facet of transboundary conservation. First Nation people are now able to identify important significant sites and work with government and industry in the protection of these sites through the use of traditional land use studies and traditional land use assessments.

This presentation will illustrate how indigenous information is crucial in the protection of the overall landscape and that the identification of protective measures is the responsibility of all stakeholders.

Concurrent Sessions 2 – Monday September 10, 2007
3:30 pm – 5:00 pm

2A International Peace Parks – conservation and conflict II

- Krishna Roka
Yale School of Forestry and Environmental Studies, USA

Protected areas during the Maoist rebellion and their future in Nepal

Maoist insurgency of Nepal became one of the most deadly and bloodiest civil war in the post-communist era. The conflict lasted for 10 years from February 1996 to April 2006, killing more than 14000 people, violating human rights, destroying infrastructure, displacing thousands of people and affecting natural resource management. Protected areas during the conflict were targeted by the Maoist rebels for various reasons: all national parks and reserves were under direct control of the king and even named with a “Royal” prefix, army stationed on each park, remote location, and to use them as training ground, transportation corridor and income source. As a result of Maoist threats and attacks office and staffs of two national parks and one hunting reserve were moved to district headquarters, security posts in all national parks were significantly reduced, patrolling and activities of park staff were affected, vehicles and weapons looted, poaching increased, wildlife population declined (e.g. Rhinoceros) and community involvement reduced. In the post-conflict Nepal “royal” has been removed from the names but the army is still stationed in the parks and efforts to re-establish posts and offices are underway. Future management of protected areas is under debate with the Maoists and locals proposing community management with removal of army while the army argues it can better manage the parks with more resources and forces. This study shows that protected areas had nothing to do with the cause of the conflict but were heavily impacted as consequences of it

- Jarullah Mansoori
Legal Advisor and chief of staff, National Environmental Protection Agency, Islamic Republic of Afghanistan

Developing a Transboundary Protected Area in a Conflict Prone Region

The proposed Pamirs Transboundary Peace Park will encompass much of the Pamirs, as well as sections of the Hindu Kush, Karakoram, Himalayas, Tien Shans, and Kunlun ranges. This park will create one of the most spectacular mountain region protected areas on earth, and work to strengthen cooperation among the countries that share this region.

Four countries – Afghanistan, Pakistan, China and Tajikistan – meet at this knot of mountains. Marco Polo sheep and other wildlife of the Pamirs regularly wander or migrate across international borders, leaving them vulnerable to differing levels of management and enforcement in the various countries. Wildlife know no political boundaries, but may be affected by them. There is thus a critical need for transboundary collaboration for the protection of wildlife in the Pamir region. The four governments are cooperating to determine the state of knowledge of wildlife and research needs, state of legislation and policy concerning reserves and other lands, eco-tourism potential and development, trophy hunting, environmental education, community participation in resource management, community development, and the identification and establishment of new or expanded reserves and buffer zones. This level of cooperation is unprecedented and opens the door for cooperation on other issues.

Finally, the Pamirs Transboundary Protected Area will also strengthen regional security, and encourage dialogue between the four countries, and facilitate trust, understanding, and cooperation among nations. Political coordination is frequently a necessary facilitating step to permit initial scientific cooperation and data sharing. Countries that have economic incentives to work together (such as with cost and revenue sharing among nations) frequently do work together cooperatively. Scientific and environmental cooperation frequently occurs at a technical level, and provides a common language and common shared goals.

- Anna Grichting
Doctor of Design Candidate, Harvard Graduate School of Design, USA
Researcher and Coordinator, Green Line Peace Park

From Military Buffers to Transboundary Peace Parks. The case of Korea and Cyprus.

Cyprus and Korea are partitioned by a Military Buffer Zone. In both of these enclosed linear enclaves, the negative impact of war and separation has allowed nature to be reclaimed, inserting a positive dimension into the landscapes and allowing them to become havens of biodiversity. There are ongoing initiatives to transform these buffer zones into Transboundary Peace Parks; both projects aspire to help overcome conflict and foster reconciliation in constructing a common and positive future around Nature and the Environment. Aside from becoming laboratories of ecological territorial planning and acting as havens to rare and endangered species, these initiatives have the potential to open gateways to peace, act as memorials to the many victims and help to create eco-tourism and other sustainable activities for mutual gain by all parties involved.

- Hall Healy
Interim President, The DMZ Forum, Inc., USA

Korean Demilitarized Zone (DMZ) Peace and Nature Park

For over 50 years the DMZ has been part of a geopolitical vacuum and symbol of war, tension and separation. During this period nature there has regenerated. The DMZ and contiguous Civilian Control Zone in South Korea contain five rivers and many ecosystems and over 1,200 plant, 50 mammal, over 80 fish and hundreds of bird species, many of which are globally endangered. The DMZ provides a unique link to the entire East Asia flyway system from Russia down to Australia.

Safeguarding the DMZ as a transboundary nature and peace park, like those in South Africa, Central America and Asia, can provide significant ecosystem services in the form of biodiversity, jobs, revenues from sustainable agriculture and fishing, eco-tourism and other sustainable economic activities and major water resources. It can be a symbol of peace, a buffer and example of cooperation; an opportunity to maintain, reintroduce species and habitats largely extirpated from Korea; a rare chance to study what happens when an area like this is left untouched for over 50 years. The ROK Ministry of Environment (MOE) has stated that the DMZ is a priority area to protect. A global coalition of experts, patterned after the 6-Party Talk structure, has been formed to help the Korean people preserve the cultural and biological resources of the DMZ and adjacent areas.

2B Transboundary corridors and connectivity I (Y2Y)

- Dave Quinn
Program Manager, Wildsight, Kimberley, British Columbia, Canada

Wildsight: Partnerships in Action: The Cabinet Purcell Mountain Corridor

Wildsight Program Manager Dave Quinn will summarize the Wildsight/Yellowstone to Yukon (Y2Y) Cabinet-Purcells Transboundary Conservation Plan. This presentation will use the ongoing Cabinet-Purcells transboundary conservation partnership as a case study to highlight Wildsight's partnership with Y2Y and the diverse set of groups involved in creating this transboundary conservation vision. The talk will introduce attendees to the biologically rich Cabinet-Purcells region, the conservation issues at play (including endangered mountain caribou), summarize the Cabinet-Purcells plan, and touch on the complex process of landscape-level planning involving a diverse range of interests. Wildsight works locally, regionally and globally to protect biodiversity and encourage sustainable communities in Canada's Columbia and Southern Rocky Mountain region. This area is internationally recognized as a keystone to conservation in western North America. Wildsight received the 2005 Canadian Environmental Award for Conservation in recognition of its successful work to protect the region's wildlife and wildlands. For more information, please visit www.wildsight.ca.

- Gary Tabor
Director, North America Program, Wildlife Conservation Society

Carnivores, Ungulates, and Corridors "Oh My!" - Conservation Science as the touchstone of Yellowstone to Yukon

Yellowstone to Yukon grew out of large landscape thinking inspired by advances in the field of conservation biology. Since its formal founding, Y2Y has nurtured a plethora of conservation science initiatives from climate change to ecological connectivity. The "laboratory" of Y2Y has forwarded new ideas on wildlife movement; on aquatic and avian ecology; and on conservation planning in general. The gap between theory and on-the-ground implementation of science has been remarkably small in the Y2Y region; and as such, makes Y2Y one of the best proving spots for large landscape conservation. This talk will provide an overview of some of the best of Y2Y science and how that science has translated into tangible conservation.

- Charlie Chester
Lecturer, Brandeis University, USA
Author of *Conservation Across Borders: Biodiversity in an Interdependent World*

The Yellowstone to Yukon Conservation Initiative: A brief history of a big idea in landscape conservation

The phrase "Yellowstone to Yukon" describes a region, an organization, a network, and a "vision of the landscape." To a great extent, Y2Y was initially conceived on the basis of scientific research into how carnivores use the landscape, and accordingly early participants mostly consisted of conservation biologists and science-oriented activists concerned over the extirpation of the region's large carnivores (viz., wolves and grizzly bears). Two other important influences in the Y2Y's origins included a widespread acceptance of the "Greater Yellowstone Ecosystem" concept, as well as various cooperative efforts that emanated out of the Waterton-Glacier International Peace Park. Since Y2Y's original conception in 1993, numerous observers have described it as the premier example of a "large landscape" scale conservation effort in North America—if not the world. Over time, direct participation in Y2Y has changed and expanded significantly, with a loosely structured "Council" and "Coordinating Committee" evolving into a more formal organizational structure with staff, trustees, and consultants. The Y2Y organization now reaches out to a wide range of conservation audiences, including sportsmen and aboriginal peoples. The Y2Y organization also focuses on key geographical priority areas, emphasizing the role of local communities in effectively responding to the threat of biodiversity loss. Largely due to its appealing landscape vision incorporating two national icons, Y2Y has both coordinated previously disparate conservation activities and has attracted additional resources for the conservation community in the region.

- Jennifer Miller
Program Officer, Yellowstone to Yukon Program, Wilburforce Foundation, Seattle, Washington

Why would a Seattle-based foundation invest more than \$20 million over a period of ten years in an effort called Yellowstone to Yukon?

As a foundation with a mission to conserve the wildest and most intact wildlife habitat remaining in western North America, Wilburforce identified the Y2Y region ten years ago as one of our best opportunities to accomplish that goal. Working across boundaries -- between countries, states and provinces, between organizations, in the interface between science, policy, management, and advocacy -- we have supported efforts to conserve wildlife habitat on the ground and in the service of the larger vision of interconnected wildlands known as the Yellowstone to Yukon Conservation Initiative. Others have taken notice, too, of the successes of the Y2Y effort, and during the last decade the resources of national and international organizations and of other foundations have begun to coalesce into partnerships and collaborations that begin to match the scale of this hundred-year vision. This talk will share a foundation's perspective on the Y2Y effort during the last decade, from its beginnings as a loosely organized network to a strategic effort that adds value and plays a unique role in creating opportunities for on-the-ground conservation.

2C Transboundary wildlife management II

- Roger Creasey, Manager, Ecosystem Management, Shell Canada and University of Calgary, Canada
 Cristina Eisenberg, Oregon State University, USA
 Tyler Muhley, University of Calgary, Canada
 Dale Paton, University of Calgary, Canada
 Justin Pitt, University of Alberta, Canada

Critters without Borders: Collaboration In Transboundary Wildlife Research

The SW corner of Alberta is home to several species whose home ranges span across ecological and political boundaries. These species (eg. elk, grizzly bear) are important as indicators of robust ecosystems. Studying wide ranging species requires extensive (and thus expensive) research programs and thus collaborative efforts act to share the burden of cost & project management, and provides a basis for complementary research projects. In this presentation, the SW Alberta Montane Elk Research Program will be used to demonstrate the benefits of a collaborative approach to wildlife research between governments, industry, the public, and research institutions.

- Jennifer A. Grant, Policy Analyst, Pembina Institute, Calgary, AB
 Michael Quinn, Associate Professor, Faculty of Environmental Design, University of Calgary

Factors influencing transboundary wildlife management in the Crown of the Continent

The political and administrative borders imposed on landscapes rarely align with ecological spatial boundaries. The Crown of the Continent Ecosystem (CCE) supports internationally recognized habitat and species diversity; however mounting human demands and a variety of uncoordinated jurisdictional mandates threaten the region's natural resources. Cooperative management approaches, such as the Crown Managers Partnership, are therefore necessary to mitigate the effects of boundaries. This presentation identifies the driving forces and barriers to transboundary wildlife management through: 1) a case study of a multinational European initiative and 2) qualitative interviews with CCE managers, biologists and scientists. Driving forces include social factors such as long term relationships and public values. Institutional obstacles and a lack of financial and human resources are among the top barriers to transboundary management. Recommendations to the Crown Managers Partnership include clarifying and formalizing the Partnership's identity and common problem statement, hosting a transboundary symposium, and enlisting the assistance of other groups such as NGOs on a case by case basis. Recommendations to manage shared wildlife included a re-examination of traditional environmental problem solving techniques, and the use of metapopulation ecology.

- Kim Keating
 U.S. Geological Survey, Northern Rocky Mountain Science Center, Bozeman, Montana, USA

Why boundaries matter: understanding the spatial structure of bighorn sheep in Waterton-Glacier International Peace Park

Understanding relationships between ecological and jurisdictional boundaries is vital to managing species like bighorn sheep that have extensive home ranges and vulnerable metapopulation structures. Bighorns occupy open, patchily distributed habitats. Movements among habitat patches are traditional, with knowledge of favored bedding or feeding sites, and the pathways that link them, being passed from one generation to the next. These traditions foster formation of distinct social groups and, in turn, metapopulations with complex spatial structures. Preserving these spatial structures is key to the long-term conservation of this species. In a 5-year study of bighorn sheep in Waterton-Glacier International Peace Park, seasonal ranges, migration routes, and interchange among subpopulations were examined using GPS-collared animals, genetic analyses, and disease assays. Results revealed important structure at multiple spatial scales. Matrilineal ewe/lamb groups comprised the smallest social and spatial units in the metapopulation, while rams exhibited more fluid social groupings and larger home ranges that overlapped those of multiple ewe bands. At broader

spatial scales, telemetry, genetic, and serology data all pointed to the existence of distinct subpopulations, each comprised of multiple ewe and ram groups. Computer-based habitat models suggest that these subpopulations are determined by factors that, in most instances, correlate poorly with jurisdictional boundaries. This work thus underscores the importance of adopting a large-scale ecological perspective when planning for the conservation of transboundary metapopulations.

- Steve Gniadek, Wildlife Biologist, Glacier National Park, Montana, USA
Rob Watt, Waterton Lakes National Park, Alberta, Canada

Wildlife Management in Waterton-Glacier International Peace Park

Independently and collectively, Waterton Lakes and Glacier NPs have a rich history of wildlife management in an area noted for a nearly complete assemblage of native wildlife species. A summary of wildlife management activities and issues will be presented, with an emphasis on cooperative projects, including recent research and management efforts involving elk and wolves, and opportunities for future collaboration. How this transboundary protected area forms the hub of a broader inter-connected ecosystem, requiring international cooperation and stakeholder involvement, will be discussed.

2E Transboundary and Peace Park Management

- Roland Stein
Transboundary Coordinator, "Pfälzerwald – Vosges du Nord" Biosphere Reserve, Germany
Chair, European Expert Group on Transboundary Conservation, IUCN World Commission on Protected Areas

"Intercultural experiences and transboundary success stories in an inhabited, large-scale protected area across the German-French border"

"Pfälzerwald – Vosges du Nord" Biosphere Reserve is the largest uninterrupted forest in Western Europe. Its 310,000 hectares stretch across a low-mountain range of Southwestern Germany and Northeastern France. It is characterized by a massif of coloured sandstone with magnificent cliffs, covered by deciduous, temperate broadleaf forest, dotted with small lakes and fens and passed through by numerous creeks. On its eastern edge it encompasses the famous German wine route with cozy half-timbering villages; on its western edge a vast plateau expands, with traditional orchards and meadows with thousands of orchids.

Man started to settle in this area from the mesolithic on and today tourists can visit neolithic caves, celtic ringwalls, roman villas and more than 80 medieval rock-castles along the German-French border.

Balancing conservation and biodiversity issues with the needs of local people and recreational tourism is the core challenge in this protected area where more than 300.000 people try to sustain their livelihoods and where in the transition zone urban-industrial and agro-industrial ecosystems marginally occur.

Transboundary protected area cooperation started in 1983. Since then, despite a wide range of intercultural problems and political in-fighting, many examples of good practice were achieved, of which some were partly funded by the European Union:

- The cross-border protection of flagship-species like the lynx, the wildcat, the peregrine falcon and various bats lead to the creation of joint stakeholder-networks and the construction of „green bridges“ for road-crossing wild animals.
- The implementation of sustainable, cross-border close-to-nature forestry initiated the creation of a cluster of nature forest reserves, including a transboundary core area.
- Rural markets, where local organic farmers from both sides of the border offer their regional produce, promote site-stable, ecologically sound agriculture resulting in food products of highest quality.

Furthermore, the presentation will highlight present and future challenges.

- Karen Miner, Senior Program Manager, National Parks Conservation Association, Center for Park Management, USA
Michael Heaney, Senior Director, National Parks Conservation Association, USA

Drawing on International Experience to Enhance Park Management: Operational, Financial, and Organization Best Practices

Drawing on national and international experience, the National Parks Conservation Association's Center for Park Management (CPM) has a unique perspective on park management. CPM focuses on improving the US National Park Service's capacity through helping parks develop and implement practical management strategies. CPM works with parks, on the ground, to address a wide range of local and systemic issues. Projects have covered areas of financial, organizational, operational and marketing strategy and include, but are not limited to: strategic and business planning, best practices for landscape management, fleet management, revenue diversification, partnerships, and community outreach.

Management issues are widespread and challenge the ability of parks to be effective and efficient land stewards. CPM believes that improving the management of the US National Park Service can be best served by taking a broad view of management practices and drawing from the experiences of parks in other developed and developing countries, as well as more effective knowledge transfer within the NPS. CPM will discuss international projects, highlight best practice studies and results, and present a theory of change model for moving forward. Finally, CPM will present plans and early stage results from an exciting project to explore cross-border best practices in park management.

- Dr. Goetz Schuerholz, Adjunct Associate Professor, University of Victoria BC, Canada
Dr. Rolf D. Baldus, Bonn, Germany

Community Based Wildlife Management in support of Transfrontier Conservation: the Selous-Niassa and Kawango Upper Zambezi (Kaza) challenges

This paper compares the Tanzanian model of Wildlife Management Areas (WMA) with its Namibian equivalent "Conservancies" in the context of transfrontier conservation. More specifically, the paper focuses on the models applied to the proposed Selous-Niassa Wildlife Corridor connecting the largest conservation areas of Mozambique and Tanzania, and the proposed Kavango/Upper Zambezi Transfrontier Conservation Area (KaZaTFCA) that covers the greater part of the Okavango River Basin and spans approximately 300,000 km² of very complex ecosystems. The latter forms an integral part of an extended ecoregion that is linked to the Upper Zambezi River Basin shared by Angola, Namibia and Botswana and watersheds shared with Zambia and Zimbabwe. These five countries are member nations and originators of the proposed KaZaTFCA. Community cooperation and ownership in the conservation efforts are considered critical to the successful establishment of wildlife corridors crossing the strategically located Caprivi Strip (Namibia) which borders the other four countries in the KaZaTFCA. The Caprivi Strip forms the core of the KaZaTFCA and figures prominently with regard to movements of the largest contiguous population of African elephants, in particular between the Okavango Delta of Botswana and the Upper Okavango and Zambezi Rivers in Angola and Zambia. The Namibian "Conservancy" model, widely recognized as one of the most successful community based natural resource management schemes in Africa, provides full empowerment to local communities in managing the land and resources of Conservancies and in retaining revenues thus generated. In comparison, central to the Tanzanian WMA model are community empowerment in managing WMA land and resources, and partial retention of revenues generated from the WMAs. Important benefits to communities are recognized communal land titles and spatial land use plans which are required for the registration of WMAs. Current efforts by the international donor community support the sustainable conservation management of the ecological corridor that provides a critical link for the largest contiguous African elephant populations in Eastern Africa. This goal is expected to be achieved through the establishment of a network of WMAs which have been successfully piloted in the northern section of the corridor.

Concurrent Sessions 3 – Wednesday September 12, 2007
8:30 am – 10:00 am

3A Making Transboundary Cooperation Work on the Ground: Experiences from the Field
**Mountain Biome, World Commission on Protected Areas/IUCN
SPECIAL SESSION**

- Peter Jacobs, Chief Ranger, Alps, Parks Victoria and Convener, Australian Alps Liaison Committee, Australia
Gillian Anderson, Program Manager, Parks Victoria and Immediate past Program Manager, Australian Alps Program, Australia

Enhancing Connectivity through Cooperative Management – Lessons Learned from 21 Years of Cross-border Programs in the Australian Alps

The Australian Alps Co-operative Management Program is a partnership that achieves excellence in management of its natural and cultural values and sustainable recreation and tourism through a program of cross-border co-operation involving three States across 1.6 million hectares. The strength of the now 21 year program is in a balanced top down and bottom up approach. It is supported at the highest echelon through a Ministerial and Heads of Agencies level Memorandum of Understanding and along with strong staff involvement, results in pride, ownership and relevance. Dedicated partner funding and management support is crucial to success along with working groups drawn from within the agencies. Opportunities for across agency staff networking, best practice workshops and programs with tangible outcomes are the key to ongoing success. Future challenges now are responding to major issues around climate change, water, fire and potential world heritage and becoming more outward focused beyond protected areas to enhance wider connectivity.

- Barbara Ehringhaus
ProMont-Blanc

Transboundary Protection of Mont Blanc – 20 Years of Tri-National Negotiation Around the Roof of the European Alps

After centuries of conflict, but also of common cultural heritage, the region around the highest mountain chain of the European Alps, the Mont-Blanc massif (4810m), today is shared by three countries, France, Italy and Switzerland. All three areas traditionally based their economy on mountain agriculture (meat, cheese and wine!), but have now shifted to tourism, both in winter and summer. For the area excels in natural beauty with its famous granite “needles” and its multitude of glaciers and alpine pastures with high biological diversity – easily accessible in the middle of densely populated Europe. Therefore, the Alp’s most important water catchment area which guarantees high precipitation even in spite of climate change is threatened by increasing mass tourism and the respective corollary of real estate speculation, excessive traffic and ski lifts encroaching into its remaining wilderness areas.

Since 1986, when mountaineers of the world met here to celebrate the bi-centennial of Mont-Blanc’s first ascension in 1786 already, locals and tourists have been demanding international protection of this unprotected icon, cradle of mountaineering and of earth sciences. The environmental ministers of the three countries promised an International Park in 1991, but the local and regional politicians seized the mandate to carry out transboundary protection and sustainable development with financial support from all three states. Also the European Union, to which France and Italy belong, has increasingly encouraged transfrontier cooperation among its member states, but also with neighbouring countries like Switzerland, by allocating respective funds for transboundary projects. Ecology, however, has not been a priority with these European funds, nor have they been monitored effectively even when conservation or sustainable development were the projects’ main objective.

The international umbrella NGO ProMONT-BLANC, with its local, national and international constituency of environmental associations and alpine clubs, has been working with scientists, media and conservation networks in the 3 countries and worldwide to prepare for a joint nomination of Mont-Blanc as transboundary World Heritage Site to be surrounded by a transfrontier Biosphere Reserve. A management plan is being prepared with the local stakeholders, but quite some resistance from still flourishing tourist business (ski lifts, real estate, truck transit, heliskiing etc.) is slowing down the process. In spite of the same language, similar dialects and many joint cultural events in the three border areas, different conservation laws and categories and the lack of local political will for efficient protection are obstacles toward progress as pilot application zone of the Alpine Convention and its protocols. With the complementary support from key local leaders, from national decision-makers and from the international community of environmentalists and mountaineers the highly symbolic Mont-Blanc will gain the transborder protection it deserves.

- Patrizia Rossi, Director, Alpi Marittime Natural Park, Italy
Thierry Boisseaux, Director, Mercantour National Park, France
[presented by : Hamilton]

Maritime/Mercantour, Parks without frontiers: a Vision Made Real

Alpi Marittime Nature Park (I) and Mercantour National Park (F) together protect a total area of about 100,000 hectares in the heart of Maritime Alps. In ancient times, shepherds and their flocks were already moving across the two sides of these mountains. Even today, peaks and ridges are not a frontier. In fact, the inhabitants of the Argentera-Mercantour massif have close relations and common mores, language and traditions.

In 1960, eminent scientists and cultural personalities gathered in Cuneo at the occasion of a Conference organized to discuss the future of the region, and for the first time the proposal for "An International Park for the protection of fauna and flora" was put forward. This was the vision that was implemented in the following years, slowly but steadily. In 1979 the French Ministry of Environment established Mercantour National Park while on the Italian side the Alpi Marittime Nature Park was established by Regione Piemonte in 1980.

Starting in the seventies, research studies gave evidence of fauna migration across national borders: in summer, ibex migrate towards French territories and, at the beginning of autumn, they come back to Italy where their winter range is. The importance of checking these migrations and reaching common and coordinated fauna management urged park's managers to strengthen their collaboration through the exchange of data, common censuses and controls. The Operation Ibex was at the origin of the first Twinning Agreement, signed on the 10th of July 1987.

The second operation concerns the successful reintroduction of the bearded vulture, the largest European bird, which disappeared from the Alps at the beginning of the XXth century. The large extension of the protected territory (100,000 hectares together), being a factor extremely important since a bearded vulture can cover hundreds of kilometers in a short period of time.

Most important to mention is the recent appearance of wolves on the French side of the Alps. In the summer of 1995, there was the first sighting for the Italian side of the Maritime Alps. An important project has been prepared by the two parks covering scientific research and an information campaign.

In order that our collaboration need not rely entirely on a personal relationship a Twinning Charter has been signed during a special ceremony on June the 6th 1998. It contains a special commitment to protect the common natural and cultural heritage and to use it as a means for sustainable development, to favor bilingualism and reinforce the links between local communities, to harmonize institutions and regulations, to create a real community of knowledge, work, protection and management. But this was still not enough: considering that the Twinning Charter was a list of good intentions, but a little bit too general and needed to be translated into specific actions. In 2003 we begun to work on a more detailed and defined Common Action Plan for 5 years. The action Plan was approved by the Councils of the two parks and by the respective local communities.

Finally, a regulation recently approved by the European Parliament in a juridical instrument called the European grouping of territorial cooperation (EGTC) will allow us to create a common management structure. A specific working group has been established, with the task of creating a Maritime/Mercantour EGCT in practice, thanks to which the borders will in fact completely disappear.

3B International Peace Parks – conservation and conflict III

- Jason Lambacher
University of Washington, Seattle, Washington, USA

Kuril Islands International Peace Park

Russo-Japanese relations have been mired in a territorial dispute over the Kuril Islands since the end of WWII. Because the historical and legal claims to the islands are complex, inconclusive, and marked by zero-sum justice claims, a new and politically courageous approach to the problem is required. This paper explores the prospects and challenges of one such approach, that of creating a jointly administered International Peace Park (IPP) to advance peace and conservation. I argue that an IPP in the disputed islands holds intriguing promise as a measure of “environmental peacemaking” in that it offers a pragmatic context in which to end a period of acrimonious history and innovatively begin a new era of trust and mutual understanding. Furthermore, ecological exigencies compel urgent action to protect a globally important bioregion from poaching, pollution, and political neglect. Unlike many IPPs, a Kuril park raises a peculiar challenge because the disputed islands would effectively become shared “international space” jointly managed by both countries. This challenge is amplified because the issue has been captured by nationalists on both sides and the political costs of an IPP amount to abandoning exclusive claims to Kuril sovereignty. Nonetheless, the benefits of an IPP have the potential to outweigh the costs, and demand further investigation as a credible means to a long-overdue peace treaty, more cooperative relations between two global powers, and effective protection for Kuril ecology. A Kuril IPP would also be a significant contribution from East Asia to the growing IPP movement.

- Tom Hatley
Sequoyah Distinguished Professor in Cherokee Studies, Western Carolina University, North Carolina, USA

Reversing Ravensford— Transboundary Disputes and Conflict Resolution Within the Southern Appalachians, USA

Four years ago, the debate over the seemingly innocuous land swap (at a place called Ravensford) took the relationship between the Eastern Band of Cherokee Indians and the Great Smokey Mountains National Park from all-too-customary alienation into outright hostility. The dynamics of the debate illustrated the inadequacy of conventional consensus processes for creating good policy, as well as a pattern by which good intentions fell apart over mis-communication and mis-matched expectations across the negotiating table.

While far from unusual, recent initiatives, such as the creation of a new collaborative council between the tribe and park and the co-acquisition of related sacred sites have helped heal this wound. Each of these—one public and the other private, citizen sector—was intended to contribute to a new level of cooperation necessary for both cultural and natural resource management.

After describing this process, several observations are made concerning situations when power across boundaries and sovereign territories is unequal. Ideas about what actions will constitute reconciliation, rather than simply redress, for instance, may fundamentally differ between parties.

3C Marine and aquatic transboundary conservation

- Sabine Jessen, Canadian Parks and Wilderness Society, Vancouver, British Columbia, Canada
Megan Baker, Canadian Parks and Wilderness Society, Vancouver, British Columbia, Canada

The Big Eddy: A Canada/US Grassroots Marine Transboundary Cooperation Initiative on the Pacific Coast

The Big Eddy Marine Conservation Initiative reaches across the Canada/US border on the Pacific coast off Vancouver Island and Washington State. Bringing together communities, Tribes and First Nations, conservation organizations and federal, provincial and state agencies, the initiative seeks to maintain a healthy, wild and productive ocean environment that safeguards ecological linkages, while supporting human communities for the present and future. The Big Eddy region, among the most productive marine ecosystems on the continental margin, is driven by the Juan de Fuca eddy, which circulates the deep nutrient rich waters brought to the surface by upwelling. This rich marine environment supports major populations of fish, seabirds, turtles, whales, pinnipeds, and benthic species, including corals. It is also a region of tremendous economic significance, including fishing, tourism, shipping, and scientific research. The Nuu-chah-nulth First Nations and Makah Tribe, who have lived here for thousands of years are recognized for their highly developed traditional trading and governance systems. Coastal communities are also intimately connected to this ecosystem. Guided by an international steering committee since 2003, the Big Eddy initiative has convened a scientific symposium in 2004 which confirmed the exceptional ecosystem values of the region and the potential to establish a global model for transboundary ecosystem-based oceans management. This was followed by stakeholder and community meetings, and most recently a symposium which examined current management and use of the region. These efforts are serving to inform the development of a strategic plan for the initiative.

- J. Todd Walters
Director, Experiential Peace Building - Center for Peace Building International
Facilitator – Hemlock Overlook Center for Experiential Education

Bolivia & Peru – The Joint Trans-boundary Water Management of Lake Titicaca

The joint management of the waters of Lake Titicaca on the border of Peru and Bolivia began in 1957 with a plan for commercial integration. Two flashpoints highlighted the need for a comprehensive management scheme between the two countries – the floods of 1986 and the destruction of the Aral Sea after the collapse of the former USSR which led to competition for the water resources between Kazakhstan and Uzbekistan. These events stimulated greater cooperation between Bolivia and Peru than ever before. Initially that cooperation took the form of sharing data already gathered between water scientists from both sides. This grew into a joint scientific expedition which involved the Navy's of both countries cooperating with the scientists to completely map and monitor the lake, as well as standardize the scientific processes used, and data gathered. Maps were created of the "ecoregion" without political boundaries, so that the scientific viewpoint is politically neutral, and the resources are managed based on ecological sustainability. The scientific results combined with the catastrophe in the Aral Sea, were used as justification to lobby the Congress of both countries to establish consistency in laws and regulations to manage the water resources, and create a joint management organization A.L.T, which would be independent of the governments and include scientists, congressmen, and local elected governors from the communities around the lake from both countries. The indigenous Aymara culture of both countries contains the creation myth "Pachamama" – where Lake Titicaca is believed to be the birthplace of the universe, and conservation of the lake ecosystem is deeply embedded in millennia of Andean culture. This cross border collaboration on multiple levels of society is a shining example of how to cooperate to manage and preserve water resources on a border that are critical to the survival of both countries.

- F. Richard Hauer, Flathead Lake Biological Station, The University of Montana, USA
Erin K. Sexton, Flathead Lake Biological Station, The University of Montana, USA

Headwater Streams and Rivers of Waterton-Glacier: Ecological Linkages in the Crown of the Continent

The Crown of the Continent is one of the premiere ecosystems in North America with Waterton-Glacier International Peace Park, at its core. The region is the headwater source for three of North America's great rivers: the Columbia, Missouri and Saskatchewan, which flow to the Pacific, Atlantic and Arctic Oceans, respectively. Most headwaters contain extremely high quality waters. Alpine streams have few species of aquatic organisms; however, these often are rare species vulnerable to climatic change. Forested valley streams and rivers of Waterton-Glacier flow through alternating canyon and floodplain reaches. The floodplains are characterized by high species diversity and bioproduction maintained by the hydrologic linkages of habitats. The streams and rivers of Waterton-Glacier are significantly affected by wildfire, near-park resource extraction activities, (e.g., logging, mining) and exurban encroachment. Wildfire has been shown to increase nutrient loading to lakes and streams, both during a fire and following the fire for most of a decade. Logging and associated roads increase sediment transport into streams and rivers bordering Waterton-Glacier, thus directly affecting native trout in the parks. The regions surrounding Waterton-Glacier are among the fastest growing regions in North America due to the many recreational amenities. And, while the region has many remarkably pristine headwater streams and receiving rivers, there are many pending threats to water quality and quantity. One of the most urgent threats comes from the coal and gas fields to the northwest of the International Peace Park, where coal deposits are proposed for mountain-top removal and open-pit mining operations. Waters draining the proposed coal mining site flow into the North Fork of the Flathead River, which flows into Glacier National Park. This will have significant effects on the waters of the region, its native plants and animals and quality of life of the people.

3D Southern Africa and the Greater Limpopo Transfrontier Park

- Freek Venter
Head of the Department of Conservation Services, Kruger National Park, South Africa

Co-management in the peace parks context: Kruger National Park in partnership with national and international neighbors and stakeholders

The Kruger National Park (KNP) has seen great changes since 1898 when the precursor of the KNP was established. The areas surrounding the KNP experienced a human population explosion during the past three decades, causing a rapid expansion of farming areas and rural settlements. In the 1970's the KNP was fenced off to control wildlife diseases and to protect the neighbouring areas from damage causing animals, as well as to prevent animal movement into war-ridden neighbouring countries. Ecologically the KNP had then become an island and previous regional animal movements were restricted to within its boundaries. Three decades later the Great Limpopo Transfrontier Treaty made provision for many of these barriers to be removed between South Africa, Mozambique and Zimbabwe. This initiated various formal and informal co-management agreements with a range of neighbours and stakeholders as fences came down. Ecosystem management issues such as to keep commercial poaching, especially for bushmeat and rhino horn, which continue to trouble the KNP, at bay is discussed. Lessons learnt are put in perspective of ecosystem management theory as well as practical cooperation in a highly complex socio-political arena.

- Danie Pienaar, Kruger National Park, South Africa
Piet Theron, Head, Transfrontier Conservation Areas, South African National Parks
Bartholomeu Soto, National Director of Conservation Areas, Mozambique and Head, TCFA Unit, Ministry of Tourism, Transfrontier Conservation Areas Unit, Mozambique

Drafting a joint research policy for the Great Limpopo Trans-frontier Park

The Great Limpopo Transfrontier Park (GLTP) was established in 2002, and it incorporates the Limpopo National Park of Mozambique, the Kruger National Park of South Africa and Gonarezhou National Park of Zimbabwe. The goal of establishing the GLTP is biodiversity conservation and sustainable socio-economic development across international boundaries, yet knowledge on the current status and trends in achieving these goals in the respective parks is limited. It was identified that a joint research policy was necessary to guide research & monitoring, compare information, share data and measure performance between the partner parks.

We will describe the process followed to generate this policy, the joint research objectives and priorities generated for the GLTP as well as the joint approaches regarding specific issues such as control of bio-prospecting, baseline mapping and inventorization and building capacity.

Specific issues that each partner has to address to create a facilitating and enabling environment were also identified as well as how the individual project registration procedures could be simplified to stimulate external research.

We trust that this product will solicit input and stimulate interest in research collaboration from the scientific community as well as be helpful to other trans-frontier conservation areas who are dealing with cross-border research issues.

- Piet Theron
Head, Transfrontier Conservation Areas, South African National Parks.

Lessons learned in the implementation of Transfrontier Conservation Areas (TFCAs) Programme in southern Africa

Good progress has been made in the implementation of the transfrontier conservation areas (TFCAs) projects in South Africa. This initiative constitutes some of the most exciting, exhilarating and ambitious conservation projects in the world today. These projects aim to establish large conservation and wildlife areas not only through the integration of vast landscapes and re-connecting ecological systems, but also through development of cross-border tourism linkages, ensuring sustainable benefits to local communities through socio-economic upliftment, and the promotion of peace and stability in the region. The development of TFCAs is also an exemplary process of partnerships between governments and the private sector. While the main players are the relevant governments and implementing agencies, donors and NGOs have also greatly contributed towards the creation of transfrontier parks and transfrontier conservation areas.

Various lessons have been learned to date in planning, developing and implementing TFCAs in Southern Africa. These include the construction of the Giriyondo Tourist Access Facility, the Wildlife Translocation Programme, and the development of an Integrated Development Plan for the Pafuri Area as part of the further implementation of the Great Limpopo Transfrontier Park; the development of a Joint Zoning Plan in the Kgalagadi Transfrontier Park; and a successful Public-Private Partnership in the Limpopo-Shashe TFCA. All of these key project specific initiatives provided implementing agents and other key role players with a better understanding of the key challenges, opportunities and constraints associated with the successful implementation of TFCA projects in the region.

- David Mabunda
Chief Executive Officer, South African National Parks

The Transfrontier Conservation Areas (TFCA) Programme in South Africa—An Overview

The global growth in transfrontier conservation areas (TFCAs) is indicative of a belief of the potential of these exciting initiatives to conserve biodiversity and cultural resources at a landscape level, foster peace and prosperity between nations, and promote regional socio-economic integration and development. This has led to these projects achieving the highest level of political support in Southern Africa, underpinned by key regional programmes and objectives providing for the conservation of natural resources as a means to achieve cross-border tourism development and the alleviation of poverty. In so doing, the TFCA Programme in Southern Africa is not only in line with the objectives of key regional initiatives such as the New Partnership for African Development (NEPAD) and the Leadership for Conservation in Africa (LCA) initiative, but is also featured as one of the key recommendations of the 5th IUCN World Parks Congress held in September 2003 in Durban, South Africa.

Guided by the above, the various TFCA projects in the Southern Africa have responded well to the challenge of realising the potential of conservation based initiatives to promote peace and prosperity in the region through the exchange of information, transfer of skills and by building partnerships between government, NGOs, communities and the private sector. However, it has been realised that these benefits may take time to be materialise, some of them only becoming a reality in the medium to long term. In the meantime, governments, implementing agencies and protected area managers will continue to strive to find appropriate ways and means to plan, develop, implement and manage these projects more effectively. These actions will always be guided by regional priorities and programmes, and inspired by the vision of realising an African ideology.

Concurrent Sessions 4 – Wednesday September 12, 2007

10:30 am – 12:00 pm

4A Making Transboundary Cooperation Work on the Ground: Experiences from the Field II

**Mountain Biome, World Commission on Protected Areas/IUCN
SPECIAL SESSION**

- Robert Brunner
Thayatal National Park

From Diverse Visions to Consistent Management: the National Parks in the Thayatal (Austria and Czech Republic)

Until 1989 the Iron Curtain divided Central Europe. The so-called "Death Strip" remained nearly untouched for more than forty years. Immediately after the fall of the border fortification the Czech Republic established a national park. Austria followed a few years later. Today, the two parks cooperate in all issues concerning management, nature protection, infrastructure and tourism on the basis of a bilateral agreement between the two governments. The courts of auditors of the Czech Republic and Austria described the co-operation as excellent and a model for other transborder initiatives. Visitors can experience both parks without border controls, visitor information is available in German, Czech and English, and for seven years management has been following joint principles. A recently implemented project, the European Green Belt including protected areas along the former Iron Curtain from the Baltic to the Mediterranean Sea, will be supported by the two parks Thayatal and Podyjí.

- Roland Stein
Transboundary Coordinator, "Pfälzerwald – Vosges du Nord" Biosphere Reserve, Germany
Chair, European Expert Group on Transboundary Conservation, IUCN World Commission on Protected Areas

***Joint opportunities and present/future difficulties in the German-French biosphere reserve
"Pfälzerwald – Vosges du Nord"***

Transboundary biosphere reserves (TBR) have the great potential to facilitate an integrated and coherent approach to management and sustainable development of a cross-border landscape and shared ecosystem, in ecological, socio-economic, cultural and political terms, thus offering the perspective that dialogue and joint action can transcend politics and resolve long-standing problems, affecting both sides of the border.

In "Pfälzerwald – Vosges du Nord" TBR there are success stories and examples of good practice but there is also the challenge of making good practice sustainable. Apart from political and legislative frameworks, mutual agreements and international conventions, sustainability depends on constructive interaction of humans, continuous confidence-building, committed key-people and intercultural communication.

The growing tendency of desk-bound, electronically hypnotized decision-makers and planners to manage protected areas by creating self-dynamic virtual worlds, is a fundamental threat to a balanced perception of the issue. On-ground reality requires a complementary approach where computer-based work is linked up with frequent field-experience and active stakeholder involvement. It concerns all technical staff.

Transboundary cooperation needs long-term perspectives, practitioners' recognition, specific staffing and an own budget-line, independent of external funding.

Hence, the collaborating partners have to make a strong commitment to the transboundary dimension, by means of clear mission statements which put the cross-border objectives right to the centre-stage of the protected area management and its national components.

“Pfälzerwald - Vosges du Nord“ TBR is becoming aware of these challenges. A new mutual agreement will contain a joint vision, clear mission statements and the creation of a joint coordination structure with a permanent secretariat.

Finally, the 2008 periodic review, jointly carried out by the two national MAB-committees, will identify weaknesses and threats, but also strengths and opportunities. This supports the TBR managers in their effort to consolidate the cooperation.

- David Mihalic
Former Superintendent, Glacier and Yosemite National Parks, USA

Glacier-Waterton: Retrospection on Cooperation Issues Past and Present

Since its inception in 1932, the idea of a place along a transnational boundary where two countries could celebrate their own unique cultures as well as their commonality, has been inspiring. It inspired members of Rotary in Canada and the United States of America, meeting jointly, to politically connect two national parks as an “international peace park” by working through their respective federal governments. A key thought at the time was that the two parks become more than a symbolic idea. What has transpired since? Park rangers and wardens cooperate in visitor protection and emergency services. More recently, fire management is more closely coordinated. And management of grizzly bears, which along with other animals know no boundaries, has moved from coordinated management action to scientific breakthroughs in population dynamics using DNA. Yet, visitors still perceive Waterton Lakes and Glacier as two separate parks, in spite of the national legislation that says each is a component of a larger whole: a peace park. And, a once open border along Waterton Lake, celebrated as the peace park’s most potent symbol has hardened, due to security concerns. As the idea spreads to other nations, what can 75 years of management at Waterton-Glacier International Peace Park by both Parks Canada and the U.S. National Park Service model to the rest of the world? More importantly, perhaps, are there cross-border parks elsewhere in the world that can serve as better models, even to Waterton-Glacier?

4B Engaging with transborder stakeholders

- Udaya Sharma
Chairman, Resource Development Initiative Center, Kathmandu, Nepal

Khaptad National Park, Nepal: Unique partnerships with local communities

Khaptad National Park is located in the mid-mountain region of Far-Western Nepal at an air distance of 446 km from Kathmandu. It was established as a national park 1984 with a core area of 255 km² and a proposed buffer zone of approximately the same size. As with the other 15 national protected areas in Nepal, balancing biodiversity conservation with human needs is a central challenge. The national Participatory Conservation Programme has been developed to address the challenge. Khaptad National Park is recognized for both its biodiversity and cultural significance. There is a great variety of vegetation types ranging from sub-tropical forest in the lower altitudes to temperate forest on the Khaptad plateau. The most common tree species are chirpine, spruce, fir, maple, birch, alder and rhododendron. Dense bamboo stands (nigalo) and wide varieties of medicinal herbs occur in the park. The most common fauna in the park are leopard, Himalayan yellow-throated marten, Himalayan tahr and others. The common bird species include Impeyan pheasant, chkor partridge, kalij pheasant, monal, red and yellow-billed blue magpie, and Himalayan griffin. A wide variety of colorful butterflies, moths and insects are also an important feature of the Khaptad ecosystem. The core area of Khaptad is of great cultural significance as it includes the Ashram of Khaptad Swami, a renowned spiritual saint. More than fifteen ethnic groups and tribes share the park region and work closely with park managers to mobilize resources, create economic opportunities and implement community development opportunities for that address the needs of local people. Conflict management and transboundary approaches have been instrumental in protecting the cultural and ecological values of the park and the surrounding region. The park has worked cooperatively to develop a management plan that strives for a harmonious, peaceful and mutually beneficial coexistence between the park core and buffer zone communities. The presentation will highlight the unique partnerships that have been established between the park and the diverse regional community.

- David Green
Manager, Southwest Alberta Sustainable Community Initiative (SASCI), Pincher Creek, Alberta, Canada

We are our own neighbours...

Diversity: Southwest Alberta is a diverse landscape, rich in biodiversity and natural capital. In addition to town and country residential uses, the landscape currently supports oil and gas, mineral exploration and development, forestry, tourism, recreation, agriculture, commerce, processing, and manufacturing. There is a wide range of special interest groups and civil society organizations focused on various aspects of land and resource use and management.

Integration: As the level of activity on the landscape increases, so does the potential for conflict between competing land and resource uses. The needs, interests, and perspectives of residents and stakeholders of southwest Alberta are diverse. Our greater community, encompassing towns and hamlets, rural agricultural land, Provincial Crown Lands, Municipal Districts, the Piikani First Nation and a National Park, is increasingly aware of the cumulative effects of development and other activity on the landscape. Stakeholders recognize the need for a more integrated approach to land and resource management that considers long-term economic, environmental, and social sustainability.

Challenge: SASCI has accepted this regional challenge as a neutral organization that works with all sectors of the local economy and society. While our members, individually or through sub-committees, may hold specific views on issues facing our community, and may undertake initiatives that are of particular interest or benefit to themselves, SASCI, as an organization, remains neutral and strives to promote balanced information and dialogue that reflects the full range of issues related to all stakeholders.

In an increasingly complex and competitive land-use environment, SASCI will continue to secure and provide information and to encourage constructive dialogue in an effort to enhance the community's ability to understand and act upon the issues related to our sustainability.

- Will Harmon, Senior Associate, Public Policy Research Institute, University of Montana, USA
Matt McKinney, Director, Public Policy Research Institute, University of Montana, USA

Collaborative approaches to transboundary management in the Crown of the Continent

The Crown of the Continent is one of the largest remaining intact temperate ecosystems in North America. It is the headwaters for a continent, sanctuary for endangered plants and animals, and a natural, wild oasis in an otherwise developed, domesticated landscape. Sparked in part by the model of the International Peace Park, more than 21 government agencies and 45 place-based and special interest groups are working to protect and preserve the Crown ecosystem in the face of unrelenting change. Many changes accumulate at the local or sub-regional level and eventually have a region-wide impact. People raise concerns about residential and commercial growth, energy and resource exploration and development, habitat fragmentation, water quality degradation, climate change, and noxious weeds.

Partnering with the Lincoln Institute of Land Policy, the Miistakis Institute, and National Parks Conservation Association, we are working with these agencies, non-governmental groups, civic leaders, and citizens in the Crown to foster regional, collaborative stewardship. For example, with our help, the Crown Managers Partnership is improving its strategic communications among member agencies and with outside partners. In May 2007, we hosted a workshop for more than 100 people from across the Crown to network, share information, build understanding, and foster working relationships where interests and goals overlap. Our work is based on seven basic principles for regional collaboration: (1) focus on a compelling issue (catalyst); (2) organize around collaborative leaders (leadership); (3) engage the appropriate people (representation); (4) define the “problemshed” according to people’s interests and the ecological boundaries (regional fit); (5) jointly name issues and frame solutions (deliberation); (6) move from vision to action (implementation); and (7) learn as you go and adapt as needed (evaluation). These principles and a commitment to a grassroots, participant-driven process are leading us toward exciting “next steps” for stewardship in the Crown in the coming years.

- Kimberley Pearson
Conservation Coordinator, Waterton Region, Nature Conservancy of Canada, Alberta Region

The Waterton Park Front Project: Furthering Conservation Through Partnerships

The Nature Conservancy of Canada’s (NCC) Waterton Park Front Project is Canada’s largest private land conservation initiative. Approximately 30,000 acres of foothills parkland, foothills fescue grassland and montane natural subregions adjoining Waterton Lakes National Park have been conserved since 1998. The project area is maintained as a working landscape where cattle ranching continues as the dominant land use; one that has resulted in conservation of one of the highest levels of biodiversity on private land in Canada. The project also contributes to maintaining the integrity of the headwaters of the Oldman River watershed. In addition to NCC’s success in securing ranchlands for long-term conservation, the project boasts a strong stewardship program in which NCC and its many partners collaborate on such challenges as invasive species management and enhancement of range and riparian health. Engagement of the local community is ongoing and has been successful to date through a well-attended extension program. A public education facility has been established in 2007 which will provide opportunities for visitors to learn about NCC’s role in transboundary ecosystem management.

4C Transborder corridors and connectivity II

- Wendy Francis
Senior Conservation Program Manager, Yellowstone to Yukon Conservation Initiative, Banff, Alberta, Canada

Maintaining Connectivity through Mountain Transboundary Protected Areas

Inspired by the Yellowstone to Yukon Conservation Initiative, transboundary protected area projects are being implemented throughout the globe. For example, Espace Nature Mont Blanc involves three countries in the establishment and management of an international protected area linking this \"roof of the European Alps.\" In Asia, the Sacred Himalayan Landscape project is connecting protected areas across the boundaries of Nepal, India and Bhutan. This presentation will examine this global trend and highlight the legal mechanisms, collaborative initiatives, conservation benefits, and stakeholder arrangements that are resulting in successful transboundary protected area establishment. Using a case study approach, the author will review transboundary protected areas in various states of development in Europe, South America, North America and Asia to suggest conclusions about the effectiveness of such mechanisms for ensuring wildlife conservation.

- Animesh Sarkar, Associate, Centre for Studies in Rural Economy, Appropriate Technology and Environment (CREATE), St. Joseph's College, North Point, Darjeeling, India
Milindo Chakrabarti, Director, Centre for Studies in Rural Economy, Appropriate Technology and Environment (CREATE), St. Joseph's College, North Point, Darjeeling, India

Feasibility of Corridor between Singhalilla National Park and Senchal Wild Life Sanctuary: A Study of five villages between Poobong and 14th Mile Village

Hunger for 'development' has led to conversion of good amount of land inhabited by wild animals into land suitable only for human use. Very often these conversions were carried out in unplanned ways often leading to discontinuities in natural habitats of wild life. Establishing corridors to link up such disjointed patches is considered a possible solution today to give the wild lives a larger space to move around and sustain thereby. The intricacy of forests in Darjeeling has also fragmented to adjust the human needs and reduce the wild live movements from one area to other. A feasibility study was taken up in 2005 to evaluate the possibility to establish a corridor between Singalila National Park (SNP) and Senchal Wild Life Sanctuary (SWLS) in Darjeeling Himalayas and socio-economic studies in five villages (Pubung Phatak, Pussumbung Phatak, Ghoom Bhanjyang, Bhalu Khop & 14th Mile) were conducted. It is found that the relationship between forest and the people is very intimate and the wild animals, plants and they have been harmoniously sharing the same land. However, less crown cover is inhibiting the movement of Himalayan Black Bear or Leopard. Locals suggest private plantation to eradicate this problem. However, ownership of land is a problem and could be solved through the change on property right regime on the produce in a land owned by forest Department.

- Catherine Picard
Graduate Student, Yale University, USA

Selous Niassa Wildlife Corridor

Transboundary protected areas are rapidly proliferating around the world. While the ecological rationale for transboundary conservation has been articulated, the socio-political implications of working in a border region often remain under-explored. African borders pose particular challenges for transboundary conservation given their heterogeneous and mobile populations, colonially-determined boundaries and history of conflict.

The Selous-Niassa Wildlife Corridor (SNWC), located on the Tanzanian-Mozambique border, is the site of a proposed doctoral research project that will explore the constraints, challenges and influences of the transboundary conservation model. The SNWC aims to conserve a section of communal land that stretches for 180 kilometers between the Selous Game Reserve in Tanzania, and the Niassa Game Reserve in

northern Mozambique. The Corridor's objectives include: (1) conserving a transboundary route for elephants, (2) devolving the protection and management of the Corridor to local villages through the establishment of Wildlife Management Areas, (3) increasing economic benefits to communities, and (4) curtailing the illegal transboundary trade in ivory.

This presentation will first summarize the goals, trends and conditions that underlie the Selous-Niassa Wildlife Corridor. The objective is to encourage transboundary conservation scholars and practitioners to consider the impact of connecting homogenous habitats across heterogeneous and contested social spaces. This analysis treats the SNWC as a constellation of social and decision processes that are embedded in the historical political economy of Tanzania. Second, I will describe my proposed research study, including the theoretical grounding, research design and methods with the intention of gaining feedback from the transboundary conservation community.

- Harvey Locke
Senior Advisor for Conservation, Canadian Parks and Wilderness Society, Canada
Strategic Advisor, Yellowstone to Yukon Conservation Initiative, Canada

Waterton-Glacier International Peace Parks- a proposal for expansion

Waterton-Glacier Peace Park, a protected core area in the broader Yellowstone to Yukon region, has an obvious boundary anomaly noted when the parks were given World Heritage Status - the missing piece in the Flathead Valley of British Columbia. Park expansion is now part of the national parks action plan for Canada and is necessary. Glacier Park starts on the east where the grasslands enter the mountains, crosses the mountains of the continental divide and ends on the west in the Flathead River. Waterton Park abuts Glacier's northern boundary and carries a logical eastern boundary northward but ends abruptly on the continental divide on the edge of the Flathead Valley. These areas of Montana and Alberta were federal lands at the time of the parks' creation, but the BC Flathead is provincial land. BC has so far resisted efforts to protect the area (except for a small provincial park) preferring it as a resource extraction zone despite its extraordinary conservation values and vital importance to the survival of carnivores in the US due to connectivity to populations further north. The BC policy has given rise to a major international conflict as Americans downstream object to degradation of the headwaters of the Flathead River by coal mining and oil and gas development. A solution is proposed that would add one third of the Flathead Valley as a sanctuary for wildlife to fill in the missing piece of the Peace Park. The natural values in the remainder of the Flathead would be secured by creating a Wildlife Management area that allows forestry and hunting but no other resource extraction to ensure habitat values, traditional recreation and wildlife connectivity northward to Banff National Park. Economic analysis has shown this would be a net gain for the BC regional economy.

4D Transboundary governance, policy and law

- Martin Nie
Associate Professor, University of Montana, USA

The Underappreciated Role of Prescriptive Regulations and Litigation in Natural Resource Conservation in the Crown of the Continent Ecosystem

This paper analyzes the role played by prescriptive regulation and litigation in conserving the American portion of the Crown of the Continent ecosystem. It first explains why the American judiciary is so involved in resource management and why litigation is so often used as a conservation tool. It then explains the extent to which regulatory enforcement is being threatened and/or undermined by Congress, the Executive branch, and other interests. The analysis shows how prescriptive regulation and litigation often facilitates the use of less adversarial conservation strategies and that there are important synergies between them. Regulatory interactions with collaborative conservation, land and resource acquisitions/easements, land exchanges, ecosystem and adaptive management, and policy experimentation and pilot programs are analyzed. Examples from Montana are used for demonstration. It finishes by examining how some of these policy strategies and tools might be better coordinated in the future.

- Mike Schoon
Ph.D. Candidate, Indiana University, USA

Institutional Disturbances in Transfrontier Conservation: Governance in Southern African Peace Parks

This study looks at the institutional design and ongoing development of the management structure of transfrontier protected areas in an attempt to analyze transboundary cooperation on environmental issues. Using two transfrontier parks involving South Africa – the Great Limpopo Transfrontier Park, partnering with Mozambique and Zimbabwe and the Kgalagadi Transfrontier Park, partnering with Botswana – I seek to address two questions crucial to the success of transfrontier parks. Here, success is determined by any of the three primary benefits claimed by transfrontier conservation advocates. Transfrontier park proponents assert that transfrontier parks improve biodiversity conservation, foster regional economic development, and promote peace and understanding between neighboring countries.

To study the concept of transboundary cooperation, I use theories of ecological resilience and institutional robustness to look at specific challenges or what I define as “disturbances” confronting park employees and governmental officials in the management of a transboundary system. From this flows, the first, more theoretical, research question that I hope to answer – how do institutions change in response to various types of disturbance. In interviewing over one hundred people knowledgeable about these two transfrontier parks, dozens of disturbances are identified. These disturbances have then been coded to enable a study of when international cooperation emerges and when it remains absent. Supplementing this quantitative study are case studies focusing in greater depth on the four most recurring, interlinked disturbances mentioned – relations with local communities, veterinary disease control, human-wildlife conflict, and river health/catchment management. With a more pragmatic impetus, the second question that I examine concerns what role the joint management board of a transfrontier protected area should play vis-à-vis the national park staffs and environmental officials. Often overlooked by transfrontier conservation supporters, the higher transaction costs of international coordination and the lack of direct enforcement abilities may minimize the amount of institutional development at the international level relative to national and sub-national levels. In spite of the increased costs of negotiating, collaborating, and sharing information, transboundary cooperation, working through the Joint Management Board of the transboundary parks, can improve policy outcomes if the international level is the appropriate scale of response. However, not all disturbances should be addressed at the international level, with more appropriate responses coming from a more localized level. This study hopes to provide advice on which issues to handle through the joint management board and which to cope with within a country.

- Randy Tanner
Ph.D. Candidate, The University of Montana, USA

Formal and Informal Governance of Transboundary Protected Areas – Lessons from North America and Southern Africa

At a minimum, the existence of a transboundary protected areas requires the participation of two or more sovereigns or governmental organizations. Beyond that, transboundary protected areas may be governed through a number of institutional arrangements, including joint management boards, cooperating agencies, project-level coordination, etc. An important factor contributing to the legitimacy and effectiveness of such arrangements is the degree to which those arrangements are formalized – whether, for example, they are codified into legal binding agreements or whether they are only unwritten arrangements. Employing examples from southern Africa and North America, the impact of formalization on transboundary protected areas will be discussed, as well as a framework for assessing the degree of formalization that may be required for an area.

4E Transboundary vegetation management

- Richard Menicke, Geographer/GIS Coordinator, Glacier National Park, USA
Tara Carolin, Ecologist, Glacier National Park, USA
Cyndi Smith, Conservation Biologist, Parks Canada, Waterton Lakes National Park, Canada

Production of a Seamless Vegetation Map for the Waterton-Glacier International Peace Park

In 1998, the USGS-NPS Vegetation Mapping Program initiated a vegetation mapping effort in Glacier National Park. Waterton Lakes National Park staff was invited to initial scoping meetings and soon acquired independent funding to join the effort in creating a seamless vegetation map and classification for the Peace Park. Building on their long history of cooperative work across an international boundary, Glacier and Waterton partnered with NatureServe, Montana Natural Heritage Program, USGS and private consultants in sharing resources and expertise. Geographically distributed vegetation sampling conducted from 1999 through 2002 provided the knowledge base for preliminary classification and mapping of vegetation. Accuracy assessment sampling conducted from 2003 through 2006 was used to refine the classification and mapping products, and provided inputs to formally evaluate the accuracy of individual map classes. USGS mappers relied upon aerial photography, in conjunction with numerous field trips and reference to the vegetation sampling data, to guide vegetation delineations. Final products are due to parks by fall of 2007 and include: 1) digital vegetation map, associated attributes, and metadata; 2) a spatial database of all vegetation sampling; 3) vegetation classification report/descriptions and field key; 4) data collection methods manual; and 5) final report documenting all project activity. These products will be used by park staff, partners and researchers for a variety of purposes of common interest; such as assessing rare plants, sensitive wetland communities, weed invasion, disturbance effects (e.g. fire, insects, avalanches), and wildlife habitat.

- Tara Carolin, Ecologist, Glacier National Park
Joyce Lapp, Restoration Biologist, Glacier National Park, USA
Cyndi Smith, Conservation Biologist, Parks Canada, Waterton Lakes National Park, Canada

Whitebark and Limber Pine Restoration and Monitoring in Waterton-Glacier International Peace Park

Whitebark pine and limber pine are ecologically important species that have suffered dramatic decline due to a number of factors: a non-native pathogen, white pine blister rust, fire exclusion, mountain pine beetle and global climate change. Waterton and Glacier are working together on restoration and monitoring efforts. A comparison of stands surveyed for blister rust in Glacier and Waterton in 1995-97 and again in 2003-04 showed an increase in mortality from 28%-49% and increase in blister rust infection from 41%-56%.

Restoration efforts have included collecting seed from healthy trees in stands with heavy blister rust infection, indicating rust resistance, and raising seedlings to plant in the field. Almost 5,900 whitebark and 5,600 limber pine trees were planted between 2000-2006. Experimental plantings of limber pine seeds were installed in Waterton and whitebark seeds in Glacier. Limber pine survival has been widely variable. In 2006 percent survival for each planting year was: 2002-0.5%; 2003-31%; 2004-39%, and 2005-26%. Limber pine seedling survival and health was substantially higher when planted as seedlings rather than as seeds and when planted in clumps of five. Whitebark seedling survival after five years was 34%, and four-year survival was 46%, while overall survival of all seedlings planted was 38%. Eighty-five percent of surviving seedlings are in healthy condition and on average range from 5" tall for four-year-old trees to 8" tall for five-year-old trees. We are optimistic for potential long-term success of our joint whitebark and limber pine restoration program.

- Joyce Lapp, Restoration Biologist, Glacier National Park, USA
 Cyndi Smith, Conservation Biologist, Parks Canada, Waterton Lakes National Park, Canada
 Dr. M. Anne Naeth, Professor, Applied Ecology and Land Reclamation, Department of Renewable Resources,
 Faculty of Agriculture, Forestry, and Home Economics, Agriculture Forestry Centre, Edmonton, Alberta, Canada

International Cooperation in the Art and Science of Ecological Restoration

Waterton and Glacier National Parks share a common boundary, many of the same ecological communities and many of the same management concerns. Over the past several years the two parks have made great strides in working together to share expertise and resources to accomplish management objectives that mutually benefit both parks.

Waterton's Trade Waste Pit, used as a dump site for 50 years, was identified as a high priority for restoration. Goals for this site call for the restoration of native plant diversity and wildlife habitat, reduction of invasive plants and an overall reduction in the ecological footprint of park management activities.

Waterton biologists, in partnership with Dr. Anne Naeth, University of Alberta, and staff from Glacier National Park's Native Plant Program developed a restoration strategy for this several hectare project. Prior to project implementation, crews from Glacier and volunteers assisted in the collection of many kilograms of native grass, forb and shrub seeds. Glacier staff grew containerized plants from this seed. In the fall of 2006 site preparation, fencing, initial planting and seeding activities were completed. Dr. Naeth and graduate and undergraduate students worked with Glacier's revegetation crew to plant over 3600 plants. All plants were mapped by species/location and their survival/growth will be rigorously monitored.

Knowledge gained in this restoration endeavor will enable both parks to pursue other restoration projects at much less cost. Involving students, community and visitor volunteers provides an opportunity to share the importance of native ecosystems and the protection of public lands in a tangible manner.

- Sallie Hejl, Acting Director, Crown of the Continent Research Learning Center, Glacier National Park, USA
 Jami Belt, Biological Technician, Crown of the Continent Research Learning Center, Glacier National Park, USA
 Dawn LaFleur, Invasive Plant Species Biologist, Glacier National Park, USA

Working Together To Create a Crown of the Continent Invasive Plants Field Guide

A major threat to native plant communities within the Crown of the Continent Ecosystem (CCE) is the invasion, establishment, and spread of invasive non-native plants. Combating invasive plants in the CCE is complicated because it is an international transboundary region managed by more than 20 agencies. Invasive plants do not recognize political boundaries and CCE managers acknowledge that this is a shared problem that cannot be solved independently. Yet, currently there exists no single reference or common strategy for containing and managing invasive plants in the CCE. For these reasons, we are creating a user-friendly, ecosystem-specific field guide on invasive plants with potential for ecological impact in protected areas. The Crown of the Continent Research Learning Center and Glacier National Park's Invasive Plant Species Biologist are designing and developing the field guide in concert with representatives from 20 agencies and organizations including Waterton/Glacier International Peace Park, many of whom are members of the Crown of the Continent Managers Partnership (CMP). The guide will serve as a tool for educating staff, volunteers, and the general public. It will also provide the CMP a foundation from which to build a common strategy for communication, education, and decision support. The guide will highlight detailed accounts on approximately 40 species, including the highest priority species currently present in the CCE and those most likely to invade the CCE, thus promoting early detection. The guide will be printed in 2008.

Concurrent Session 5 – Wednesday September 12, 2007**1:30 pm – 3:00 pm****5A Transboundary Protection Case Studies I**

- Yongyut Trisurat
Assistant Professor, Faculty of Forestry, Kasetsart University, Bangkok, Thailand

Transboundary biodiversity conservation of the Pha Taem Protected Forest Complex: a bioregional approach

With the financial assistance from the International Tropical Timber Organization (ITTO), the Thailand's Royal Forest Department (RFD) has initiated a strategy for cooperation in transboundary biodiversity conservation with Cambodia and Laos. The Pha Taem Protected Forest Complex (PPFC) in northeastern region was chosen as a pilot project because of the increasing pressure on biodiversity from illegal trade in plants and wildlife across the tri-national borders. The PPFC covers 5 protected areas in Thailand and adjoins the Phouxeingthong National Biodiversity Conservation Area (NCBA) in Laos and the Cambodia's Protected Forest for Conservation of Genetic Resources of Plants and Wildlife. Two important outputs derived from the project phase I (2001-2004) were a long term management plan in a framework of transboundary biodiversity conservation and initiative cooperation between the three countries. Cooperation is achieved at certain level and Laos is reluctant to nominate the Phouxeingthong NBCA for inclusion in the project's second phase. In addition, forest cover in buffer zone has been encroached for agricultural practices. The ecological management zones using bioregional approach was developed to provide a framework for transboundary biodiversity conservation in the adjoining protected forests and reducing the conflict of resource uses by local residents in the buffer zone. The project phase II is being implemented to strengthen existing cooperation among the tri-national countries and to enhance the protection of biological resources with the involvement of local communities and stakeholders.

- Arthur Mugisha, International Gorilla Conservation Program, Kampala, Uganda
Anecto Kayitare, International Gorilla Conservation Program, Kampala, Uganda
Eugene Rutagarama, International Gorilla Conservation Program, Kampala, Uganda
Moses Mapesa, Uganda Wildlife Authority

Overview of International Peace Parks and trans-boundary protected areas - Conserving Mountain gorillas in Virunga Massif of Democratic Republic of the Congo, Rwanda and Uganda. A case study

The Virunga Massif strides the international borders of Democratic Republic of the Congo (DRC), Rwanda and Uganda. It lies within the albertine rift valley, the richest biodiversity spot in Africa. It is the only home to the highly endangered mountain gorillas, estimated at 700 individuals covering four contiguous protected areas; Mgahinga and Bwindi National Parks in Uganda, Volcanoes and Virunga National Parks in Rwanda and DRC respectively.

The International Gorilla Conservation Program (IGCP), a coalition of three international NGOs; AWF, WWF and FFI, was established in 1991 with a mission to conserve endangered mountain gorillas within their remaining habitats. Starting with country-based conservation programs, IGCP built partnerships with neighboring communities and protected Area Authorities (PAAs) of the three countries to establish collaborative transboundary protected areas management, within the Massif landscape.

IGCP's collaboration with her key partners has achieved good results: the mountain gorilla population is growing at a 16% rate despite armed conflict in the region, and a tripartite agreement between the PAAs of the Massif, the Institut Congolais pour la Conservation de la Nature (ICCN), Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN) and Uganda Wildlife Authority (UWA) has been formulated. This Agreement, together with other regional frameworks and planning tools were endorsed by the respective governments.

Our experience indicates that the bottoms up approach and close ties with PAAs and neighboring communities are successful interventions in biodiversity and protected areas management. They promote an ethical and value system, which establishes solid roots that transcends political interests and borders and instead promotes gorilla conservation interests and support protected areas management.

- Paul Chai, ITTO Project Manager, Pulong Tau National Park, Sarawak, Malaysia
Oswald Braken Tisen, Senior Manager, Protected Areas and Biodiversity Conservation, Sarawak Forestry, Sarawak, Malaysia.

Enhancing the Conservation of Wide-ranging and Threatened Wildlife (Orangutan, Rhinoceros, Wild Cattle) through Transboundary Biodiversity Conservation Initiatives – the Malaysian and Indonesian Experience

The objectives of the International Tropical Timber Agreement (ITTA), 1994, among others include contributing to the process of sustainable development, promoting and supporting research, and increasing the capacity to conserve and enhance other forest values in timber producing tropical forests. Malaysia being a member of the International Tropical Timber Organization (ITTO) subscribes to the ITTA's objectives through the implementation of a number of biodiversity conservation projects in Malaysia and Indonesia.

With the full support and recommendations of ITTO and the commitments of the governments of Malaysia and Indonesia, two TBCAs in the Malaysian state of Sarawak and Kalimantan in Indonesia were established. These are the Lanjak-Entimau Wildlife Sanctuary / Betung Kerihun National Park Trans-boundary Conservation Area (LEWS/BKNP TBCA) established in 1994 – the first in the wet tropics, and the Pulong Tau National Park / Kayan Mentarang National Park Trans-boundary Conservation Area (PTNP/KMNP TBCA) established in 2006. ITTO has also provided financial support for the implementation of specific biodiversity conservation projects in each of the TBCAs.

This paper presents available information on the wide-ranging wildlife in the TBCAs, the importance of trans-boundary cooperation in the conservation of the animals, and constraints relating to effective collaborative management across the borders. It puts forward recommendations for enhancing collaborative efforts, including the establishment of a strong and independent institutional setup on either side of the international borders solely devoted to transboundary duties, strengthening human resource capacity with a team of trained and interested scientific and management personnel, and a management plan for collaborative actions.

- Kerttu Härkönen
Park Superintendent, Natural Heritage Services, Finland

Emergence of a Transboundary Network of Nature Protection Areas on the Finnish-Russian Border

The presentation looks at the emergence of and cooperation in nature protection areas between Finland and Russia on their 1200 km –long border area.

What once was one of the battlefields in the Second World War, and where thereafter a strictly controlled border existed between two states and two political systems, is today a relatively open area for cooperation in several fields of human activity.

With the collapse of the Soviet Union, the border zone in Russia became more accessible. Interest to investigate the nature values of the old-growth forests at the border led into forest inventories by environmental groups and scientists of both countries. Simultaneous interest into the forests by the forest industry gave rise to several conflicts. Concurrently, an extensive old-growth forest inventory was conducted on the Finnish side. After inventories and evaluations, several new forest protection areas have been established on both sides of the border, with some areas still under consideration. The concept of "Fennoscandian Green Belt" refers to the network of these protected areas together with areas further to the north at the Finnish-Norwegian-Russian border, stretching from the Baltic Sea to the Arctic Ocean.

The presentation describes the processes and mechanisms – e.g. a series of joint projects financed by the European Union - that have made this development possible. Practical experiences illuminate the successes, as well as the obstacles, of the work.

5B Transboundary tourism and conservation

- Beth Russell-Towe
President, Trail of the Great Bear, Alberta, Canada

The Trail of the Great Bear (TGB)

TGB is an international scenic travel corridor that links the great parks of the Rockies: Yellowstone, Glacier-Waterton, and Banff/Jasper. It is an acclaimed eco-tourism program born and raised in Waterton. Trail publications and learning travel programs interpret the integrated landscape. Economic returns from that activity contributes to the sustainability of natural and cultural communities. TGB is credited as being the first tourism initiative to recognize ecosystems as travel destinations, "a result of living in the Peace Park." Trail of the Great Bear is the recipient of the British Airways Tourism for Tomorrow Award.

- Steve Thompson
Crown of the Continent Project Coordinator, Associate Regional Director, Northern Rockies Region
National Parks Conservation Association, Montana, USA

Geotourism and the Crown of the Continent

The National Geographic Society is creating a "Geotourism MapGuide" for the transboundary Crown of the Continent region in collaboration with regional partners, including communities, land management agencies, First Nations, conservationists, and the travel industry. The map is based upon public nominations of the sites, experiences, activities, events and businesses that define the region's sense of place. It will feature stewardship initiatives aimed at sustaining the region's natural and cultural assets. A diverse transboundary stewardship council is advising National Geographic on the map. We will discuss the community-based process to develop the map, which will be completed in early 2008.

- Betty Weiler, Professor of Tourism and Director, Tourism Research Unit, Monash University, Australia
Jennifer Laing, Tourism Research Unit, Monash University, Australia
Susan A. Moore, Murdoch University, Perth, Australia

Developing effective partnerships for facilitating sustainable tourism associated with protected areas

Tourism in and around protected areas continues to grow steadily (Buckley, 2000a; Cole, 2001; Eagles, 2002b; Newsome *et al.*, 2002; Worboys *et al.*, 2001), and as such protected areas are of great importance to the tourism industry. Much of Australia's nature-based tourism, ecotourism and adventure tourism activity occurs in protected areas such as national parks, conservation reserves, marine parks, and world heritage areas (Buckley and Sommer, 2001).

While protected areas are clearly essential for a viable and sustainable tourism industry, tourism in turn offers an important vehicle for garnering and maintaining public support for protected areas. Eagles (2002, pg. 139) notes that "generally the trend is for government to demand that parks earn much higher amounts of their budget from tourism sources." Thus, tourism and protected partnerships are increasingly viewed as a valuable tool for both park managers and the tourism industry. There is increasing evidence that working in partnership can lead to "more constructive and less adversarial attitudes" (De Lacy, Battig, Moore and Noakes, 2002, pg. 10).

At the same time, as Timothy (1999, pg. 182) points out, there has been a growth in the numbers of parks that straddle or are located adjacent to political borders. Cross-border partnerships are a functional means to use, develop and manage these shared resources for both resource protection and tourism. Tourism, like nature, does not stop at jurisdictional borders – as with native animals, water and other resources, tourists have little or no interest in the boundary lines that determine legislative authority.

This paper reports on selected findings from a two-year Australia-wide research project that seeks to identify the attributes of successful partnerships, and to determine how particular elements contribute to developing,

fostering and maintaining partnerships among those involved in sustainable tourism in and around protected areas. The project, funded by the Sustainable Tourism Cooperative Research Centre and supported by an Industry Reference Group, is undertaking a number of protected area—tourism case studies, to provide recommendations for establishing, assisting and monitoring partnerships.

- William Flynn, Ph.D. Student, Geography, Oklahoma State University, USA
Douglas Hevenor, CEO, International Peace Garden, USA

A Border Runs Through It: 75 Years of Integration at the International Peace Garden

Back in 1928, horticulturist Henry Moore of Ontario dreamed of creating a place along the border between Canada and the United States “where the people of the two countries can share the glories found in a lovely garden and the pleasure found in friendships.” On July 14, 1932, Moore’s dream became a reality as some 50,000 people were on hand for the dedication of the International Peace Garden (IPG) near the geographic center of North America and nestled up in the Turtle Mountains where Manitoba meets North Dakota. Later this summer, the IPG will celebrate its 75th anniversary. Like the namesake of its topography, the IPG has slowly but surely come out of its shell to become not only a grand symbol of peace but an example of what Dallen J. Timothy (1999) describes as “an integrated level of partnership, wherein both sides are functionally merged and managed as one entity, and the border has relatively few effects on everyday functions.” The IPG makes for an interesting case study due to its unique border geography, as the open border transecting the park is a novelty that gives the Garden part of its character and is one of the main tourist draws (a la the Four Corners phenomenon), but at the same time, the border can also be a complication, as a barrier to tourism (Timothy 2002) or as a fuzzy line of legal interpretation within the park. This paper explores the role of the border in two fashions—(1) The physical form of the border in shaping the landscape of the International Peace Garden, and (2) The function of the border, exploring the ongoing political and economic integration between the two sides through the consideration of three scales—the Turtle Mountains region, at the state level between Manitoba and North Dakota (the Peace Garden State), and at the federal level between Canada and the United States.

5C Transboundary Protection Case Studies II

- Bill Dolan, Chief, Resource Conservation, Waterton Lakes National Park, Parks Canada
Larry Frith, Rancher; Chair, Waterton Biosphere Reserve Association

History of the Waterton Biosphere Association and transboundary cooperation in the Waterton Biosphere Reserve

Waterton Lakes National Park is located in south western Alberta and borders on British Columbia and Montana (U.S.A.). The park has been recognized for its exceptional biodiversity and scenic qualities, where the prairies meet the mountains. Waterton Lakes is the only park or protected area in Canada to receive three international designations - part of the world's first International Peace Park (1932), a Biosphere Reserve (1976) and a World Heritage Site (1995). However, the park is relatively small and unable to sustain wide ranging wildlife, most notably large carnivores. Additional challenges arise in maintaining ecological processes like wild fire. In this context, an ecosystem-based management approach has historically been an important element of the park's program.

The Waterton Biosphere Reserve (WBR) was established in 1979 through the Man & Biosphere Programme. Waterton Lakes National Park is the core protected area of the Reserve and the adjacent public and private lands constitute the zone of cooperation. To advance the concept, the Waterton Biosphere Association (WBA) was established in the early 1980's to promote, through science and education, land use and activities that are sustainable. The WBA has been relatively inactive in recent years, and as such, there has been a perception that the Waterton Biosphere Reserve is not a functioning Reserve.

The purpose of this presentation is to challenge this perception. The history of the Waterton Biosphere Association, the transboundary efforts of the national park and the health of the Waterton Biosphere Reserve will be presented and discussed.

- Prof Willem Van Riet, Chief Executive Officer, Peace Parks Foundation, Stellenbosch, South Africa
Craig Beech, GIS Manager, Peace Parks Foundation, Western Cape, South Africa

GIS and 3D modelling as a tool in the facilitation of peace parks

Peace Parks Foundation (PPF) is an international non-profit organization that assists Southern African governments by facilitating the development and establishment of Transfrontier Conservation Areas (TFCAs). Peace Parks Foundation supports 14 TFCAs throughout Southern Africa, six of which cross South African borders (see Map 1 overleaf). Furthermore assistance has been offered internationally, for example between North and South Korea, and between Israel and Palestine.

Peace Parks strengthen regional development, peace and stability through the use of the conservation of biodiversity, sustainable land use, sustainable economic development and tourism. These improve the ability of governments and conservation agencies to monitor and predict change and the progress towards the Millennium Development Goals. Peace Parks Foundation makes extensive use of GIS as an international 'language' integrating vast amounts of environmental and socio-economic information to be used for informed decision making. It is encouraging stakeholders in conservation, international aid agencies, non-government organizations (NGOs), community based organizations, community leaders, landowners, the private sector and all levels of governments to work together, adding to the body of knowledge of addressing the ongoing threats to people and the environment.

The success of the foundation has resulted in 3 treaty signings concretizing the establishment of peace parks between countries. A further four peace parks have been established through the signings of memorandums of understanding by the involved countries. The success stories and achievements of the foundation will be shared, highlighting the varying degree of progress which has been made by the Foundation during its first 10 years of existence.

- Linda McMillan
Deputy Vice-Chair, IUCN-WCPA Mountains Biome

Carabiners to Cricket Bats: The important role of sports in catalyzing cooperation and conflict resolution

The past forty years have clearly demonstrated the increasing power of sports to transcend differences of race, religion, and national origin and unite people across borders. From an unlikely genesis improving relations between the US and China in 1971 at the height of the Cold War, this power of sports to bring people together has grown rapidly with the global spread and improvement of modern communications technologies. Those working to create and manage peace parks and transboundary protected areas can leverage this unique power to catalyze cooperation and positive conflict resolution outcomes for their projects.

The United Nations declared 2005 as the International Year of Sport and Physical Education and affirmed that "Sport as a universal language has been found to bridge social, religious, racial and gender divides, hence contributing to lasting peace...[and] is an important way to achieve the Millenium Development Goals."

Sports that have been particularly effective in achieving these goals include ad hoc team sports like mountaineering and rock climbing tackling dramatic one-time objectives, as well as organized team sports such as cricket focused on creating a longer-term series of games that increase the level of positive interactions over time. Exploring the use of sports to catalyze cooperation and resolve conflicts in transboundary or international situations can yield valuable best practices for those working to create and sustain peace parks and transboundary protected areas.

- Wayne Friemund, Chair, Department of Society and Conservation, University of Montana
Robert Fincham, Director, Centre for Environment, Agriculture and Development, University of KwaZulu-Natal, South Africa

Trans National Protected Area Research and Education: A South Africa and U.S. Experience

Contemporary transboundary conservation is occurring in a climate of strained financial support, increased and often competing global demands and rapid social and ecological change. To meet these needs, managers are increasingly embracing the complexity of social ecological systems, relying on partnerships, and striving for agreement with civil society on a common vision regarding the priority roles of protected areas. Developing education and research programs to support management in this climate requires programs to think across broad social, ecological and political scales. Greater attention must be paid to the political dimension of conservation, the pace of current and anticipated temporal change and scales at which that change will occur. By simultaneously working across the countries of South Africa and the U.S the changes occurring in each conservation system become visible and comparable. In our work together over nine years, we have needed to address many of the same partnership issues that conservation managers are now facing (e.g., building trust, finding a common vision). While our work has targeted training and academic programs, a Doctoral Research program named Treehouse best articulates the vision of the partnership. The Treehouse program, designed in cooperation with the protected area management community has adopted a systems approach with focus on the management of demands, relationships and organizational learning. A systems thinking approach enables focus on processes within the social and ecologic system, forces of change and feedback mechanisms that can be intervened with. Within this general framework, the research of 14 graduate research projects is being integrated to demonstrate the functioning of complex systems in the arena of visitor management, planning, community displacement, organizational change and role of the private sector in managing public lands. Our work has illustrated that education and research institutions are integral to the larger system of protected area management and that while we have strived to help build capacity in management institutions, we have needed to gain considerably within our own institutions. The challenges related to conservation in the next half century, therefore, apply to all of us and demand transboundary thinking.

5D Transboundary Protection Case Studies III

- Kevan Zunckel,
RSA Project Coordinator, Maloti Drakensberg Transfrontier and Development Programme

The Maloti Drakensberg Transfrontier Conservation and Development Programme: A Collaborative Initiative between Lesotho and South Africa

The Kingdom of Lesotho is surrounded by the Republic of South Africa and they share the Maloti Drakensberg mountain bioregion along their north eastern and south eastern borders. This mountain bioregion hosts globally significant natural and cultural heritage and is also of great scenic value. This was recognized when the uKhahlamba Drakensberg Park was registered as a World Heritage Site in 2000 in recognition of these features. Some time before this though, in the 1980s, officials from the two countries had already recognized the need to collaborate on the management of this shared asset. Preliminary talks grew to the signing of a declaration of intent in 1997 and then an international memorandum of understanding in 2001. This then led to the launching of the first 5 year phase of a transfrontier conservation and development programme in 2003.

As this phase is drawing to a close and efforts are focused on getting all that is necessary in place for the 2nd phase, much has been achieved and learnt as far as the mechanisms that are required for collaboration across the numerous boundaries within this mountain bioregion. Collaboration across the international boundary has been the most challenging with the significant differences between the two countries in terms of their legal, social, cultural, political and economic frameworks. This paper will discuss these differences and how they were addressed during the 1st phase as well as what has been planned for phase II.

Together with this biological and cultural richness is the strategic significance of the ecosystem services delivered from the area, particularly water.

- Angeles Mendoza Sammett, Ph.D. Candidate, Faculty of Environmental Design, University of Calgary, Alberta, Canada
Michael S. Quinn, Associate Professor, Faculty of Environmental Design, University of Calgary, Alberta, Canada

On the edge: factors influencing conservation and management in two border Mexican parks.

This paper discusses governance and management factors influencing wildlife conservation in two Mexican parks in the Sonoran Mexican-U.S.A. border: Sierra de los Ajos-Bavispe Protection Zone and Desierto del Vizcaino Biosphere Reserve. The methodology included case studies, key informant interviews, field visits, and document reviews. A multi-dimensional model of governance interactions among parks and stakeholders helped identify critical factors influencing management outcomes at various spatial scales. Sharing the border with USA wild lands and protected areas is a conservation driver because of the interest from USA authorities to increase cooperation to protect shared wildlife and water supply. This brings the possibility to access financial and human resources from USA academic institutions and agencies. However, the remoteness of some areas within the parks and economic interest, together with problematic enforcement on the Mexican side, are main barriers compromising conservation outcomes because of the proliferation of illegal activities.

- Goetz Schuerholz, Adjunct Associate Professor, University of Victoria BC, Canada
Samuel Sangüeza-Pardo, Executive Director, National Environmental Fund of Ecuador

Removing colonial barriers for the benefit of the Indigenous Achuar People of Peru and Ecuador through conservation efforts

In 1998 Peru and Ecuador signed a definite Peace Agreement in the aftermath of the 1995 Cenepa war between the two countries. The so called "Rio Protocol" ended an almost two century-old boundary dispute, triggering a flurry of transboundary activities, mostly under the umbrella of the "Binational Plan for Development of the Peru-Ecuador Border Region", established as a result of the Rio Protocol. The geographic intervention area of the Binational Plan covers approximately 400,000 km² straddling the borders

of the two nations, the greater section (85%) forming part of the Amazon rainforest. Within the framework of the Binational Plan and with bilateral financial assistance from Germany, a current initiative aims at the conservation management of the 1.5 Million hectares Achuar lands on both sides of the international border, in support of the Achuar people and their battle against increasing pressures from the oil industry and other outside development interests that threaten the Achuar' rich cultural heritage and unique lifestyle firmly anchored in the sustainable use of their biodiversity-rich lands. With a total of 8,500 persons, the Achuar indigenous community is the smallest indigenous group of the four Jibaro linguistic groups, inhabiting the largely pristine rainforest of the Pastaza and Morona watersheds. Two thirds of the Achuar live on the Ecuadorian-, one third on the Peruvian side of the international border that artificially has separated this closely linked indigenous group since early colonial times. The proposed conservation management approach to the threatened Achuar territory and its people is expected to benefit this unique indigenous group, peace efforts between Peru and Ecuador, and biodiversity conservation.

- Christina Alexander
Founder and President, United States Canada Peace, Anniversary Association, Washington, USA

Peace Monuments and Parks – Preserving the Heritage in a Changing World Situation. Peace Arch International Park (1921-2007) a overview of the park culture, history, development and effects.

If the creation of a Monument and Park to PEACE is itself difficult, then the preservation of these monuments and the surroundings created for them, is also a monumental task. Located on the US/Canada Border between Washington State and British Columbia the Peace Arch International Park provides a case study of the forces affecting both national entities as they struggle to sustain or modernize the real estate that is their foundation. Parallel to these forces are those involving cultural, political and economic issues along with the external or global pressures such as we are experiencing as a result of the war on terror.

To many it appears there is a new global movement in the creation of Peace Parks around the world. Awareness of the need for networking the existing peace parks like the Peace Arch Park is overdue. Also, the circumstances that inspired the creation of these unique monuments and parklands is a long standing issue with nations around the world, but the forms of expressing such movements are varied and sometimes even threatening.

The Peace Arch and the Peace Arch Park were constructed and dedicated in 1921, by the citizens of the United States and Canada. Since then the efforts to preserve and protect the Peace Arch and Park have been impacted by a number of cultural forces, economic and political events. In the late 1930's the Peace Arch and Park were entrusted into the care of the Washington State Parks and British Columbia Ministry of Lands.

During its lifetime the Arch has had one conservatory restoration measure taken in 1985. In 1996, it was listed on the national historic registries of both countries. Most recently, the border facilities adjacent to the park in both countries are under redevelopment. This is the second major redevelopment of these facilities during the Peace Arch's lifetime.

Closing Plenary – Wednesday September 12, 2007**3:30 pm – 4:30 pm**

- Trevor Sandwith
Deputy Chair: IUCN World Commission on Protected Areas

Contemporary issues and challenges in transboundary conservation: conference reflections

The Durban Action Plan adopted at the World Parks Congress in 2003 reflected the global interest in transboundary conservation as a viable strategy for biodiversity conservation at the landscape scale. Its translation into the CBD Programme of Work on Protected Areas in 2004 was the first time that the development of transboundary conservation programmes received a formal mandate requiring national governments to respond to the challenge. Yet the practice of transboundary conservation poses some of the most intriguing challenges for the sector, despite its popularity measured by the global growth in numbers and diversity of initiatives. Seen from the point of view of meeting biodiversity targets in terms of the CBD, the approach offers the opportunity to address landscape scale conservation in areas marginal to the centres of national power where development pressures are lowest. In areas of conflict, past or present, the regional co-operation across national borders offers the hope of fostering or sustaining peace and mutual support.

The implication is that issues of national sovereignty and international relations are dominant, and the driving forces are often high level and remote from the realities of people and conservation practice in sites. Conservation at the protected area scale is always challenged by the complex sets of goals and means, involving governance, community involvement, institutional arrangements, rights and obligations. Scaled up at the transboundary level, these considerations must consider a new range of actors in a transnational context including international relations and diplomatic protocols, boundary disputes and land restitution, immigration and emigration, customs and excise, security, trade, health and safety, among others.

This has demanded the development of a whole new set of processes and skills to facilitate effective transboundary conservation that ranges through defining the purpose and nature of effective transboundary conservation initiatives, seeking legal and institutional models for implementation, dealing with social and community processes, and considering economic benefits and financial sustainability. In this review, emergent issues and challenges in contemporary conservation will be highlighted together with the insights of the Parks, Peace and Partnership conference, supporting the global dialogue for improved practice.

Poster Session and Book Launch – Monday September 10, 2007

5:15 pm – 9:00 pm

- Barry Batchelor
Ranger, Tas Parks & Wildlife Service, TASMANIA, AUSTRALIA

Rabbit & Rodent Eradication Plan: restoring habitat on a unique sub-Antarctic island

Macquarie Island Nature Reserve and World Heritage Area has outstanding global conservation, geological, ecological and scientific values.

A long-term feral animal control program commenced on Macquarie Island in the 1960s resulted in the eradication of the weka, a predatory bird, by 1989 and cats by 2000. The proposed eradication of rabbits and rodents on Macquarie Island is an extension of this program.

The impacts caused by increasing rabbit and rodent populations on Macquarie Island Nature Reserve and World Heritage Area are very serious and there are currently no viable population control options for any of these three species of rabbits and rodents. These impacts include devastating effects upon native fauna, flora, geomorphology, natural landscape values and nutrient recycling systems. Up to 24 bird species are expected to benefit from a pest eradication operation on Macquarie Island. Twelve of these bird species are listed as threatened under Tasmanian and/or Commonwealth threatened species legislation. It can be expected that many seabird species would rapidly re-colonize the island given habitat restoration and removal of predatory rodents.

Recognizing the significance of current issues, a Draft Plan for the Eradication of Rabbits and Rodents on Subantarctic Macquarie Island (the plan) was prepared. This plan provides an overview of the issues resulting from increasing rabbit and rodent populations on Macquarie Island. To address these issues the only viable long-term solution is the eradication of these three last remaining animal pest species. A comprehensive operational plan for an eradication program on Macquarie Island has been developed, and an environmental impact statement on the proposed operation is currently in preparation. The proposed Macquarie Island pest eradication operation will be undertaken during the winter months (May – September) to exploit seasonally low levels of all the target species and their natural food resources. It will coincide with the absence of most of the indigenous species, thus minimizing or avoiding any effects on their populations.

There is a continuing international cooperation stemming from Tasmanian Parks & Wildlife Service & New Zealand's Dept of Conservation staff being involved in pest eradication programs on both NZ & Australian islands. Also NZ islands, especially Campbell Is, will be used as a staging post in getting aircraft, machinery & supplies to Macquarie, as it is possible to 'island-hop' by helicopter from New Zealand's South Island.

Background: Macquarie Island, one of Australia's sub-Antarctic islands is a site of outstanding geological significance on a world scale, being included on the World Heritage List. It is also a UNESCO MAB Biosphere Reserve, a Tasmanian State Nature Reserve, and has 2 Marine Reserves (Tasmanian State, & Aust Federal) declared over the adjacent waters to protect the vital marine ecosystem.

It is unique, as it provides evidence of the rock types only otherwise found at great depths in the earth's crust; but also gives evidence of plate tectonics and continental drift, the geological processes which have dominated the Earth's surface for many millions of years.

Macquarie Island is situated about 1500 km south-south-east of Tasmania, about half way between Tasmania, New Zealand and the Antarctic coastline at around 55 degrees south. Its position just north of the Antarctic Convergence makes it one of only eight island groups in the sub-Antarctic region. The main island is approximately 34 km long and 5.5 km wide at its broadest point.

As one of the only specks of land in a vast expanse of ocean, it is essential terrestrial habitat, supporting a huge breeding concentration of seabirds (3.5 million) and seals; 3 fur seal species, and Southern elephant seals – many of which are classified as threatened species. It is also valuable as an important monitoring station for meteorological observations, climate change, ozone depletion, tectonic seismic activity, atmospheric physics, and threatened species recovery, and an Australian Antarctic research station has been continuously operated here since 1948.

- Hall Healy
Interim President, The DMZ Forum, Inc., USA

Korean Demilitarized Zone (DMZ) Peace and Nature Park

For over 50 years the DMZ has been part of a geopolitical vacuum and symbol of war, tension and separation. During this period nature there has regenerated. The DMZ and contiguous Civilian Control Zone in South Korea contain five rivers and many ecosystems and over 1,200 plant, 50 mammal, over 80 fish and hundreds of bird species, many of which are globally endangered. The DMZ provides a unique link to the entire East Asia flyway system from Russia down to Australia.

We propose having a poster at the upcoming Waterton Peace Park Conference to depict the following aspects of on-going work to preserve the Korean DMZ:

- Conflict resolution/peace enhancing and conservation components of the project
- Potentially huge economic/ecosystem service benefits of managing the DMZ sustainably
- Globally unique nature of the DMZ from biodiversity and geopolitical perspectives
- Opportunity to study what happens with nature when an area is left virtually untouched for over 50 years
- Opportunity to reintroduce formerly resident species
- Global collaborative efforts being engaged in to preserve this unique area

An example of a previously done poster is attached, as are examples of some of the graphics that will be used in this proposed poster.

- Daniel B. Fagre, USGS Northern Rocky Mountain Science Center, Glacier National Park, USA
Tony Prato, University of Missouri, Columbia

Sustaining Rocky Mountain Landscapes: A Focus on the Waterton-Glacier International Peace Park

This poster will summarize a 2-year effort to assess the state of natural resources, human impacts, and management approaches in the Crown of the Continent Ecosystem that is shared between Canada and the U.S. At the core of the Crown of the Continent Ecosystem is the Waterton-Glacier International Peace Park where much of the effort was focused. As the world's first peace park, the transboundary cooperation between the two parks and their countries has provided a role model for other peace parks and also has been critical to long-term sustainability of the regional landscape. The recently published book that summarizes the assessment has 39 authors from Canada and the U.S., representing numerous perspectives and disciplines.

- Jason Lambacher
University of Washington, Seattle, Washington, USA

Kuril Islands International Peace Park

Russo-Japanese relations have been mired in a territorial dispute over the Kuril Islands since the end of WWII. Because the historical and legal claims to the islands are complex, inconclusive, and marked by zero-sum justice claims, a new and politically courageous approach to the problem is required. This paper explores the prospects and challenges of one such approach, that of creating a jointly administered International Peace Park (IPP) to advance peace and conservation. I argue that an IPP in the disputed islands holds intriguing promise as a measure of "environmental peacemaking" in that it offers a pragmatic context in which to end a period of acrimonious history and innovatively begin a new era of trust and mutual understanding. Furthermore, ecological exigencies compel urgent action to protect a globally important bioregion from poaching, pollution, and political neglect. Unlike many IPPs, a Kuril park raises a peculiar challenge because the disputed islands would effectively become shared "international space" jointly managed by both countries. This challenge is amplified because the issue has been captured by nationalists on both sides and the political costs of an IPP amount to abandoning exclusive claims to Kuril sovereignty. Nonetheless, the benefits of an IPP have the potential to outweigh the costs, and demand further investigation as a credible means to a long-overdue peace treaty, more cooperative relations between two global powers, and effective protection for Kuril ecology. A Kuril IPP would also be a significant contribution from East Asia to the growing IPP movement.

- Dr. Nigel Young, Former Chair of the Peace Studies Department at Colgate University in New York, USA
Abigail Radis, Graduate Student & Assistant to Antonia Young, Chair of Balkans Peace Park Project- BPPP
UK Committee

Balkans Peace Park Project Exhibition

The BPPP Exhibition, is a 7-panel graphic/text display.

The first five panels of this exhibition were created to commemorate a long trek organised by the BPPP in association with Aquila, ERA, Halil and IRSH. The 11 day trek was made by 36 people from 9 countries through Albania, Kosovo and Montenegro as a further step towards creating a transnational peace park for the Balkans. The two later panels provide information about the BPPPs more recent activities.

- Samuel Sangüeza-Pardo
Executive Director, Fondo Ambiental Nacional Ecuador (FAN - National Environmental Fund of Ecuador)

Fondo Ambiental Nacional (Ecuador)

A private non-for-profit organization created by the Republic of Ecuador with the purpose of mobilizing extraordinary funding through donations and grants to finance environmental priorities of the country. The principal activity of the Fund is directed to support biodiversity conservation in Ecuador through sustainable financing of core operations of the National System of Protected Areas, and support of activities in buffer zones. This is achieved, by channeling funding to different entities that implement environmental programs and projects in Ecuador such as: the Ministry of Environment, National Local NGOs, local communities, indigenous groups, local governments, and Universities.

Key Implementation Strategies include:

- The Protected Areas Fund, based on a \$12M endowment (GEF, Germany and Ecuador) supports 11 of the 35 Protected Areas with a yearly budget of approximately \$600,000 which is more than 20% of all funding for protected areas in Ecuador (continent).
- EcoFondo is one of the most important funding initiatives from the private sector (OCP-EnCana) \$16.9M until 2020 which funds projects out a competitive cycle which includes peer reviews and a participatory selection and decision process. Funding is directed primarily to conservation units in areas of direct influence of the OCP Pipeline and other areas related to hydrocarbon extraction.
- The Condor Kutuku Conservation Corridor Project has funding from the GB Moore Foundation for the strengthening of protected areas and the creation of new ones around the Sangay and Podocarpus National Parks.
- Fondo Ambiental will manage the Galapagos Invasive Species Fund that will operate from an endowment fund targeted to \$15M to fund entities and organizations of Galapagos in charge of implementing actions to control invasive species in the archipelago.

Several other donors and agencies have supported different projects managed by the Fund including: Cooperation from the Netherlands, USAID, TNC, CI, The MacArthur Foundation, UICN-NED, CEREPS-Ecuador, KfW-Germany, among others.

The experience, track record and credibility of Fondo Ambiental, provide an interesting and effective way to support biodiversity conservation in Ecuador.

Mission: "Support financing of environmental management towards the sustainable development of Ecuador"

Web Page www.fan.org.ec

- Crown Managers Partnership

Cooperation in the Crown of the Continent Ecosystem

The Crown of the Continent Ecosystem stretches along the Rocky Mountains from the Provinces of Alberta and British Columbia in Canada down into the State of Montana in the United States of America. This area is blessed with exceptional biodiversity and natural beauty as evidenced by the various international designations afforded to the core of this important ecosystem, the Waterton-Glacier International Peace Park. However, the ecosystem has been fragmented by a complex milieu of federal, provincial, state, tribal and local governments who exercise distinct statutory jurisdictions on various parts of the ecosystem.

The purpose of this Poster is to present this challenge and describe a unique partnership amongst government agencies which has been established to respond to these circumstances. The Crown Managers Partnership was established in 2001 to promote communications and collaboration around this challenge and to cooperate on shared science and management initiatives in the ecosystem.

- Saleem H Ali

Associate Professor of Environmental Studies, Rubenstein School of Natural Resources, University of Vermont

BOOK LAUNCH: Peace Parks: Conservation and Conflict Resolution

In 2007, MIT Press will release the edited volume, *Peace Parks: Conservation and Conflict Resolution*. As the first extensive treatment of the relationship between peace parks and international security, the volume examines peace parks from a number of contrasting perspectives—with individual chapters ranging from an analytical game theory approach to numerous place-based case studies. One of the fundamental goals of the volume is to move beyond the hotly contested debate over the degree to which environmental factors either cause or are associated with border conflict. Regardless of where one stands in this debate, a question that has received insufficient attention is the potential role of peace parks in harmonizing the two worthy goals of environmental protection and conflict mitigation. This volume fills this gap by portraying peace parks not as an all-encompassing panacea, but as a workable tool that could minimize conflict in an appreciable number of border regions.

- Bill Hayden, Glacier National Park Interpretive Specialist, Glacier National Park, USA

“Glacier Is...” An Overview of Glacier National Park – Video Presentation