

**SCOTTISH  
NATURAL  
HERITAGE**  
  
**DUALCHAS  
NADAIR  
na h-ALBA**

**IUCN**  
The World Conservation Union

 **WCPA**  
WORLD COMMISSION  
ON PROTECTED AREAS

The 7<sup>th</sup> World Protected Areas Leadership Forum (WPALF) was held in Inverness, Scotland from 17 – 19 October, 2007.

A full list of participants is attached as Annex 1.

Copies of all Powerpoint presentations are available on the enclosed CD.

The text of this report covers the key issues raised in presentations and in subsequent discussions.

Cover photograph: Slioch from Loch Maree Islands, 17 October 2007 by Graham Neville, Scottish Natural Heritage © Graham Neville/ SNH.

## **FINAL RECORD OF MEETING**

### **Objectives**

The objectives of the Forum were:

- Benchmarking – for reviewing standards and approaches to different issues; Forum for discussing issues; and
- A platform for further cooperation and strengthening efforts for protected areas.

**THURSDAY OCTOBER 18**

**SESSION 1: WELCOME AND SCENE SETTING**

***Ian Jardine, Chief Executive, Scottish Natural Heritage***  
***David Sheppard, IUCN/WPALF***

The agenda for the meeting was outlined, with particular reference to the need for the WPALF to feed ideas for discussion into the Durban +5 meeting during 2008. This meeting will assess progress and help chart the future course for Protected Areas, identify big issues emerging for Protected Area management, and set the framework for the 2013 World Parks Congress. Also, the wider links to the Convention on Biological Diversity (CBD) 9<sup>th</sup> Conference of the Parties (COP9) in Bonn in May 2008 were made.

There were 5 key areas identified for the 2007 Forum and some questions to stimulate debate posed:

- Future issues for Protected Areas;
  - Within the context of global change, how do Protected Area managers ensure that Protected Areas are recognised as the cornerstones of biodiversity protection, and that their role in sustaining human life is acknowledged?
- State of the Parks Reporting and Management Effectiveness Assessment at the PA system level;
  - What are the lessons from experience to date and how can results be better applied in Protected Area management and influencing budget allocations?
- Marine protected areas;
  - How do we establish more effective management of marine Protected Areas?
- The social and economic value of protected areas;
  - How can these values be better identified and better communicated to stakeholders and decision makers?
- Climate change and protected areas;
  - How can agencies respond to the threats and opportunities presented by climate change?

**Review of progress and current challenges**

***Presentation: Nik Lopoukhine, IUCN***



The Convention on Biological Diversity (CBD) calls for a number of targets and deliverable outcomes. However, there has been a low commitment so far to meeting some of these targets – as at COP8, only 15 out of a possible 188 reports have been received.

Marine protected areas are currently being designated more than ever, with new legislation in force or expected in many countries. However, the process for establishing effective protected areas in the marine environment has not yet, on a global scale, engaged with the transport, military, or fishery sectors. It is imperative to engage these communities to protect the biodiversity of the seas.

New schemes for the sustainable financing of protected areas are being explored. This includes direct payment for services provided, carbon sequestration, the creation of a Natural Heritage Fund and other foundation or trust funds. However, the challenges to sustainable funding of protected areas include the situation where increases in external

funds leads to equivalent reductions in Government funding, and also where funds raised by a protected area do not get re-invested into the immediate area. It is clear that protected areas leaders need to engage with financial decision makers in Government rather than simply environmental decision makers on this issue.

The issue of human resource capacity was also noted, including the fact that an enormous resource demand exists in terms of the development of access to information, and training. However, there is a risk that the relatively small number of professionals delivering capacity building are being 'burnt out', and risk leaving the arena. Therefore, it must be necessary to 'train the trainer' to foster greater capacity amongst wider audiences.

People's interaction with Protected Areas can increasingly be accepted in terms of viewing protected areas as a social/economic driver, linking to global agendas of health, education and poverty alleviation. It is also noted that protected areas provide 'free' ecological services to urban areas, such as the provision of fresh water, and that the costs of these services must be factored into any formulae for working out the economic values of protected areas. The key challenge is that some literature places conservation efforts as no better than extractive industries owing to the perception of removing these areas from common use.

Focusing attention on emerging issues to be discussed at the Durban +5 meeting, Nik Lopoukhine noted the issue of invasive non-native species, which is currently more of an issue than was considered at Durban. In addition, it is clear that climate change adaptation strategies must be discussed, including the role of protected areas in providing corridors and connectivity for species driven by climate change in either an altitudinal or latitudinal direction. This also links to the question of ecological restoration – to what, and using what baseline? Finally, the view that protected areas have 'been achieved', leaving governments to focus on other 'big issues' was discussed, focusing on how to ensure that the global agenda does not marginalize the role of protected areas. The World Conservation Congress in 2008 provides an opportunity to address some of the above challenges and issues. It was noted that protected areas leaders could continue to discuss these amongst themselves, or could have others talk about the value of protected areas – such as Nelson Mandela – under the approach of 'For Life's Sake'. This would seek to identify and communicate the value of protected areas as contributing to global solutions.

## **The future of Protected Areas**

### ***Speaker: Peter Cochrane, Parks Australia***

Peter Cochrane noted that the issues facing protected area managers have never been so difficult or urgent. A quote from Bob Carr - that "the work we are doing now is having a conversation with the future" – highlighted the point that it is important to share the experiences we have now in protected areas with future generations. The challenge is to convince decision makers and others of their value. Thus protected areas managers need to have discussions within societies at a different level to those with whom we are currently engaged.

It is clear that to do this, protected areas managers need to use the right languages for the audiences, and need to improve language skills to effectively engage with health and other sectors. There is also a clear need to communicate the consequences of inaction on issues, including the need to move from acquisition of land for conservation purposes to better management of protected areas in order to better deliver goods and services. Peter Cochrane also argued that protected areas managers need to talk in the language of tourism and regional economics, and argue for marine protected areas on their spill over effects to communities and economies on shore.

Climate Change is a key area where the role of protected areas could be more widely communicated – for example, the role of protected areas in storing carbon. For example, 25% of forests in Australia are in protected areas – equivalent to a decade worth of carbon emissions. Thus protected area managers are carbon managers – a new concept which should be communicated.

In some protected areas, declining visitor numbers is an issue with knock-on effects of declining revenue, prompting the question whether protected areas are becoming less relevant. In other countries, however, the opposite is in effect with increasing visitor pressure. Globally, changing demographics and related language or cultural shift is a key issue which has many ramifications relating to the traditional visiting population to protected areas. As a further example, ageing and less active populations have implications for future protected area management.

Finally, there are a number of opportunities presented for discussion on the future management of protected areas. New technologies provide a new challenge and opportunity for communicating values and roles of protected areas to new audiences. In the wider landscape, it was proposed that protected areas managers need to be more conscious of neighbouring lands, and have a closer relationship with neighbouring communities, in order to be of more immediate relevance.

## **Discussion**

The Forum participants responded to the above presentations, noting the need to:

(1) Change the language away from traditional conservation management technical language, and change the key messages of our engagement – keep messages clear and simple and relevant to broader issues in society, such as the role of protected areas in providing fresh water to urban areas. It is also important to learn from experience elsewhere – the *Healthy Parks, Healthy People* initiative from Parks Victoria offers a good model of successfully interacting with the health (physical and mental) agendas. In Mexico, a new campaign of engagement with people is running under the banner of ‘*Do you know how Mexico tells you I love you?*’ – putting protected areas into the heart of people. Protected areas managers should not be afraid of emotional appeal to new audiences.

(2) Reach out to new audiences, including those viewed as opponents to traditional nature conservation approaches. An example of this was the invitation from Parks Victoria to the Sporting Shooters’ Association, who were asked to help control feral animals in return for being able to practice their sport within the protected areas, or the invitation to the 4WD users’ groups to come and help clear storm debris in return for use of limited amounts of maintenance tracks.

(3) Target influential people and use them to communicate our message, e.g. the presentation by Nelson Mandela at the World Parks Congress. The key events during 2008 offer opportunities to communicate these messages but they should be relevant to a wider audience. New audiences can also be reached through new technologies – take the parks to the people.

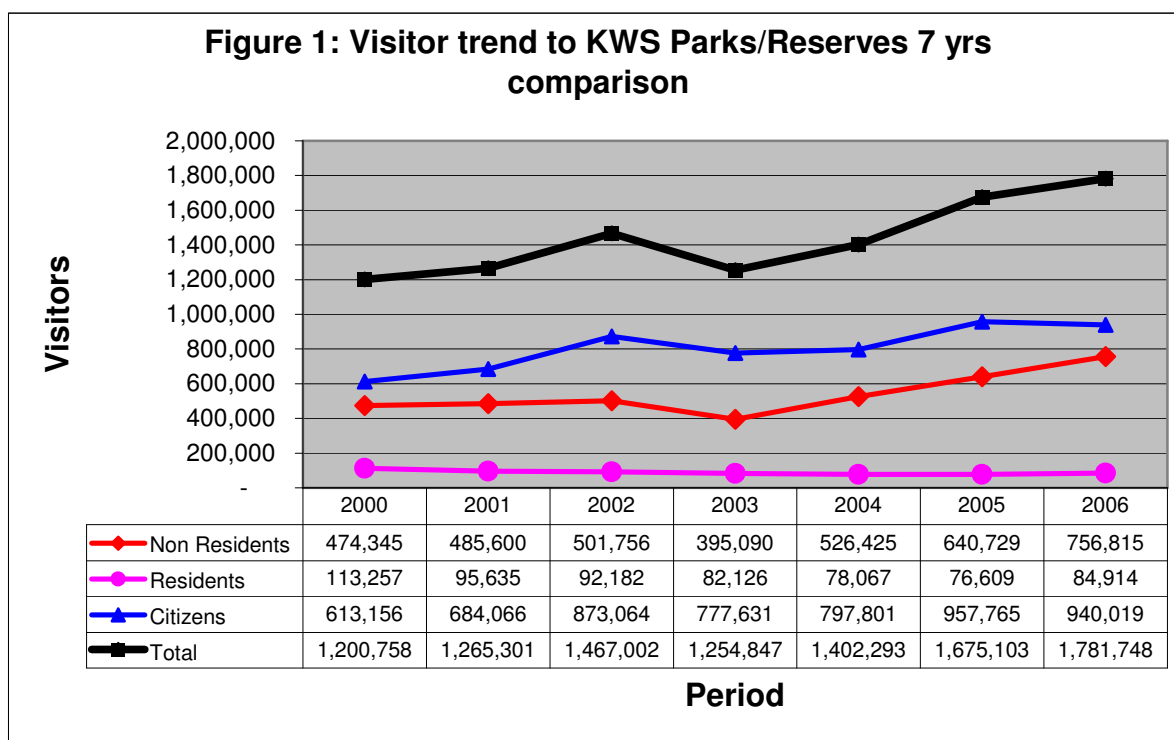
## SESSION 2: STATE OF THE PARKS REPORTING AND MANAGEMENT EFFECTIVENESS REPORTING AT THE PROTECTED AREA SYSTEM LEVEL

### Kenya Wildlife Service: Our 3-year journey

*Presentation: Julius Kipngetch, Kenya Wildlife Service*



This presentation outlined the fact that protected areas are an integral aspect of Kenya's economy: Revenue from protected areas is 25% of Kenya's overall GDP. Forty percent of all visitors to Kenya came to National Parks. There has been a major jump in revenue, due to increase in tourism, tariff adjustment (increase in fees) and also fighting inefficiencies (theft etc.). Figure 1 shows the recent trends in visitor numbers to Kenya's National Parks and nature reserves (past 7 years):



Kenya has used Scenario Analysis based on projections on visitor numbers and revenue, to look at best case and worst case scenarios in terms of income. In the best case Kenya will establish an Endowment Fund which will provide sustainable financing for future years. A number of different approaches have been applied, including surcharges on different areas, to maximise income.

Protected areas in Kenya serve many purposes and functions: 4 of 5 major water towers are in protected areas, plus they provide major benefits for biodiversity and tourism.

A Strategic Planning Framework was developed to address many of the issues facing the Kenya Wildlife Service 5 years ago. Some of these issues included corruption and poor morale. Through new systems, strategic objectives and leadership, including through new

systems of training and investment in staff (increasing salaries), staff morale has been raised and capacity built to raise standards.

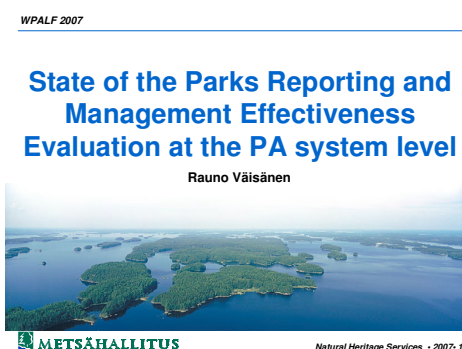
Beyond the immediate staff issues, there has been a focus on community development: particularly in relation to education, water, and roads. Finally, work has been undertaken on developing “Brand Kenya” which is clearly focused on wildlife and protected areas. The communications work alongside this has focused on positive messages.

The planning framework has been evaluated using technology and IT tools. Julius Kipngetich outlined his 3 management principles: (1) the principle of high concept; simple execution, big impact; (2) Design structure, with core business at the top, focused on frontline staff; (3) Sequencing change – first: cleanliness, order and discipline; second: systems, structure, rules and regulations; third: attitude. Reform should be continual - but avoid “paralysis by analysis”.

Throughout this programme of change and investment, challenges initially included a resistance to change, but increased revenue and therefore investment addressed that. Another challenge was the resistance from other agencies to the values of protected areas, who were not aware of the benefits of protected areas at a level beyond wildlife conservation. Key messages were communicated to these bodies to address this.

## **State of the Parks Reporting and Management Effectiveness Evaluation at the PA system level**

***Presentation: Rauno Väisänen, Metsähallitus Natural Heritage Services, Finland***



This presentation outlined the structure and aims of Metsähallitus, and introduced the approaches taken to Management Effectiveness Evaluation and State of the Parks Reporting. The First Management Effectiveness Evaluation (MEE) was carried out in 1994 by Bibelriether & Eidsvik. A further MEE was carried out in 2004 by Gilligan, Dudley, Fernandez de Tejada & Toivonen, and published in 2005.

The objectives of the second Management Effectiveness Evaluation (MEE 2) were to enable

the management bodies and authorities to evaluate whether:

- approaches in protected area (PA) management are sound and sustainable
- resources are used in an appropriate and efficient way; and also served to:
- develop cooperation and partnerships with local communities, NGOs and other stakeholders
- give guidance on how to further improve the management and monitoring system
- provide a platform for testing and developing existing methods and frameworks
- guide the development of specific national or local objectives, etc.

These objectives helped assess the health of the system but also change the culture towards adaptive management, and test and apply new ideas. Metsähallitus carried out self assessment, and also used external assessment methods. A field assessment, covering different parts of Finland, reviewed different management systems and interviewed different stakeholders: scientists, indigenous peoples, etc. The Finnish Minister of Finance was involved from the start, and represented on Committee, leading to greater ownership and buy in by central Government.

The management response to MEE2 was divided between complex and easy; and less important and important. Results were defined as follows:

- Management response at the national level – input to national strategy for sustainable use and developing an ecosystem approach;
- Increased international cooperation and activity, linked to benchmarking and also trying to help other agencies;
- Seconded staff member to IUCN for one year, to work on IUCN programme on protected areas;
- Undertook organisational restructuring to achieve greater efficiency;
- Concrete implementation of recommendations through organisational work plans and target setting;
- Developing culture of adaptive management, use of best practices, bench marking etc;
- Regular system of regular reporting, 5 yearly, on issues such as threat assessment;
- Use of a standardised IUCN template for reporting;
- Continuous data collection system put in place that can be integrated and aggregated across the country.

The first State of the Parks Report flowing from this process was published in 2007, using standardised frameworks and indicators, including the Balanced Scorecard Approach, and lessons learned from the Australian experience.

Metsahallitus have documented the lessons learned from this process. These are:

- That Management effectiveness and State of the parks reporting are useful at various levels;
- There is a need to develop better ways for involving the public;
- Enabling factors include the scientific support from universities and research institutions;
- Efficient data management systems are crucial;
- Results from MEE can be used for many different purposes – for park managers, for stakeholders, as a communication tool etc.

## **State of the Parks Reporting**

### ***Speaker: Mark Stone, Parks Victoria***

Mark Stone noted the value of State of the Parks Reporting as a snapshot of Parks development, whose true value grows over time as future snapshots identify trends, successes, and failures. Also noted was the value of such reporting in providing accountability within the organisation, within the community, and within Government, enabling a broader look at issues, and prioritisation of resources.

The first State of the Parks report carried out by Parks Victoria concentrated solely on the health of the environment, identifying ecological values and risks, and threats to these. The report didn't take into account the whole value of the Park. The next model used for the subsequent State of the Parks report brings into the analysis other factors such as visitor appreciation and economic values, demonstrating the return to communities, and finally also the benefits for community values such as health. Economic valuation carried out in this report showed the multiplier effect of investing in Protected Areas and how much this brings into local communities. This is a powerful tool, and engages many other communities of interest in having a say on their National Parks.

## **Discussion**

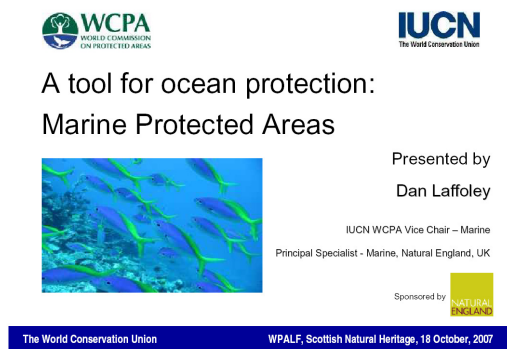
Discussion amongst Forum participants on State of the Parks Reporting focused on the strengths of the format and its application, and how to engage wider communities of interest within it. The following issues were raised:

- (1) State of the Parks reporting needs to be at a regular interval – around 5 years. This is in order to maintain a currency of reporting, but to enable real reporting on progress. This process should also feed into the reappraisal of organisational strategies and business planning.
- (2) There is a need to define very clear goals in setting up a State of the Parks report, and be clear about the methodologies required to achieve them.
- (3) There are many requirements for reporting and there is a need to harmonise this to address the many different reporting needs of different Conventions, including the CBD.
- (4) State of the Parks reporting is valuable for communicating benefits of Parks and for engaging wider community involvement.

## SESSSION 3: MARINE PROTECTED AREAS

### Marine Protected Areas – A tool for ocean protection.

**Presentation: Dan Laffoley, IUCN WCPA / Natural England**



A tool for ocean protection:  
Marine Protected Areas

Presented by  
Dan Laffoley

IUCN WCPA Vice Chair – Marine  
Principal Specialist - Marine, Natural England, UK

Sponsored by NATURAL ENGLAND

The World Conservation Union WPALF, Scottish Natural Heritage, 18 October, 2007

There is a clear need for better protection of the marine environment. There is continued pressure on the marine environment from a variety of sources. Marine protected areas bring benefits to both the area within the protection zone, and to the ecosystems immediately outside their border, as well as communities on shore.

Marine biodiversity conservation targets are enshrined in Programmes of Work for the World Summit on Sustainable Development and Convention on Biological Diversity.

There is a high level of political agreement regarding the importance of this topic. Signatories are committed to building networks of marine protected areas. However the targets are unlikely to be met until much later than anticipated and set out in agreements.

The WCPA Marine Plan of Action develops a shared agenda for informing and supporting this global process over the period 2006 – 2012. This document highlights the need for effective partnerships in the management of the ‘high seas’, and also shares best practice management and includes a self assessment checklists for nations to assess their progress. There are also some key elements being developed for managers guides for addressing particular issues, e.g. coral bleaching.

Dan Laffoley outlined the need to engage with a wider public who are generally unaware of the issues affecting marine ecosystems – and avoid the “double disconnect” of a disinterested public, being targeted through the wrong media. Protected areas managers also need to find ways of engaging with fisheries, military and other marine users to persuade them of the benefits of conserving marine biodiversity.

The WCPA are trying to focus on a set of priorities for securing better marine protection. The “Wet List” is the new generation of the 1995 4-volume set: online, interactive, update-able annually and widely disseminated in various formats. It will enable WCPA and protected area managers accurately to show various communities how the oceans are protected and will celebrate progress to meeting the WSSD 2012 goal and beyond.

### Discussion

The following points were noted by Forum participants during discussion:

- (1) There is a need to find ‘global ocean ambassadors’ to highlight the need for, and benefits of, marine protected areas. This could work through the 18 region structure of the IUCN.
- (2) Although much effort is required to work with the fishery sector, a key partner to increase effort in working with is the tourism sector. Protected areas managers need to address engaging with tourism on a local or regional scale. Effort is also required in making the connections to land activity, and benefits to communities on land.

(3) A key message for Marine Protected Areas CEOs is that they need to improve the global processes, including in relation to data collection, for MPAs and make better use of available IUCN and other guidance for planning and management. They also must work better with others to ensure there is a useful and relevant role for protected areas in securing biodiversity conservation of the seas.

(4) The carbon debate needs to be had more fully in a wider arena – the fact that oceans are large carbon sinks is not widely recognised. However, there was some debate about the role of oceans as carbon sequesters, and the fact that the solubility of CO<sub>2</sub> is reduced as temperatures rise.

(5) Marine conservation at the global regional scale is an opportunity for many countries to come together. For example, Mexico is working with the United States of America and Canada to establish a cohesive marine protected areas network.

(6) No take zones are essential for the direct protection of marine biodiversity with protected areas. However, these are the most hard won elements of marine protected areas and often involve considerable debate.

(7) Arbitrary targets for protection of sea area are difficult to justify and achieve. There needs to be a greater emphasis on celebrating the successes in securing marine conservation rather than the failures to reach targets.

FRIDAY 19 OCTOBER

SESSION 4: THE SOCIAL AND ECONOMIC VALUE OF PROTECTED AREAS

Global change and protected areas: Social benefits

**Presentation: Ernesto Enkerlin Hoeflich, National Commission on Natural Protected Areas, Mexico.**



Protected areas in Mexico have to consider economic benefits for local people. Eighty percent of the Mexican population is classified as 'poor'. There is a clear need to explain protected areas to local communities, and therefore a need for a clear definition: "Conservation means protecting, managing and restoring biodiversity including ecological processes, natural changes and ecosystem goods and services".

Mexican Protected Areas can be designated over any type of land. CONANP try to manage for a range of benefits including direct ecosystem services, but also developing the economic sustainability of local communities. Mexico now has 161 protected areas, the majority of which are national parks, totalling about 11% of the land surface of Mexico. The vision for protected areas has been oriented towards people and this is essential in arguing for the establishment of protected areas, and has used public benefit arguments to secure funding.

CONANP has been trying to increase awareness of the importance of protected areas, through events such as "Conservation week", which has been particularly effective. The key message of this event is conservation with, for and by people. Trying to involve people in all aspects of conservation is of key importance in Mexico, as the alleviation of rural poverty and management of protected areas are seen as part of the same objective.

This approach has led to budget increases. Funding comes from a mix of government, donors and projects/programs relating to the identified development needs of local people. Protected Areas in Mexico bring a direct revenue to the local area through the administration of an entrance fee. This is charged regardless of the land tenure through the initial founding legislation of the protected areas.

In summary, the overall approach in Mexico has been enhancing the contribution of other sectors to conservation; strengthening community organisations; and developing alternative livelihoods.

## South African National Parks: Land claimants and protected areas

### **Presentation: Hector Magome, South Africa National Parks Service**



This presentation gave an overview of the geography of National Parks in South Africa, the organisational structure of South African National Parks (SANParks) and introduced a study which carried out an economic impact appraisal – but noted that the methodology used was flawed and therefore low confidence is placed in the findings.

Private Game reserves in South Africa have contributed greatly to the economic development of tourism based on nature, and for a period this model was followed by SANParks in order to generate significant income from the nature reserve resource. However, recent policy has been more related to focusing more clearly on the primacy of nature. Biodiversity conservation is now recognised as the bedrock on which constituency building and tourism rests. Furthermore, SANParks recognise that the ‘brand’ of National Parks is one of the key iconic images of the country – and as such, is an asset which can be used to build capacity and provide economic benefit.

Eighty percent of SANParks income is through tourism – permits and accommodation provision. However, South African National Parks are not financially viable as a separate business despite having over 13,000 bednights available – more than large hotel chains. This is because there has been a focus on the wrong market sector. A reorientation to the 2-3 star hospitality sector is underway to increase both the income from a wider variety of people, but also to make it affordable to the majority of South Africans.

Communicating the economic benefits of South African National Parks has been very difficult historically, including engaging the Government in discussing the values of their protected areas. However, the values of protected areas has increasingly become more important as under land reform, indigenous communities have laid claim to areas of national parks.

At Kruger National Park, 19 communities have now staked land claims. The direction of SANParks at the moment is to facilitate ways in which local communities can have a share in managing protected areas without losing the cohesion and primacy of nature of the protected areas. A ‘buffer zone’ will be handed over to the communities, whereby the core of the National Park is retained nationally, with community ownership of the outer zones. These claims would be settled with a lease back arrangement in place to ensure that management of the Parks would continue to benefit biodiversity.

### **Community management of protected areas**

#### **Speaker: Peter Cochrane, Parks Australia**

National Parks in Australia provide direct economic and social benefits to local communities. Twenty years ago the Parks Australia on behalf of the Australian Government handed the ownership of Uluru National Park back to an indigenous community trust, with a leaseback clause to the Director of National Parks for 99 years. This also arranged to give 25% of the revenue generated directly to the members of the Community Trust. However, this method proved inefficient and inequitable, and the Central Lands Council changed the method of providing income by distributing that funding straight to the Community projects directly administered by the Central Lands Council. This arrangement provides much greater public

benefit from the income generated by the National Park. At Kakadu National Park, the entrance fees were removed from the National Park. Replacement funding was required to continue to provide an income stream to the community. A deal was brokered which tied income to the numbers of visitors, with certain baseline guarantees.

In addition to providing local benefits, National Parks provide a considerable benefit to the Australian economy. Economic benefits are measured through a methodology which seeks either to measure the change in distribution or change in the amount of benefit received to a community or economy from a National Park. However, very few studies have used both approaches – and therefore often fail to assess the full range of benefits. Parks Australia have commissioned research into methodologies for establishing the fullest range of social and economic benefits from National Parks. The report, received in 2007, recommended the following actions:

- there should be a best practice guideline for economic assessments developed;
- further case studies are required;
- generic indicators should be developed; and
- more research into a wider variety of methodologies is required.

## **Sustainable Development Planning**

***Speaker: Maria Rosario Pintos Martin, Junta de Andalucia, Spain***

Sustainable development planning of communities located near protected areas in Spain makes use of a 5-stage methodology. The social and economic conditions of the area around the park was studied first, then key stakeholders were invited to talk about the park and the problems, facilities and challenges for development. A draft report, which contained the main opportunities for the sustainable development of the area and the actions for the different departments of the national, regional and local government, was then created and consulted upon before being approved by Government.

The coordination of the implementation of the plan is the responsibility of the head of the regional government in the province, supported by technicians who are contracted between the environment ministry and the innovation and development agency of Andalucia. An annual report on progress towards implementation is prepared and presented to the participation forum of the park, and a resume published. In this way the local people can see the benefits of the park.

A National Park 'brand' has been created and can be used by those organisations working in the National Parks and in their surrounding zone of economic influence. The ownership of the brand is through an accreditation agency, ensuring consistent standards. One hundred and seventy five organisations have obtained the brand with 951 products and tourist services on offer.

The European charter of sustainable tourism is an initiative of the Europarc federation which involves a process of agreement between the responsible management of the park and the enterprise agencies for tourism and rural development, and tourism authorities. It sets out the actions that each organisation has to do to achieve responsible tourism in the park. The Andalucian government has published a guide for the tourism agencies who are already involved and those who are interested in joining. The good practice guide contains information about the park, the charter, and the process for the adherence to the charter. In Andalucia two national parks and twelve natural parks have obtained the certification of the European charter.

## Discussion

The Forum participants discussed the demonstration of economic and social values of protected areas, noting the following points:

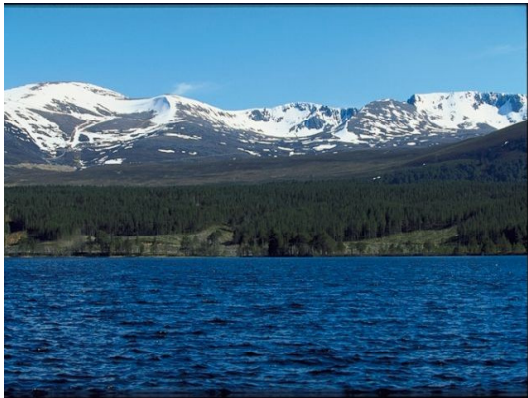
(1) There needs to be a greater understanding of economic impact appraisal methodologies by protected areas managers. It was suggested that an MBA in conservation economics may be a useful tool for enhancing that capacity. More linkage should be made by proving that it is economically more sound to “keep the fish in the sea” or “trees standing”: a lot of work is required for the conservation community to be able to say that protected areas are truly contributing to human life. Nik Lopoukhine offered to circulate an RSPB document ‘Well-being through Wildlife’. This document is available online at [www.rspb.org.uk/policy/economicdevelopment](http://www.rspb.org.uk/policy/economicdevelopment) .

(2) The role of protected areas as drivers of economic development must be established, but there is still a need to link these to the direct conservation values and retain their relative values. The intrinsic values of nature conservation should not be lost – nor should they lose support against hard economic arguments only.

(3) Local economic arguments may be difficult to win, but there should be considerable focus on the contribution of protected areas to the national economy and society.

## SESSION 5: CLIMATE CHANGE AND PROTECTED AREAS

### *Presentation: Colin Galbraith, Scottish Natural Heritage*



The global picture of climate change was outlined to the Forum, noting the trends in rising temperatures, annual precipitation, relative sea level and extreme weather events from the IPCC Millennium Assessment. The linkages between climate change issues and other environmental issues such as biodiversity conservation and water issues were also highlighted. The global picture was then applied to Scotland, where average temperatures have risen around 1°C between 1914 and 2004, resulting in a reduction in the number of days of air frosts and where precipitation has increased during the same period. This has also

resulted in an increase in the growing season across the country.

The impact of these trends on Scotland's habitats and species can be demonstrated through the northwards and upwards migration of certain species of butterflies, including the Scotch Argus, which has moved northwards with a resultant reduction of 17% fewer square kilometres of habitat since the 1970s, and the Mountain Ringlet, which has moved to higher altitudes resulting in a 50% loss of kilometre squares. The earlier flowering of a series of common plants, by 1 – 3 weeks has been noted. This affects the whole ecosystem synchronicity between species and the plants which depend on and support them.

Alleviation of the pressures on habitats and species resulting from climate change can be achieved through deliberate management to promote ecosystem resilience or adaptation. One example could be a review of the boundaries of protected areas in order to increase flexibility or to allow changes within the species mix found therein. One example of the latter is by allowing managed retreat of coastal plains to allow the migration of coastal ecosystems inland ahead of rising sea levels.

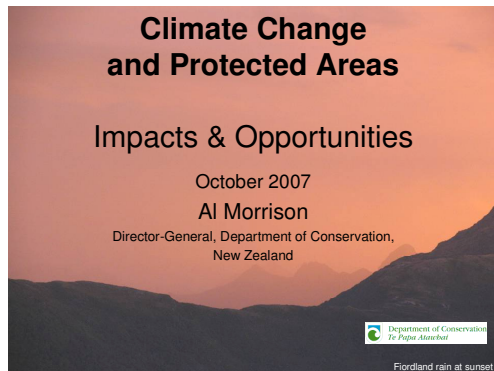
The implications of climate change in Scotland are as follows:

- The composition of habitats on sites will change over time. Sites that are important now for a mix of habitats will still be important in the future. The assemblage of species on sites will change in composition but will still be of significance.
- Sites designated for single species will be problematic. The species may change in number or distribution relatively quickly.
- Linkages between sites and managing the wider countryside will be important.

It was suggested that to maintain a credible protected area system as climate change impacts occur will require protected area managers to continue to manage protected areas but to review and reappraise management objectives. Protected areas are likely to remain important for biodiversity in their own right and in relation to the provision of ecosystem services. However, it is important to accept that some change is inevitable. The challenge is the need to focus on key species and habitats for management. Protected areas managers should work to align the relevant legal systems relating protected areas with the ecological reality, i.e. some flexibility in management and in area boundaries may be required as climate induced changes take hold. Finally, it was suggested that it is very important to keep a wide range of stakeholders involved and aware of the issues.

## Impacts and opportunities

### **Presentation: Al Morrison, Department of Conservation, New Zealand**

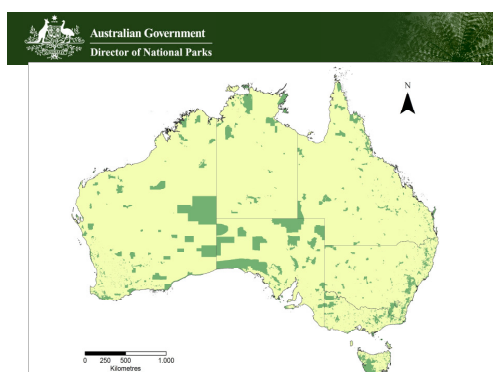


Protected areas in New Zealand are managed for biodiversity conservation and for recreation. New Zealand is one of 12 global hotspots especially vulnerable to extinctions of endemic species. By 2100, predicted changes to the New Zealand climate include increased average air temperatures and more frequent heatwaves, increased westerly winds with associated changes to precipitation patterns and cyclone activity particularly in the west of the country, and changes in ocean salinity and relative sea level. Associated with this will be decreasing frosts and less snowfall, affecting the snow budget of many of the country's glacial systems. As with many countries, there is predicted to be a poleward and altitudinal migration of species in relation to climatic zones, including an increase in the prevalence of invasive exotic species (and pests). There is likely therefore to be a loss of or irreversible damage to native ecosystems, species, and habitats.

There are a number of manageable climate change impacts and some which are unmanageable at a country level. An example of the former is the higher seedfall from beech trees leading to a greater number of birds feeding on these seeds – and a resultant increase in food abundance up the foodchain. However, pressures on species affected by altitudinal or latitudinal migration are unlikely to be manageable.

One opportunity presented by the effects of climate change is the renewed ability of protected areas to provide carbon storage as a mitigation for further emissions – either by better management of existing forests or new planting of native species. Further opportunities are afforded by New Zealand's reputation as a 'green' country – the "100% Pure New Zealand" strapline is an example of this. The Government has commenced an offset scheme for the country's carbon emissions, and has recently tested the market by inviting tenders to provide the offset schemes. Protected areas offer an opportunity to improve carbon sequestration.

### **Presentation: Peter Cochrane, Parks Australia**



Protected areas in Australia form the National Reserve System (NRS). A forthcoming report into the effects of climate change on the NRS modelled 2030 and 2070 projections, and considered the impacts of these on biodiversity. Eight key issues were identified. These include the change in emphasis from preventing change to adapting to it, and how to anticipate and respond to change. The threat of non-linear changes are also considered as are the resultant need for strategic conservation across the NRS and landscape scale planning. The report will highlight how current planning processes are the best

option for securing protected area management, but that there is a need to continue to improve management skills and gather information and carry out modelling and analysis.

The report identifies 4 priority adaptation actions:

- Improve understanding of biodiversity responses and implications for conservation;

- Protect more habitat and more diverse habitat;
- Reduce threats (improve resilience); and
- Manage landscape-scale issues (including positive and negative connectivity issues).

Australia's national carbon accounting system estimates that 21% of the country's biomass capacity for carbon storage is in protected areas – storing about 1.5 billion tonnes of carbon. Ensuring that this carbon is retained in biomass must be a management priority. Regeneration of the forest reserves enhances the ability of forests to store carbon. The key point is that protected areas managers are also carbon managers on a large scale.

One example of working with various partners from communities to commerce is the West Arnhem Land Fire Abatement programme, where Conoco-Phillips is funding a 17 year, AU\$1m p.a. project to return to traditional burning regimes which prevents further wildfires later in the season, and will contribute an estimated 100,000 tonne reduction in carbon emission per year.

## Discussion

The following issues were raised by Forum participants:

(1) Protected areas managers must be dynamic in their management style in the way that they approach and manage the changes brought about by climate change. This includes arguing for more budget allocations to address the climate change threats, justified by the contribution protected areas can make to carbon sequestration and climate change adaptation.

(2) The role of protected areas managers as carbon managers must be more widely communicated. There may be merit in more positive communication of the carbon accounting approaches such as that used in Australia. This means that protected areas are again more relevant to the alleviation of global problems. This is a large opportunity and is worth discussing at the Durban +5 meeting.

(3) The role of protected areas in providing biodiversity corridors must be communicated more widely – it may be worth having this as an IUCN programme.

## Protected areas management in Romania

**Presentation: Mihai Zotta, Protected Areas Unit, National Forest Administration, Romania**

Protected areas  
Management

Mihai Zotta, Protected  
Areas Unit NFA



Protected areas in Romania, of which there are 27 major areas, fall into three categories – International designations including RAMSAR sites and biosphere reserves, European designations including Special Areas for Conservation, and national designations including National Parks, Nature Parks, Scientific Reserves and Nature Reserves. National Parks meet the IUCN criteria for Category II Protected Areas. There is a mix of land tenure within protected areas, and a mix of administration types between public and partnership administrations. Increasing funding from external bodies has allowed an increase in the activities undertaken, including LIFE projects funded by the EU LIFE Programme.

A recent 'State of the Parks' (RAPPAM) evaluation found the following threats:

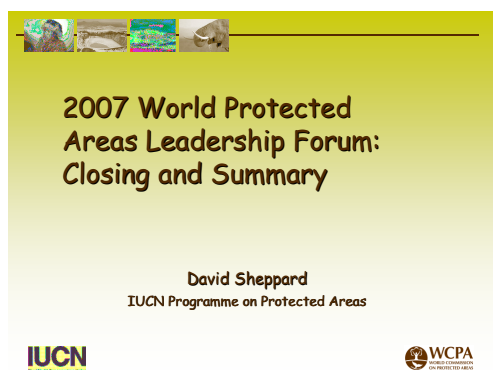
- Lack of financial support from the national budget;

- Human developments-Lack of cross sectoral planning;
- Pressure in overusing the natural resources in some cases;
- Lack of personnel, equipments and specific infrastructure;No National training system for rangers in place;
- Lack of national educational programs;High Costs in implementing the management plans( studies and research are needed);
- Lack of updated national strategies for protected areas; and
- The system of compensation measures is not operational ( the borders of the parks were imposed without consultations, permanent tensions with local communities, the number of land owner has increased).

A national level strategy is required to take forward linked strategic priorities to be implemented with the support of central Government.

## SESSION 6: CONCLUSIONS

**Summary: David Sheppard, IUCN**



The Forum participants agreed on the following conclusions to be noted:

- (1) This WPALF has served the traditional functions, including:
  - Benchmarking
  - Forum for discussing issues
  - A platform for further cooperation and strengthening efforts for protected areas.
- (2) In relation to our communication of key messages, we need to:
  - Change the language and the message – keep messages clear and simple and relevant to broader issues;
  - reach out to new audiences, including those who don't like us; target influential people and get them to communicate our message e.g. Nelson Mandela at the WPCongress. Possible Actions:
    - ✓ Use key events next year – WPC+5 and WCC as platforms to better communicate messages. Can WPALF agencies support with preparation of case studies and material ? Can we develop a global initiative, based on combining efforts of WPALF members, e.g. in relation to tourism (e.g. UNESCO/IUCN tourism initiative) or health (e.g. with WHO)
    - ✓ Can we include PA messages into key events; At the next WPALF invite Minister for Finance and use him/her as a challenge speaker as we did for Tourism speaker at Banff.
- (3) A range of approaches have been applied to assess effectiveness – at the system and at the site level. These have had a range of spin off benefits – including communicating with stakeholders and influencing decision makers. State of the Parks Reporting takes time and it is a long term process.
- (4) The marine environment is poorly protected (less than 1%) and this is a future priority. Targets from WSSD and WPC have provided a stimulus to action – but are unlikely to be achieved. Partnerships are essential to achieve this at all levels. There is a need to change community perceptions regarding marine protected areas, and persuade stakeholders that active management is needed; and about the importance of marine conservation for biodiversity and for livelihoods. Establishing large "no take" zones takes considerable time, energy and efforts and often involves conflict with marine users, particularly the fisheries and tourism sector.
- (5) Values of protected areas need to be better identified and communicated. Protected Areas must consider and allow for benefits to local communities. Many innovative approaches and linkages to economic and social benefits have been made by protected

areas agencies – e.g. benefit sharing in Mexico, Kenya, and South Africa. Working more closely with people has benefits for increasing local support and also for budgets.

(6) Climate change is a fact of life and is having a major impact on the values of protected areas. There are threats and opportunities, including making use of the higher political profile of this issue and the close link between climate change and protected areas. This will require a re-thinking of how protected areas are established and managed in the future.

## ANNEX: Participants List

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