COUNTING THE COST OF THE DEADLY TIDE

As this issue of NPIB went to print, official figures for the loss of human life in the countries in south and south-east Asia resulting from the December 26 Indian Ocean undersea earthquake and devastating tsunami tidal waves had risen to over 280,000.

With an unprecedented international effort now underway to provide emergency relief and help millions of people rebuild lost homes and livelihoods, assessments of the tsunami's environmental impact are being urgently undertaken.

Many of the worst-hit coastal areas, which support inland and marine fisheries, agriculture and other sources of food and income for local populations, are also among the most fragile ecosystems in the world. A statement from the IUCN Wetlands and Water Resources Programme said that accurately assessing the impact on affected areas, and planning and implementing reconstruction and rehabilitation quickly and carefully, would be crucial to rebuilding the lives and livelihoods of the millions of survivors.

Initial reports of impacts on biodiversity and ecosystems included:

**SRI LANKA**
Coastal rice fields and adjoining saltmarshes in the southern part of the country were partially covered with marine silt containing sulphurous substances, which has resulted in destruction of vegetation. There have been observations of mass mortality of near-shore, lagoon and estuarial fish.

**INDONESIA**
Many of the 110,000 Indonesians who died in the disaster lived in Banda Aceh, the provincial capital on the northern tip of Sumatra, which bore the brunt of the tsunami. Environmental damage ranges from the destruction of fish ponds which are now open to the sea and extensive damage to mangrove forests.

Further south, severe damage to the coastal strip has removed beaches and created new lakes and lagoons, with most of the vegetation washed away.

**THAILAND**
Coastal developments along the country's west coast and islands were seriously damaged. IUCN is now working with the Department of Marine and Coastal Resources Conservation to assess biodiversity loss, impacts on fisheries and tourism, land use planning, the cleaning up of contaminated wetlands and the restoration of coastal spawning areas.

Initial reports indicated that up to 10% of coral reefs in the Andaman Sea off Thailand had been damaged or covered in debris and sediment.
**ISLANDS SUFFER EXTENSIVE DAMAGE**

THE tsunami caused extensive damage to many of the 38 inhabited islands in the Andaman and Nicobar archipelagos, which stretch over 700 km/435 miles in the southern Bay of Bengal close to the epicentre of the December 26 undersea earthquake.

The official death toll of more than 7,500 is considered by many to be an underestimate, and 37,000 people who have been left homeless are being cared for in 105 temporary relief camps. Landmass upheavals have left large areas near coastlines submerged, and coral reefs and mangrove forests have suffered severe damage.

Writing in NPIB (Issue 11), Pankaj Sekhsaria highlighted the importance of four primitive tribes - among the world’s last hunter-gatherers - who live on reserves created in the Andamans in the late 1950s. The 240 Jarawese have a 700 sq km/270 sq mile reserve on the South and Middle Andaman Islands; 96 Onge live on a 520 sq km/200 sq mile reserve on Little Andaman; 39 Sentinelese have a 100 sq km/38 sq mile reserve on North Sentinel; and 50 Great Andamans live on Strait Island.

The greatest loss of life was on Katchall Island in the central Nicobars, where almost half of this low-lying island remains submerged and the total of dead and missing may be as high as 4,000.

Other islands in the Nicobar archipelago were also seriously affected. Coastal forest areas on Great Nicobar were devastated, and the small islands of Little Nicobar and Chowra have been left largely submerged.

The ecologically fragile Andaman and Nicobar Islands, which are considered to have some of the finest tropical evergreen forests, mangroves and coral reefs in India, are an internationally recognised hotspot for biological diversity.

The Indian government and a number of non-government organisations are now undertaking an assessment of the damage caused to ecological resources and it is hoped that a preliminary report will be completed by late March. India’s Zoological Society is also undertaking a detailed survey of damage to coral reefs.

Dr Sarang Kulkarni, a marine biologist with Reef Watch Marine Conservation, believes that many turtle nesting sites in the south Andamans and the Nicobars will have been destroyed. He said that as November to January was the main nesting period on the islands for leatherback, green sea, hawksbill and Olive Ridley turtles, he feared that an entire generation of these species might have been lost. An assessment report by marine biologists expected to be completed by early March will also include estimated losses of dugongs and salt water crocodiles.

* India’s Supreme Court has lifted a ban on timber felling in the Andaman and Nicobar Islands for a temporary six-month period to help efforts to rebuild homes, public buildings and bridges. The ban remains in force in areas within 1 km/half a mile of the sea and in national parks, wildlife sanctuaries and mangrove forests.

**COUNTING THE COST**

THE first comprehensive study of tsunami damage in north Sumatra, made by the World Bank and the Indonesian government, has estimated the total cost of property and businesses destroyed at more than US $4.4 billion. Some 700,000 people have been left homeless and of these a great majority, including farmers, fishermen and others with small businesses, had lost their livelihoods.

In some areas the tsunami swept more than 5 km/three miles inland, destroying crops and killing livestock. Coral reef destruction, the loss of fish stocks and destruction of boats and nets will make it impossible for many fishermen to return to work.

The report, which was presented to the world conference on disaster reduction in Kobe, Japan, estimated the environmental damage to the region to be US $675m.
MANGROVE FORESTS REDUCE WAVE DAMAGE

IN the wake of the tsunami, reports from a number of stricken countries pointed to the fact that in coastal areas containing extensive areas of mangroves, the impact of tidal waves had been lessened and fewer people had lost their lives.

Commenting on the need to rehabilitate seriously affected mangroves as a part of integrated coastal area management, Mette Loyche Wilkie, of the UN Food and Agriculture Organisation (FAO), said: "Mangroves contribute directly to rural livelihoods by providing wood and non-wood forest products, and indirectly by providing spawning grounds and nutrients for fish and shellfish. Mangroves can also help protect coastal areas from future tidal waves.

"Restoration of damaged mangroves should be undertaken as part of the post-tsunami rehabilitation process, but FAO does not recommend massive planting of mangroves in areas where they would replace other valuable ecosystems, such as turtle nesting grounds and sea grass beds.

"The role of mangroves in providing coastal protection against the actions of waves, wind and water currents is well known. But the extent to which mangrove green belts contribute to saving lives against large tsunamis depends on several factors.

"The protective effects of mangroves against tsunamis mainly depend on the scale of the tsunami, and the width of the forest and, to a lesser extent, the height, density and species composition."

Mangroves cover an area of some 150,000 sq kms/58,000 sq miles worldwide, with close to 40% of this area found in the tsunami-affected countries.

During the recent tsunami, the Pichavaram mangrove forest in Tamil Nadu, India, slowed down the waves, protecting around 1,700 people living in settlements built inland between 100 m to 1,000 m/110 to 1,100 yards from the mangroves. Similar reports of reduced damage have been reported from areas where mangrove forests were intact in both Malaysia and Sri Lanka.

INDIAN OCEAN TSUNAMI

TURTLE PROJECTS THROWN INTO CHAOS

MARINE turtle conservation programmes throughout the Indian Ocean - home to six of the world's seven species - suffered considerable tsunami damage which has severely disrupted regional efforts to save these endangered marine reptiles.

Douglas Hykle, Bangkok-based co-ordinator of the Indian Ocean and South East Asian Marine Turtle Memorandum of Understanding (IOSEA MoU), which has been involved in a regional turtle revival programme since 2001, said that the IOSEA secretariat was compiling information on conservation projects that may have been affected by the tsunami and would be collaborating with other organisations which are conducting assessments of important turtle habitats.

The destruction of sea turtle tanks on one site resulted in the loss of 200 hawksbill turtles. Facilities in Sri Lanka, Thailand and India's Nicobar Islands have reported dead or missing field staff and destruction of research facilities.

At the Andaman Nicobar Environment Trust field station at Campbell Bay on Great Nicobar island, four scientists and two field staff who were studying the Olive Ridley and leatherback turtles are missing, feared dead.

At the Kosgoda nesting beach on the southern coast of Sri Lanka, which was hit by a tidal wave six metres/20 feet high, three local people working as egg-protectors died, but 14 of their colleagues and six research officers and several foreign volunteer workers survived.

In Thailand, three turtle research facilities suffered severe damage. The Italian Naucrates conservation project at Koh Phra Thong was destroyed and two marine biologists, Canadian Rebecca Clark and Lisa Jones from Britain, were swept to their deaths by giant waves.

The Thai navy's turtle head-start programme at Tap Lamu naval base was also left in ruins and 2,000 turtles, ranging in age from two months to seven years, were lost. In nearby Phuket, the Marine and Coastal Resource Development and Research Institute reported 20 missing Olive Ridley turtles.
IF any game ranger admits to having had the most privileged and interesting career, then I am going to have to say it’s me. The 16 years of working for the Natal Parks Board/KZN Wildlife were extremely honoured years, years I will never take for granted.

Not only did I work in some wonderful natural areas, I worked alongside some truly remarkable people. These are the people who made me who I am today. From my early days as a learner ranger at Injasuti Outpost to my last six years as the Conservator-In-Charge of Umfolozi Game Reserve, I had the fortune of building an incredible and diverse experience base. From law enforcement to wildlife management, from community conservation to ecotourism, I did it all, and enjoyed every aspect of my work.

In 2003 I became acutely aware that I would never be able to progress further up the corporate ladder and had a family to consider. It was time to make a career move. Sad as this may seem, it did get me thinking about pursuing something I have always wanted to get involved with – developing a national park from scratch.

Call it what you may – fortuitous, God’s will, whatever – I received an e-mail from the technical advisor at Cat Tien National Park in Vietnam whom I had got to know through doing contractual law enforcement work in that country. Attached to this e-mail was an advert advertising an IUCN position as a park management advisor at the proposed Kyabobo National Park in Ghana.

I thought: “Why not? It’s probably time for a challenging adventure and something new”, so I applied. I went through the whole interview process and in September 2003 was offered the position. With the support of my wife (who has stood by me throughout my career) I accepted the position. I tendered my resignation to an organisation with which I am proud to have been associated. Although sad to be leaving, I was on my way to what is turning out to be a most challenging and interesting adventure, one not without its hair-pulling frustrations (yes – sadly I have lost more hair since leaving Zululand).

The job is to develop the park into a fully functional national park, with appropriate infrastructure/equipment, competent staff and effective management systems/plans in place. I have a two-year contract with the IUCN that is due to end in October.

THE PROJECT

The project of developing Kyabobo National Park is an element of the larger Wildlife Division Support Project. This project is made up of three parts:

- To develop Kyabobo National Park into a fully functioning park with an efficient and effective staff.
- To revitalise Ghana’s premier park, Mole National Park. This park is really a fantastic park and could compete with any southern African park in terms of game viewing and a game park experience. Sadly, due to financial difficulties and a lack of capacity over the years, the park has fallen into a state of disrepair. The project aims at upgrading dilapidated infrastructure and resurrecting park management systems and practises – a really worthwhile project. Charlie Mackie (an old game ranger from Zimbabwe Parks) is heading up that side of the project.
- The last and most important part of the project is the institutional reform of the Wildlife Division, which has recently broken away from being a government department and has become a parastatal organisation. The aim of this part of the project is to restructure the division and put systems in place to enable the organisation to operate more effectively and efficiently. Dr Peter Howard is heading up this part of the project. The entire project is funded by the Dutch Government and managed by both the Wildlife Division and the IUCN (World Conservation Union). Kyabobo National Park Development Project is a five-year project and has a budget of around €3 million.

Members of a special anti-poaching strike force take a break while on patrol in Kyabobo National Park.
National park staff outside a nearly-completed patrol camp, one of six to be located at Kyabobo.

THE PARK
Kyabobo National Park is situated in the Volta Region of Ghana, on the Togo border. It covers an area of 380 sq km/145 sq miles and abuts onto the much larger Fazao-Malfacassa National Park (1,920 sq km/740 sq miles) in Togo. The topography is hilly (altitude range of between 300-800 metres/985-2,625 feet) and the vegetation type is a mixture of moist semi-deciduous forest, woodland savannah, montane ravine forests and grasslands.

It is a truly rugged park with access into the park by means of foot only. This has resulted in the park remaining pristine in most areas and largely unmodified in others. There are a few small settlements of subsistence farmers in the park's periphery and poacher camps were spread throughout the park; we are in the process of taking appropriate action against these illegal activities. The park has really stunning scenery and has great wilderness attributes for the visitor wanting to take a walk on the wild side.

It is an important park in terms of biodiversity of Ghana's protected area system and is the only national park situated on the Dahomey Gap (a strip of savannah between the central and west African rainforests). Before 1980 the area teemed with wildlife, especially elephant and buffalo, but due to high poaching pressures only remnant populations of wild animals exist. There is, however, a continual movement of animals between Togo and Ghana, and recently elephant, buffalo, roan and hartebeest have been sighted. Other more common species such as bushbuck, kob, waterbuck, red-flanked duiker and a number of primate species have held their own against poaching, but are only found in relatively small numbers and have become incredibly shy.

What is really exciting for me is the number of tree pangolin I have seen since I have been here; sadly these animals are also targeted by the bush meat trade in the area. No animal seems to be excluded from the bush meat menu in Ghana; really quite distressing.

THE PEOPLE
The Ghanaian people have got to be the friendliest and most welcoming people in Africa. When you arrive in Ghana you immediately feel the warmth and generosity of its people. The crime rate is really low and at no time since I have been here have I felt threatened in any way; even the poachers I have encountered have been really good sports. No doubt when we get really stuck into the hard-core poaching gangs and syndicates, I will come up with resistance, but I am not expecting anything as bad as the poachers I encountered in Zululand.

The local chiefs and communities have really been great, although at times a little too welcoming as I described in my journal below.

"Now for the tricky bit - to get permission to put an access road through the Odome area. I had met the chief previously and he appeared to be really receptive to the idea of the park's creation.
That, however, wasn't the problem. The issue was his heavy hand when pouring out a 'welcoming' (92% proof) alcoholic beverage. Being a game ranger, I am up to most things like sniffing tequila or chasing a raw egg with a shot, but drinking this stuff is too much for even the bravest.

"My whole career has been filled with fear of the next community function. I vow that my next job will not involve the drinking of local brew. I have endured tremendous punishment in many communities in Kwa-Zulu, at Afrikaans farmsteads, at ZAC Mine (outside Umfolozi), Cat Tien (Vietnam), not to mention places like the staff pub in Hluhluwe-Umfolozi Park, and now Ghana."

The meeting was going very well. The chief was happy to see me, he was supportive of the road passing through his area, and things were really going well (so I thought). Then disaster struck. The chief's son emerged from a hut with a bottle in hand and, not wishing to appear a sissy, I partook of a few drinks. Within a few minutes my head was spinning and it was time to make a steady retreat. My father always taught me that discretion was the better part of valor, and this was an ideal time to start listening to my father. I ran for the vehicle and, with the world spinning and my stomach burning, I returned to Nkwanta. Mission accomplished!"

INFRASTRUCTURE

This has become a big part of my responsibilities at Kyabobo, especially since I have to oversee the supervision of emerging contractors, many of whom have never read drawing. The development I will be overseeing during my two-year contract consists of:

- four senior level three-bedroom houses;
- four mid-level two-bedroom houses;
- eight junior staff one-bedroom houses;
- two range outposts consisting of accommodation for 16 wildlife guards;
- an office complex consisting of six offices, conference room, strong room and a park reception;
- access roads to outposts and headquarters;
- six satellite patrol camps.

In September 2003 an infrastructure design competition was held with the intention of commissioning the winner as the development architect. The competition was well supported by the local architectural fraternity in Ghana and entries were of an extremely high standard. The winners were two Accra architects who really produced good designs and drawings. By the end of December 2003, drawings had been finalised and contracts for the development had been awarded to local/emerging contractors.

Working in a rural Ghanaian setting is not without its frustrations and getting things done takes a great deal of patience, particularly when developing capacity of local emerging contractors. An example of this is given in an entry I made into my journal:

"After a great deal of logistical headaches I was finally ready to begin the concrete strips at Laboum, or so I thought. On arrival at the site I immediately noticed that the stone that had been delivered did not look good quality. On closer inspection I discovered that the supplier had supplied sandstone chips. Yes I did use very expressive language - I obviously had to condemn the whole consignment. Now I started thinking, perhaps the building contractors were using the same stone. I immediately left the site to go to the HQ development site. I found that one out of the four were using the poor quality stone. The supplier was immediately corrected and my two clerks of works were hauled over the coals.

"After which I set off on a quest for good quality stone. After much

Materials for an isolated satellite patrol camp are transported to the site by helicopter.
running around I found a site behind the Catholic mission. The stone was excellent quality, being volcanic, but what really impressed me was how the stone was crushed. There, sitting beneath a large mango tree, was a little old woman with a worn-out hammer in her hand, chipping the stones into concrete chips. She had already chipped about three tractor loads—just what I needed. After a little negotiation I bought the entire supply for US $60. I left her still chipping away, quite astonishing!

Generally the infrastructure development is going quite well and should be completed by June.

**LAW ENFORCEMENT**

People who know me will know that law enforcement has, over the years, become one of my interests and something I really enjoy. I knew from the start that Kyabobo was going to be the ultimate law enforcement challenge. The park was overrun by poachers, and although there have been 45 wildlife guards based there for the past 10 years, law enforcement was non-existent. The guards were based in villages and field work consisted of sitting around the guard camp, doing very little. In December 2003 I hired a helicopter to do a reconnaissance flight over the entire park. I was shocked at the number of well-equipped poacher camps in the middle of the park, complete with smoking and drying racks for bush meat.

For the first few months I left things as they were, in order to establish what was really going on and to design an appropriate law enforcement strategy. My first task was to restructure the staff component of Kyabobo and select people capable of achieving law enforcement effectiveness. It was really a simple task as more than half of the wildlife guards failed the fitness test and were redeployed into a temporary maintenance team. These guards will be redeployed or retrenched some time in the future as the staff numbers were reduced during a study conducted by Robbie Robertson in 2003. The 22 guards left would become the core law enforcement team. These staff were then given the opportunity to apply for positions in the new LE structure I had designed.

Training has become a big part of getting things moving in the right direction and the guards are really responding well. They are really lapping up the attention and leadership they have been without for all these years and are turning out to be exceptional operators. Since the implementation of the Law Enforcement Management Plan last April we have made great inroads into shutting down poaching gangs and illegal chainsaw syndicates operating in Kyabobo National Park. Arrests are taking place every day and the illegal operators seemed stunned at the wave of law enforcement moving through the area. By the end of 2004 a total of 20 hardened poachers had been convicted and a large number of illegal firearms seized.

A major success was the breaking of a large commercial poaching syndicate in the north of the park. On the day of those arrests a total of 18 carcasses destined for the meat markets of Accra were recovered. The ring-leader of the syndicate has since fled the country and by all indications the entire network has collapsed.

One of the major challenges for me now is to make the entire law enforcement plan sustainable. The only way to achieve this is to ensure that the officer ranks of the Park/Wildlife Division are capable of strong leadership and are equipped with sound law enforcement knowledge and practice. The Executive Staff of the Division have shown a commitment to this and have decided to send officers from other parks in Ghana to Kyabobo NP for two to three-month internships.

I am at this stage really confident that effective and sustaining law enforcement will be achieved in Kyabobo National Park.

**THE FUN**

No-one can call him/herself a game ranger unless they really enjoy what they are doing and are prepared to have fun. I am certainly having fun and making the most out of my experiences in Ghana. There are times I pull at the last remaining patches of hair, but mostly I am absorbing the experiences of wildlife conservation in Ghana. Life is great!

* With funding from the Netherlands government, the Ghana Wildlife Division has embarked upon a comprehensive Wildlife Division Support Project involving institutional restructuring and reform of the Wildlife Division and implementation of a comprehensive programme of field support to two of Ghana’s national parks. The five-year project is being supported by a number of international partners, with technical assistance provided by IUCN, The World Conservation Union.

* Based on a report written for The Game Ranger, published by The Game Rangers’ Association of Africa.
PROTECTED HAUNTED OF SWIFTS AND BUTTERFLIES

by ERIN SHAW

A scenic drive up a twisting dirt road will take you to the village of Los Pinos, nestled on the east side of Lago Yojoa. Only a stone’s throw from there will land you in the learning centre and camping grounds of Los Pinos.

It seems as though you are miles away from the hustle and bustle of civilization. The air is filled with the sounds of birdsong and the humming of chicharras – a large green-fly-like insect that makes almost an electric buzz. The air here is fresh with comfortable temperatures. There are plenty of shaded hammocks around for relaxing after taking one of the many hiking paths the park offers.

In 1987, the government of Honduras began to set aside land for preservation, including 25 sq km/10 sq miles to be known as PANACAM, (Parque Nacional Cerro Azul Meambar). In 1992, PANACAM was placed in the care of the NGO Proyecto Aldea Global (PAG). Since then, the park’s borders have been expanded to protect a total area of 304 sq km/117 sq miles.

Although there were some scattered inhabitants still living in the original park area, the park’s limits now include a number of small villages whose residents have lived off the land for generations, taking wood from the forests, and slashing and burning land for farming. There are approximately 21,000 people living within the protected area, with an average monthly family income of about US $70. Proyecto Aldea Global has been working with these villages to make sure they are economically sustainable, and are learning to respect the environment.

It is a necessary balance, taking care of the land and its people, because telling a man not to slash and burn protected lands when he has a hungry family to feed would be useless. Therefore, PAG works with different alternative projects hand in hand with these communities, including stocked fishponds and pig breeding programmes, to ensure that they can respect their environment without jeopardising their own needs.

In the little village of Los Pinos, an exchange programme is being set up, where the visitors to the park centre will have the opportunity to eat a traditional meal at one of the village homes, or to go fishing with local fishing enthusiasts. It costs about US $1.50 to be taken by boat on a fishing excursion, and roughly the same for a local meal. This programme is being established so that the community of Los Pinos will have the opportunity to share their lives with the tourists and vice versa, and will allow the community to gain financially from tourism.

Along with community development, PAG has been working to reforest some of the areas devastated by fire and slash and burn. Walking along the trails at Los Pinos, you can still see the coffee plants, and some domesticated flowers which grow in the formerly inhabited areas. In 1999, PAG reforested 319 hectares/788 acres, and constructed 347 km/215 miles of fire breaks. In addition to reforestation, the projects create jobs for local men.

The centre of Los Pinos offers camping and cabins, as well as three different levels of trail. Los Vencejos trail is a walk suitable for any level of physical fitness, including children and seniors. The 500-metre/550 yard walk takes you to a small waterfall and swimming hole where you can
Right: the view from El Mirador, looking across Cerro Azul Meambar National Park to Lago Yojoa.

Below: the national park is home to 41 species of butterfly.

Observe the white-collared swifts (los vencejos) which nest there. The most difficult trail, El Sinai, takes you up a mountain trail to El Mirador, a rest stop which provides a breathtaking view of Lago Yojoa and surrounding countryside. The remaining section of the trail walks you past a myriad of waterfalls.

As you hike the trails of Los Pinos, you will notice the abundance of butterflies – PANACAM is home to some 138 species of insects, 41 of which are butterflies. In early spring, Los Pinos hopes to host a butterfly count in which volunteers will be instructed by a specialist and then set out to identify butterfly species.

PANACAM is also home to 122 species of birds, including toucans, which are often seen here. The endangered aguilila blanca (white hawk) has also been spotted recently in this area. PANACAM is home to 35 mammal species including pizotes, monkeys, and numerous species of bats. In 1998, two jaguars were released here and are believed to be among four still living deep inside the park. They are among the seven mammal species living within the park that are close to extinction which include tapirs. The jaguar, once abundant in an area stretching from Mexico through Central America, was painted or etched on stones by Mayans, Aztecs and Olmecs. This ancient art, which managed to pass the tests of time, serves as an eerie reminder of both the creative and the destructive nature of man.

Aside from the natural beauty of the area, PANACAM was the home of an indigenous tribe called the Lencas. They were an advanced culture, influenced by the Maya and Olmec, who created works of art, decorative pottery, and built temple town centres. There are various archaeological sites in and around PANACAM and Lago Yojoa. Los Naranjos site offers a small museum and a former temple site. A perfect day excursion, which can be organised from Los Pinos, is a 3 km/two-mile hike through another area of the park, in which you can view ancient Lencan pictographs painted on cave walls.

PANACAM offers a wide range of activities from nature hikes to archaeological sites to intercultural exchanges. The PANACAM Park is located between Honduras’s two largest cities, San Pedro Sula and Tegucigalpa, so transportation to the area is easy. When you are exploring PANACAM, you are helping to protect the land by paying the admittance fee (US $3 for foreigners) as this money directly supports park programmes.

The Los Pinos Visitor Centre is a remarkable area with some of the most breathtaking views, great hiking trails, plenty of wildlife, and a great opportunity to learn about this part of Honduras. From nature enthusiasts to travellers who like to get off the beaten path, this park comes highly recommended.

* For more information, peruse the Proyecto Aldea Global website: www.paghonduras.org
NEW PROJECTS THREATEN WILDLIFE AREAS

THREATS posed by a number of proposed industrial and commercial projects within or near national parks and wildlife sanctuaries have been highlighted in the latest issue of the Protected Area Update, No. 52, published by the Indian environmental action group, Kalpavriksh.

In Andhra Pradesh, on the Upalila-Vakalapudi coastline close to the Coringa Wildlife Sanctuary, an industrial group is seeking permission to establish a ship-breaking facility that would dismantle 300 ships annually. Environmentalists opposing the development have cited the environmental threats highlighted by a Greenpeace study into one of world’s largest ship-breaking sites at Alang, in Gujarat. Here 350 ships are dismantled annually for steel recovery, and after 15 years of this activity the site was found to contain high levels of hazardous chemicals and pollutants.

In Gujarat, the Ministry of Environment and Forests is reported to have approved a plan to allow the expansion of a cement plant, enabling it to more than triple its output to over four million tons annually. The plant is sited only one kilometre/half a mile from Barda Wildlife Sanctuary. Wildlife groups have pointed out that India’s National Wildlife Action Plan recommends that all land within 10 km six miles of either a national park or wildlife sanctuary should be declared an eco-fragile zone.

The Karnataka state government has approved plans to develop a “science city” in 40 hectares/100 acres of forest in Uttarhalli, an area adjoining Bannerghatta National Park. The Wildlife Trust of India and the Wildlife Rescue and Rehabilitation Centre have appealed to the Supreme Court to overturn the decision, arguing that the area is an important elephant corridor and destruction of the forest would intensify human/wildlife conflict in the area.

Other cases highlighted by PA Update include a proposal by the Maharashtra state government to redesignate a large tract of land in a no-development zone adjoining Sanjay Gandhi National Park in Mumbai for housebuilding; and the permission given to a mining company to build access roads through forests in the Karlapat Wildlife Sanctuary.

Pankaj Sekhsaria, editor of PA Update, said: “These reports are just the tip of what is happening across the length and breadth of the country. We know there are many more proposed port projects in the vicinity of sensitive coastal and turtle habitats; mining projects near innumerable protected areas; many dam projects that will affect the entire hydrology of regions; and construction of roads, highways and canals that are destroying significant animal corridors between protected areas and/or important forest areas. Our protected areas are getting increasingly boxed in in this manner, and it’s an issue of increasing concern.”

While our legal framework provides many measures for protection of wildlife and habitats within the boundaries of a protected area, the land immediately outside remains extremely vulnerable. This is because, in the final analysis, the ecological system which will be devastated by the dam, mining operation or port project does not respect the boundaries that we put on the map under the Wildlife (Protection) Act. So, even if a development is just outside the protected area, its impact cannot be isolated.

“We also need to bear in mind that a few million people live in these regions surrounding our protected areas, and any activity taken up, or any prohibition put in place, needs to keep their needs in mind as well. There are certain legal provisions which could provide the way out. The most promising, perhaps, is the Ecologically Sensitive Area (ESA) under the Environment Protection Act that allows for larger landscape level planning with the involvement of local people. “Some areas, like Matheran and Mahabaleshwar in Maharashtra, have recently been declared as ESAs. The National Wildlife Action Plan of 2002 too had recommended that areas within a 10 km/six mile radius of a protected area should be declared an ESA. The recommendations, however, largely remain on paper and we’ve seen project after project being proposed and cleared near protected areas. “More recently, the National Board for Wildlife has created a special task force for what have been called “augmentation areas”. Here too, the proposal is for working with people in areas adjoining PAs and other forest areas too, to ensure livelihood security and at the same time ensure habitat integrity. What will result is something that we have to await and watch. “There are a number of other efforts as well. WWF India, for instance, has been working on landscape level projects in the Terai and Satpuda regions. The Bombay Natural History Society (BNHS) has just published its compilation of Important Bird Areas (IBAs), nearly half of which are actually outside the official protected area network of the country. The idea of Community Conserved Areas (CCAs), too, has caught on, and Kalpavriksh is in the process of finalising a directory which lists nearly 300 of these. Most are outside the PA network, but there are significant examples from within protected areas too. “Considering the magnitude and speed with which development projects are boxing in our protected areas, something far more urgent and significant will have to be done. We certainly have to look at what’s happening inside our protected areas, but let’s look as urgently and seriously at what is happening around them as well.”

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peru

VILCANOTA IS FIRST NATURAL SACRED SITE

THE newly-created Vilcanota Spiritual Park in Cuzco province is the first natural sacred site in Peru to recognise and promote the values and principles of the Kechua communities in the conservation and sustainable use of biodiversity.

The Vilcanota mountain range is dominated by the snow-capped peak of Ausangate (6,372 m/20,905 feet), a sacred mountain which attracts more than 50,000 pilgrims annually to this region of the southern Andes. The site is recognised as a biodiversity hot-spot, a critical ecosystem and one of the main centres of genetic diversity of important Andean crops.

Alejandro Argumedo, director of the Asociación Andes, said: "Because of restricted access to some areas with voluntary protection measures exercised by the local population, natural sacred sites conserve local ecosystems and their unique biodiversity in an effective and efficient way, so they could serve as repositories of critical biological resources for the rehabilitation of depleted Andean landscapes."

The Vilcanota Spiritual Park is being implemented as a Community Conservation Area, a concept based on community-based landscape management, integrating traditional models with modern counterparts, and could serve as a model for the establishment of other special conservation areas in the Peruvian Andes.

russia

SURVEY OF SIBERIAN TIGERS

THIS winter an international team of conservationists have been conducting a range-wide count of Siberian (Amur) tigers, one of the world's most threatened big cats. Hundreds of biologists, hunters and trackers have combed a variety of landscapes to ascertain how many Siberian tigers still exist in the wild. Since the last survey in 1996, when the population was estimated at between 415 and 476 individuals, the tigers have faced continuing pressures from poaching, logging and hunting.

The survey co-ordinated by the Wildlife Conservation Society began in December, when a complete blanket of snow allowed field workers to search for tracks in the vast region of the Sikhote-Alin Mountain range, which holds 95% of the remaining Siberian tigers.

In recent years some indicators suggest that their numbers may be decreasing as a result of over-hunting of prey species such as deer and wild boar. Russia's Ministry of Natural Resources contributed one sixth of the survey's total US $300,000 cost, with other funding provided by a number of non-governmental organisations including the Exxon-Mobil Save the Tiger Fund, WCS and WWF.

spain

REGIONS WILL RUN PARKS

AUTONOMOUS Communities (regional governments) have been given the exclusive authority to manage Spain's national parks in a landmark ruling by the country's Constitutional Tribunal.

Until now the Autonomous Organisation of National Parks of Spain (OAPN), in the Ministry of the Environment, was the only public administrative authority responsible for developing and co-ordinating the planning and management of the country's 13 national parks.

OAPN will continue to form part of the Parks System Council which involves the participation of the public administration and other stakeholders in the commission (Patronatos) created for each park.

china

SMUGGLERS FACE DEATH SENTENCE

A CHINESE court has sentenced two Tibetan men to death and another to life imprisonment after they were convicted of smuggling the skins of nearly 1,400 endangered animals into Tibet. Among the pelts confiscated were those of tigers, leopards, otter and lynx, all classified by China as endangered species. Officials, who valued the haul at US $7.6 million, said it was the largest single seizure of endangered animal products in the country since 1951.

The three were arrested with the skins in October 2003 in Tibet's Ngamring County, along the border with Nepal.

guatemala

RANGERS’ TRIBUTE

A MEETING of the Association of Guatemala Rangers, held recently in the Monterrico Multiple Use Area on the Pacific coast, paid tribute to three colleagues who have lost their lives since the organisation's formation four years ago.

The event - attended by 62 rangers and International Ranger Federation vice-president, Juan Carlos Gambarotta - was dedicated to the memory of protected area officials Erwin Ochoa and Julio Vasquez and field ranger Enrique Alcanatara, who were all shot dead by factions opposed to their efforts to halt illegal timber and wildlife trading in protected areas.

All rangers attending the event were presented with the six-volume Central American Ranger's Manual, edited by Juan Carlos Godoy of the Proarca organisation.

canada

STRIKES END

FOLLOWING a two-month long series of rotating strikes at national parks, marine conservation areas and historic sites by the 4,800 members of the Public Service Alliance of Canada, the union and Parks Canada have signed a new collective agreement on increased pay backdated to August 2003.
A fifth of Italy’s brown bears were killed by poachers and poisoners in less than two years.

POACHERS AND DEVELOPERS THREATEN BEARS’ SURVIVAL

A CONCERTED effort involving scientists and volunteers is in motion to save central Italy’s last few surviving brown bears from an onslaught by poachers and poisoners – and to save their habitat from the threat of further development.

The WWF launched its project in the Appennine highland region last summer after a senior forestry official told a conference that a fifth of the bear population had been wiped out in less than two years. He claimed that in a 20-month period eight bears had been found killed by poachers. The Abruzzo, Lazio and Molise National Park, where most of the bears live, previously had an estimated population of around 40.

Augusto De Sanctis, of WWF Italy, is the official who was put in charge of the urgent initiative. “The bears often die atrociously,” he said. “They are being captured with steel loops attached to the bushes and trees along the paths they use. They die with deep wounds. Even worse is death by poisoning. The bears swallow bait laced with pesticides and strychnine. They die in terrible pain from internal haemorrhaging.”

One of the characteristics of the Appennine (or Marsican) brown bear – a distinct sub-species of the European brown bear – is its tolerance of humans. Until about a year ago, trapping and poisoning had been seen as a relatively limited threat to the survival of an animal which has often been used as a symbol of Italy’s endangered indigenous wildlife.

A drive in the 1990s succeeded in curbing the incursions of trophy hunters, but recent evidence suggests there are clear signs of an upsurge in poisonings by aggrieved locals, many of whom see the park as an obstacle to economic development. Yet it is the effects of a gradual increase in prosperity – in particular the abandonment of smallholdings that has driven the bears out of their normal habitats into more lethal contact with urban man.

Only two small groups of brown bears are clinging to survival in Italy, the more northerly group living in the Adamello-Brenta Natural Park near the Swiss and Austrian borders. Abruzzo National Park is just one hour’s travelling time from the major population centres of Rome and Naples.

To make matters worse, the ecological corridors between protected areas are being put under increasing pressure. Wind farm projects have been approved at Serralunga (with 50 towers as high as 80 metres/260 feet) and Carrito (105 towers), although recent scientific data about the bears has meant that only 28 of the towers at Serralunga have yet received preliminary authorisation. Both schemes are currently at the environmental impact evaluation phase.

To the east of the national park, plans are in place for development of a ski resort on the slopes of Monte Greco, which would involve the construction of two 15 km/nine mile-long cableways, three chairlifts, associated access roads and pistes. The projected cost is about €89 million, of which €24 million would be provided by the European Union. A final decision on whether the resort will be built is expected this year, although plans for similar developments tend to surface every three or four years.

The WWF collected a 15,000-name petition opposing the project and enlisted the expert evidence of 90 Italian scientists to back their claim. At the time of writing, there has been a delay in starting work while a preliminary evaluation is carried out, but strong economic pressure remains to give the scheme the go-ahead.

The failure of the park’s authorities to block such schemes has been criticised by environmental lobbyists – who worked in close contact with the park while carrying out their work – but park officials have to work with meagre resources which have dwindled since Italy’s current government took office in 2001.

Last month the Italian parliament sanctioned a one-off payment of €4.5 million for Abruzzo, but the entire national parks system in Italy will receive only €57.8 million of government money in 2005, compared with €62.5 million in 2001 – when there were eight fewer national parks in existence.

Depopulation of the highland areas has resulted in flocks of sheep being withdrawn from the high pastures, prompting the bears
to seek out prey elsewhere. Two years ago the mainly elderly inhabitants of the village of Frattura petitioned the authorities to say that bears roaming the area in search of chickens were threatening their “physical and emotional well-being”.

Serralunga is one of the upland locations where wind farm projects have received preliminary approval.

The abandonment of fruit farms in the Abruzzo uplands has also hit a key source of food, prompting the animals to range farther afield to look for sugar-rich vegetables such as carrots and beet. Part of the WWF initiative, due to run for at least three years, involves winter care of abandoned fruit trees, and in December volunteers spent a week reviving old trees in Valfellona and the Sagittario Gorge, pruning them and freeing them from invasive lianas and shrubs. A census has been carried out of those trees which are most preferred by bears; a file is filled out for every plant, which can then be located by global positioning satellite.

GREY WOLF’S LONG WALK

A GREY wolf has completed an amazing 1,000 km/620 mile trek across north-west Italy in just six months.

The young wolf was found injured on the Parma ring road, having been hit by a car last February. After a rapid recovery it was released in the wild last March in the Park of a Hundred Lakes, near Parma, and was tracked – using a device in its collar – across Lombardy and Liguria, to Mercantour National Park in the French Alps in September.

In the past, radio-tagged wolves have rarely travelled more than 50 km/30 miles, but this one moved westward along the crest of the Appennines, crossing and re-crossing motorways before reaching nature reserves in the Italian and French Alps.

It is estimated that between 500 and 600 wolves are still living in the wild in Italy. Although a protected species, they are often poisoned by farmers and shepherds anxious to safeguard their stock.

In 2003, officials say, Abruzzo National Park received €2.9m, almost 40 per cent less than in 2002. An official statement said it did not even have the money to provide its wardens with new boots. Another effect of the cuts has been to halt the subsidies the park offered local farmers to plant Indian corn, another important source of food for the bears.

Various operations to stamp out poisoning have been launched by the carabinieri, forestry guards and park wardens in recent months. But the long-term prospects for Italy’s emblematic large mammal still appear bleak. The official who first alerted the country to the gravity of the situation has warned that within 20 years there may be no more Marsican bears left.
From Alaska to South Carolina, Research Learning Centres are located in a wide variety of landscapes throughout the USA.

USA

RESEARCH LEARNING CENTERS PLAY ESSENTIAL ROLES

by LYNNE MURDOCK,
Natural Resource Interpretive Specialist, NPS.

FROM the moment of Yellowstone's establishment, there have been people who have recognised the value of national parks for scientific research.

As the world population and related development grows, the scientific value of large protected areas continues to increase. This fact, combined with gaps in the National Park Service's knowledge of what natural resources exist within national parks, has led to significant changes in recent years. The Natural Resource Challenge was conceived by NPS Natural Resource Associate Director Michael A. Soukup and past NPS Deputy Director Denis P. Galvin.

Funded by Congress in 1999, the goals of the Natural Resource Challenge are to:
- inventory natural resources and develop methods to accurately monitor their trends;
- restore natural systems that have been degraded by the introduction of non-native plants and animals;
- encourage scientific research in national parks;
- obtain scientific information needed to better manage the parks; and
- share the knowledge gained with the public.

Research Learning Centers (RLC) are one of the outcomes of the Natural Resource Challenge. To date, 16 RLCs provide infrastructural resources necessary for researchers to conduct research and exchange information for their network of parks. Education staff at each RLC communicates key messages on topics such as environmental history, fire ecology, resource stewardship, cultural landscapes and coastal ecosystems. Designed as public-private partnerships, RLCs collaborate with researchers, universities, educators and community groups and are cost-effective since each has a small staff and shares operational expense with partners.

One of the cutting-edge research projects at the Appalachian Highlands Science and Learning Center (AHSLC) is an All Taxa Biodiversity Inventory (ATBI), a comprehensive inventory of all forms of life in Great Smoky Mountains National Park. To date 543 species new to science and 3,358 species new to the park have been discovered and documented. Work of this magnitude could not be accomplished by park staff alone, and park partners Discover Life in America and Friends of the Smokies play a critical role in assisting research.

Within Tomales Bay, an important...
A University of Alaska graduate student prepares to draw blood from a black oystercatcher with the help of an NPS Resource Management Specialist.

This male rufous hummingbird was one of 668 banded during a survey at Rocky Mountain National Park.

This data structure allows users to generate checklists based on any taxonomic level. Future plans include a spatial database containing maps of species and habitat distributions available via the web.

In Seward, the Ocean Alaska Science and Learning Center is using video to describe National Park Service (NPS) inventory and monitoring work. The finished product will showcase three inventories: freshwater fish at Kenai Fjords National Park, small mammals at Katmai National Park and vascular plants at Aniakchak National Monument. At Kenai Fjords, scientists share research findings with the public via regularly scheduled seminars and park staff transfer information through consistently updated interpretive exhibits on research project outcomes.

Ever since discovering Crater Lake — the deepest lake in North America at 589 m/1,932 feet deep — scientists have been analysing the lake’s clarity and biological components. The establishment of Crater Lake Science and Learning Center (CLSLC) provides a new venue to transfer decades of synthesised data and make it relevant to local schools, communities and tourism bureaux.
partnering is helping to develop necessary infrastructure for the CLSLC. Two former NPS residences, both on the National Register of Historic Places are in the process of being renovated and, when finished, will serve as the CLSLC. Funding for this is being accomplished through a grant received from the Jeld-Wen co-operation. In addition, Crater Lake Trust, an arm of the National Park Foundation, invests revenue from a popular license plate, Crater Lake-themed 'Centennial' in an interest-bearing account. This revenue stream plays an important role for the start up of this RLC.

Fifteen structures at the McGraw Ranch, a former guest ranch at Rocky Mountain National Park, have been adapted for use by researchers and constitute the Continental Divide Research Learning Center (CDRLC). Seven former guest cabins have been converted to researcher housing, each with bathrooms, heat, electricity and phone connections. The main house includes a kitchen, dining room and living room. The $2 million project was carried out by park staff, local contractors and 200 volunteers who contributed 5,000 hours to help with the rehabilitation work.

Educational workshops were held during the process to provide hands-on training to the public and staff from other parks in masonry rehabilitation, log repair and window restoration. With cities such as Denver and Fort Collins which call Rocky Mountain National Park their 'backyard' and have a vested interest in its ecological integrity, park staff have cultivated a large volunteer population to draw from. Supervised by qualified researchers, park volunteers can often accomplish projects that parks may not otherwise be able to afford. This national movement called "Citizen Science" provides volunteers with an in-depth understanding of the complexities of park science issues.

On July 1, 2002 Acadia National Park acquired a former naval base on the Schoodic Peninsula in Maine. This property, with 36 buildings on 12 hectares/30 developed acres and pristine intertidal resources, will host Schoodic Education and Research Center (SERC). The developed area is already being used for existing programmes as park staff investigate market demand and partnership possibilities for SERC in this beautiful and special part of the world.

In summary, the NPS develops Research Learning Centers to facilitate research and provide educational opportunities throughout the National Park System. Each centre is unique and focuses on resources particular to an area's geography, landscape, culture and history. Some RLCs foster research through seed money provided to struggling graduate students or through matching university funds; other RLCs provide in-kind support through housing and logistical support. Research Learning Centers are places where research, education and community partnerships come together over shared natural, fiscal, and human resources to increase our understanding of the resources within national parks and protected areas.

climate change
POLAR ICE MELTS HARM SEA AND LAND

SCIENTISTS at a conference in England were warned that a dramatic ice melt in both polar regions could raise sea levels globally by five metres/16 feet — and cause a plunge in temperatures for much of Europe and North America.

The 200 delegates from around the world were told at the climate change conference in Exeter earlier this month that, contrary to earlier predictions, west Antarctic ice was flowing into the sea at a rate of 250 cubic km a year, raising fears that the ice sheet could collapse by the year 2100. The weakening of the permanent ice sheet — caused by global warming from carbon dioxide emissions — has been detected by scientists from the British Antarctic Survey, who have measured depths of ice at various locations throughout the continent.

Delegates heard that global warming was also causing Greenland and Arctic ice caps to melt, which threatened to halt the moderating flow of the Gulf Stream in the north Atlantic. A three-degree rise in global temperatures this century would lead to a 45% chance of the ocean current being totally halted — and perversely result regionally in a five to 10-degree fall in winter temperatures.

Carbon dioxide emissions were also threatening to increase the acidity of the seas, resulting in coral reefs around the world beginning to dissolve within 30 years. Emissions were continuing to show a worrying increase, with predictions that global demand for electricity would double in the next 25 years, most of this need being supplied by fossil fuels.
conservation

ONE THIRD OF AMPHIBIANS ARE AT RISK

THE 2004 IUCN Red List of Threatened Species, which was published at the 3rd IUCN World Conservation Congress, revealed that a total of 15,589 species face extinction, including one in three of all amphibians.

More than 500 scientists from over 60 nations contributed to the Global Amphibian Assessment, the most comprehensive study ever undertaken. Over a three-year period they analysed the distribution and conservation status of all 5,743 known amphibian species, and found that 1,856 (32%) are now considered threatened with extinction. Of these, 427 species are considered Critically Endangered, 761 Endangered, and 668 Vulnerable. Other key findings were:

- at least nine species have become extinct since 1980, and a further 113 species have not been reported from the wild in recent years and may possibly now be extinct;
- while 43% of all species are in population decline, fewer than one per cent are increasing;
- the country with the highest percentage of threatened amphibians is Haiti, where 92% are threatened with extinction;
- Colombia is the country with the highest number of species at risk, with a total of 208, followed by Mexico with 191, Ecuador with 163, Brazil with 110 and China with 86;
- the highly permeable skin of amphibians is more immediately sensitive to changes in the environment, including changes to freshwater and air quality.

Commenting on the study, Russell A. Mittermeier, president of Conservation International, said: "Amphibians are one of nature's best indicators of overall environmental health. Their catastrophic decline serves as a warning that we are in a period of significant environmental degradation."

In the Americas, the Caribbean and Australia, a highly infectious disease called chytridiomycosis has had a serious impact on amphibians. Research is showing that in some regions, outbreaks of the disease may be linked to drought years, which scientists are increasingly attributing to the effects of climate change. Other threats, such as habitat destruction, air and water pollution and consumer demand, are leading causes of amphibian decline.

Simon Stuart, senior director of the IUCN/CI Biodiversity Assessment Unit and the leader of this research, said: "Since most amphibians depend on freshwater and feel the effects of pollution before many other forms of life, their rapid decline tells us that one of Earth's most critical life support systems is breaking down."

Bruce Young, a zoologist with the conservation group NatureServe, whose scientists worked alongside experts from Conservation International and IUCN, said: "This assessment removes any doubt about the scale of the problem. Now we need greater protection of natural areas and accelerated research on amphibian diseases to stem the tide of extinction."

42% of turtle and tortoise species could face extinction in the next century

Among other key messages to emerge from the Global Species Assessment (GSA) were:

- 42% of turtle and tortoise species could face extinction in the next century.
- 18% of assessed sharks and rays are threatened.

Almost half of Europe's birds — some 220 species — are facing serious declines

One in eight of the world's bird species face extinction, and research by Birdlife International found that almost half of Europe's birds — some 220 species — are facing serious declines.

The GSA did, however, impart the good news that conservation measures are making a difference with one quarter of the world's birds benefiting from such measures.

David Brackett, chair of IUCN's Species Survival Commission, said: "Governments are starting to realise the value of biodiversity and the critical role it plays in their people's wellbeing. Species provide food, medicine, fuel and building materials. They help filter water, decompose waste, generate soil and pollinate crops. Recognition of this is growing, but governments need to mobilise far more resources. The private sector also needs to play a central role by actively promoting and pursuing the sustainable use of the world's natural resources."

Achim Steiner, IUCN's director general, said: "It is clear that the situation facing our species is serious and getting worse. We can continue to assess and bemoan the loss of the world's biodiversity, or we can act. We must re-focus and rethink the way in which society must respond to this global threat."
FUND HELPS THREE PROJECTS

IN the first round of grants issued under the Sir Peter Scott Fund for Conservation Action, created by the IUCN Species Survival Commission (SSC), three projects by specialist groups in the SSC network have been selected to receive a total of US $40,000.

In Mauritius, on the 26 hectare/64 acre Ile aux Aigrettes, the Indian Ocean Plant Specialist Group will receive a grant to complete restoration of a globally important coastal ebony forest, one of the last remnants of this forest type in Mauritius. The project, which involves the removal of invasive alien plant species and re-establishment of native species, was instigated in 1985 and to date 80% of the island's forests have been restored.

Support will also be given to the SSC Iguana Specialist Group to implement a recovery plan for the Anegada iguana, which is endemic to Anegada island in the British Virgin Islands and classified as critically endangered following an 80% population decline since the late 1960s. Only 200 remain, and the project aims to significantly enhance the recovery of this species through an integrated programme involving the release of young iguanas reared in captivity, feral mammal control and building community support for the recovery programme.

The third project to receive support involves monitoring population trends and habitat quality of the critically endangered Przewalski's gazelle, which is endemic to western China and now confined to a small area around Qinghai Lake. Also classified as critically endangered with an estimated population of less than 250 animals, the extinction of this species is considered a real possibility as there is no captive breeding population. Continuing threats include competition with livestock and extensive fencing which prevents free movement between foraging areas and disrupts mating.

The project, involving SSC Conservation Breeding and Re-introduction Specialist Groups, will carry out science-based research on the surviving gazelles and their habitat in order to identify specific measures for conservation action.

UK

MARINE RESERVES RECOMMENDED FOR NORTH SEA

THE most comprehensive report on the impact of fisheries on the marine environment of the North Sea has been published by the UK's Royal Commission on Environmental Pollution following an 18-month long investigation.

Contained in the Commission's Turning the Tide report is a call for 30% of the UK's exclusive economic zone – the sea area out to 370 km/200 nautical miles from shore – to be turned into a network of marine reserves, where fishing is halted to save threatened species, within the next five years.

The report states that: "Intervention on this scale is necessary to preserve important ecosystems and to break the present cycle of unrealistic catch quotas and diminishing fish populations. Similar measures are also needed across Europe."

ICES, the International Council for the Exploration of the Sea, which provides scientific advice to the European Community about the state of fish populations managed under the Common Fisheries Policy, has recommended that no cod should be caught in the North Sea next year.

The North Sea is one of the most intensively fished areas of the world. Scientists at Plymouth Marine Laboratory have deduced that 90% of its floor is trawled at least once a year – and in some areas as often as six times.

Professor Sir Tom Blundell, who chairs the Commission, said: "Around the world there is evidence that creating marine reserves – areas where fishing is not allowed – leads to a several-fold increase in the size and number of fish, shellfish and other animals. A third of the Great Barrier Reef is closed to fishing, and countries like New Zealand and South Africa have plans to designate between 10% and 20% of their marine environment as reserves.

"There are some particularly damaging fishing practices which we believe should be strictly controlled. One of these is deep-sea fishing by factory trawlers, which can damage the seabed and result in the capture and death of other animals. The sector appears inherently unsustainable because many deep sea species are so slow growing, late to mature and easily fished out. We recommend that the UK government should prohibit deep-sea fishing in UK waters, or by UK vessels, and press for similar restrictions at the European level."

"A system of marine spatial planning is urgently needed to allow the environmental impact of all activities – including fishing, wind farms, oil and gas exploration and conservation – to be assessed before they are carried out. Only a statutory planning system will be powerful enough to manage rival development pressures."

AFRICA

WILDLIFE ART RAISES FUNDS

THE African Conservation Foundation has teamed up with Canadian wildlife artist, Daniel Taylor in an Art for Conservation project to raise funds for the conservation of endangered African gorillas, elephants and lions.

Taylor is creating an original wildlife painting of each of these animals, and limited-edition prints will be available through auction or direct purchase, with 100% of all proceeds going to conservation projects.

For further details of "When Paintings Come Alive" – The Endangered Species Project, visit: www.africanconservation.org/artforconservation.html

More news: Page 26
Elk Island is unique in Canada because it is the only completely fenced national park within the system.

**canada**

**JOINT INITIATIVE WILL PRESERVE BEAVER HILLS**

by MURRAY HEAP, GUY SWINNERTON and STEVE OTWAY.

Elk Island National Park is situated within the Beaver Hills ecosystem, which is characterised by the hummocky knob-and-kettle topography of the Beaver Hills – Cooking Lake Moraine. Approximately 1,500 sq km/580 sq miles in extent, the topography of the moraine rises to over 60 metres/200 feet above the surrounding plains and forms a disjointed portion of the Dry Mixedwood Sub-region of the Boreal Forest Region within the Central Parkland Sub-region of Alberta.

The complex hummocky topography of the moraine, together with its associated hydrology and soils and local climate, inhibited extensive clearance of the natural cover and contrasts strongly with the predominantly developed landscape of the surrounding plains. This remaining abundant tree cover and the numerous water bodies found within the moraine support a rich diversity of ungulates and other wildlife, waterfowl, and migratory birds.

Protection of this landscape has a long history, and designated protected areas account for just over a quarter of the Beaver Hills. Elk Island National Park (194 sq km/75 sq miles) is the largest of these, and was originally set aside as a Dominion Wildlife Reserve in 1906. The reserve gained National Park status in 1913. Other designated protected areas include the Cooking Lake – Blackfoot Provincial Recreation Area, the Ministik Bird Sanctuary, Miquelon Lake Provincial Park, the Strathcona Wilderness centre, and a number of Natural Areas designated by the Alberta Provincial Government. More recently, conservation initiatives involving private landowners and supported by various non-government organisations such as the Nature Conservancy of Canada and Ducks Unlimited have become increasingly evident.

Located some 45 km/28 miles east of the city of Edmonton, the Beaver Hills and its immediate area are becoming increasingly affected by growth of the city, which recently became the sixth metropolitan region in Canada to exceed a population of a million people.

The pressures of urbanisation including residential development, infrastructure expansion, and the demands for outdoor recreation opportunities, are making increasing inroads into the Beaver Hills. Agricultural improvements and oil and gas development also contribute to the intensification and fragmentation of land use patterns which have significant implications for the long-term biodiversity and character of the area. Not surprisingly, Parks Canada has been specifically concerned about these changes because of its mandate to protect the ecological integrity of Elk Island National Park.

Elk Island National Park is representative of the Southern Boreal Plains and Plateaux Natural Region of Canada. As previously stated it is the only completely fenced park within the Canadian National Parks system. The fencing was originally put in place to preserve the last remaining elk in the region from hunting pressure. Subsequently, the park also served to protect a plains bison herd, and later assisted in the preservation of wood bison.

The fence, and lack of natural predators, have led to high concentrations of ungulate species in the park, making it a prime destination for wildlife viewing and creating the need for active management of these species. Elk from Elk Island have been transported across North America to help reintroduce the species into many areas within their historic range. Similarly, wood bison from Elk Island have been successfully relocated to several areas within their natural habitat in northern Canada.

The future health of the ecosystem within Elk Island National Park is tied to the health of the greater ecosystem within which it is
situated. Parks Canada recognises the need to work with all of its neighbours to establish a jointly held vision, and then to work with them towards attaining these goals. In particular, Elk Island can contribute good natural and biological science to the decision-making process, but ultimately the decisions must be made considering not only the ecological needs of the park, but also the social and economic needs of the partners.

BACKGROUND
The idea behind the Beaver Hills Initiative began back in the spring of 2000. Faced with proposals for pipeline development and seismic exploration near their shared boundary, Elk Island National Park worked in conjunction with Strathcona County to develop a common approach to deal with the environmental assessments of such projects. That undertaking led to the realisation that Elk Island could not maintain its ecological integrity without the co-operation of adjacent landowners.

General principles of the initiative were formed, and park staff presented them to the councils of not only their immediately neighbouring counties (Strathcona, Lamont and Beaver), but also to the other two counties which have land in the Beaver Hills ecosystem (Leduc and Camrose). All five municipal councils bought into the concept.

A meeting was held with all council members, environmental non-governmental organisations, and federal and provincial government departments on April 30, 2002, which led to a follow-up workshop on September 9 of that year. Draft guiding principles and vision and mission statements were prepared at that workshop. A co-ordinating committee was formed and has been meeting regularly since then. The committee is composed of one or two members from each of the stakeholder groups (counties, federal and provincial government, NGOs and industry). Committee members are responsible for bringing concerns of those they represent to the table, and for distributing information from the committee back to their own respective groups.

Decisions are made by consensus, and sub-committees formed as needed to address specific tasks like communications and finances.

Although the Beaver Hills Initiative was unsuccessful in securing funding through grant applications in the first year of operation, the Initiative has continued largely through in-kind contributions of the various partners. This past year, funded by grants from Alberta Municipal Affairs and Parks Canada’s Ecological Integrity Innovation and Leadership Fund, the Initiative hired a consultant to develop a business plan, compile existing data into a common database, and develop a land management area map to assist future land use planning. Work is currently being done to address data gaps, and to develop joint strategies towards common concerns such as weed control. Future goals include the development of consistent landscape management policies, implementation of non-regulatory conservation initiatives, joint initiatives with industry, joint statutory plans, and ultimately global recognition as a sustainable region built upon shared initiatives and collaborative community action.

KEY CHARACTERISTICS

Vision
The Beaver Hills Partnership values the region for its natural beauty, quality of life, and supports cooperative efforts to sustain water, land, air, natural resources, and community development.

Mission
Working together for a sustainable region, through shared initiatives and co-ordinated action.

Guiding Principles
Working together – focussing and improving on positive contribution and communication; being stronger together than acting separately; success requires community education, participation, input and support; success requires commitment and leadership from all processes; consistency in speaking in one voice on all issues.

Land use planning practices – to conserve, enhance and monitor improvements or impacts to the environment; to promote regional co-ordination by reflecting the regional vision in all municipal land

Wood bison from Elk Island have been relocated to several areas within their natural habitat in northern Canada.
Elk from Elk Island have been transported across North America to help reintroduce the species into many areas within their historic range.

Use policies, plans and actions; to strive for a common level of data (identifying critical data needed, improving access and sharing where appropriate).

Quality of Life – maintaining or improving quality of life; maintaining a holistic approach between psychological health and natural environment; maintaining social and cultural history; developing planning tools to assist in reaching a common goal.

Economics – integrating/initiating economic forces with environmental stewardship concerns (people’s needs, economy, environment).

Environment – enhancing quality conservation techniques and striving to improve quantity of natural resources; respecting appropriate use of land and water, and the importance of our natural environment in maintaining or improving our quality of life; determining habitat required and striving to ensure that at least the minimum viable habitat is maintained.

Anticipated Benefits
The Beaver Hills Initiative provides a co-ordinated, cost-effective approach to fire protection education; watershed stewardship; environmental (air, water, land and biodiversity) resources management; invasive alien species and weed control; pest and disease management; information/data development and sharing; and decision making among member municipalities, partners and agencies involved.

What has been accomplished:
- promotion of environmentally sustainable landscape management practices; regular information-sharing meetings; delivery of cost-effective services; co-ordinated service from all three levels of government concerning weed management, fire protection and watershed/landscape planning.

CONCLUSION
Recommendations made by the panel on the Ecological Integrity of Canada’s National Parks (2000) noted that protecting and restoring the ecological integrity of Canada’s national parks required the development of outreach programmes and Parks Canada’s participation in regional sustainable development strategies.

The Beaver Hills Initiative exemplifies a bioregional approach to planning within a critical ecosystem that is under the increasing pressures of land-use change and fragmentation. In addition, Parks Canada’s involvement in the Initiative, through its staff at Elk Island National Park, demonstrates the agency’s commitment to transboundary collaboration and active and meaningful partnering with local people and communities.

The Initiative also illustrates the fact that protecting the ecological integrity of a national park requires the conservation of biodiversity at a regional level, and that these objectives can be achieved in conjunction with sustaining the social and economic viability of an area and the quality of life of local communities.

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Guy Swinnerton is Professor Emeritus, Parks & Protected Areas, University of Alberta;
Steve Otway is Chief Park Warden, Parks Canada, Elk Island National Park.
ONCE again I've met and interviewed some amazing rangers working their patch. I started off in Scotland, where the work of rangers in conservation areas includes patrolling hunting grounds, ringing birds and conducting education programmes. Most rangers believe that they need a higher profile among the Scottish community to gain more support for their work. Let's hope that happens, as they are doing a great job looking after a beautiful part of the world.

Next I was off to see Gordon Miller and Sean Prendergast in England's Peak District National Park. Gordon was one of the founders of the International Ranger Federation and he has travelled to many corners of the world talking, helping and building the IRF, so his views were great to capture on film. The Peak District park has over a million annual visits and I was given a good perspective on how they try to deal with such high visitation rates.

Next I went to Ireland where I spoke to Ger O'Donnell at Connemara National Park on the west coast. He explained that much of their work was with neighbouring private landowners, and their greatest struggle was convincing local people that conserving their greatest struggle was conserving their land, and how they try to deal with such high visitation rates.

Next I went to Norway next, where Rigmor Solem showed me some of the great work they are doing restoring traditional mountain farms in Jotunheimen National Park as a way of outreach to local communities and gaining their support. Next I was climbing glaciers, hiking up and down mountains looking for reindeer and swimming in freezing rivers counting fish, as well as interviewing more rangers. They have carried out remarkable programmes involving reindeer repopulation, but it was sad to see wolverines still being hunted - with government permission, in some places.

In Denmark I met Jes Aagaard, Nils Brum Neilson and other rangers. Most outstanding here is the interpretation work which is very progressive, ranging from a virtual insect playground - where children run among charred pine poles pretending to be insects in blades of grass - to shooting and dissecting deer with schoolchildren, which finishes with roasting and eating the deer to show those from the city that their food does come from nature. Nils also took me to the Ecological Inspiration House, which aims to reconnect city dwellers by showing them how their day-to-day lives impact on the natural world.

My next port of call for filming was Portugal, where the ranger profession is only 15 years old and they are pushing to establish their identity. I was shown how a lack of understanding by both the public and government has led to illegal housing in parks, rubbish dumping, illegal forestry, poaching and violence towards rangers.

Inspirational stuff from my European colleagues. I'm sorry I couldn't film more countries, but budget and time have dictated this.

The last part of my trip took me to Bwindi Impenetrable National Park in Uganda and the ever-smiling chief ranger, John Mokombo. Bwindi and Virunga National Parks are home to half the world's critically endangered mountain gorillas, and I filmed the rangers on guided treks, on anti-poaching patrols and implementing community programmes.

The gorilla trek provided great footage, with the ranger giving expert commentary as the young gorillas entertained us and the silverbacks did what silverbacks do... not much.

The rangers are implementing programmes to build hospitals, schools and other projects to benefit this poor community, who have responded by supporting the conservation work of the rangers; a good model for those interested in learning more. When John Mokombo stops smiling you know it must be serious - and this was the case when he talked of rangers being gunned down by rebel soldiers.

Next I was off to South Africa where I was met by David Zeller, the IRF President, and we travelled up to Sable Park where I filmed an interview with him. At Kruger National Park Richard Sowry took me down to a river where we had a serious encounter with a charging elephant: great footage, but the audio might need some editing of my use of expletives as a 2.5 ton creature with pointy tusks ran full pelt five metres from my vehicle window. Good driving saved us from a more dramatic finish. One of the most bizarre interviews I filmed was Richard talking in front of a waterhole with some impala in the background. After a few minutes 300 buffalo walked into shot just 20 metres from Richard who, I noticed, kept a trained eye on them through the car's wing mirror.

After filming rangers in an anti-poaching squad at Greater St Lucia Wetland Park, I went to the Drakensberg Mountains to meet Tim Snow, president of the African Game Rangers' Association, and filmed the last interview of my world tour.

I'm back in Australia now after an exhilarating 12 months. I think I have interviewed between 100 and 150 rangers on location in 22 countries, with more to go if I can. There's still Australia, Papua New Guinea, New Zealand, India, Vietnam and any other countries if money and time allow.

I have had great support from all the rangers and their families I have visited. Thanks to you all for helping make it happen. I am deeply indebted to you all.
VISITORS to England’s east coast counties of Norfolk and Suffolk have long been attracted to the network of inland waterways known as the Broads. Britain’s largest protected wetland — and a major centre for boating holidays — the 63 Broads bring in some £146 million annually through tourism, and support some 3,000 jobs.

It is the navigation by pleasure craft which has prevented the Broads Authority from being classified as a National Park. Britain’s National Parks in Britain are governed by the Sandford Principle, where conservation takes priority. However, as a Special Statutory Authority it has the same status and is recognised as a member of the family of National Park Authorities, thereby receiving part of its funding from central government sources.

Director of Field Services, Mark MacGregor, told me: “Many of those coming to our visitor centres at Hoveton and Potter Heigham, or to Wroxham on a day’s shopping trip, don’t know they’re in a National Park. Therefore we have to develop the public perception of the concept of the Broads as a National Park. The necessary restrictions are already in place and there is no movement against this.”

In 2004 the Broads Authority was awarded Beacon Status by the UK government for promoting sustainable tourism — the first National Park in the country to receive such recognition. Mark McGregor explained: “Currently, and most probably due in great part to the availability of cheap holidays and flights abroad where good summer weather can normally be guaranteed, our boating sector of private hire cruisers is spiralling downwards. This has led to not only a loss of tolls which provide 30% of park income, but a decrease in riverside facilities. To reverse this trend and to extend our eight-month visitor season, our goal is to revive water-based tourism whilst at the same time developing the land-based sector.”

Confronting complex issues of economy, landscape, water quality and recreational use, the director pointed out that this was not an easy task: “Farming here is not intensive. The farmers who graze cattle are unable to make a living. Cheaper thatching reeds imported from Romania and elephant grass from South Africa have caused a decline in the traditional marshman’s craft of reed cutting. This is allowing scrub to creep in. There is also the question of restoring the windpumps to their original condition. To the Broads the loss of the windmills is as devastating as the loss of stone walls and barns would be to the Yorkshire Dales.”

To promote the area and to maintain the character of the Broads, the authority is hopeful that besides attracting new enterprise, it will be possible to encourage people to continue to take up employment in traditional crafts and skills. Altering visitor expectations and pre-conceptions will take time. Most of those coming to the Broads usually respond to conventional wisdom and choose to take to the water to appreciate this ecosystem. This can lead to both problems and solutions.

A river inspector with Great Yarmouth Port Authority for several years, navigation ranger, Jamie Hanger, transferred to the Broads Authority when it was formed in 1988. As we followed part of his 72 km/45 mile beat along the Rivers Thurne and Lower Bure aboard the patrol launch Chet, he told me: “Even in a week here the person
By draining the land, now-obsolete windpumps maintained water levels on the Norfolk Broads.

Jamie checked out its details on the on-board lap-top computer, which carries a complete database of all boats registered and their toll status.

When the vessel in question appeared, the ranger drew alongside and politely, but firmly, outlined the problem to the person in charge of the craft. On resuming our patrol, I learned that problems with speed were not uncommon. Speed limits on the water were reduced in 1992 to five, six, eight and 10 kph/three, four, five and six mph. To detect craft which exceed them, radar is used and offenders reminded of the regulations. In more serious or persistent cases the Broads Authority will prosecute, leading to fines of up to £1,000.

After the majority of cruising visitors have left and winter settles in, how does a navigation ranger fill his day? "Without any difficulty!" was the immediate response. Although the Broads will freeze - my guide mentioned a tanker that was ice-bound in tidal water some years ago - Jamie maintains his river patrols and village liaison activities. A qualified chainsaw operator, he also gets the opportunity not only to sharpen this skill but to keep warm by spending three days of his working week with volunteer labour clearing the river-banks.

Ludham Field Base shares Womack Quay with the Hunter Fleet of leisure boats. Built in the 1930s, these stylishly-lined sailing craft still, for many, represent the golden age of pleasure boating on the Broads. They and other unmotorised vessels are encouraged by the payment of a lower licence fee. The Broads Authority has had to have a re-think about the premium paid by motorised boats. Some motors are more environmentally friendly than others, so electrically powered craft now also qualify for a reduction.

I was to meet volunteer assistant ranger, Richard Murat, aboard the solar-powered passenger carrier...
Volunteer navigation ranger Richard Murat aboard the solar-powered Ra.

Ra: so named after the Egyptian infant sun god who was born and died daily. Ra was the first vessel to harvest the energy of Norfolk's (or indeed, Britain's) sunshine. Richard did, however, point out that the vagaries of the English weather necessitated the occasional "plug-in".

As we slipped soundlessly into Barton Broad, 1.2 to 1.8 metres/four to six feet deep and the second largest of the waters, I learned from my guide that the Broads were formed after peat diggings established in the 12th century were mostly abandoned in the 1400s.

"At the time when large quantities of turfs were being cut more people lived in Norfolk than in any other county in Britain. But the Black Death (1348-1350) killed most of those living close to the churches, the main gathering place in the villages, decimating the workforce. The majority of those who survived the plague were the isolated population who lived scattered throughout the marshes."

Already in decline, the peat cutting industry's virtual demise was exacerbated by a huge winter flood. The rising waters engulfed the peat extraction pits, creating the Broads.

The sun sparkled on the choppy wavelets of the reed-fringed expanse of open water. Yacht sails billowed and, his boat hidden in the reeds, a fisherman waited patiently for a bite. Richard explained that Barton had not always been so beautiful. "In the 1980s it looked and smelt like pea soup. Fish were dying in their thousands and the wildlife was disappearing. Some 10 cm/four inches below the water's surface lay algae that looked like a diesel spill. The Broads Authority was formed with the brief of regenerating the water before all was lost, with a knock-on effect on the other Broads. In order to secure the necessary funding it was agreed with the government that access for all would be provided."

 Owned by the Norfolk Wildlife Trust, much of the later restoration work has been achieved under the Broads Authority's £3 million flagship project, Clear Water 2000.

I learned from Richard that, working in co-operation with Anglian Water who installed state-of-the-art nitrate stripping machinery into their sewage facilities, initial activity involved dredging 305,000 tonnes/300,000 tons of mud and silt out of Barton. This was spread onto nearby fields, creating agricultural lagoons. After these dried out the sediment was ploughed into the land. With the broad's depth now increased, to further stimulate the eco-system a 560 metre/1,835 feet long fish-proof curtain was installed. Designed by the Broads Authority's engineers, this innovative structure is held to the lake bed by weights and supported by floats on the water's surface.

Richard continued: "Once the fish had been removed from the protected area the barrier allowed the daphnia to flourish, breed and chomp up the algae."

The creatures are aided in this by spikes driven into the lagoon which have 14,000 brushes attached to them. These create a spawning habitat and protect straying fish from eating them. Any fish that do manage to get through the curtain are electrically stunned and returned to the main broad.

Other wildlife also benefit from the barrier. Acting as a windbreak, it protects the reeds in the winter...
months. However, according to the volunteer ranger, trees introduced by farmers which crash onto the reeds cause the major disturbance to the sheltering birds and animals. In earlier times such damage was limited by the coal wherrymen who sailed Barton Broad. They felled the trees in order to keep the wind in their vessels’ sails.

Floating on the open water, sand-filled nesting boxes for the common tern (Sterna hirundo) have been provided. Richard told me: “The breeding grounds for these birds are on the nearby coastal sands, but their nests were being vandalised.” The re-appearance of Norfolk Boulder reed, used traditionally for making horse collars, is a further indication of the health of Barton Broad.

Since 2003 nature lovers, including those with disabilities, have been privileged to visit one of Barton Broad’s most secret corners. But providing ‘access for all’ was not without its hazards for some of those building the Barton suspended boardwalk. My guide explained that the supporting posts had to be sunk into peat nine metres/30 feet deep. Whilst labouring on the project workers occasionally slipped, sometimes finding themselves up to their necks in the bog. The hard-won 610 metre/2,000 feet long wheelchair-friendly walkway passes through the atmospheric swampy woodland of Heron’s Carr before reaching a viewing platform at the water’s edge.

A few well-loved Broads traditions have disappeared forever. As Ra passed by the pretty village of Barton Turf, Richard pointed out a small building at the water’s edge. “A chap used to sell glasses of beer to passing boaters from that little window,” he recalled. How times change. The gentleman in question, of course, did not bother with the small formality of obtaining a licence for the sale of intoxicating liquor. I wonder how would he have felt about needing a licence to take his punt on to Barton Broad?

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**NEWS REVIEW**

**democratic republic of congo**

**BONOBO NUMBERS SHOCK**

The preliminary results of a survey conducted in the 36,000 sq km/13,900 sq mile Salonga National Park, a known stronghold of the bonobo – a pygmy chimpanzee – indicate that previous estimates of a 50,000-strong population of this species in the heart of the Congo Basin could be highly misleading.

The survey supported by WWF was undertaken by the Congolese Institute for Nature Conservation (ICCN) and the Wildlife Conservation Society, and data in from about a third of the park revealed scant evidence of bonobos living there. No bonobos were encountered and sightings of nests and dung were only made in a quarter of the area surveyed.

There was, however, much evidence of human encroachment and poaching. Due to the long-running civil war in the DRC, it has been almost impossible for ICCN to effectively protect the country’s national parks with increased poaching activities carried out by armed militias as well as local people.

Dr Peter J. Stephenson, WWF’s African Great Apes Programme Co-ordinator, said: “These initial results concern us greatly. Salonga National Park was created in 1970 specifically to safeguard the species and potentially represents the largest, undisturbed and protected habitat for the bonobo. If things are this bad here, we can assume that across the Congo, bonobos are in crisis.”

A new project to monitor and protect surviving bonobo populations in the northern sector of Salonga, which has been launched by WWF, will provide park staff and researchers with training and equipment as well as supporting anti-poaching operations on foot and by boat to stop the illegal killing of these rare apes.

The bonobo, which is found only in the DRC – in the central Congo Basin south of the Congo river – is often cited as one of the closest relatives to human beings. The genetic code in the DNA of chimpanzees and bonobos is closer to that of humans than to that of gorillas.

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**iucn**

**NEW PRESIDENT ELECTED**

DELEGATES at the World Conservation Congress elected South Africa’s Valli Moosa as the new president of IUCN, the World Conservation Union.

Mr Moosa, a former anti-apartheid activist who became South Africa’s Minister of the Environment, received 432 votes while his opponent, Dr Parvez Hassan of Pakistan, attracted 199 votes. He replaces outgoing president Yolande Kakabadse.

Following his election success, the new president said that nature conservation was “everybody’s business” and he urged more people around the world to become conscious of its importance.

“The world is agreed that conservation should be more strongly connected with the needs of the poor,” he said, “and it is an honour for Africa to be bestowed the responsibility of leading the world as it seeks to take conservation to another level.”

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**mountains**

**NEW BOOK**

Managing Mountain Protected Areas: Challenges and Responses for the 21st Century, a 432-page book edited by David Harmon and Graeme Worboys which contains contributions from participants in the IUCN World Heritage MPA Drakensberg Field Workshop held in South Africa in 2003, is now available from publishers Andro-meda Editrice, price €78 excluding postage. To order, e-mail: andromedit@tin.it
MOUNTAIN huts play an important role in making the world’s high places more easily accessible. They allow climbers to start their ascents early in the morning, and backpackers to create adventurous high-level treks.

But they should not be viewed simply as facilities. Properly-managed mountain huts create an atmosphere of fellowship, helpfulness and responsibility which has an educational impact, especially on younger tourists.

Technical and economic developments, together with the growing and increasingly sophisticated demands of visitors, are changing the nature and extent of mountain tourism. Mountain huts are not immune to these pressures, and provision of larger, more accessible and more comfortable huts inevitably results in an increased impact on local resources.

This is why people involved in all the various aspects of this complex issue are being invited to a special seminar from April 14 to 17 to discuss the present and future of mountain huts. Mountain Huts—Challenges for Tourists and Nature? is being organised by the International Friends of Nature, the Institute of Tourism and Recreation at Kraków Academy of Physical Education, and the Kraków Academic Section of the PTTK. The venue will be Szklarska Poreba, a popular mountain resort in south-west Poland near to the Czech border.

The objectives of the seminar are to exchange information, experience and ideas on topics which include:
- mountain huts as historical monuments and witnesses to the past;
- huts in the mountain landscape (disfigurement or additional value);
- environmental impact of mountain huts and how to limit it;
- mountain huts as places of interpretation and education;
- creating the right social atmosphere in mountain huts;
- nature-friendly mountain huts;
- mountain huts and protected areas: conflict or co-operation?

In addition, the seminar will provide participants with an opportunity to visit Karkonosze National Park (see NPIB, Issue 14), a mountainous area of exceptional bio-cultural diversity with more than 200 years’ history of mountain tourism. Visits to other national parks in the Sudety Mountains will be possible during the post-seminar excursions.

The organisers invite participation from anyone with an involvement or an interest in mountain tourism—natural as well as cultural—including managers of mountain huts, mountain guides, tour leaders, interpreters, rangers, park managers responsible for environmental education, scientists, writers and journalists interested in mountain issues from all over the world.

The working languages of the seminar will be English and German, and simultaneous translation will be provided. The cost of participation is €150-195 per person, dependent on the standard of accommodation required; more detailed information will be provided later.

Anyone wishing to participate or receive further details are requested to send an e-mail or fax to Michael Prochazka (Secretary General IFN): m.prochazka@ifn.at fax: (+43) 1 8129789 or Piotr Dabrowski: oapttk@eko-tourist.krakow.pl fax: (+48) 12 4231697

THE first-ever International Marine Protected Areas Congress (IMPAC1), to be held in Geelong, Australia from October 23-27, has already attracted more than 560 expressions of interest from 65 countries.

This inaugural congress is expected to attract leading marine scientists, managers, commercial and recreational interests, as well as community representatives from around the world.

Registration is now open, and the registration brochure can be accessed via the web-site www.impacongress.org and is also available in hard copy from ASN Events, PO Box 200, Balnarring, Victoria 3926, Australia. The registration fee covers a number of social activities designed to encourage a ‘get-to-know-you’ atmosphere and assist networking. The third day of the congress will consist of a variety of local field trips (by boat and/or bus) and include diving and snorkelling opportunities.

Applications to seek financial support for indigenous and community representation together with delegates from developing countries are available—see the website or contact ASN Events when registering.

More than 250 possible topics for discussion were received during last November and December 2004: these are currently under review, and a provisional programme will be compiled and promoted during March.

The focus for IMPAC1 is “The Contribution of Marine Protected Areas for Sustaining Marine Eco-Systems”.

A SEMINAR for managers of European Diploma Areas organised by the Council of Europe is to be hosted by the Thayatal National Park Centre in Hardegg between September 1 and 4 this year, to mark the 40th anniversary of the adoption of the resolution establishing a European Diploma for protected areas.

For additional information, pre-registration and detailed programme, e-mail: office@np-thayatal.at
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