

No. 65 - March 2010



The majestic Himalayan Tahr and the precious glaciers on beautiful Ama Dablam are great symbols of the need to protect the Himalayas for future generations

Photo courtesy of Mr. Son Ale

In This Issue More Wild9 Items Summiteers Save Himalaya Mountains of Oman Mealy Mtns (Canada) Nepal Glacial Lake Dangers Connectivity in ALPARC Waterton-Glacier Peace Park Cycling Silk Connectivity in NZ Valles Caldera NP (USA) Naryn Reserve (Kygyzstan) Ancestral Lands (Colombia) Galapagos NP-WHS Danger Vermont Transboundary PA Bits & Pieces Recent Publications Useful Links Meetings & Events

UPDATE Newsletter Editor



Dr. Larry Hamilton

The Mountain Protected Areas UPDATE is a quarterly newsletter edited by Dr. Lawrence Hamilton. It is . distributed to members of our Mountain Protected Areas Network

Note: Names of Network Members appear in bold italics in our Newsletter

IUCN - WCPA

Vice Chairman

Mountains are the beginning and end of all natural scenery.

~ John Ruskin 1819-1900

Recreational development is a job not of building roads into lovely country, but of building receptivity into the still unlovely human mind.

~ Aldo Leopold, A Sand County Almanac 1949

Nota Bene:

2010 is the UN International Year of Biological Diversity

Also Note: The Connectivity/Mountains WCPA Executive Committee has a new Deputy Vice Chair for Mountains. It is Patrizia Rossi, a longtime Network



program in Connectivity and Mountains. To learn more about the new configuration and activity of the Connectivity Conservation and Mountains Theme see Graeme's "Year in Review" which is posted on our website http:/protectmountains.org/about/

--Larry Hamilton

Some Subsequent Items from the World Wilderness (WILD9) Congress

The 9th World Wilderness Congress occurred in such close proximity to the production date of the December UPDATE that only a few highlights were included. Here are a few additional interesting items.

Among the very fine photographic exhibits, many of those by members of the International League of Conservation Photographers, was one on Wilderness Visionaries. Four of this select group (plus one deceased) are member of the MtPA Network: Harvey Locke, Franco Zunino, Alex Marr, Vance Martin and Edgar

Wayburn (deceased).

One of the plenary main stage presentations was a coalition of ENGOs wearing animal masks. This group has been achieving success in a transborder effort to establish a US/Mexico conservation area at the intersection of the States of Arizona, New Mexico, Guanajuato and Chihuahua. This is a key link between the US Sky Island Mountains and the Madrean Archipelago. The species focus for this corridor includes red wolf, jaguar, mountain lion, brown bear, thick-billed parrot and some fish species. The organizations coming together on this connectivity project are: Sky Islands Alliance, The Nature Conservancy, Naturalia, Cuenca los Ojos, Wildlands Network and Northern Jaguar Project. [See photo below for group in animal masks.]



We were again struck by the wonderful power of photography to capture the essence and nesthetic/cultural value of Nature. The Conservation Photographers associated with the WILD Foundation was a splendid development. Stunning photos in display galleries, and presentations in some sessions, plus workshops by ILCP for young "apprentices" were important eatures of the Congress.

There were many more items of import, but one audacious one will close our account. At the end of the Congress in a summary by Harvey Locke,

WILD called for protecting "At Least Half". The following statement sets out an ambitious clarion call:

We believe that at least half of Earth's surface (land and water) needs to be permanently protected in an essentially wild condition, in a manner that keeps all of life interconnected. The mechanisms for such protection should be culturally appropriate and be implemented at a variety of scales including: international, national, provincial, aboriginal, regional, municipal, as well as private individual, corporate, and NGO landowners. This is the right thing to do for ourselves and for all other things that share this beautiful planet with us.

International Mountaineers at Copenhagen Climate Change Summit

The Nepalese Government, and Nepalese mountaineers are taking climate change impacts on the Himalayas very seriously. We have previously reported on the Imja Tsho Action Event of 2009 (and its 35 km run from Imja Lake to Kumjung Village led by Dawa Steven Sherpa). To mark International Mountain Day on December 11, the Government of Nepal organized a Summiteers Rally in Copenhagen. Dawa Steven and his father Ang Tshering Sherpa, President of the Nepal Mountaineering Association and Union of Asian Alpine Associations, coordinated the

The purpose was to highlight to delegates and others the challenge faced by the Himalayas in the context of global warming. Our own Deputy Vice-Chair, Linda McMillan and



Elizabeth Fox were also proud participants. Several other organizations cooperated including ICIMOD, WWF, Danish Embassy, Nepal's National Trust for Nature Conservation, and the World Bank. Ang Tshering informs us that there will be another Action Run and Khumbu Festival this year, starting on June 11. The Eco-Everest Expedition and clean-up will also take place this year, led by Dawa Steven Sherpa and his team. This attracted mountaineers from many countries, who marched in a throng estimated by the police to be 900-1,200 strong.

At the Copenhagen Climate Summit in December, ICIMOD and the Center for International Climate and Environmental Research (CICERO) organized a side event for countries in the Himalayas-Hindu Kush who had senior government officials at the Summit. At it, the Prime Minister of Nepal called for an "alliance of the mountain countries" to enhance cooperation and improve representation in the process of the UN Framework Convention on Climate Change, in which mountain issues are understated. He also announced that Nepal would host in 2010 a ministerial-level conference on climate change in all mountain countries. (photo courtesy of Elizabeth Fox)

Mountains of Oman - Need for Protection By Bruno Messerli

The following material comes from a letter to me from Bruno Messerli, and concerns an area of the mountain world from which we seldom hear. It is included in UPDATE for that reason:

Because of work I had done in my younger years in the Sahara and in the Atacama Mountains it was especially interesting for me to compare this several hundred kilometer-long mountain system at the southeastern end of the Arabian Peninsula with all my other experiences in arid mountains. This was based on a two day excursion with the head of the Environment Research Centre at the University of Muscat, who has been working since 10 years in these mountains. The relief is spectacular with deep canyons, high summits (3000m) and with old villages and small terraces for irrigation in a self-sufficient agricultural structure, at least until 20 years ago. But two trends indicate that these mountains are at a crossroad:

First there is an unbelievable modernization of the whole country. After 1970, with a new sultan, began the big change: highways; modern big towns on the coast; asphalt roads in the mountains to every old village; schools, hospitals (schools and health services all for free) also in the mountains; high quality and expensive tourism on the coast and just beginning in the mountains. The result of this fast economic growth, thanks to the oil, is a migration of mountain people to the towns and urban centers. But by car they are in two hours back in their home villages and therefore a boom of new house construction is going on in these mountain settlements. The old cultural landscape is changing and disappearing rapidly.

Second, a serious overuse of mountain ecosystems can be observed everywhere. Families with one thousand goats,

wind donkeys everywhere (they were once used, but with the road construction they were just terr ourside and ran wild) with the consequence that there is no regeneration of Juniperus and wild olive trees - growing in higher altitudes above 2000m - a complete degradation of soils and vegetation.

These mountains are at a crossroad. Economic development on one side and ecological degradation on the other side. If science and politics together are not able to create certain natural reserves (Biosphere Reserves, National Parks etc.), which could be of high value not only for nature, but also for the preservation of the cultural landscape and for a regulated development of tourism, then it will very soon be too late.

Eastern Canada's New, Largest National Park Reserve

In February, the governments of Canada and Newfoundland/Labrador agreed to establish the <u>Mealy Mountains National Park Reserve</u>. It covers $10,700 \text{ km}^2$ ($4,130 \text{ mi}^2$) and the Provincial Government has announced its intent to protect an additional park along the adjacent Eagle River, thus increasing the effective area of protection to almost $14,000 \text{ km}^2$ (3.3 million acres). Mealy Mountains of Labrador rise to roughly 1,120 m (3,700 ft) and are as close to "pristine" as that word implies. A fitting dedication of a natural area in this International Year of Biodiversity. It is also an area of great cultural importance to Innu, Inuit, Métis and other people of the region, all of whom were part of the planning process. This is a key piece in the overall framework of the Canadian Boreal Forest Initiative.

Survey of New and Potentially Dangerous Glacial Lakes in the Remote Hongu valley, Makalu-Barun National Park, Nepal

Between October 4 and November 18, 2009, The Mountain Institute (TMI), in partnership with Hokkaido University, Japan, the International Centre for Integrated Mountain Development (ICIMOD), Nepal, and the American Alpine Club (AAC) launched a scientific field expedition to the remote Hongu valley of Makalu-Barun National Park. Alton Byers of The Mountain Institute was the team leader. The goal of the expedition was to scientifically assess the condition of 9 glacial lakes that have grown significantly over the past 20 years as a result of global warming and climate change. These lakes are usually contained by dams of loose boulders and soil, presenting an associated risk of glacial lake outburst floods (GLOF) that can result in the destruction of downstream farmland, infrastructure, and villages. Team members conducted detailed assessments of each lake's developmental history, physical characteristics, water volumes, growth rates, danger of catastrophic outburst, and prospective mitigation methods. Resulting data and insights will be shared with the Government of Nepal and the scientific community in forthcoming publications and workshops. Reaching the field sites required a trek of roughly 8 days from the Lukla airstrip, gateway to the Everest Region.

Following the survey in Hongu valley, the team went north over Mingbo La $(5,817m/19,080\ ft)$ to monitor the rapidly melting Imja glacier and lake. The team felt that this lake could be dangerous at current growth levels (as revealed in repeat photography) within 10-20 years. It is this same threat, at Imja Lake that has led to the series of Imja Action Runs to highlight that a GLOF could not be outrun in the 34 km to Khumjung Village (see previous articles on this, and reference to the next one in June, 2010 in this issue).

Connectivity Activity by Alpine Network of Protected Areas (ALPARC)

With summits above 4000 m (13,120ft) and an area of 250,000 km² (96,500 sq. miles) the Alps are the most important mountain chain in Western and Central Europe. Because of the great climatic differences the Alps shelter a large number of different natural and semi-natural habitats. They show a rich diversity of nature and landscape, which offers living place to a large number of plants and animals. About 30,000 animal species and 13,000 plant species are found in the Alps. Several of these species are endemic to the Alps. The protected areas of the Alps give an important contribution to the protection and preservation of this biodiversity. The Alps not only possess a large natural diversity but also an important cultural diversity, and the landscape often reveals the old traditional livelihood systems. Many of the traditional land uses have provided habitat to specially adapted plant and animal species. A biodiversity of its own can be found in the cultural land.

The Alpine Convention is a framework agreement for the protection and sustainable development of the Alpine region. It was signed by Austria, France, Germany, Italy, Switzerland, Liechtenstein, Slovenia, Monaco and the EU, and entered into force in March 1995. The Alpine Network of Protected Areas was established in 1995 by France as a contribution to the implementation of the Alpine Convention. Its concrete objectives are the promotion of common activities of the Protected Areas towards the conservation of biodiversity, the enhancement of the cultural heritage of the Alps and the strengthening of sustainable development within the Alpine Convention. To achieve these objectives, work is done for the exchange of knowledge and know-how (Parkto-Park), the creation of an ecological network, and a wide suite of activities with the general public.

Article 12 - Protocol "Nature conservation and landscape planning" of the Alpine Convention:
"The contracting parties take adequate measures to establish a network of existing national and **transboundary**protected areas, of biotopes and other protected elements or those to be protected. They commit themselves
to harmonize the objectives and applicable measures in **transboundary** protected areas."

In this context the Alpine Network of Protected Areas was commissioned by the 27th Alpine Conference in February 2004 with a feasibility study on how to create a "Transboundary Ecological Network".

The Alpine Network of Protected Areas promotes the creation of an alpine ecological network between protected areas by proposing suggestions of possible corridors in places where these make sense. These connections and corridors need to be where appropriate by reason of different criteria, such as special migrations routes for wildlife, geographic proximity, extensive land use, low human impact. Efforts are focussed on these zones, using NATURA 2000 site protection programs to help establish the network between the "core zones" (existing PAs).

Guido Plassmann is the Director of ALPARC, and a long-time Network member. Headquarters is in Chambery, France. www.alparc.org for further details and progress.

Waterton-Glacier International Peace Park (USA/Canada)

Several important items to report:

- 1. Glacier NP celebrates its 100th anniversary this year (the International Year of Biodiversity). Various celebratory events are taking place. See www.nps.gov/glac/index.htm.
- 2. Due to threats from oil and gas mining in the adjacent Flathead Valley in British Columbia (especially impacts on downstream water quality), a World Heritage Mission was mounted, and took place in September 2009, to assess whether Waterton-Glacier WH Site should be put on the "In Danger" list. Two members of our Network, Kishore Rao and Paul Dingwall formed the Mission team. Other members making significant input into the assessment include Harvey Locke, Stephen Morris and Dave Mihalic. While the report will not be presented officially to UNESCO WH Committee until its July meeting in Brazil, advance word has it that it says that any mining in the Flathead area would have a serious negative impact on the Peace Park and WH Site. Many conservationists have been pushing for 45,000 ha (111,150 acres) to b added in to Waterton Park. And now in December 2009, came word of a Canadian company finding a significant gold deposit, just 10 miles north of the Montana border, clearly visible from Glacier NP and again impacting the Flathead River which is the Park's western boundary.
- 3. But wait, on February 9, the BC government announced that Canada's North Fork of the Flathead River would be "off limits" to mining and energy development. The Governments of Montana and BC have been working together for some time developing a memorandum of understanding over this

BRITISH **ALBERTA** COLUMBIA Fernie Waterton Lakes National Park Canadian 📙 Flathead drainage Glacier North Fork National Flathead River Park 93 MONTANA Whitefish Kalispell

transboundary issue, which finally has borne fruit. The timing may well have been speeded by the World Heritage concerns as expressed by the occurrence of the September Monitoring Mission. This all would appear to be a good example of what transboundary cooperation for PAs is all about! And on February 18, A Memorandum of Understanding and Cooperation was signed by BC and Montana committing to remove mining,oil and gas, and coal development as permissible uses in the Flathead River Basin, such actions to be implemented by July 2010!!! They will work with the Krunaxa Nation and Confederated Salish and Kootenai Tribes, and others to accomplish this goal.

Cycling the Silk Road

No stranger to bicycling in tough environments, having spent four months of biking following Marco Polo's route through western China, Kate Harris and partner Mel Yule plan to do the Silk Route in 2011. Kate views the Silk Road as a landscape corridor of continuity despite many national borders. Jim Thorsell had this same kind of vision back in the 80s,-always ahead of the curve! In doing this, they plan to stop and study six existing or potential Transborder Protected Areas: In reverse order-Sagarmatha/Qomolangma (Nepal/China); proposed K2 Peace Park (China/Pakistan); Western Tien Shan (Kazakhstan, Kyrgyzstan, Uzbekistan); proposed Pamir/Marco Polo Sheep (China, Pakistan, Tajikistan, Afghanistan); proposed TBPA straddling Uzbekistan and Turkmenistan); Caucasus TBPA (Russia/Georgia/Azerbaijan); and, (a new addition)-Alpi Marittime/Mercantour (Italy/France). (See map.)

They plan to commence on December 1, 2010 at some well established TBPA in Europe, as a yardstick of how such areas can function. Patrizia Rossi's Alpi Marittime (Italy), which is celebrating its 30th anniversary along with its transfrontier partner Mercantour (France), has tentatively been selected for the "launch". Through a website, photography, writing and a video along the way, they hope to increase public awareness of TBPAs and of this amazing, ancient trading route. We will follow with great interest. Our Mountains and Connectivity Conservation Group is a cheering "Supporter", as is the Transboundary Conservation Specialist Group. Check out the website www.cyclingsilk.com



The project has recently received one of the competitive 2010 Polartech Challenge Grants. Congratulations! In addition to the prize money, Kate and Mel will be outfitted with Polartech garments. They will need them for winter bicycling from Alpi Marittime across Europe and then in the Himalayas in winter of 2011-2012. The project also has the blessing of George Schaller, who has been promoting a Pamir Transboundary Park.

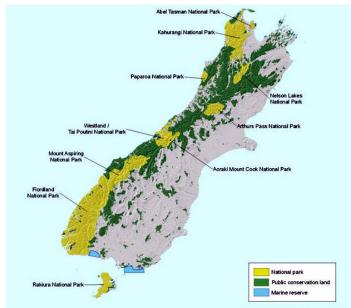
Would any readers who have knowledge of these particular transboundary conservation areas please get in touch with Kate at kateonmars@gmail.com? She is a Canadian cyclist, photographer, writer who did her Master's thesis on the Siachen Glacier/Peace Park Proposal.

This news just in..... The Explorers' Club, a prestigious group based in New York City, has named Kate winner of the 2010 Women of Discovery Award from Wings World Quest. This will be presented at a gala dinner in April. She joins an outstanding group of women which includes for instance Dame Jane Goodall. Congratulations Kate!!

Connectivity along the Southern Alps of New Zealand By Bruce Jefferies

The Southern Alps extend along the length of South Island (largest of New Zealand's three land masses), with the highest peak being Aoraki/Mount Cook at 3754 meters, and another 18 peaks rising more than 3000 meters. The entire length of the Southern Alps is now under one form of conservation management or another, and is administered on behalf of the NZ public by the Department of Conservation (DOC). The matrix of protected area categories includes nine national parks that are generally spread along the length of the mountainous spine of the South Island and its subsidiary ranges. From north to south these include: Abel Tasman, Kahurangi, Nelson Lakes, Paparoa, Arthurs Pass, Westland/Tai Poutini, Aoraki/Mount Cook, Mt Aspiring and Fiordland. These areas, in terms of conservation connectivity, can be considered as "core sites" and are linked by a range of other areas administered by DOC under both the Conservation Act (1987) and the Reserves Act (1977). They are generally designated as Conservation Parks (in some cases the term Forest Park is used - usually for historic reasons and is not a category that is used in the Conservation Act) and Scenic Reserves, and include: Puponga Farm Park, Richmond Conservation Area (CA), Clarence Reserve (Kaikoura mountains), Hanmer Springs, Lake Sumner Forest Park (FP), Lewis Pass Scenic Reserves, Ahuriri Conservation Park, Ohau Forests, Craigieburn FP, Victoria FP. Most of these areas are mountainous but there is significant altitudinal as well as lateral connectivity in most locations including, Abel Tasman NP through Kahurangi Paparoa, Westland / Aorangi Mount Cook and Fiordland National Parks. In all of these areas conservation lands transcend from high mountain tops to sea level. Refer [Figure 1]

Figure 1 South Island New Zealand -conservation connectivity has been achieved by linking a matrix of National Parks and Public Conservation Land.



Abel Tasman, Kahurangi and Paparoa contain extensive limestone formations, to a high point in Kahurangi of about 1800m, with a huge range of plants from alpine to sub tropical at sea level. In Kahurangi National Park these include a narrow zone of some of the least modified dune ecosystems in the South Island and a strip of very diverse coastal forest. Further south the rain forests of Westland and beech forests of Fiordland contain a similar diversity of vegetation. Westland and Aoraki / Mt Cook share the main divide and include the highest peaks - Aoraki (3764m) and Mt Tasman (3498m). Vegetation on the eastern side of the Alps reflects a dry climate whereas that of Westland National Park, which features two very significant glaciers, the Fox and Franz, is dense and luxuriant as a result of high rainfall. Fed by four alpine glaciers, Fox Glacier falls 2,600m on its 13km journey towards the coast from ice sheets high in the Southern Alps. Although retreating throughout most of the last 100 years, both glaciers have been advancing since 1985 at an average rate of about a meter a day and currently descend to within less than 20km of the Tasman Sea.

The Te Waihi Pounamu (Southwest NZ) World Heritage Site is constituted as follows:

A total of 4 National Parks, 2 Nature Reserves, 3 Scientific Reserves, 12 Scenic Reserves, 4 Wildlife Management Areas and 5 Ecological Areas making a 2,600,000 ha WH Site.

Valles Caldera National Preserve (USA) and Watershed Value

Some 10-12 years ago Network member *Rick Saunier* showed my wife *Linda* and me some of his favorite outdoor places in New Mexico. One of these was the large and impressive collapsed magma chamber in the Jemez Mountains called Valles Caldera. The highest dome in the rim is Redondito Peak at 3,430 m (11,254 ft). The caldera is a complete, self-contained watershed with the East Fork of the Jemez River flowing out at an elevation of 2,317 m (7,930 ft), —an ideal locale for hydrological study.

The area had been owned by the Boca Ranch, 35,977 ha (88,900 acres). In 2000 it was acquired by federal purchase under the Valles Caldera Preservation Act and designated a National Preserve. At the same time, a non-profit Valles Caldera Trust was established to manage the area.

The Preserve was established to protect and preserve the scientific, scenic, geologic, watershed, fish, wildlife, historic, heritage, and recreational values of the area, and to provide for multiple use and sustained yield of the renewable resources within it. VCNP operates as a working ranch and is to become financially self-sustaining by 2015. Since 2004 the Preserve has been the site of detailed hydrology research out of the University of Arizona. With the development of a detailed hydrologic understanding of VCNP's climate, geology, soils,

vegetation, and hydrology, preserve managers have begun to incorporate research results into their management planning for rangelands, forests, and watersheds, including specific programs such as livestock grazing and management of fisheries and wildlife populations.

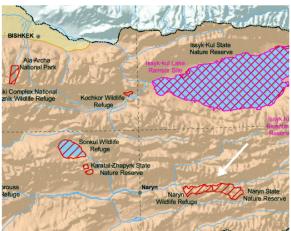
Studies have shown that appropriate forest thinning practices in the pine/fir forests can increase snow water to about 20% greater than in open areas and 50% more than tightly-packed tree crowns. Thinning to canopy densities between 25 and 45% can provide 2,000 acre/feet of water on top of the average 20,000 acre feet provided by VCNP streams. At current water prices this could mean a value of US\$2.2 million per year to downstream ranchers, farmers and urban residents. These ecosystem services thus have significant monetary value to society. As Nigel Dudley and Sue Stolton, who are becoming the water gurus of PAs, have often pointed out, water may be the most important tangible product of PAs, especially those in the uplands/highlands/mountains.

Now, a recent study by the National Park Service has concluded that this area would constitute a feasible addition to the National park System. There is some pressure for this due to the high public values, and improved condition of the area since the 2000 acquisition by the Federal Government, and management by the Trust. Rick Saunier, who has a longtime interest in the area and provides consistent constructive critique of the management, may have some follow-up reactions to this article, in a future issue.

Naryn State Reserve (Kyrgyzstan)

This MtPA was established in 1983. It protects fine coniferous forests and alpine meadows. It is one of the linkage areas between the Tien Shan Mountains and the Alai Mountains. It is important habitat for the snow leopard, and is the site of one of the "Snow Leopard Enterprises" of the Snow Leopard Trust together with the Community and Business Forum. In addition, it hosts the endangered Tien Shan meral (wapiti or Siberian deer), lynx, Argali sheep, brown bear, manul, golden eagle, lammergeyer (bearded vulture), ibisbill and falcon. It is listed as an IUCN category 1a, and comprises 18,300 ha (45,200 acres)

Since 2005 the Chinese have been allowed to survey for potential mining possibilities for ferrous metals, in Naryn



Reserve. They and other foreign companies have now been given permission to exploit certain areas in the Reserve, according to Ranger Ulan Nasmatbekov. This will not only physically disrupt several Red Data Book animal species, but the mining waste will seriously pollute streams and rivers of this headwaters area on which much lowland potable and irrigation water depend. Mining becomes an issue in yet another MtPA!

Restoring Ancestral Lands at Santa Marta (Colombia)

Sierra Nevada de Santa Marta is the largest coastal mountain in the world. It emerges 42 miles from Colombia's Caribbean shoreline to ascend to a height of 5,776 m (18,945 ft). Hence the great biodiversity which ranges from palms, cacti, and tropical dry forest, through tropical rainforest and cloud forest to snow-capped peaks. For instance there are 628 bird species, of which 70 are migratory to North America. The National Park of the same name, comprising some 675,000 ha (1,668,000 acres) was established in 1959. It became a Biosphere Reserve in 1979. It is augmented by Tayrona National Park of 15,000 ha (37,100 acres) which extends from the seashore up to 900 m, established in 1964.

Much of the land is the ancestral homeland of the Kogi, Arhuaco, Wiwa and Kankuamo indigenous peoples of the great Tairona Culture. These "tribes" believe that their home is the "heart of the world", and that on its health depends the health and well-being of the entire Earth. The areas that they continue to occupy are sustainably managed under a spirit-based agroecological system. Recently, The Nature Conservancy purchased 1,200 ha (3,000 acres) of high biodiversity priority areas throughout the mountain, which were then transferred to these indigenous communities. The conservation agreement provides that 70% of the natural forest remains intact and the remainder goes into small subsistence parcels for crops such as coffee, yucca, corn, potatoes, plantains and fruit. The key sites for conserving were determined by a combination of local knowledge and western science, a process which TNC is applying in many areas where it works.

Still In Danger Galapagos National Park and World Heritage Site (Ecuador)

Though mostly famous for its marine life, its mountainous character qualifies the Galapagos NP as a MtPA. Since 2007 it has been on the "In Danger" List of World Heritage Sites. There follows some of the knotty factors which are responsible.

The islands, 600 miles from the mainland, are battling several huge problems at once. There are the hordes of visitors, which have quadrupled since 1990 and more than doubled since 2005. Research by the Charles Darwin Foundation suggests that 60% of the 168 endemic plant species are threatened. Feral goats have been a major headache, and introduced plant species (748) now outnumber those that are native (about 500). More than 500 non-native insects have been introduced, mainly inadvertently. One, a parasitic fly, is attacking the famed Darwin's finches.

Some invasive species are brought in on tourist boats and cargo ships ferrying food and fuel for the burgeoning population. A recent report on the Galapagos by conservation groups claims these ships rarely treat water discharged into the sea. This month the science journal *Global Change Biology* revealed that, of 43 threatened Galapagos marine species, one in five may already be extinct.

Above all, the islands are struggling to cope with the press of people from the mainland who see their country's Pacific possessions as a brave new boom land. Here, they can find the jobs that are hard to come by in Ecuador and which attract higher wages than at home. Up to the early 1970s, inhabitants numbered around 4,000. Now the population is 30,000.

Tourist numbers are roughly 173,300 visitors per year. To some extent, tourism is regulated by the high cost of getting to the islands and subsisting there, combined with the US\$110 tax levied on foreign tourists. UNESCO has asked Ecuador to clamp down on new accommodation in the island's towns. Hotel and boarding house owners are, however, opposing limits on visitor numbers.

Another Piece Added in Another Transboundary PA Corridor

Close to my home base in Vermont, and a project which I am trying to support, is the Northern Green Mountains/Sutton-Mt. Orford Connectivity Corridor, crossing the Vermont (USA)/Québec (Canada) border. Principal umbrella organizations are 2 Countries - One Forest and the Wildlands Network. A new reserve was inaugurated in 2009, Reserve Naturelle des Montagnes-Verts under the auspices of Appalachian Corridor Appalachien (ACA) (www.apcor.ca). This 5,000 ha (12,355 acre) holding is owned by Nature Conservancy Canada and is the largest private PA east of the Canadian Rockies. It is the last wild, unfragmented area in Southern Québec, and will be managed by ACA. Special protection is afforded to the Round Top habitat of the Bicknell's Thrush, a species of Special Concern in Canada (estimated 10 birds located there). This project contributes to the Wildlands Network's Eastern Wildway which runs some 4,035 km (2,500 miles) along the Appalachians to the Boreal Forests of the Canadian Maritime Provinces.

Bits and Pieces

There were two embarrassing errors in the last issue of UPDATE! Your Editor had a disconnect between brain and hand and placed **Morne Trois Pitons NP** in Dominican Republic, --a magical relocation for a MtPA that is in fact on the island of Dominica. I also mistakenly gave World Heritage status to **Torres del Paine NP** in Chile, -- though it does seem grand enough to be one.

The World Commission on Protected Areas has had a small group of Senior Advisors, namely: *Kenton Miller*, *Adrian Phillips, Graeme Kelleher, and Larry Hamilton*, all members of our Network. In December these were melded into an expanded group of WCPA Emeriti as advisors to the Steering Committee and Chair, due to their past experience. Those added were: *Marija Zupancik Vicar* (Slovenia), *Roger Crofts* (UK), and *Natalia Danilina* (Russia). Additions may occur as need arises.

Some recently released figures for 2008 about the impact of US National Parks on local economies are of interest. There were 274.9 million recreational visitors, who spent roughly US\$11.56 billion within 50 miles of the park. The four economic sectors most directly affected were lodging, restaurants, retail trade and amusements, with visitor spending supporting in each of those sectors respectively at least 50,000,50,000,23,000 and 23,000 iobs.

We have previously reported on the serious deleterious impacts on aspen and cottonwood trees (*Populus*) from ungulates in **Yellowstone** NP due to the absence of **wolves**, and the recovery evidenced since wolves were reintroduced. Now comes a study showing a similar trophic cascade in **Zion** NP due to the disappearance of the **cougar** (mountain lion). The two researchers from Oregon State University reported in *Biological Conservation* that the loss of the large predator resulted in greatly increased mule deer density with increased browsing on woody vegetation. This reduced replacement young *Populus* and streamside vegetation, resulted in declines in riparian fauna, increased streambank erosion, over-widened and shallower channels of degraded fish habitat.

From *Bruce Jefferies* comes an interesting issue concerning control of alien, invasive pest animal species in New Zealand's PAs. It has been accepted policy to keep continuous control pressure on introduced species such as tahr, deer, chamois and pigs which adversely impact NZ's native biodiversity. Currently being pushed by certain hunting groups is a proposal to overturn this policy (eliminate where possible), designate them as a "game" resource for their recreation, commercial and tourism values, and set up a new Game Animal Council to manage them. This would over-ride the Department of Conservation's PA management authority. Not a good move, says *Bruce*.

Sumava (Czech) and Bavarian (Germany) National Park Services are attempting to implement a working Transboundary Conservation Area, and last March prepared a joint management plan for a core area of roughly 15,000 ha (35,050 acres) in the heart of the Greater Bohemian Forest Ecosystem. They are also promoting this as a Wilderness Area (IUCN category 1b) and urging respective governments to adopt the IUCN definition of "wilderness", and to so classify this area. We hope to keep abreast of this development through new members Hans Kiener and Zdenka Kreniova.

Much of the land in Europe which would qualify as "Wilderness" is located in mountains. There seems to be increasing interest in Europe in promoting the wild lands idea (as above). PAN Parks Foundation is responsible for much of this (Zoltan Kun is Director) as well as Toby Aykroyd's Wild Europe Initiative. And, within one country, Franco Zunino's Italian Wilderness Association is steadily making progress. Now comes word of a new research group at Leeds University in UK, called Wildland Research Institute. Its first projects are a wildlands map of the UK and a report on conservation status of wildlands in Europe. At its launch, Zoltan announced formation of a PAN Parks Wilderness Think Tank. For information: www.wildlandsreserach.org

Hohe Tauern NP (Austria), the Salzburg Section has established a "Climate Change School" at its visitor center at Mittersill. It has developed exhibits that augment this function. Around 25,000 schoolchildren from Austria, Germany and Switzerland have taken part in the educational program as of February 2010.

In case you missed *Linda McMillan's* News Flash, a note about a remarkable political coup for **connectivity**, largely the result of work by Vice-Chair *Graeme Worboys* and his colleague *Ian Pulsford*. In December, the New South Wales (Australia) Government report stated the following recommendations: *That the NSW Minister for Environment and Climate Change nominate an agency or establish a task force to develop an overarching NSW Framework for connectivity conservation including the identification of key corridors across NSW and*

IUCN has put out a "**Species of the Day"** posting on its website www.iucn.org as a contribution to the International Year of Biodiversity 2010. The 365 species selected represent the entire range of taxonomic groups and cover all regions. It has information on species range, status (threatened or endangered), threats and conservation priorities.

And, while on the subject of species, The Information Center for the Environment, at the University of California (Davis Campus), has over a 20-year period been developing databases for species of plants and animals reported from many of the world's Protected Areas. As of 2010, there are records from 1,434 PAs in 133 countries, covering some 503,353 records. These are available at www.ice.ucdavis.edu/bioinventory/bioinventory.html. If you have data to report, contact Bob Meese (rimeese@ucdavis.edu).

It is with great pleasure that I write of the recovery of a valued member of our Network, *Dave Morris* of the Scottish Ramblers. On January 5 last year Dave went under the knife due to throat cancer and had his voice box removed. He set himself two recovery targets: 1) to be present on January 25 at Robert Burns night celebration in his local village; and 2) to get in shape to climb Everest within the next 7 years. (Since he has to breathe through a hole in the throat, the latter presents a serious challenge.) On January 25, Dave raised a toast to his beloved Robbie Burns and ate his first food in three weeks. In October *Dave* and his son, Calum Morris Macintyre, went on a Team Ascent expedition to climb Ama Dablam (6812m/22,349ft) in Nepal. Dave got as far as Everest Base Camp, the summit ridge of Lobouche East and Camp 1 on Ama Dablam. Calum managed to summit Ama Dablam with the team on October 25, a great achievement for a 16 year old schoolboy. If any reader knows of anyone else with a laryngectomy who has climbed over 20,000 ft (6,000 m) please contact Dave at <u>davemorris2@btinternet.com</u>.) The other good news is that in spite of the Scottish Ramblers having to reduce staff numbers last year *Dave* is still running the Scottish program from their office in Kinross and helping to protect some of Europe's finest wild country.

We welcome to the Network a few more new members, since our listing in the December issue: *Thomas Minney*, Central Appalachian Program Director for The Nature Conservancy (USA). He is working to advance large landscape connectivity in the Central Appalachians, but also connections to the Northern and Southern Appalachians.

David Ray, Mountains Program Director for The Nature Conservancy (North Carolina State).

Maja Vasilijevica, (Croatia) Transboundary Conservation Specialist Group Chair for WCPA

Jan von Wagtendonk, Emeritus Scientist, US Geological Survey.

Kate Harris, writer photographer (and traveler to remote places - see article about Silk Road trip) (Canada).

It is seldom, in the USA that nature protection wins out over Homeland Security (think of the border fence on the US/Mexican border). But the National Park Service won one, in opposing the erection of an 80-foot telecommunication "security" tower on the summit of Cadillac Mountain in Acadia National Park. This, and local opposition, led to removal of this site from consideration in late December. The summit area of Cadillac is by no means pristine, with "hardened" trails to protect sensitive alpine vegetation, visitor center and parking areas, but addition of a highly visible tower and service building would have a quantum effect on the viewscape.

At first, I thought that this was another one of *Jim Thorsell's* legendary tricks (like putting rocks in my day pack at a rest break while hiking in the Drakensbergs). However, it looks legitimate since it is from *Geobios* 42(6):813-823, and he has a plausible explanation. A fossil marsupial from the Eocene has been discovered in southeastern Queensland Australia. Its closest relative in the genus *Chulpasia* was unearthed in Perú. Believe it or not, the new find has been named *Chulpasia jimthorselli*. This honor is due to the key role that Jim played during the evaluation of the Riversleigh/Naracoort fossil site for World Heritage inscription, and in presenting the case to the WH Committee. What a tributel

Relatively "low" mountains in PAs can be treacherous places. In our Mountain Dinner quiz at the World Wilderness Congress (WILD9) last November, many members correctly identified Scotland's Ben Nevis as having more deaths than Everest, K2 or Denali. Word comes via *Guardaparque* of the International Ranger Federation, of rescue problems in **Snowdonia NP**. At 1,066 m (3,500 ft) Snowdonia is the highest mountain in England and Wales. There have been several deaths in 2009, and the number of calls for help reached 334! Rescue teams and emergency services, including mountaineering groups, have joined forces to launch "Mountain Safe", a campaign to encourage walkers and climbers to think about and incorporate safety measures prior to travel.

The Agrobiodiversity Research Platform is seeking short items of news and happenings for its newsletter. *Elizabeth Fox* sends out this appeal to readers who may be working in the arena of Mt Agro-Biodiversity maintenance. Please send them to platformcoordinator@cgiar.org. Do I need remind you also that UPDATE solicits your input? What a splendid way to stay in communication and prevent your name being dropped from the Network as "not participating"!

The Mountain Forum Global Node has been re-located from ICIMOD to CONDESAN in Lima, Perú. Contact is moderator-mf-global@mtnforum.org (Miguel Saravia). Also, The Banff Centre no longer hosts the North American Node under Amy Krause.

What is being called the first Mountains to Ocean Bottom Protected Area was established in January on territory of the Haida Gwaii Haanas peoples along the British Columbia coast. In an agreement the newly created Gwaii Haanas National marine Conservation Reserve is added to the previous (1993) upland national park reserve, meaning a $5,000 \; \mathrm{km}^2$ (1,930 mi^2) PA from mountain summits of the coast range on Queen Charlotte Island to the sea floor in the Hecate Strait.

The World Bank and GEF have approved a grant to the Republics of Kazakhstan and Kyrgyzstan to support management of PAs and sustainable ecosystem development in the ${\sf Tien}$ Shan Mountains as part of the ${\sf Tien}$ Shan Ecosystem Development Project.

Erik Hauge sends us news of an interesting website displaying information on air quality problems from cameras next to air monitoring sites at 15 PAs in the USA. Eight of these are Mt PAs: Olympic, Mt. Rainier, North Cascades, Yosemite, Grand Canyon, Denali, Acadia and great Smoky Mountain. By clicking on a PA site, you get a photo of visibility (currently), data on ozone conditions, weather and particulate matter, www.nature.nps.gov/webcoms.

Mount Cameroon and surrounding rainforest in a 58,000 ha (143,400 acre) have been designated as the **Mount Cameroon National Park**. This coastal, volcanic mountain rises to 4,040 m (13,255 ft) and has erupted as recently as 1999. The Afromontane forest includes important cloud forest, and it is an Endemic Bird Area.

Moving over to West Africa, --it is Mount Kilimanjaro that gets most of the world's attention due to its rapidly disappearing snow/ice cap. The famous **Mountains of the Moon**, given protection in **Rwenzori NP** of 100,000 ha (247,100 acres) is losing its glaciers, so that now they cover less than 80% of the area first mapped by Italians a century ago. They now cover less than 1.3 km² (0.5 mi²). In 1994 the Park was inscribed on the WH List. It includes Africa's third highest peak, Mt. Margherita (5,109 m, 16,760 ft).

We have previously written of the plight of the American pika which is facing serious problems in the alpine zones of the US western mountains. Higher temperatures have already resulted in losses of populations at the lowest elevations of the zone. The US Fish and Wildlife Service has just rejected a petition to list it under the Endangered Species Act. ENGOs are considering a lawsuit to obtain listing.

A new 7,500 ha (18,525 acre) mountain PA has just been established in Italy -- Valle di Antrona Natural Park. It will be managed by a public body called Ossola Protected Areas Management Authority, which already manages the nearby Veglia and Devero Natural Park. This is a new addition to the developing Conservation Connectivity Corridor along the European Alps. It borders Switzerland, and is located to the west of Domodossola and Val Grande National Park.

International Peace Park Expeditions is offering two accredited Academic Expeditions in the proposed Balkan Peace Park between Albania, Kosovo and Montenegro, June 7-26 and August 2-21, 2010. Todd Walters, the Executive Director would like to hear from professors who have students who might be interested. This unique institution is based at the University of Vermont, and Peace Park Expert Saleem Ali is an instructor and partner in this venture. Check http://learn.uvm.edu/studyabroad/balkans.

In 2006, *Dave Mihalic* as asked to evaluate for World Heritage status the **Primeval Beech Forests of the Carpathians** in the Ukraine and Slovakia. This World Heritage "serial" property consists of 10 sites straddling the frontier of both countries, including some of the very last places of pristine nature in Europe. Moreover, the values include uncut beech forests, National Parks, Biosphere Reserves, research areas and working forests. Yes, logging is part of the management mix. Buffer zones connect them all. But what he found most intriguing was the integrated, landscape level management plan, driven bottom-up by citizens, scientists, interest groups and resource managers to ensure conservation and human use while protecting biodiversity and ecological processes. And, it was all codified into law by both countries. Community councils and resource managers work together to effect one comprehensive management regime. *Dave* thought it a good model, worth thinking about in 2010.

Some Recent Publications of Interest

Natural Solutions: Protected Areas helping people cope with climate change. 2010. (Launched at Copenhagen Climate Change Summit.) Produced by IUCN, TNC, UNDP, WCS, World Bank and WWF, and edited by Nigel Dudley, Sue Stolton, A. Belokurov, L. Krueger, Nik Lopoukhine, Kathy MacKinnon, Trevor Sandwith and N. Sekhran. Copyright WWF. 126 pp. Contributions were made by many, including Graeme Worboys, Larry Hamilton, Pedro Rosabal, Charles Besancon, Adrian Phillips, Tim Badman, Bruce Jefferies, Cyril Kormos, Penny Figges, Adriana Dinu. A massive undertaking!

Convenient Solutions to an Inconvenient Truth, Ecosystem-based approaches to climate change. 2009. A World Bank team led by Kathy MacKinnon. Makes the case that protection of natural habitats and ecosystems can contribute to climate change mitigation and adaption strategies. www.worldbank.org.

Climate Change Impacts and Vulnerability in the Eastern Himalayas. 2009. Eklabya Sharma, Nakul Chetri, and 5 other authors. ICIMOD. The "vulnerability" in the title refers to the ecosystems of this region. It is the result of work in 2007 and 2008 by the ICIMOD team. One section does deal with the 17 PAs in the region, and the threats to the ecosystems of which they are a part, as well as to the 41 candidate priority areas of high biodiversity importance, 175 key biodiversity areas and 5 transboundary landscape complexes. www.icimod.org.

Catalogue of Possible Measures to Improve Ecological Connectivity in the Alps. 2009 Y. Kohler and A. K. Heinricks, ALPARK, ISCAR, CIPRA and WWF. 147 pp. This is a catalogue of measures from various European Alpine countries that can contribute to the implementation of ecological networks, under the framework of the Ecological Continuum Project. The networks herein are not the large corridors at a large landscape scale on which our Connectivity and Mountains program mainly focuses, but a finer-grained level including hedgerows and tree orchards that provide stepping stones at more local levels. It is available electronically through the ALPARC Resource Library www.alparc.org in English, French, German and Italian.

Sacred Natural Sites: Guidelines for Protected Area Managers, TUCN Best Practice Guideline 16. Previously listed. Now available in Russian and Spanish. Accessible as a download from www.csvpa.org. These were prepared by the WCPATask Force on Cultural and Spiritual Values of Protected Areas.

Mountains and Climate Change, from Understanding to Action. 2009. Centre for Development and Environment, Institute of Geography, University of Bern. Can be downloaded at www.mountainpartnership.org/common/files/pdf or contact sara.manuelli@fao.org for hard copies.

Global Assessment of Light Pollution Impact on Protected Areas. 2010. C. Aubrecht, M. Jaiteh and A. de Sherbinin. This is a working paper contribution to the WCPA Dark Skies Advisory Group of the Cities and Protected Areas Specialty Group. Using satellite observed nighttime lights and global PA distribution it develops a Protected Area Light Pollution Index and a Protected Area Human Impact Index. Biomes most affected are Temperate Broadleaf and Mixed Forests, and Mediterranean Forests, Woodlands and Scrub. Austrian Institute of Technology. Download from http://ciesin.columbia.edu/documents/light-pollution-Jan2010.

Mountain Development Based on Cultural and Environmental Assets. 2009. By Richard Robinson. Euromontana and EAO's SADD M Project. 65 pp. This interacting papert is a series of case studies of A European DAs.

including 3 Mt PAs: Entlebuch BR (Switzerland), Cevennes NP and BR (French Central Massif), Triglav NP and Julian Alps BR (Slovenia). The report attempts to derive from lessons learned in these case studies some recommendations that might be applied in the Carpathian and Balkans Region Reserves, particularly in payments for environmental services (PES). Available from SARD-M Project, FAO, Rome. Information at SARD-M@fao.org.

Useful Links

UPDATE Archive Past editions, hosted by The Mountain Forum: http://www.mtnforum.org/rs/ol/periodicals.cfm?periodid=30

IUCN-WCPA Mountains Biome:: http://mountains-wcpa.org/

IUCN-WCPA Connectivity Theme: http://www.iucn.org/about/union/commissions/wcpa/wcpa_what/wcpa_conservingsd/

Connectivity Conservation website: http://conservationconnectivity.org/

Some Meetings and Events of Interest

Healthy Parks/Healthy People International Congress. April 11-16, 2010 in Melbourne, Australia. Major sponsors: Parks Victoria; TUCN; Beyond Blue; Deakin University; Australia Department of Environment, Water, Heritage and the Arts. Information at www.healthyparkshealthypeoplecongress.org. Call for proposals has closed. The WCPA Steering Committee meeting (Ecuador in June) discussed establishing a new Task Force with this same name: Healthy Parks, Healthy People.

5th Meeting of the Platform "Ecological Network" of the Alpine Convention, April 21, 2010 in Mittersill, Austria. Information at www.alparc.org.

Conservation for a Changing Planet. July 3-7, 2010 at University of Alberta in Edmonton, Canada. This is 24th annual meeting of the Society for Conservation Biology. Major themes: Conservation Science, Conservation Management, Policy and Education. Abstracts deadline past. www.conbio.org/2010.

VIII International Mobile Seminar on Protected Areas. July 5-20, 2010 in Guatemala and Belize. CATIE, cooperatively with Colorado State University (*Jim Barborak*) and CI. Application Deadline April 30, 2010. US\$2,850 plus travel to CATIE, Costa Rica. Partial financial assistance available. English proficiency needed as well as Spanish. capacitation@catie.ac.cr.

11th Annual International Seminar on Protected Area Management, July 12-31, 2010 at University of Montana, Missoula. For mid-career planners and managers. Organized by Universities of Montana, Idaho and Colorado State plus the US Forest Service Office of International Programs. Includes travel to Washington DC. www.fs.fed.us/global/is/ispam/welcome.htm. Applications due April 2. Conducted in English.

Functional Significance of Mountain Biodiversity, International Global Mountain Biodiversity Assessment - Diversitas Conference, July 27-30, 2010 in Chandolin (Valais), Switzerland. Paper/poster submission deadline December 15. Registration deadline is April 30. www.gmba.unibas.ch/2010conference/registration.htm.

Manejo de Areas Silvestres y Areas Protegidas, July 6 - August 8, 2010. Colorado State University, Fort Collins, USA. An intensive short course conducted in Spanish for 22 participants. This is the 21st annual course that has trained 400 professionals. Network member *Jim Barborak* is one of the instructors. Cooperative between Colorado State University and the US Forest Service. Deadline for applications is March 12. http://welcome.warnercnr.colostate.edu/cpam-course-sp/index.php

Workshop: Indicators for the Management of Parks and Protected Areas, September 6-8, 2010. Location in Switzerland to be determined. ALPARC and Network of Swiss Parks. info@alparc.org.

Forum Carpaticum: Integrating Nature and Society Towards Sustainability, September 15-17, 2010 in Krakow, Poland. An event in the Science for the Carpathian Initiative. www.forum.carpaticum.org.

Global Change and the World's Mountains, September 27 - October 1, 2010 in Perth, Scotland. Sponsored by Centre for Mountain Studies (Perth College); UNESCO; Mountain Research Institute; Uni Twin; and Uni Millenium Institute. Focuses on physical and biological research updates, monitoring and changing social/cultural aspects. Members of the Organizing Committee include: Linda McMillan, Graeme Worboys, Martin Price, Thomas Schaaf, Eklabya Sharma and Fausto Sarmiento. Fausto (fsarmiento@uga.edu) is organizing a session on the Americas Cordillera Transect Network. For program details: martin.price@perth.uki.ac.uk. General information at www.perth.uhi.ac.uk/mountainstudies/2010.

VII. General Assembly and International Conference of the ALPARC Network, October 21-23, 2010 in Zernez, Switzerland. Theme: Protected Areas and Wildlife Management - Which way to follow? ALPARC and Swiss NP. info@alparc.org

Parks, Protected Areas and Cultural Sites, March 14-18, 2011 in New Orleans, Louisiana. The George Wright Society Conference for 2011 - Early Notice. Focus is on US, but there are always participants from Canada and Mexico, and papers from overseas are welcome at this lively meeting. To be on mailing list for notices contact info@georgewright.org. (Dave Harmon is Executive Director)



Linda McMillan

Deputy Vice-Chairman, Communications, WCPA Mountains Biome

(photo of wildflowers in the Australian Alps courtesy of Dr. Graeme Worboys)

