

Mountain Protected Areas UPDATE



No. 71 - September 2011



Ecuadorian mountain guide Marco Cruz uses his ecolodge at the base of Chimborazo to restore the páramo grasses and the traditional species of guanaco and llamas.
Photo courtesy of Larry Hamilton

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*The mountains are nature's
enlightenment. They are her
greatest works.*

~Jim Crumley,
Among Mountains, 1993

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*Corrie<sup>1</sup> and mountain are the  
natural altars of the earth, to be  
used as such before one goes.*

~W. H. Murray, *Undiscovered  
Scotland, 1951*

<sup>1</sup> Corrie is a Scottish term for a cirque  
formation.



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UPDATE Newsletter  
Editor



[Dr. Larry Hamilton](#)  
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 *italics*

[Dr. Graeme Worboys](#)  
Vice Chairman, IUCN-  
WCPA Mountains Biome  
and Connectivity  
Conservation

Image above: Coire an t-Sneachda in the Grampian Mountains of Scotland

## Notes from the Editor

This issue may be one to try your patience. We usually try to keep the articles short and snappy, including a large section of few-sentence Bits and Pieces. But, we have received some articles that in spite of their length are of unusual interest, and are violating our usual policy. Any comments on length of articles are welcome.

Mea culpa, there was a glaring error in the last issue of UPDATE. Jack Ives was the first to spot it, and write in. How many others spotted it we wonder? The opening quote was about Mount Elbrus, in Antarctica. The photo we used was of Erebrus in the Caucasus. Apologies from your time-pressed Newsletter producers.

We welcome new members :

*Ste'phane Morel*, Task Force Protected Areas, Permanent Secretariat of the Alpine Convention, Chambéry, France.

*Bill Hunt*, Resource Conservation Manager, Banff NP, Alberta, Canada. Bill has also worked in several other of the National Parks in the Alberta/BC Rockies, -Jasper, Yoho and Kootenay.

*Valerie Braun*, Assistant Editor of *ecomont*, Journal on Protected Areas Research and Management, Innsbruck, Austria.

*Prof. Alex Bosdorf*, Co-Editor of *ecomont* and Institute of Geography, University of Innsbruck, Austria.

*James Lutz*, Research Scientist, University of Washington, USA, currently working in Yosemite NP.

*Katie Palm*, Director of Education, Catskill Center for Conservation and Development.

And to our "new" men at HQ, *Stephen Woodley* (Parks Canada) Senior Program Advisor, Global Program on Protected Areas, IUCN, Gland, Switzerland; and *David Reynolds* (US NPS) PA Capacity Development Program, Global PPA, but who will be mostly based at his home in New Jersey. See Bits and Pieces items on these.

## In Memorium

I write this to briefly commemorate the life of *Dr. Anne LaBastille* who died in early July. She was an author/educator whose work mainly focused on the contribution which women were making to conservation. She lived and worked in and wrote about the Adirondack Mountains of New York State USA, and particularly about wilderness. She was a Commissioner of New York State's Adirondack Park Agency for 17 years, the agency which regulates land use in approximately 6 million acres (2.4 million ha) of State and private land. She was a true "Woodswoman" (the title of two of her books). Her most outstanding international work was her ecological studies in Guatemala of the resplendent quetzal and the flightless grebe of Lake Atitlán (whose path to extinction she monitored and battled against). She was a student of mine at Cornell University, and I miss her greatly.

## International Appalachian Trail in Europe

In a previous issue of Mt PA UPDATE we carried an item about the vision to extend the USA/Canada International Appalachian Trail undersea to pick up the European mountains that are of the same geologic origin. These include the Caledonian and the Atlas Mountains of North Africa. At a recent meeting in Aviemore, Scotland, trail clubs in Iceland, Norway, Sweden, Denmark, Scotland, Ireland, England and Wales formally joined the International Appalachian Trail. Greenland and Scotland

had joined last year. Spain also has now formed a chapter. Each IAT chapter will identify the trail in their territory, much of it already in place in national trail systems. IAT hopes to add Belgium, France, Portugal, Morocco and Algeria. The IAT was first proposed on Earth Day 1994 by Richard Anderson, a fisheries biologist and former Commissioner of Maine's Department of Conservation.

While the initial portion from Georgia USA, through to Gaspé Canada can be hiked continuously, there is a short water trip to reach Newfoundland, and then long hops by boat or plane to Greenland then Iceland and then Scandinavia, Britain and Ireland and then to the European mainland. I wonder who will be the first "crazy" trekker to attempt the whole thing? Thanks to *Bart DeWolf* for the heads up on this and providing the website for further information: [www.iat-sia.com](http://www.iat-sia.com). Bart walked a section of the IAT in Donegal, Ireland last March along with the trail planner.



### Trek East Progress

Our good friend *John Davis* on his Wildlands Network Trek East journey departed the Appalachian Mountain chain in mid-June to bicycle through Ohio's Edge (or Arc) of Appalachia, looking at connectivity possibilities for the Eastern Wildway, between the Daniel Boone National Forest and Shawnee State Forest. He is now biking, hiking, swimming or paddling north east through Pennsylvania and into New York's Catskill and Adirondack Mountains and coming into my home State of Vermont, and its Green Mountains. On September 1 he is giving a talk on his Trek in a northern Vermont village. Learn more at [www.TrekEast.Wildlandsnetwork.org](http://www.TrekEast.Wildlandsnetwork.org).

### Importance of Top Predators/Consumers

MT PA managers and policy-makers are often favoring in their actions the maintenance or even re-introduction (both natural and by artificial relocation) of top predators such as wolf, bear, large cats, eagles and other raptors. These have often been considered to be "umbrella" or "flagship" species. A fine, seminal report has appeared in *Science* Vol 333 (July 15, 2011) which firms up the importance of such species in playing these roles, especially that of keystone species. It is co-authored by an international team of 24 of the world's most prestigious ecologists (*James A. Estes et al.*) and is titled "Trophic Downgrading of Planet Earth". I felt that its significance warranted calling attention to in this Mt PA newsletter.

Their review of recent research confirms extensive cascading effects of top predator disappearance in marine, terrestrial, and freshwater ecosystems worldwide. This top-down forcing often has unanticipated impacts in trophic cascading on processes as diverse as: the dynamics of disease, wildfire, carbon sequestration, invasive species and biogeochemical cycles, with effects on

biodiversity, fire, disease, soil, water, atmosphere, and invasive species. Examples are documented.

## ICIMOD

We often refer to the **International Centre for Mountain Development** as ICIMOD. Some members of our Mt PA Network may not know much about this organization and so we present a brief description of its function. It is a regional knowledge development and learning center serving the 8 member countries of the Hindu Kush-Himalayas region: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. It is based in Kathmandu,



Nepal. Globalization and climate change have an increasing influence on the stability of fragile mountain ecosystems and the livelihoods of mountain people. ICIMOD aims to assist mountain people to understand these changes, adapt to them, and make the most of new opportunities, while addressing upstream-downstream issues. They support regional transboundary programs through partnership with regional organizations, facilitate the exchange of experience, and serve as a regional knowledge hub. It strengthens networking among regional and global centers of excellence. Overall, it works to develop an economically and environmentally sound mountain ecosystem to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream, now and for the future.

ICIMOD was established in 1983. The Board of *Governors* consists of one representative from each of the member countries and 6 independent members having scientific or professional expertise. The current *Director General* is Dr. Andreas Schild, though on December 1 he will be replaced by an eminently qualified American, Dr. David Molden. Mt PA members on staff include *Eklabya Sharma*, *Nakul Chettri*, *Krishna Prashad Oli* and *Tek Jung Mahat*. See [www.icimod.org](http://www.icimod.org).

## Mount Nimba: A Tri-country Transboundary PA

Editor's Note: Mount Nimba (a transborder site, Cote d'Ivoire/Guinea) has appeared fairly often in these pages, mainly due to showing up repeatedly as a World Heritage Site in Danger. The problem is mainly mining impacts. I have asked John Waugh,



who has been working on a USAID project in **Liberia** that is pertinent to the whole Nimba Massif, to prepare an article to give us insight into recent developments on

that side of the border. It will be presented in two parts due to its length, and in Part 2 the mining issue again arises on the Liberian side. Part 1 gives us some excellent background on the process of Mt Nimba PA establishment and management in Liberia. Thanks John.

## Conservation of the Nimba Massif in Liberia Part 1

-from John Waugh,  
Semaphore Inc.  
*Conservation Strategies  
and Planning*

The Nimba massif of West Africa is a top priority for biodiversity conservation for the Alliance for Zero Extinction. It has long been presumed to be a Pleistocene refugium with a high degree of endemism. The southern part of the Nimba



massif, primarily in Liberia, is the northernmost extent of the Upper Guinea forest region, one of the world's most important, and most threatened, biodiversity hotspots. In 2003 Liberia declared its side of the main Nimba massif as its second protected area East Nimba Nature Reserve. While this provides some cause for optimism, the conservation of biological diversity on the Liberian side of the Nimba massif is not yet assured.

The northern part of the Nimba range was protected in Cote d'Ivoire in 1943 and in Guinea in 1944. The Guinea portion was inscribed as a Biosphere Reserve in the UNESCO MAB program in 1980, and as a World Heritage site in 1981. Cote d'Ivoire's segment was added to the World Heritage list in 1982. Liberia lagged behind, creating the East (71,650 ha) and West (32,000 ha) Nimba National Forests in what is now northern Nimba County in 1960 and 1961, respectively, but never establishing an effective management presence.

The Nimba forest block, including East and West Nimba National Forests, constituted about 2% of Liberia's forest area when surveyed by the German Forestry Mission to Liberia in 1966. The upper elevation above 1200 m (4,000 feet) is a cloud forest where the trees are stunted and seldom exceed 10 m in height. The lower slopes and at the foot of the western side of central Nimba are mixed moist semi-deciduous closed forest, with some patches of grassland savanna. The German survey described the high forest as "the richest forest area of Liberia." This closed forest is attributed to the steep slopes and microclimate of the Nimba range; it represents the northernmost extension of the Guinea forest belt.

The Alliance for Zero Extinction identifies the Nimba massif as the site with greatest number of trigger species (at high risk of extinction) on the African continent and among the six highest in the world. This is a function of both the high number of endemic species and the high degree of threat. Although conservation groups, notably Fauna and Flora International and Conservation International, are active in the area, survey data is still incomplete; and important data collected at

the Nimba Research Station between 1962 and the outbreak of the civil war in 1989 may have been lost when the station was destroyed. In particular little appears to be known of the isolated peaks to the west of the main massif in Liberia, parts of which are included in the West Nimba National Forest.

In 2003, the government of Liberia created the East Nimba Nature Reserve (ENNR) out of most of the East Nimba National Forest in response to international encouragement for Liberia to do more to protect its biodiversity. Objectives included support for a tri-national program for the integrated conservation of Mt Nimba and securing the benefits of conservation and sustainable use for present and future generations of Liberians. The unit is designated a nature reserve ("an area that does not represent a complete ecological unit, legally set-aside for the preservation and enjoyment of features that have outstanding natural beauty, cultural or biological significance, which may require management intervention"). It is to be managed according to "rules and regulations as may from time to time be promulgated by the Forestry Development Authority." The Liberian-American-Swedish Minerals Company (LAMCO) mine, which sits along the international border, was incorporated into the ENNR with a view to ecological restoration and contiguity with the protected areas of the Nimba range in Guinea and Cote d'Ivoire.

Other units of the East Nimba National Forest have the potential to be reclassified as community forests under provisions of the 2006 National Forest Reform Law and the 2009 Community Rights Law, which for the first time since the nationalization of the forests in the early 1950s permitted communities to manage forests for their own use and benefit.

Efforts to assume control of the new ENNR hit a barrier in 2008, when government conservation staff was prevented from demarcating the boundary to ENNR by a local clan. Communities appear not to have been effectively engaged in the development of the legislation including boundary locations, and were unclear about the implications of establishment of the reserve.

To resolve the impasse, the Forestry Development Authority sought the involvement of the Land Rights and Community Forestry Program (LRCFP), a US Agency for International Development funded activity implemented by Tetra Tech ARD, to support the implementation of the 2006 forest reforms through pilot activities in community forests. Through workshops organized by the LRCFP, community leaders and the Conservation Department identified areas of mutual interest which became the basis for a co-management agreement signed by community leaders and FDA in 2009. In 2011 a workshop at ENNR headquarters produced a first draft of a management plan for the ENNR and adjacent community forests. Significant knowledge gaps must be filled before a fully functional management plan can be implemented. The challenge is to keep up with the mounting threats to the region's biodiversity in the absence of adequate knowledge.

### **Large Portion of the Flathead River Basin (USA) Protected**

We have previously reported on the energy development threats to and the need to secure protection for this transboundary (USA/Canada) Flathead River Basin that adjoins the Waterton/Glacier International Peace Park (the world's first). Nature Conservancy Canada, The Nature Conservancy's Montana Chapter, and its Canada Program have put together a US\$9.4 million fund to prevent coal, oil and gas development in 400,000 acres (161,800 ha) of this international watershed. The money will be used to compensate mining companies that give up their existing

mineral rights in the North Fork Basin in British Columbia. This will implement an agreement made by Montana (USA) Governor Schweitzer and BC Premier Campbell to protect this key part of the Crown of the Continent. This partnership includes the Ktunaxa First Nation in Canada and the Confederated Salish and Kootenai Tribe in USA, whose lands are involved.

## **UIAA (International Mountaineering and Climbing Federation) Activities**

This "partner" organization will hold its General Assembly in October in Kathmandu, October 5-8. At a previous meeting in Kathmandu, it adopted a forceful declaration on mountain protection as follows:

### **Articles of the Declaration from Kathmandu, October, 1982**

1. There is an urgent need for effective protection of the mountain environment and landscape.
2. The flora, fauna and natural resources of all kinds need immediate attention, care and concern.
3. Actions designed to reduce the negative impact of man's activities on mountains should be encouraged.
4. The cultural heritage and the dignity of the local population are inviolable.
5. All activities designed to restore and rehabilitate the mountain world need to be encouraged.
6. Contacts between mountaineers of different regions and countries should be increasingly encouraged in the spirit of friendship, mutual respect and peace.
7. Information and education for improving the relationship between man and his environment should be available for wider and wider sections of society.
8. The use of appropriate technology for energy needs and the proper disposal of waste in the mountain areas are matters of immediate concern.
9. The need for more international support - governmental as well as non-governmental - to the developing mountain countries, for instance, in matters of ecological conservation.
10. The need for widening access to mountain areas in order to promote their appreciation and study should be unfettered by political considerations.



*Linda McMillan* who is President of the UIAA Mountain Protection Commission reports that this 29-year old declaration will be reaffirmed in its original and still-relevant wording at the General Assembly in Kathmandu this year. There are also plans to re-issue the beautiful poster (shown above), designed by the famous mountain artist Samivel, that celebrated this declaration in 1982. *Linda* also provides some additional information about what will go on there:

*On Oct. 7th we will have a two hour symposium on Climate Change in Mountain Regions which I'm helping to organize with the Nepal Mountaineering Association and Ang Tshering Sherpa. Part of the session will be on the impacts of mountain climate changes on mountaineers and climbers. The topic of the second session will be "We are the Solution", and will discuss how mountaineers, climbers, and mountain tourists can engage with other mountain stakeholders to respond effectively to climate changes in mountain regions. Among our panelists for the symposium will be three other Network members: Alton Byers, Jon Miceler, and Dawa Steven Sherpa. Nakul Chettri has also been invited to speak.*

*During the General Assembly, our Mountain Protection Commission of the UIAA will announce our new Mountain Protection Label, which will help mountain tourism operators and guides around the world to promote their mountain stewardship efforts and RESULTS, plus educate their clients in mountain protection ethics and best practices.*

## **Some Interesting World Heritage Reflections on Juiz NP (China)** by Jim (Muddy Boots) Thorsell following a recent trip



Juiz World Heritage Site --- Photo by Jim Thorsell

At the end of my recent trip to China I was invited by the local authorities to pay a "20 years later" visit to the park. I was there previously on 5-6 June 1992 to undertake the World Heritage (WH) technical evaluation with Bing Lucas. This time, instead of a 2 day drive on rough roads from Chengdu we were able to get the 40 minute direct flight to the new (2004) airport of Juiz/Huang named after the 2 WH sites that it is midway between. Prof Liang accompanied me.

My visit was a personal and informal one only - no report was required. But, after the passage of 19 years I made some "longitudinal" observations that provide some indications of the changes observed over this time span. These changes have been dramatic ones and are similar to what I saw last year on my "20<sup>th</sup> anniversary" visit to Huangshan. The following field notes illustrate the impact of WH designation (in part) can make to the enviro/economy of a rural area in China.

The afternoon of our arrival was cold and grey and we spent time being conducted around the new entrance gate/reception area as well as the new visitor facility strip- 3 km in length - that now exists outside the WH site itself.

The community that has developed just outside Juiz is now an official township and has grown from 150 to 10,000 residents. It is totally oriented to tourism with some 8,000 beds and even chain hotels such as the Sheraton present. Resident Tibetans however, own most of the facilities. As far as gateway towns go, this one has been reasonably well developed in terms of architectural design including green spaces along the river and footpaths. Of course it has a commercial aspect with plenty of souvenir shops but I have seen more garrish examples elsewhere.

The park entrance now has a new entry gate, bus parking area, visitor centre and staff accommodation. Again the layout here has been well done although the visitor centre displays could use some modernizing (too many examples of bad taxidermy!). I was surprised to see a photo exhibit of Bing and myself on the original inspection in '92 as well. The ticketing system is quite advanced with each visitor obtaining a bilingual park brochure and an e-entry card, which has a bar code which will allow various add-ons such as pre-meal purchasing and monitoring of where visitors actually go in the site.

The "processing" of the large number of visitors seems to be well organized. With no private vehicle access over 300 tour buses move through here several times a day. The buses themselves are not the large "greyhound" type but low emission vehicles designed for scenic viewing.

The next day we woke to a crisp, clear morning with fresh snowfall on the high peaks of the Minshan. We spent a memorable spring day driving and hiking up both the long lake and virgin forest arms of the park including a walk with Director Zhang at the end of the afternoon (all of which filmed for TV). Some of my detailed notes from the day:

- Since inscription 70 km of new trails (sidewalks mostly) have been provided and 50km of roads improved;
- 3 hydro power stations in the park have been removed and water flows restored to more natural flows;
- Some 7000 beds (?) Formerly inside Juiz have been relocated outside;
- Number of villages inside have decreased from 9 to 6 and all have been upgraded in terms of services and appearance. Resident population has remained stable at about 1000. All are involved in tourism and park management work. Yak grazing and forest exploitation have been discontinued. Unlike many rural areas in China very little out-migration by young people takes place. All integrity issues on human use identified in the '92 IUCN WH evaluation report appear to have been satisfactorily dealt with and the Tibetan community seems to be very well integrated into the management of the park;
- A 3000 seat restaurant (4 different levels of service) and visitor service centre has been built at the main y-junction in the park.;
- Visitor numbers since we were there have grown from an estimated 140,000 in '92 to around 2 million today. Numbers are still recovering from the effects of the Sichuan earthquake prior to which 2.5 visitors came. This increase is due to a mix of factors including new airport and improved highway access, WH status, and the growth in domestic tourism (which accounts for some 90%

of all visitors). This must be one of the highest increases in visitation that any park has ever received! Indeed, Juiz has become a natural icon in China ranking up there with its many cultural attractions;

- A new ecotourism adventure programme is being offered which involves a 3-day walk with local residents up to a sacred peak. This has been slow to get off the ground but with a Discovery Channel special due to air soon, this could become attractive to a wider audience.
- Along with visitor use, increases in staff have followed. Today there are some 500 permanent staff (many with advanced degrees) plus 200 seasonals. Staff capacity has been augmented by a cooperative agreement with the US National Park Service (Yosemite NP) and liaison with resource programmes at the Universities of California and Washington (some 15 staff are now studying park management in the US). The '92 IUCN evaluation report also underlined the benefits of this arrangement.
- The research program in the park also has been much augmented with 29 staff involved in various studies as well as additional projects undertaken by foreign scientists
- Juiz has a 20 year management plan approved in 2008.
- The economics of Juiz were quite interesting and were touted as a new model for parks in China. This was not all clear to me but Juiz is required to raise some 90% of its own budget. This comes totally from tourism (the bus operation itself is a major income source). Fully 70% of the income is shared with the local community. The mantra seems to be tourism provides the funding which allows and promotes protection. As long as tourism is carefully managed (in this case it is), the principle seems to be working;

In conclusion, my impression of the progress made in Juiz has been very positive and they deserve great credit for their efforts to live up to their WH status. Since '92 there have been many transformational changes (not only in Juiz but in the whole country). These are reflected in the economy of the region, improved life of the local community, an enhanced visitor experience and in the increased protection that Juiz now enjoys.

I did not have time to discuss the possibility of an additional WH criterion be considered for Juiz (as per the '92 evaluation), nor was the corridor link with Huanglong raised.

I offer my thanks to the local authorities and Juiz staff for the invitation and their hospitality as well as to Prof. Liang for his advice and company.

A suggested reference on the economics of tourism in Juiz written by Fung Mei Sarah Li can be found as case study 19.10 in "Managing protected areas - a global guide". 2006. Michael Lockwood, Graeme Worboys and Ashish Kolthari Eds.

## **Road to Rio +20 (June 2012)**

"Mountains" as a recognized Biome were put on the global agenda at the UN Earth Summit in Rio de Janeiro in 1992. Five scientists, subsequently called the "Mountain Mafia" plus a sixth facilitator were the primary instigators for this recognition. Four of these are Mt PA Network members: *Bruno Messerli, Yuri Badenkov, Jack Ives* and *Larry Hamilton*. A Mountain Agenda was established at that time as Chapter 13 of the global Agenda 21. Much action has taken place since then in sustainable mountain development, in spite of the failure of the major international funding called for and approved at that time.

A UN Conference on Sustainable Development is scheduled for 2012, being called Rio +20. Rio +10 was signaled in 2002 as the International Year of Mountains, and we now have an annual Day of the Mountains each December 11. Hopefully some members of our Network will be attending this 2012 event, to assure that Protected Areas are strongly endorsed as part of sustainable development.

Last May an important preparatory meeting was held in New York. It was convened by the Governments of Switzerland and Italy and involved the Mountain Focus Group (an informal group of countries at the UN) to devise ways that Rio +20 deliberations might give mountains their due. Representatives of Argentina, Armenia, Austria, Bolivia, Chile, France, Kyrgyzstan, Morocco, Lesotho, Perú, Slovenia and Tajikistan participated. Is your country involved? The Mountain Partnership (serviced by FAO) is urging countries to participate in the Global and Regional assessments which are underway. Check out much material on [www.uncsd2012.org/rio20/](http://www.uncsd2012.org/rio20/).

### **Peneda-Geres National Park (Portugal)**

It always pleases me greatly when a magazine of the status of *National Geographic* features a Mt PA, since it reaches thousands of potential and actual supporters of PAs. The July 2011 issue carries an article on Portugal's only National Park, Peneda-Geres. It is situated in the northern part of the country adjacent to the Spanish frontier, and abuts Baixa Limia-Serra do Xures Natural Park. It is roughly 702 km<sup>2</sup> (270 mi<sup>2</sup>). It hosts one of the few populations of Iberian wolf and the Iberian wild goat has recently recolonized this craggy park. The mountains reach to just over 1,500 m and orographic rain from the Atlantic produces rainfall and snow up to 2,500 mm/year. Lush vegetation and many waterfalls characterize the park.



The Iberian Wolf (*Canis lupus signatus*)  
whose population was almost eradicated

The resident human population of around 9,000 persons constitutes a traditional farming base, and is in decline. But, second homes and increasing visitation are having an adverse impact on nature. Only 7-8% of the area is publicly-owned, 27% private and 65% is "commons". It has been designated by PANParks as one of their tourism models, and has a 5,000 ha wilderness area, with a commitment to enlarge it to 10,000 ha.

### **Cycling Silk**

No issue would be complete without a brief report on the progress of our two intrepid bicyclists doing the Silk Road. After crossing Kazakhstan, and after some political difficulty, they were able to enter Uzbekistan and be in one of their target transborder study areas. Their journey across the Ustyurt Plateau was hardship in the extreme. They are now approaching the target area of the transboundary Pamir Mountains, a site of great interest to our WCPA program. Read exploits at [www.cyclingsilk.com](http://www.cyclingsilk.com) Good luck Kate Harris!

### **New Resident in Gran Paradiso NP (Italy)**

A small freshwater crustacean (*Daphnia meddendorffiana*) normally found in the

Arctic tundra has just been discovered in three alpine lakes in Gran Paradiso. The discovery was made by scientists at the University of Pavia as a result of collaboration with the Park since 2006. The study was actually focused on the ecological effects of the introduction of American brook trout in the 1960s.

Apparently the voracious brook trout have eliminated this crustacean in the other high altitude lakes where they were stocked. There were no alien introductions into the three lakes Nivolet (2,538m), Trebecchi (2,729m) and Lillet (2,702m); in fact they have no fish, as was the situation in the other lakes prior to the 1960s introductions. *Michele Ottino*, the Park Director, points out that this study confirms the need for protection of sensitive native ecosystems from alien invasive introductions. This lesson has also been driven home in Yellowstone Lake in America's first NP.



## Bits and Pieces

Bhutan, Venezuela, New Zealand, Ecuador and Guatemala, very mountainous countries, have formally protected more than 25% of their land. Bhutan has 51% of its land protected and Venezuela has 46%, according to **Nature Needs Half** of The WILD Foundation.

**Brasil's Atlantic Forest** (1.3 million km<sup>2</sup>) is not only one of the world's major centers of biodiversity, but its montane cloud forests and montane rainforests provide water to roughly 9 million people. An organization known as **Water Producers** in one location collects fees from users to pay for watershed restoration, --another good example of PES (Payment for Environmental Services). Restoration is urgently needed since only about 12% of the original extent of the forest remains. Much of it is in a Biosphere Reserve.

A recent UNDP report on biodiversity points out that more than **40% of the Earth's biodiversity** resides in Latin America and the Caribbean, particularly in Brasil, Colombia, Ecuador, Mexico, Perú and Venezuela.

We welcome *Stephen Woodley* to the IUCN Global Program on Protected Areas as Senior Program Advisor on Protected Areas and Climate Change. This is a two-year secondment from Parks Canada where Stephen has been Chief Ecosystems Scientist. A fine action of major support by Parks Canada.

Not being outdone, the US National Park Service is providing a 3½ year secondment to IUCN for *David Reynolds* to manage the PA capacity Development Program. He will work with others to develop professional, internationally recognized standards for park rangers, managers and executives. Dave has been with US NPS for 33 years and was most recently Northeast Regional Chief of Natural Resources and Science. He will work mostly out of his home in Medford, New Jersey.

**Gran Paradiso NP** (Italy) and the **Swiss NP** have last June initiated a joint research project into the ecology and behavior of ibex in the European Alps. It was the welfare of the ibex which led to the early-on transfrontier collaboration between Gran Paradiso and **La Vanoise NP** in France since the species seasonally migrated from one side of the border to the other.

And, speaking of transboundary cooperation, **Mercantour** (France) and **Alpi Marittime** (Italy) began the first European All Taxa Biodiversity Inventory and Monitoring action in 2006. It went on until 2010 and involved more than 250

taxonomists from all over Europe. They collected information on almost 8,300 species.

*Kishore Rao* and *Paul Dingwall* are fortunate enough to constitute the World Heritage mission team to Yellowstone National Park in September. Many management issues, including bison management, human-bear conflict, grizzly bear population connectivity and cut-throat trout rehabilitation.

Jay Griffith, one of my favorite writers tells of visiting the **Grasberg Mountains** of West Papua, --sacred to all Papuan. They call it a giant "mother" and like many other mountains, it is associated with dreams and ancestors. There were "dream shrines" on the mountain where Papuans went to obtain a dream to guide them. She points out that now, for miles it is a toxic wasteland thanks to the extraction of copper and gold by a US mining corporation. Special mountains of high sacred/cultural value need secular protection. This is the mission of the WCPA Task Force on Cultural and Spiritual Values of Protected Areas chaired by *Robert Wild* and *Bas Verschuuren*.

Congratulations twice to *Angeles Mendoza Sammet*. On June 6 she was awarded a PhD in Environmental Management at the University of Calgary. Her thesis on "Enhancing Management of Protected Areas" derived results from 5 case studies each in Canada and Mexico showing how each country evaluated effectiveness in PA management (emphasis on Mt PAs). And, on June 1 she was recognized in Puebla, Mexico by the International Association for Impact Assessment for her work regionally in increasing the effectiveness of impact assessments in both Canada and Mexico.

**Manas Wildlife Sanctuary** (India) World Heritage Site was removed from the "In Danger" list at the World Heritage Committee meeting on June 21. It is the lowest elevational PA in an altitudinal transboundary corridor that ascends through a series of PAs in Bhutan to the highest summits of the Himalayas. It has active transboundary cooperation with Royal Manas NP particularly on tiger management and poaching control.

*Elizabeth Fox*, who has been with Biodiversity International in Rome, has joined the **Mountain Partnership** Secretariat at FAO HQ, as Communications Officer. Best wishes in this new position, Liz.

Work began on the largest **dam removal project** in US history, on the Elwha River in Washington State's Olympic Peninsula. This \$325 million project will take 3 years, but will allow the river to run free from its source in the mountains of **Olympic NP** to the sea! The US National Park Service and the Lower Elwha Klallam Tribe are leading the restoration project. It should restore salmon runs to the river, which have been blocked since the dam was constructed in 1913. The pressure for dam removal came from the Tribe, the Park Service, the Sierra Club and a number of other organizations.

The highest treeline in the Northern Hemisphere is claimed for *Juniperus tibetica forest* at 4,900m in southeastern Tibet (China). This is a forest of single-stemmed trees with a height of just over 3m. Above this elevation, e.g. at 4,930m the junipers are gnarled and multi-stemmed.

China now has approximately 2,531 nature reserves, covering a land area of 152 million ha (375 million acres), and constitute about 15% of China's land area.

**Roughly 14% of China's mountain area is protected.**

The government of Nepal is planning to allow trophy hunting by permit of **Blue Sheep** in the **Kanchanjunga Conservation Area**. It is suggested that 13 animals might be taken of this highly-prized and somewhat rare species (*Pseudois nayour*).

**Switzerland is marching ahead in creating a very large system of PAs.** It has 8 PAs in the pipeline (mostly Mt PAs), according to ALPARC. These are: Bin Valley, Diemtital, Gantrisch and Lake Thun-Hohgant Nature Parks; Chasseral and Gruyère Pays d'Enhaut Regional Nature Parks; Ela and Aargau Parks. When added to the existing PAs: Swiss National park, Entlebuch and Val Mustair Biosphere Reserves, Sihlwald and Thal Nature Parks, this shows amazing progress in the last decade. A park is also being proposed in the Swiss Ticino.

We have previously reported on the importance of the high-elevation **whitebark pine** (*Pinus albicaulis*) of America's Western Mountains. It is an important source of fat-rich seed to help bears, especially the rare grizzly bear survive through the winter. It provides food to 20 different animal species. It is a keystone species in many national parks and national forests of these mountains. The US Fish and Wildlife Service has recently listed this tree species at risk, due to climate change, and protection is warranted though not yet included in the Endangered Species List. Whitebark pine is being attacked by the mountain pine beetle which is finding climate warming favorable to extending its range to higher elevations, and completing its life cycle more often. The beetle is expanding its range north and is also a major concern now in Canada.

Construction is underway in the Cascade Mountains to widen the busiest mountain highway in the USA from four lanes to six (Interstate I-90), at a cost of US\$550 million. **Wildlife passages** (by installing larger culverts or overpass devices) seem now to have finally caught hold, and these are being installed east of Snoqualmie Pass by the Department of Transportation. Thanks to the famous wildlife overpass pioneer in Banff NP in Alberta, Canada which has set the bar and proven effective.

And the Chinese also are doing it, and on a large scale. The **Qinghai-Tibet Railway** passes through three National Nature Reserves, and cuts through a major habitat for the endangered Tibetan antelope. Pregnant females migrate to **Hoh Xil NNR** every June to give birth, and the population leaves the reserve in September. Thirty-three special passageways have been built along the railway to assist in the annual migration.

## **Some Recent Publications of Interest**

The June 2011 issue of *eco.mont, the Journal of Protected Mountain Areas Research and Management* contains several articles of special interest to readers of Mt PA UPDATE. Two of these are written by Network members. **Zoltan Kun** of PAN Parks is author of one "Biodiversity management strategies for mountains: active or passive management practice?" Our Transboundary PA Task Force head, **Tatjana Yashina** wrote about her Park in "Adaptation to climate change in the biosphere reserves: a case study of Katunskiy Biosphere Reserve, Russia." And the PA profiled in this issue is "Berchtesgaden National Park" by **Michael Vogel** the Managing Director of the Park. Most of the other articles are of interest also. We previously (December 2010) reported on the initiation of this journal in 2009. Available electronically for Eur 50 [www.oeaw.ac.at/ecomont](http://www.oeaw.ac.at/ecomont) or contact [valerie.braun@oeaw.ac.at](mailto:valerie.braun@oeaw.ac.at) Note under our

"welcome to new members" item that *Valerie Braun* is a new Network member, as is the Co-Editor of the Journal, *Axel Borsdorf*.

*Implementation of the Convention on Biological Diversity. A retrospective analysis in the Hindu Kush-Himalayan countries.* 2011. This 36 page report is a fine overview of the status and strategy in this important mountain complex. Published by ICIMOD, the Editor/Writers are *Bharat Desai, Krishna Prasad Oli, Yang Yongping, Nakul Chettri* and *Eklabya Sharma*. [www.icimod.org](http://www.icimod.org).

*Himalayan Meltdown.* 2011. A video by Arrowhead Films for the Discovery Channel. UNDP/ICIMOD. It has segments on issues and approaches being taken in Nepal, India, Bhutan and China. The formation of many new glacial lakes is emphasized, together with the possibility of glacial lake outburst floods (GLOFS) of a catastrophic nature. Graphic pictures of both flooding and droughts are shown and attributed to glacial melting. For me it is difficult to follow the logic of increased glacial melting with current drying up of rivers and the fact that most of the river flow in lower reaches is monsoon-driven. There are some other scientifically questionable materials presented, including flooding footage not attributable to glacial melting. The section on creating an artificial glacier is puzzling. I know, our rigorous science colleague and friend *Jack Ives* will critique this in print. *Dawa Steven Sherpa* is shown on Everest's summit and is interviewed on GLOFS. *Alton Byers* provides photo documentation of glacial retreat in his photography project which we have spoken of previously. This video is not directly related to Mt PAs and their management, but is of interest to our Network because of the glacial melting that is taking place in many Mt PAs. To see this video, try <http://arrowheadfilms.com/channel/himalayan-meltdown/> Password is meltdown. Very beautiful photography.

*Crossing Borders for Nature: European examples of transboundary cooperation.* 2011. Eds. *Maja Vasilijevic* and *Tomasz Pezold*. Sponsored by the Transboundary Conservation Specialist Group. IUCN, Gland and IUCN Program Office for Southeastern Europe, Belgrade. 72 pp.

*Climate Savvy: Adapting Conservation and Resource Management to a Changed World.* 2010. *Lara J. Hansen* and *Jennifer R. Hoffman*. The authors discuss ways of buying time as well as assessing ecosystem vulnerability in order to strengthen protected areas. They deal with four different kinds of protected areas. 256 pp. Island Press, Washington, D.C.

*The State of the Mountains 2011.* *Meghan J. Ward*. While the mountains of the title are limited to Southern Alberta and British Columbia, this region is a part of the important Crown of the Continent and therefore seems worth including in UPDATE. It is also an unusual study of impacts of climate change on alpine environments in that it is written by an outdoor, travel and adventure writer, and sponsored by and published by the Alpine Club of Canada. Moreover it is based on anecdotal evidence from mountaineers (12 in number) which was used to direct sets of questions to (4) scientists and a nature historian. An interesting process. <http://issuu.com/alpineclubofcanada/docs/acc-sotm>.

*Kailash Sacred Landscape Conservation Initiative Feasibility Assessment Report.* 2011. Eds. *Robert Zomer* and *Krishna Prasad Oli*. ICIMOD and UNEP, Kathmandu. 93 pp. We have previously carried material during this study [www.icimod.org/publications](http://www.icimod.org/publications).

## Some Forthcoming Meetings of Interest

**2<sup>nd</sup> World Biodiversity Congress**, September 8-12, 2011 in Kuching, Sarawak, Malaysia. More information at [www.worldbiodiversity2011.com/](http://www.worldbiodiversity2011.com/). Organized by Century Foundation of Bangalore, India.

**EUROPARK Conference 2011**, September 21-25, 2011 in Schwabian Alb Biosphere Reserve, Bad Urach, Germany. Theme: Quality Counts - Benefits for Nature and People. [www.europarc.org/conference-2011/](http://www.europarc.org/conference-2011/).

**Caribbean Learning Symposium: Biodiversity, Adaptation, Development - A Formula for Resiliency**, September 20-21, 2011 in the Virgin Islands. Organized by IUCN Regional Office to focus on effective PA management. This will be followed immediately by an IUCN Regional Forum of members that will help shape program priorities for 2012-16. Details from *Joseph Smith Abbot* [director@bvinpt.org](mailto:director@bvinpt.org).

**European Ecological Foundation EEF/AEET Congress**, September 25-29, 2011 in Ávila, Spain. Of particular interest to Network Members is a session sponsored by the Global Mountain Biodiversity Assessment and convened by Lazlo Nagy entitled: *Climate Change, Extreme Events and Alpine Ecosystem Responses*. *Christian Koerner* is one of the confirmed presenters. Deadline for submissions closed April 30, but participants are welcome. For more information and registration details are at: [www.eefcongress2011.eu/](http://www.eefcongress2011.eu/). It is preceded (on September 25) by a workshop on **Global Change Research in Mountains** organized by the Mountain Research Initiative and the Global Mountain Biodiversity Assessment. Contact *Astrid Bjoernsen* at [astrid.bjoernsen@giub.unibe.ch](mailto:astrid.bjoernsen@giub.unibe.ch).

**Restoring the Web of Life-Alpine biodiversity needs ecological connectivity. Final Conference of ECONNECT**. September 26-28, 2011. Kongresshaus, Berchtesgaden NP. Findings from the ECONNECT project's 16 European partners, since 2008. Translations into English, German, French and Italian. No fee. Details at [www.econnectproject.eu/finalconference](http://www.econnectproject.eu/finalconference)

**UIAA General Assembly** October 5-8, 2011. Kathmandu, Nepal. See previous article and the web [www.theuiaa.org](http://www.theuiaa.org)

**The Call of the Mountains: What contribution has mountain tourism made to our cultural heritage?** October 6-9, 2011 in Pieniny Mountains NP (100 km south of Krakow) on Polish/Slovak border. English language. *Piotr Dabrowski* calls our attention to this, the Fifth International Seminar on Mountain Tourism. Contact [dabrowski@eko-tourist.krakow.pl](mailto:dabrowski@eko-tourist.krakow.pl). Papers and posters solicited. Deadline for registration is September 16. Registration form and announcement at [www.eco-tours.pl](http://www.eco-tours.pl).

**Protected Areas as Tools for Regional Development - Perspectives for Research and Management**, October 13-15, 2011 in Parc Naturel Regional de la Chartreuse (near Grenoble, France). International Scientific Committee on Research in the Alps (ISCAR) and Alpine Network of Protected Areas (ALPARC) are supporting this research workshop organized by Arbeitsgemeinschaft Neue Regionalentwicklung in Grossschutzgebieten. [www.iscar-alpineresearch.org](http://www.iscar-alpineresearch.org).

**Spiritual Values of Protected Areas in Europe**. November 2-6, 2011. Vilm, Germany at the International Academy for Nature Conservation. Sponsored by the German Agency for Nature Conservation and EUROPARC Federation. Since so many

mountains have such values, MTPAs should be an important part of this workshop. By invitation only, since numbers are limited. Josep Mallarach is assisting in organizing this activity. Information [www.bfn.de/06\\_akademie\\_natursch+M52087573ab0.html](http://www.bfn.de/06_akademie_natursch+M52087573ab0.html)

**Climate Summit in Bhutan to Address Impacts of Climate Change. November 19, 2011, Thimpu, Bhutan.** The event has been convened by the Governments of Bangladesh, Bhutan, Nepal and India and is organized in cooperation with several international partners, including the United Nations Development Programme (UNDP), the World Wildlife Fund (WWF), the MacArthur Foundation, the International Centre for Integrated Mountain Development (ICIMOD), the Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD).

Among the expected outputs of the Summit is a "10-year Road Map for Adaptation to Climate Change in the Eastern Himalaya Sub-Region" and the creation of a Regional Expert Group to advise Governments on climate change issues and policy.

Further information at

<http://www.bhutanclimatesummit.org.bt/main/aboutsummit.php>

**International Conference on East African Mountains**, November 21-23, 2011 in Mbale Resort Hotel, Uganda. Focus on mountains and highlands of Uganda, Kenya, Tanzania and Rwanda. Submit abstracts and get information at [www.iceam2011.org](http://www.iceam2011.org). Several organizing bodies, including four universities.

**Managing Alpine Future: Inspire and drive sustainable adaptation**, November 21-23, 2011 in Innsbruck, Austria. For representatives from scientific community, industry and public authorities. Organized by University of Innsbruck, Institut für Gerbirgsforschung and ALP\*S. [www.alpinefuture.com](http://www.alpinefuture.com).

**25<sup>th</sup> International Congress for Conservation Biology**, November 28 - December 2, 2011 in Christchurch, New Zealand. Theme focuses on biodiversity around the world. Title is "Engaging Society in Conservation". Deadline for proposals is past. Details at [www.conbio.org/activities/meetings/2011](http://www.conbio.org/activities/meetings/2011).

**Forum Carpathicum 2012: From Data to Knowledge, from Science to Practice.** May 30-June, 2012. Stara Lesna (High Tatra Mountains), Slovakia. Mountain Research Initiative including 14 organizations. [www.forumcarpathicum.org/FC-2012/FC\\_2012\\_programme.html](http://www.forumcarpathicum.org/FC-2012/FC_2012_programme.html)

PA managers and scientists especially welcomed according to *Astrid Bjornsen*.

**VII World Conservation Congress (IUCN).** September 6-15 2012. Jeju Island, South Korea. Contributions to Forum sessions (Sept. 7-11) are solicited, and suggestions for events are open until October 2011. File proposals and check on updates at [http://www.iucn.org/2012\\_congress/](http://www.iucn.org/2012_congress/)

**VII World Ranger Congress 2012**, November 4-9, 2012 near Arusha NP, Tanzania. To be placed on mailing list for early details, see [TanzaniaWRC@gmail.com](mailto:TanzaniaWRC@gmail.com).

**World Parks Congress. 2014.** Planning underway.

### Useful Links

**UPDATE Archive:** More recent editions are posted on our website:

<http://protectmountains.org/mtnpa-update/>

Earlier editions are hosted by The Mountain Forum:

<http://www.mtnforum.org/rs/ol/periodicals.cfm?periodid=30>

**IUCN-WCPA Mountains Biome** website: <http://ProtectMountains.org/>

**IUCN-WCPA Connectivity Theme** website:

[http://www.iucn.org/about/union/commissions/wcpa/wcpa\\_what/wcpa\\_conserving/d/](http://www.iucn.org/about/union/commissions/wcpa/wcpa_what/wcpa_conserving/d/)

**Connectivity Conservation** website: <http://connectivityconservation.org/>

## Production Editor

*Mountain Protected Areas UPDATE*

*News Flash & [Mountains Biome Blog](#)*

*Linda McMillan*

*Deputy Vice-Chairman, Communications*

*WCPA Mountains Biome*

*While Yosemite Valley bakes in late summer heat, Mountain Laurel still blooms in the cool and moist sections of hiking trails up the soaring cliffs. A refreshing sight!*

