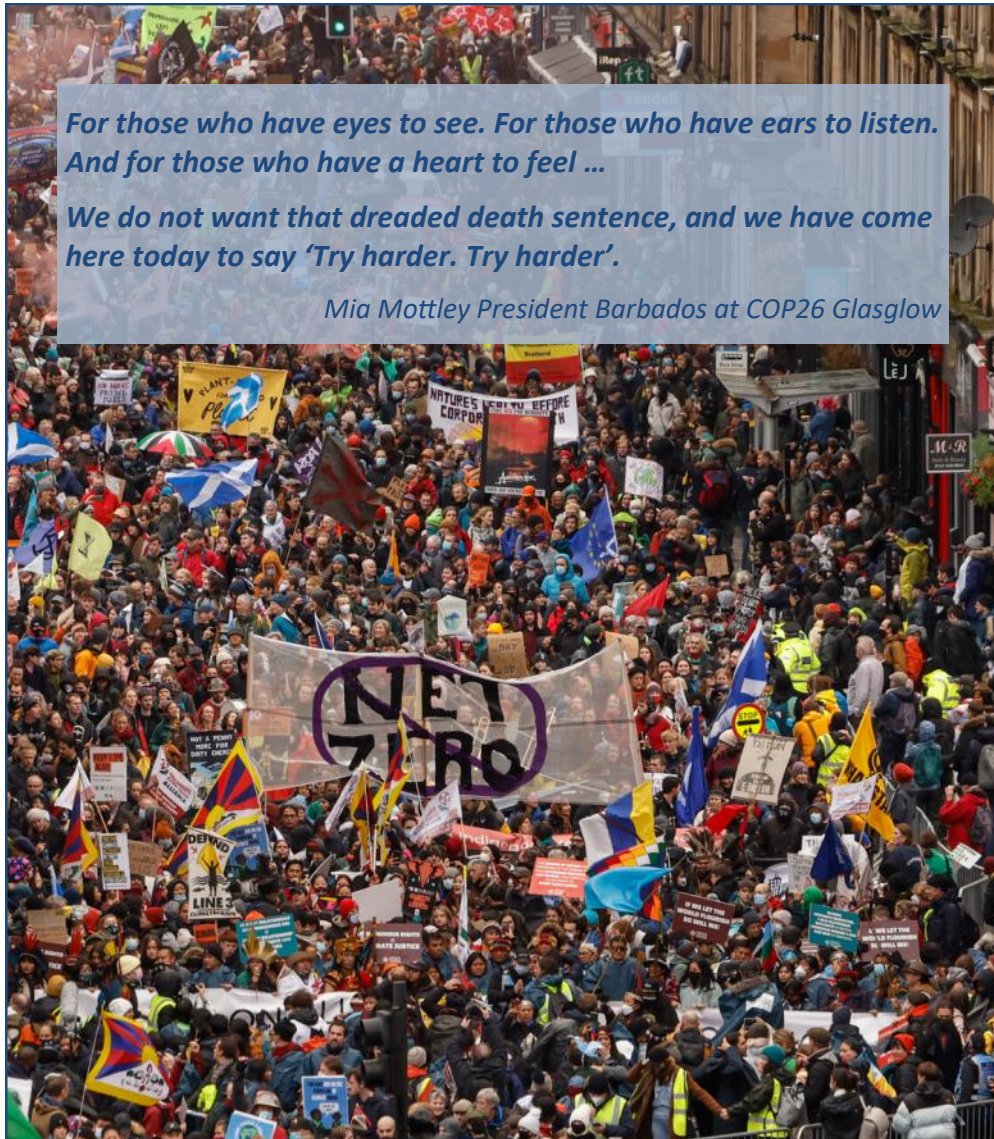


# Mountain Protected Areas UPDATE

December 2021 # 112



*For those who have eyes to see. For those who have ears to listen.  
And for those who have a heart to feel ...*

*We do not want that dreaded death sentence, and we have come  
here today to say 'Try harder. Try harder'.*

*Mia Mottley President Barbados at COP26 Glasgow*

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Mountain SG Committee

## A note from the editor

Welcome to the latest issue of the Mountain UPDATE. Of course it is impossible to compile this Update without some reference to COP26 and the numerous talks, presentations and pledges.

We all know what we must do...but for anyone with any interest or doubt of the impact on mountains and their communities at the forefront of the climate crisis I have included a number of links to excellent, compelling films and speeches from COP26. Please have a look. Many people think that if we work together as nations we can still save the world—lets hope COP26 turns out to be a game changer and not merely a continuation of spin from our leaders! Oh—and [happy International Mountains Day 2021](#) on 11th December.

Mountain Update is a quarterly newsletter distributed to members of the Mountain Protected Areas Network.

The Mountain Specialist Group acknowledges the First Peoples and Nations of the lands and waters where we live and work and we pay our respects to their Elders past, present and emerging. We acknowledge and respect the deep spiritual connection and the relationship they have to Country.

The views expressed in this UPDATE are not necessarily those of the IUCN WCPA.


IUCN WCPA Mountain UPDATE # 112 Editor: Gillian Anderson [peopleinnature@bigpond.com](mailto:peopleinnature@bigpond.com)

# From People and Mountains around the world:

Global (from IUCN WCC & Cop26)


## [Marseille Manifesto](#) (IUCN WCC)

The Marseille Manifesto aims to capture a limited number of key messages that are globally and currently relevant and which relate to the Congress proceedings, including any notable and important commitments and announcements that emerged from Congress events. The focus is on the post-Covid recovery, the biodiversity crisis and climate emergency.




### PROTECTING MOUNTAINS: WHERE WILL THE NEXT MOUNTAIN PROTECTED AREAS COME FROM?

Peter Jacobs - Chair WCPA Mountain Specialist Group



**30% X 2030 WHAT DOES IT MEAN FOR MOUNTAINS?**




**WHAT'S IMPORTANT?**

Levels of protection of Key Biodiversity Areas (KBA's) and mountain biomes and ecosystems are initial indicators of high environmental values and how well they are protected or conserved. In addition biodiversity hotspots, IUCN red listed ecosystems and species and a range of other values including OECM's have been taken into account when identifying and ranking priorities.

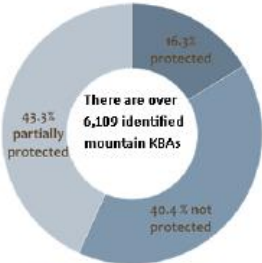
The world's system of protected areas includes many outstanding areas within the global mountain landscape; but significant mountain areas are not adequately protected. As the world conservation movement advocates to expand the global coverage of protected areas over the next decade toward 30%, identifying priorities for new mountain protected and conserved areas will be most effective if it takes a strategic approach to ensure areas of highest ecological value and most in need of protection are identified.

Employing a range of indicators, a new decision support tool helps determine where protection or conservation efforts need to be focussed.



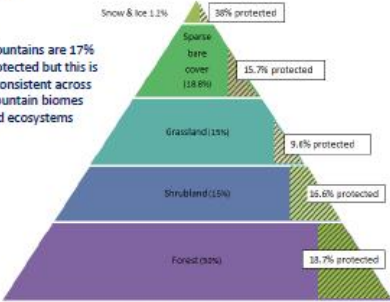
**MAKING IT HAPPEN: JOIN US!**

The Decision Support Tool (Microsoft Excel document) and Paper can be found on the IUCN WCPA Mountains web page here: [Mountains Paper and Decision Support Tool](#) The Decision Support Tool contains up to date datasets on levels of protection and built-in selection and scoring functions, plus references for information as one works through the six steps.



**There are over 6,109 identified mountain KBAs**

Key Biodiversity Areas



Mountains are 17% protected but this is inconsistent across mountain biomes and ecosystems

Mountain Biomes

Please go to <https://youtu.be/NuY89TWscl> a short video of Protecting Mountains IUCN WCC presentation by Peter Jacobs (Chair Mountain Specialist Group).

### ***An ambitious goal?*** Adapted from *The Conversation* and EWS November 2021

At the COP26 world climate summit in Glasgow, 123 countries have pledged to stop deforestation by 2030. This declaration should be welcomed for recognising how crucial forest loss and land degradation are to addressing climate change, biodiversity decline and sustainable development.

According to the agreement, about 10.3 billion euros in public funds will be mobilised for the project by 2025. At the heart of the agreement is an effort to reduce the lucrative financial incentives for deforestation. Much of the world's deforestation is driven by global demand for food. This drives people to cut down trees to make way for cattle, soy, cocoa and palm oil.

The main deficiency in the text is that not enough attention is paid to the rights of Indigenous peoples and local communities.

It is mentioned the countries will "recognise" and "support" the rights of Indigenous peoples but many of these signatories do not have adequate – or, in some cases, any – legislation that actually recognises those rights.

The declaration's signatories, which include global deforestation hotspots such as Brazil, Indonesia, Democratic Republic of the Congo, Canada and Australia have committed to: ***working collectively to halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation.***

## Global (from IUCN WCC & Cop26)

**Film: Sustainable Summits: Climate Solutions from the Top of the World: a call from the pulse of the planet for urgent environmental action:** premiered at the 2021 United Nations Climate Change Conference (COP26) in Glasgow. Featuring leading experts, adventurers, and local activists, it had a clear message for COP26. Please watch via a link below.

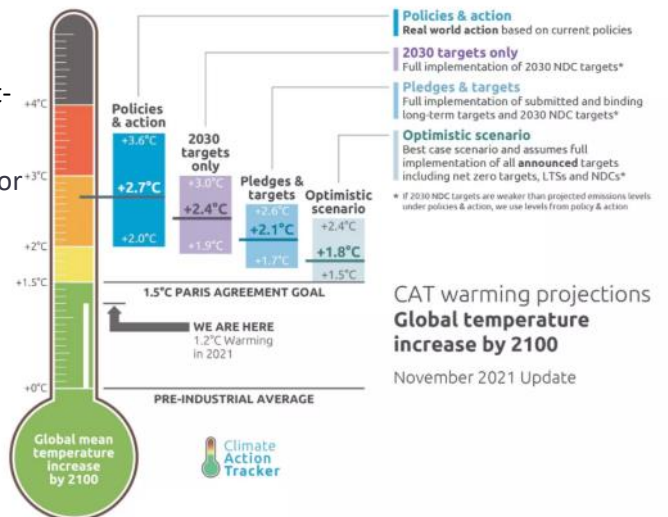
Sustainable Summits is an international conference series which seeks to raise awareness and political support to tackle the impacts of climate change in the mountains and promote solutions for sustainable mountain development.

[Sustainable Summits Web Site](#), Summary 1: [Balancing Development Pressures](#), Summary 2: [Mountains Nurturing Communities](#) Summary 3: [Regional Cooperation](#), Summary 4: [Messages for COP26](#)

An analysis of COP26 pledges by [Climate Action Tracker \(CAT\)](#) reveals the world is on track for a 4.3 degrees Fahrenheit (2.4 degrees Celsius) increase by 2100 because countries have not unveiled short-term policies to meet their long-term net-zero targets.

The U.N. Environment Programme (UNEP) chastised world leaders for failing to put forward concrete “near-term targets and actions” to prevent runaway climate change.

“The reality is that the sum total of our #climate efforts thus far is like an elephant giving birth to a mouse,” UNEP Executive Director Inger Andersen



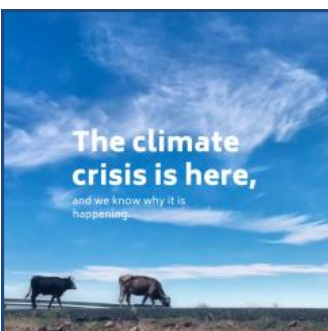
Visit the [webpage](#) for more information. Streaming will also be available at [Facebook](#), [YouTube](#) and [Twitch](#).



The session is moderated by the Mountain Partnership Secretariat with distinguished panelists representing the Governments of Nepal and Pakistan, Clean Energy Nepal, Asociación Oikos and the Consortium for Sustainable Development of the Andean Ecoregion (CONDESAN).

Watch the event on the [COP26 Platform](#) or on [YouTube](#)

## WATCH: IUCN WCPA at COP26 - Protected areas as solutions for climate change and biodiversity crises



We stand at a crossroads, facing global crises affecting nature and our climate. And we know why this is happening. Fossil fuel productions and emissions, and the destruction of nature put our climate at risk.

Deforestation and ecosystem degradation are driven by fires, agriculture, extractive industry, infrastructure, and ultimately by an unsustainable economic system.

But there is good news. We know what to do to heal our climate.

[Watch here](#)

## America—north

### *US Mountain Parks less travelled?*

**Overcrowding is being borne by just a handful of beloved landscapes including Grand Tetons, Yosemite, and Zion.**

*North Cascades NP image: US Park Service*



It's no secret that visitation to USA's national parks is skyrocketing. In 2019, more than 327 million people hiked, camped or toured within the boundaries of a national recreation area, memorial, or historic site. 2020 saw less visitation but still high at around 240 million people. It's not just a question of sustainability (which is a huge problem), when millions of tourists are competing for trail time, campsites, and the best Insta-worthy views, but is the park still wild?

For every one of the national parks swarmed by millions of visitors each year, dozens of state and federal parks and monuments go relatively untraveled. And while the landscapes may not be as spectacular a handful of alternatives offer not something more elusive—silence.

Here are some mountain park alternatives offered by *Treehugger* in September 2021 (taken from *Tripsavvy*)

Instead of **Zion National Park**, try **Grand Staircase-Escalante National Monument**

Carved by water and snow from massifs of red sandstone, [Zion National Park](#) is a stunning, hard-scrabble world of vertical rock and blazing sun. Visiting Zion has become a right of passage for hikers, backpackers, and sightseers, alike, to the tune of 4.5 million visitors a year. While Zion has worked hard to keep the overloved park sustainable with mandatory shuttle service between viewpoints and a permitting system for traversing The Narrows, its most beloved canyon, the battle against trail congestion and garbage is never ending.

Just 50 miles east is [Grand Staircase-Escalante National Monument](#) a desert landscape of flaming sandstones, gravity-defying rock formations and warren like slot canyons that draws less than a quarter of the visitors Zion receives annually to an area almost seven times the size (despite being reduced by almost half by the Trump administration in 2017).

Instead of **Yosemite National Park**, try **Lassen Volcanic National Park**

There are two National Parks very close to California's San Francisco Bay Area. Both are worlds formed by lava with steep granite mountains and serene meadowlands. Both have vertical cliffs and alpine lakes. But while one, [Yosemite National Park](#), is world-famous and battling around 4.5 million visitors each year, the other, [Lassen Volcanic National Park](#) has held steady with around 517,000 visitors annually for almost 50 years.

Instead of **Yellowstone National Park**, try **Wind River Mountain Range**

But while Yellowstone *is* spectacular, less than three hours southeast of the iconic park (and just below another overcrowded bastion of beauty, **Grand Teton National Park**), the Wind River Mountain Range is calling. This is Wyoming's largest mountain range, part of the Rocky Mountain chain, boasting 40 named peaks, seven massive glaciers, 2,300 lakes and the headwaters of the Green River.

Instead of **Glacier National Park** try **North Cascades National Park**

Like other ever-snowy places around the globe, [Glacier National Park](#) is facing a bleak future as the climate crisis wreaks havoc. Compounding the park's ecological stability is its annual visitation of 3 million glacier-seeking hikers and car-travelers. Glacier National Park though is not the last place with the frozen tundra.

West along the U.S.-Canadian border, glaciers pack the jagged peaks and feed the brilliant turquoise lakes of Washington's [North Cascades National Park](#) the National Park Service's best-kept secret. Mountains here rise more steeply more quickly than anywhere else in the lower 48, making for unbelievable panoramas on trails like the 7.5-mile round-trip [Cascade Pass Trail](#).

# America

## *American Pikas provide insights into global climate change*

From Erik Beaver WCPA Mountain Specialist Group Committee & Peter Billman

Amidst ongoing global change, finding solutions to manage and conserve species that are declining requires focusing strongly on understanding *how* or *why* declines are occurring. Research in the October issue of *Global Change Biology* combined evaluation of numerous mechanism-based hypotheses with a study design that explicitly spanned wide elevational gradients in mountains, to illuminate which combination of factors best explained patterns in occurrence, abundance, and distributional shifts in a mountain-dwelling mammal, the Pika.

This mammal is providing remarkable insights to land and wildlife managers about how species may be vulnerable or resilient to climate change. These insights are possible because it inhabits only one 'distinctive' habitat type (which, in contrast to most species, is not being converted or degraded), it is highly detectable when it's present, and because a single survey can indicate both where animals currently *are*, and where they *used to* be.

Surveys at 760 habitat patches in 64 watersheds across 4 mountain ranges spanning the Continental Divide in Idaho and Montana, USA during 2018 through 2020 suggested:

- just over 1/3 of patches contained only old evidence in each of the 4 mountain ranges, and
- the lower-elevation limit of occurrence has shifted upslope an average of nearly 200m (averaging 277m, in the 72% of watersheds that experienced retraction).

Mountains are valuable stages for this work because they provide drinking water for 2/3 of the world's citizens, contain >90% of the lands under strongest conservation guidelines (which will play integral part in future biodiversity conservation), and have sharp abiotic and biotic gradients that serve as natural corridors in climate-adaptation strategies.

The study is the first seeking to understand the specific factors underlying the amount of distributional change across so many watersheds, and it developed several new techniques for improving understanding of species' distributional shifts in mountains.

**This first study of pikas from this region, which is at the center of the species' geographic range, suggested that distributional changes are occurring even in places previously assumed to be secure strongholds.**

Research published in the October 2021 issue of *Global Change Biology* and can be found [here](#).



American Pika photo: National Wildlife Federation

Pikas, the focal species of the study are somewhat of an enigma relative to most terrestrial wildlife because it is experiencing widespread declines in distribution and habitat, despite NOT:

- a) having large body size (and thus lower fecundity and longer generation times);
- b) experiencing any appreciable change in areal extent or distribution of its habitat; nor
- c) being hunted or persecuted (this dynamic is esp. true in developing nations, less so in the developed world).

**American pikas** (*Ochotona princeps*) not only provide broader insights, but the charismatic critters are also widely beloved by hikers and backpackers in high-elevation areas across western North America, usually in boulder fields at or above the tree line.

They are herbivorous, smaller relatives of rabbits and hares. Pikas have two different ways of foraging; they either directly consume food or they cache food in piles for the winter (haying).

Pikas are vocal, using both calls and songs to warn when predators are nearby and during the breeding season.

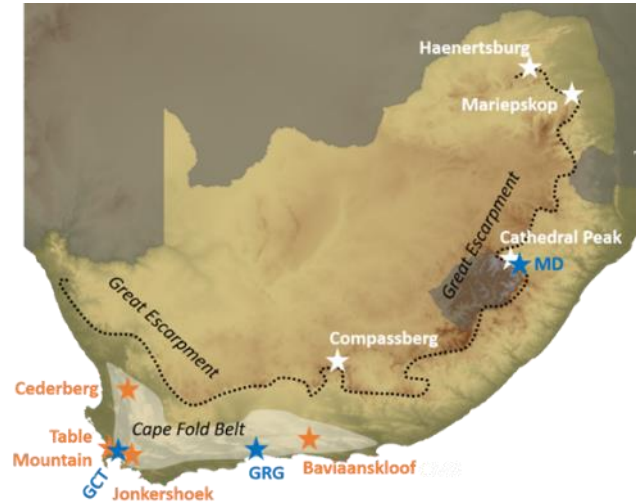
Predators of the pika include eagles, hawks, coyotes, bobcats, foxes, and weasels.

# Africa

## mountain watch for a sustainable southern African mountain future

By Dr Dave Thompson (Scientist, SAEON Ndlovu node) and Dr Clinton Carbutt (Scientist, Ezemvelo KwaZulu-Natal Wildlife and IUCN WCPA Mountain Specialist Group regional representative: Southern and East Africa)

Image: SAEON mountain observatories situated on the Great Escarpment (white) and Cape Fold Belt (orange). Emerging EFTEON LTSER landscapes in blue (GCT, Great Cape Town; GRG, Garden Route Gateway; MD, northern Maloti-Drakensberg). Adapted from Carbutt and Thompson, 2021.



**Some of the most critical data for identifying and quantifying environmental change, understanding long-term ecosystem dynamics for effective ecosystem management, understanding socio-ecological systems, and informing global policy agendas, are those attached to long time-series from long-term ecological and socio-ecological research [LT(S)ER].**

For mountains, these data-generating platforms have a pronounced northern hemisphere bias.

Now, scientists from **South African Environmental Observation Network SAEON** and Ezemvelo KwaZulu-Natal Wildlife have presented a first synthesis of the mountain observatories in southern Africa and the collective value of long-term research from the region. The primary aim was to demonstrate the value of a diverse suite of process-orientated LT(S)ER initiatives in southern Africa's mountain regions, framed by their contribution to human well-being, appropriate management of biodiversity, and environmental sustainability.

The publication concludes with a chapter '*Local Knowledge with Global Significance*'. It focuses on the unique character of the regions mountains, as well as opportunities presented by existing and emergent mountain-based LT(S)ER.

**This is fitting given the unique position of the mountains at the tropical–temperate interface of the southern hemisphere mid-latitudes, whose context is largely unreplicated in other mountain regions of the world.**

The current rollout of Expanded Freshwater and Terrestrial Environmental Observation Network, coupled with university-based research and southern Africa's inclusion in several international mountain programmes, e.g. the Global Observation Research Initiative in Alpine Environments (GLORIA), RangeX, the Global Soil Biodiversity Observation Network (Soil BON), and the Mountain Invasion Research Network (MIREN) bodes well for a renaissance period of global change research in the mountains of the region which takes greater cognisance of their social context.

This diversity of programmes will generate a more robust knowledge base from which to make sound conclusions about how to better safeguard the well-being of people and biodiversity in the region.



Repeat sampling of permanently marked plots, here in the threatened montane grasslands at the Haenertsburg observatory, allows for the detection of change in plant species diversity and vegetation structure in response to global change drivers  
photo: Sylvie Kremer-Kohne



Automated instrumentation arrays, such as this weather station on an alpine inselberg at Vulture's Retreat 3000m permit meteorological monitoring even in remote, high-elevation locations photo: Kent Lawrence

# Africa

## *Bora (beautiful), ranger in Kahuzi-Biega NP, DRC*

### **From Mongabay October 2021**

Marie Jeanne Bora Ntianabo was drawn to the extraordinary commitment of park rangers while she was still a child. Now 29, she loves her job as a ranger despite danger of being ambushed by poachers or armed groups operating in **Kahuzi-Biega National Park**.

The work doesn't pay well, especially due to reduced numbers of tourists that the park depends on for revenue, but Ntianabo says she isn't tempted by the profits others seek while harming the park's ecosystems and wildlife.

Though the rangers' work is difficult and dangerous, it's poorly paid. They work for the equivalent of \$50US a month, and sometimes go three or even six months without pay, when tourist numbers are low. And due to COVID-19, tourism to the park has suffered significantly. Ntianabo's monthly paycheck isn't enough to her cover her needs. Her parents are in poor health and rely on her for support. She also pays school fees for four of her brothers.

**High risks for low pay leaves the park rangers facing difficult choices, including the temptation to poach the wildlife they are trusted with protecting. According to Ntianabo, a baby gorilla can sell for at least \$23,000 within 50 kilometers (30 miles) of the park.**

"That sum of money does not tempt me. I cannot be associated with those who have always destroyed our forests to sell animals that I am here to protect," she says.

### **From UNESCO**

Political instability in the region, provoking the displacement of thousands of people, represents a very serious threat to the integrity of the property, resources and populations of large mammals in the Park have declined dramatically.

The Park does not have a designated buffer zone, supporting cooperation of the neighbour populations in the conservation of the property is one of the principal tasks of management.

Another key challenge is that of the control of poaching and artisanal oil exploration in the former extraction sites. Hunting of wild game for bush meat as well as the conversion of habitats are considered the consequence of the presence of numerous miners in the Park. With the financial and human resources being insufficient, it becomes imperative to obtain additional means to strengthen the effectiveness of management including, ideally, the creation of a Trust Fund.



Straddling the Albertine Rift and the Congo Basin, **Kahuzi-Biega National Park** is an exceptional habitat for the protection of the rainforest and the eastern lowland gorillas, *Gorilla beringei graueri*. Extending over 600,000 ha, are dense lowland rainforests as well as Afro-montane forests, with bamboo forests and some small areas of sub-alpine prairies and heather on Mounts Kahuzi (3,308 m) and Biega (2,790 m). Photo: Thomas Nicolon for Mongabay

# Oceania—Australia

## *Oh dear oh deer!*

From *Peter Jacobs Chair WCPA Mountain SG*

A range of deer species occur throughout the world and are integral to the indigenous biodiversity of many mountain protected areas. Deer are however not indigenous to Australia or New Zealand where they have become a serious pest in mountain protected areas.

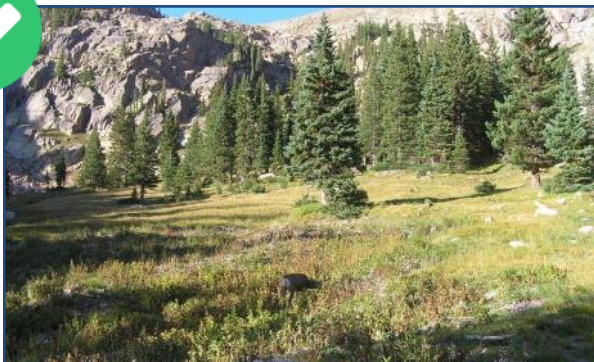
Originally introduced as game for hunting in the 19<sup>th</sup> century there are now 6 feral species that inhabit much of Australia. Feral deer are now widespread in the Australian Alps with the population and distribution rising rapidly in recent years to around 1 million across the alps. They are now invading the Tasmanian Wilderness World Heritage Area.

Feral deer cause damage to fragile mountain ecosystems through trampling, grazing, browsing and thrashing sensitive vegetation and some species wallow in delicate alpine peatlands.

The control of deer is a vexed issue particularly in Victoria and Tasmania where they are still protected wildlife for game purposes and hunters covet that protection. This is despite numbers growing out of control and spreading under these protectionist policies that are in place for the pleasure of a few hunters.

The Tasmanian Government has released a draft Wild Fallow Deer Management Plan. According to the Australia's Invasive Species Council, the plan fails to address this problem seriously by, among other failures, refusing to rule out deer remaining in parts of the precious Tasmania Wilderness World Heritage Area and other national parks. In addition, landowners will need approval from hunters or special permits to control feral deer on their own properties!

The Invasive Species Council's response can be seen here. [Feral deer plan fails Tasmania](#)



Deer in the **Rocky Mountains NP** USA—good to see!



Sambar Deer destroying alpine grasslands and bogs  
**Alpine NP** Australia



Deer exclusion fence to protect threatened species  
**Alpine NP** Australia



## Central Asia—Kazakhstan

### *On the Trail of the Snow Leopard in Kazakhstan*



Aleksey Grachev, Institute of Zoology, Snow Leopard Monitoring Centre

The Project conducted large-scale basic research that covers the whole Kazakhstan. The goal of this research is to find out the current distribution of the snow leopard, assess the status of its population, feeding areas and develop recommendations for improvement - that is, pave the way for the preservation of the snow leopard throughout Kazakhstan.

With the support of UNDP, 13 specially protected areas were equipped with drones, thermal imagers and camera traps for high-quality monitoring of wildlife, regardless of weather and climatic conditions. When it snows, the group goes on an expedition, since it is the snow that allows scientists to find the tracks of the leopards. At all other times, the researchers record and monitor the number of the prey, which is the basis for the habitat of snow leopards.

***"The active presence of the snow leopard in Altyn-Emel is an example of successful environmental protection, which the country can be proud of, because the number of leopards is steadily declining everywhere, but not in Kazakhstan with its trend of a rising leopard population," adds Aleksey.***

However, despite this success in protection of the leopard, it is still endangered by active uncontrolled human activities in Kazakhstan. The infrastructure of the Malaya Almatinka River has been developed so extensively that it now scares away the animals and prevents them from migrating between the Ile-Alatau National Park and the Almaty Reserve. For this reason, animals cannot move, interbreed or exchange their gene pool freely. Another problem is related to the number of ungulates - the prey base of the snow leopard near Malaya Almatinka is scarce, again, due to the presence of humans. Alien, invasive, species also appear, which further worsens the state of the ecosystem. For example, jackals and stray dogs.

In recent years, zoologists have been concerned about the development of uncontrolled tourism in the national parks.

***"The interests of wildlife are not always taken into account. Tourism and ecotourism are often confused, passing the former off for the latter without going into details. The task of ecotourism is, first of all, not to harm nature. However, unfortunately, various facilities are being built in the protected areas under the guise of developing ecotourism. For example, they seized 200 square meters of the area where a snow leopard lives for the construction of a glamping or a visitor's centre, but that tourist facility will have a much greater impact – it will keep snow leopards for a radius of two to five kilometres away because of new human trails around and constant presence of people, which is annoying for animals", says Aleksey.***

The researchers note that with such examples of active human activity in the mountains, snow leopards are now rarely caught by the camera traps. Last year, the laboratory completed a project that studied the distribution patterns of leopards in the protected and recreational areas. The findings formed the basis for the recommendations developed by the researchers to regulate the tourist flows and distribute the recreational loads. Read whole article [Here](#)



The development of ecotourism in national parks and reserves may help protect snow leopard habitat.

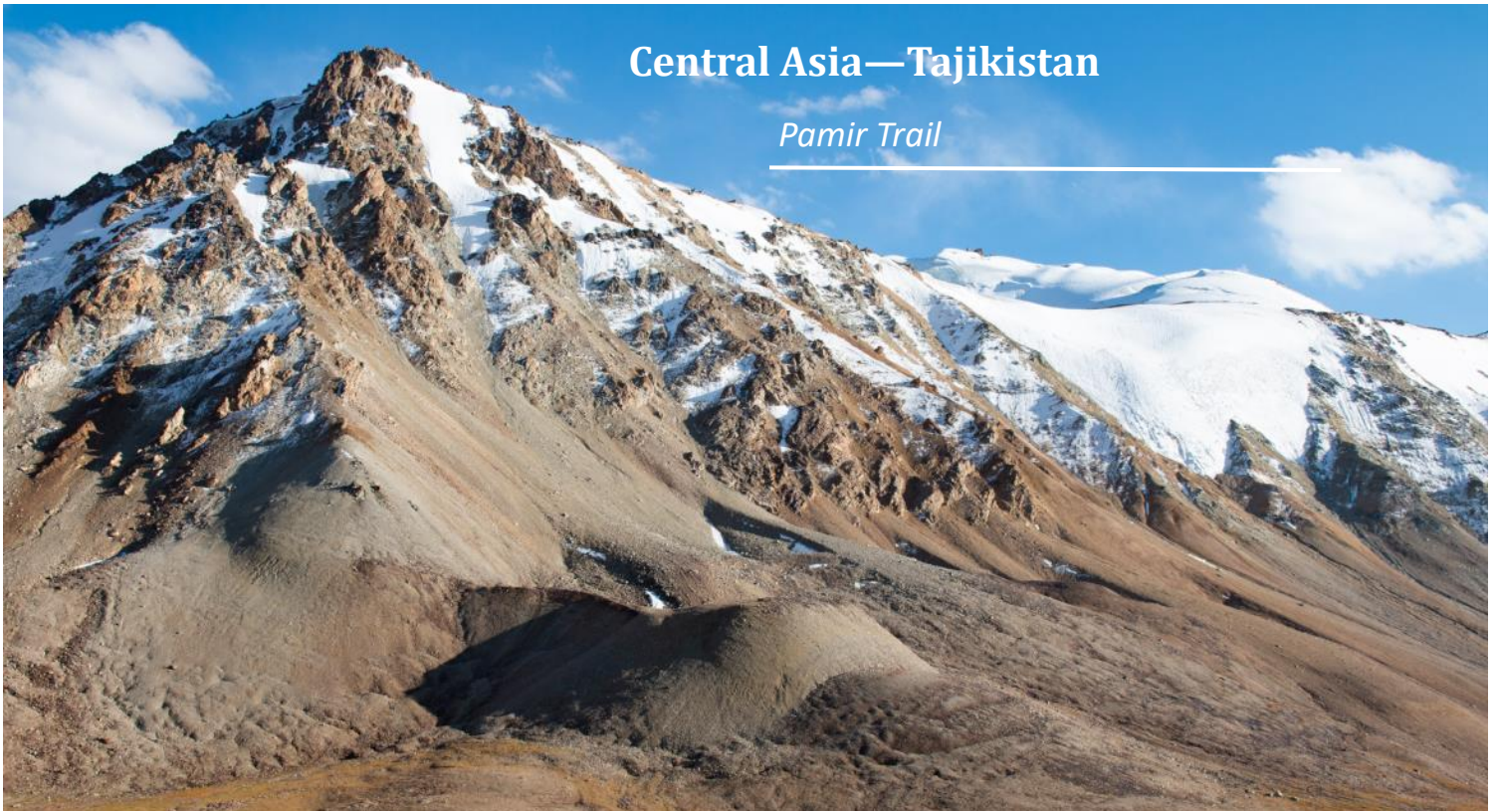


The snow leopard is one of the most secretive predators at top of ecological food chain. Photos: Saltore Saparbayev

# Central Asia—Tajikistan

## *Pamir Trail*

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From Jan Bakker co-author of the [Cicerone guidebook Trekking in Tajikistan](#)

The **Pamir Mountains** are among the wildest, least visited mountain ranges in the world. Its highest peaks stand at over 7000m high, and at 77km long its Fedchenko Glacier is the longest glacier outside the polar regions. A whopping 93% of Tajikistan’s landmass is considered mountainous but despite being a paradise for outdoor enthusiasts, the country doesn’t have the fame of other mountain nations like Nepal or Peru. Mountain tourism does however remain as one of only few economic opportunities for rural Tajikistan. Jan Bakker is looking to change that by creating the world’s newest long-distance hiking trail, the Pamir Trail.

“The mountains in Tajikistan are connected by a vast network of trails, created by shepherds who travel here with their livestock,” says Jan. “We’ve mapped out a hiking route to cover more than 1000km from the Fann Mountains in the northwest of the country all the way to the southern boundary of the Pamirs in the Wakhan Corridor, ending at the border with Afghanistan.”

The Pamir Trail passes through extremely remote locations where very few tourists have ever set foot and as such, the route is designed in a way that will impact on local businesses.

“The trail will benefit over 50 remote homestays, while creating new homestay opportunities for plenty more and boosting business opportunities for more than a dozen local tour operators,” he says. “It’s the perfect way to experience true wilderness and meet the warm, generous and welcoming people who call the Tajik mountains home.”

The Pamir Trail will consist of roughly 70 stages with more than 30,000 metres of climbing. Half of the stages have been tried and tested by Jan and his co-author Christine Oriol for their guidebook but to complete the route, Jan needs to verify and document the remaining half, mainly in the northeast of the country.

“This summer we explored unknown sections of the trail and two more reconnaissance expeditions are planned in the summers of 2022 and 2023. The aim is to have the definite route of the Pamir Trail ready by the end of 2023,” says Jan.



A high altitude camp spot along the Pamir Trail. Rushan Range, Pamirs <https://www.pamirtrail.org/>

# Europe

*in the heart of the Mercantour NP,*

*France*

From *Alparc News* October 2021

In September 2021, the integrale reserve "Roche Grande" was established in the heart of the **Mercantour National Park** (France). The challenge: to study ecological processes without any human intervention and therefore in free evolution.

The territory of this reserve extends over an area of about 500 ha and presents a vast set of lawns on limestone, cliffs and scree as well as some forest habitats. No human activity or presence is now allowed, so as to observe natural evolution. This creation of an integral reserve is only the third in France and is the result of collaborative work between the municipality of Entraunes, the National Forestry Office (NFO), the Communauté de communes Alpes d'Azur and the Mercantour National Park.

Ultimately, the goal is to have scientific references on the response of natural habitats and species, in a context of climate change. This data will make it possible to define evolutionary trajectories and assess the resilience of lawn systems and the animals that live there in the face of long- and short-term climatic events, such as droughts or extreme weather events. This reserve will be a laboratory site for innovative scientific work carried out by the National Park, the NFO and their partners.



Photo: Réserve intégrale d'Entraunes L. Scheyer

## *Fellaria Glacier, Italian Alps – evolution of the forehead from 2019 to 2021*

A video [here](#). Three summers. Twelve months of ice exposed to solar radiation, to the excessively high temperatures of the summers of the 21st century. **Riccardo Scotti and Matteo Oreggioni**- SGL\*<https://tc.copernicus.org/articles/13/1125/2019/>

Glaciers depend exclusively on the melting point of the water: above 0°C the ice melts and the snow turns into rain (point). Although the **Fellaria glacier** as a whole, for now, is suffering much less than others from the climate crisis, thanks to its accumulation basin that is located very high, above 3500 m, its eastern front continues to contract at very high rates.

Thanks to the Enlaps time-lapse camera #Tikee positioned near the glacier front, it was possible to "make the invisible visible".

The result of this work is now useful and significant because it comes out near the days when at the #COP26 the fate of the planet's climate, and consequently also of the glaciers, could be decided. Glaciers that, as mentioned, have no ears to listen to the inconsistent promises, in fact chatter in the wind, which in the last 40 years have not led to any significant results.

...Reducing emissions to zero, and at the same time extracting the climate-altering gases already accumulated in the atmosphere, is the obligatory way to try to stabilize the climate and consequently the only possibility to save what will remain of the Alpine glaciers, with good peace of mind of those who think that a plastic shroud is enough to solve the problem. **The video is available on youtube channel in Italian and English [here](#)**

***In fact, they continue to retreat and will do so for a few more decades\* before today's actions manage to have a possible effect on the planet's climate already largely compromised by the "great acceleration" of emissions over the last 60 years.***





**From Patrizia Rosso, Mountain SG**

Piedmont, where I live, is facing two problems concerning mountain protection: on the one hand, it is working on finding solutions to the depopulation in mountain areas (one of the Italian regions with the highest percentage of its territory is over 1000 m) and, on the other hand, it is trying to deal with climate-change-related issues. Unfortunately, as often happens, these problems are not tackled in an organic way, but with measures that produce strong contradictions.

### **Incentives to live in the mountains: to encourage the revitalization and repopulation of mountain municipalities**

The pandemic has engendered a curious (global) phenomenon: those who had the possibility to work from home and had a second place in the mountains moved there to spend the lockdowns. The Piedmont Region, as well as other Italian regions with problems of abandoned villages and depopulation, has issued a call for financial contributions to those who move to one of the 465 mountain municipalities, a contribution ranging from a minimum of 10,000 to a maximum of 40,000 euros. Anybody that lives in a non-mountain location in Italy can apply and based on a range of sensible criteria scored accordingly i.e. low income families with young children, people that want to transfer their businesses or 'work from home', and those that undertake to purchase and/or renovate houses using local architectural styles and materials and companies.

So far an excellent idea! But where are the contradictions? Current mountain residents have strongly criticized the fact that for those who already reside in the mountains and face enormous sacrifices to stay there; essential services are reduced every day: fewer and fewer shops, which are struggling to keep open due to low income. For the same reason, post offices, pharmacies and medical offices are closing. The schools, due to a lack of pupils, are transferred from higher altitude villages to the ones at the bottom of the valleys, with considerable inconvenience for the remaining pupils' commute.

The current residents think that, it would be better to support those who remained, guaranteeing essential services, which are equally necessary for any new resident. Otherwise only the phenomenon of second homes will be encouraged, which will continue to remain empty for most of the year.

### **The management of the cultivated woods**

In Italy, and especially in Piedmont, the altitudinal range between 500 and 1000 meters is very often occupied by semi-natural forests planted with chestnut (*Castanea sativa*). In the past, the consumption of chestnuts was very common among mountain populations, a poor but caloric food that supplemented the polenta-based menu. This type of forest also provided firewood and leaves for the cattle bedding.

### **Clean woods with towering trees and large clearings, where prized mushrooms sprout, are an interesting cultural landscape rich in biodiversity.**

Unfortunately, today many are abandoned: this type of wood, to be productive, requires cleaning of the undergrowth, with the elimination of dry leaves and empty husks in autumn by raking and burning, the ash then distributed on the wood soil as fertilizer. For the right reasons – related to CO<sub>2</sub> and fine dust pollution – a ban on burning of plant material was introduced as part of the Air Quality Plan in the Po Basin. However there is unequal treatment between Po valley municipalities.

The solution would be the joint purchase of biomass shredders which have the advantage of reducing pollution and not removing the nutrients. But these machines will be usable only in the woods accessible to vehicles: this will create the contradiction of the abandonment of the less accessible woods, and the construction of additional roads, which mostly takes place without respect for the environment. Also piles of leaves build up can create plugs in the streams and foster floods.



*These examples show the importance of addressing the issues in an organic way, otherwise it may happen that a measure solves one problem while creating another.*

## Scree and Talus

### [IUCN WCPA Membership Renewal](#)

If you served as an IUCN Commission member during the membership period 2017-2020 you are now invited to renew your Commission membership for 2021-2025. Please access the IUCN the [Commission System](#)

### [Canadian Mountain Network](#)

**WE SUPPORT THE RESILIENCE AND HEALTH OF CANADA'S MOUNTAINS THROUGH INDIGENOUS AND WESTERN WAYS OF KNOWING THAT INFORM DECISION-MAKING AND ACTION**

Canadian Mountain Network (CMN) brings together indigenous organizations and communities, universities, governments, businesses and the not-for-profit sector to support the resilience and health of mountain peoples and places.

[Learn About us](#) →



### **Join us for International Mountain Day!**

December 11<sup>th</sup>, 2021



**85%**  
of the world's species of amphibians, birds and mammals live in mountain regions



**25%**  
of terrestrial species call mountains their home



**60-80%**  
of all freshwater resources are sourced from mountain headwaters



**50%**  
of the world's biodiversity hotspots are concentrated in mountains

[INTERNATIONALMOUNTAINDAY.CA](http://INTERNATIONALMOUNTAINDAY.CA)

**SPREAD THE WORD ON SOCIAL MEDIA THAT  
#MOUNTAINSMATTER AND JOIN THE MOVEMENT!**

[Runoff, sediment flux in High Mountain Asia could limit food, energy for millions](#) From **Science News** (University of Colorado) October

Average temperatures in high altitude areas have risen twice as fast as the global average, causing more river runoff and sediment flux, and the trend could get worse.

Rivers flowing from the Tibetan Plateau and the surrounding high Asian mountains which support one-third of the world's population have experienced rapid increases in annual water and sediment runoff since the 1990s, and the volume of sediment washed downstream could more than double by 2050 under the worst-case scenario, a team of scientists has found.

Read article from Science Daily [Here](#)

[Let's not talk about the wolf on International Wolf Day](#) From **European Wilderness Society (EWS)**

The wolf-human conflict has been going on for decades if not centuries. All over the world, the issue has evolved into a polarised political and societal topic, with a constant focus on the problem, not on the solution. Thus, today, EWS decided to actively communicate about the many solutions that exist to allow for coexistence. Livestock protection is as faceted as the landscapes of our planet. Besides protecting the animals from predators it also brings many other benefits for the livestock itself, the farmer, and biodiversity.

Livestock protection measures in areas where the wolf and other large carnivores have been eradicated for decades has broadly been given up. This means that mostly also the knowledge about how to implement effective livestock protection has been lost. Additionally, the often time and money intensive practices are usually not included sufficiently in state subsidy schemes.

[Read whole article here](#)



Protecting the prey rather than hunting the predator



## Scree and Talus cont.

### [Inspired by the late Dr Graeme Worboys](#)

Australian cartoonist (for Canberra Times) David Pope has drawn attention to the forgotten heroes of Kosciuszko National Park in his posters released for Threatened Species Day—the corroboree frog, mountain pygmy-possum and broad-toothed rat are among the lesser-known creatures of Kosciuszko whose numbers are under threat.



### [After falling from the sky, Wandi the dingo is changing attitudes to his species](#)

Wandi the dingo (100% pure alpine dingo) was just five weeks old when he made international headlines after being snatched by an enormous eagle and dropped into a house back yard in Victoria's mountainous high country.

Two years later, the world's most famous dingo has fathered six cubs of his own, and become the subject of award-winning author [Favel Parrett's](#) first children's book.



Wandi at Dingo Discovery Sanctuary Photo: C.Hopkins The Guardian

From African Conservation Centre (ACC)

In April 2021, ACC celebrated the ruling by Kenya's National Environmental Tribunal that dismissed the case filed by KiliAvo, an agribusiness company that intended to set-up a 180 acre avocado farm in a critical elephant migratory corridor adjacent to **Amboseli NP**. The Amboseli ecosystem is designated by UNESCO as a Biosphere Reserve for its diverse ecological zones.

### [Nature-based tourism in China](#) [ABC News](#)

Visitors to the Zhangjiajie Grand Canyon Glass Bridge can take a leap from a height of 260 metres, a stomach-churning way to take in the views of the surrounding **Wulingyuan wilderness**, a UNSECO World Heritage site.

The area, a popular international tourist attraction, is famous for its quartzite sandstone pillars and peaks extending into the clouds, along with deep ravines and gorges.

The bungee jumping operation opened at the end of 2020, delayed by restrictions imposed by the Chinese government because of the coronavirus pandemic, which included some of the world's toughest border restrictions.

The 430-metre glass-bottomed suspension bridge offers the world's highest bungee jump from a footbridge.

Photo: Reuters Mark Chisholm



Kilimanjaro from Amboseli NP, Kenya Photo: S.Pesterev

## Scree and Talus cont.

### [COVID-19 expedition summits Mount Kilimanjaro](#)

From Mountain Partnership News October 2021

The 34 climbers participating in The Big Climb, along with their support crew of 107 porters and guides summited Mount Kilimanjaro – Africa’s highest mountain – on 24 October 2021, United Nations Day, to raise awareness of the urgent need for equitable distribution of COVID-19 vaccines.

### [Rare new orchid species just discovered in the Andes](https://www.sciencedaily.com/releases/2021/08/210811131546.htm) <https://www.sciencedaily.com/releases/2021/08/210811131546.htm>

Three new endemic orchid species were just discovered in Ecuador. *Lepanthes microprosartima*, *L. caranqui* and *L. oro-lojaensis* are proof that Ecuador -- one of the world’s megadiverse countries -- hides much more biodiversity waiting to be explored.

### [The lows and highs of Lake Como \(Italy\) water levels](#) Various sources

Even if you’ve yet to gaze upon the natural beauty of Italy’s Lake Como, there’s no doubt you’ve likely seen it on the silver screen, filmmakers, much like the centuries of tourists before them, have been drawn to Como’s stunning scenic wonders.

Like other lakes around the world, Como is facing an uncertain future due to climate change. This year Lake Como has undergone extreme peaks of high and low. Just a month ago the Como square was completely flooded. It is the climatic peaks, drought and rainy periods concentrated to make this effect.

### [Human-Made and Volcanic CO2 Emissions](#) Treehugger **October 2021** (\*Source: [United States Geologic Survey USGS](#))

The USGS estimates that volcanoes contribute about 260 million tons of CO2 to the atmosphere each year. Even so, the CO2 emitted by volcanoes probably does not have a significant effect on climate. Humans poison Earth’s atmosphere with 60 times more CO2 than volcanoes do. The USGS suggests that the difference is even greater; it reports that volcanoes release less than 1% of the CO2 that humans release, and that “the carbon dioxide released in contemporary volcanic eruptions has never caused detectable global warming of the atmosphere.”

- Global volcanic emissions: 0.26 billion metric tons per year
- Human-made CO2 from fuel combustion (2015): 32.3 billion metric tons per year
- Worldwide road transportation (2015): 5.8 billion metric tons per year
- Mount Pinatubo eruption, Philippines (1991, second largest eruption in recorded history): 0.05 billion metric tons

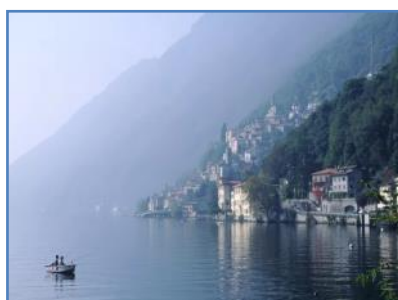
### [The Mont-Blanc protection decree October 2020](#)

The decree has just been signed by the prefect of Haute-Savoie. It regulates the number of visitors to the Mont-Blanc site and the activities that can be practiced there. Mont-Blanc, which rises to 4,810 m, attracts each year between 15,000 and 20,000 contenders for its ascent and up to 500 per day during the summer.

In recent years, pseudo-mountaineers, an altitude shelter transformed into a quasi-refuge by unscrupulous agencies, jacuzzi and other incongruous objects mounted on the sides of the giant had provoked the anger of elected officials, guides and managers.



Climbers: top women mountain athletes from Italy, Nepal, & Switzerland; a former minister; an ambassador; a polar explorer; United Nations officials youth from disadvantaged communities; & corporate executives & managers of NGOs



Eruption La Palma Canary Islands photo: ABC News (September)



Mont Blanc Photo: KONRAD K./SIPA

## Tools, Publications and other Media

IUCN - Papaco - [Massive Open Online Courses \(MOOC\) Our MOOC Conservation](#)

MOOCs (Massive Open Online Courses) are one of the latest advances in distance learning. Composed of online courses that are meant for an unlimited number of participants, MOOCs give anyone with an Internet connection access to training on a wide selection of topics. They are usually made up of short thematic videos, quizzes, automatically or peer-graded assessments, recommended readings, etc.

From Bill Laurance (ALERT) a terrific new book entitled [Central African Forests Forever](#)

The book is packed with high-quality chapters on African tropical ecosystems, wildlife, forest and landscape management, and nature conservation (and includes our final chapter on 'smart roads').

And best of all, it is **totally free** and **available in English, Chinese, and French editions** (see book-covers below and attached Table of Contents). You can access the book [here](#):



A special International Climbing and Mountaineering Federation (UIAA) Mountain Network Series webinar will be held on Friday, 3 December 2021 to announce the winner of the [2020-2021 UIAA Mountain Protection Award \(MPA\)](#).

[Thinking Like A Mountain: Exploring the Potential of Relational Approaches for Transformative Nature Conservation](#) *Sustainability* **2021**, 13, 12884. <https://doi.org/10.3390/su132212884> Foggin, J.M.; Brombal, D.; Razmkhah, A.

Building on a review of current mainstream paradigms of nature conservation, the essence of transformations necessary for effective and lasting change are presented—namely, convivial solutions (or 'living with others'), in which relationality and an appreciation of our interdependencies are central, in contrast to life-diminishing models of individualism and materialism/secularism. We offer several areas for improvement centred on regenerative solutions, moving beyond conventional environmental protection or biophysical restoration and focusing instead on critical multidimensional relationships—amongst people and between people and the rest of nature. <https://www.mdpi.com/2071-1050/13/22/12884>

On **International Primate Day**, ICIMOD launched the digital version of a new publication - **Primates of Far Eastern Himalaya!** Far Eastern Himalayan (Transboundary) Landscape is home to a number of unique and endemic primate species, including some that have been discovered in recent years. The photobook can be accessed at: [Here](#)

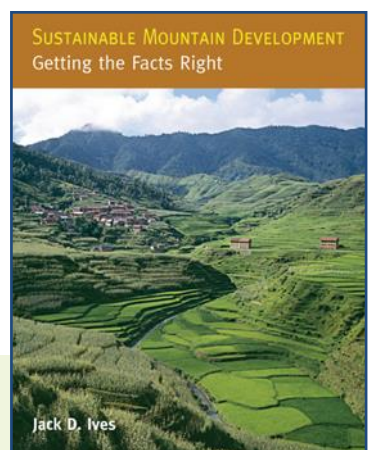
From [Global Mountain Biodiversity Assessment](#)

With a short contribution in Alpine Botany, GMBA co-chair Christian Körner and colleagues propose a brief explanation of the differences between existing mountain definitions and of the consequences of choosing the one or the other. Read about "[Mountain definitions and their consequences](#)"

[Sustainable Mountain Development \(an oldie but a goodie!\)](#) From Jack Ives

The author takes us on an epic journey in search of recognition of the importance of our mountain regions and their indigenous peoples for preservation of an environmentally viable world. The book embraces far flung field research, challenges to major paradigms of the day, team work, long-term political manipulation and adventure. The journey begins in the 1960s.

This book can be purchased online.



First Edition 2013 By  
Himalayan Association for the  
Advancement of Science  
(HimAAS)

Looking for Mountain Research? Try [Global Mountain Biodiversity Assessment \(GMBA\)](#), [Mountain Research Initiative](#), [ICIMOD](#) and [Mountain Partnership](#)—to mention a just few great sources of mountain information!



## Important links

IUCN World Commission on Protected Areas for an outline of the role of Mountain Specialist Group [IUCN WCPA Mountains](#) and [Mountain UPDATE](#)

IUCN World Conservation Congress [IUCN World Congress](#)

Protected Area Governance and Management (book) [Management Book ANU Press](#)

The Mountain Partnership is a United Nations voluntary alliance of partners dedicated to improving the lives of mountain peoples and protecting mountain environments around the world. [Mountain Partnership](#)

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While Mountain Network members can choose not to be WCPA members and still be involved and receive the Mountain UPDATE, the WCPA Chair, and Mountain Specialist Group Executive and would like to encourage all to become WCPA members. This helps to secure good governance and management of the WCPA and the Mountains Group and enlightens all members to the wider activities of the WCPA.

To learn more about WCPA membership go to: [IUCN WCPA Get Involved](#)

For any relevant mountain protected area news, please email me (Gill) on [peopleinnature@bigpond.com](mailto:peopleinnature@bigpond.com)

I look forward to hearing from you soon!