

Mountain Protected Areas UPDATE



December 2022 # 116

A note from the editor

Welcome to the 116th Mountain UPDATE. This edition is the usual mixed bag covering big picture articles like melting glaciers, territories of life or establishing wildlife corridors. But there are also some more 'personal' stories about frogs in Melanesia, bears in the Andes and lynx in Austria.

December 11 is *International Mountain Day*. I hope you have a chance to reflect on, celebrate or raise awareness about our mountain cultures and nature; especially the key role women play as guardians of biodiversity, keepers of traditional knowledge and custodians of local culture.

December 2022



In this issue

From People and Mountains around the world:

Global

- World Heritage Glaciers

Americas

- Ukuku: forest maker: Andes
- In one corner: Rocky Mountains

Africa

- Mount Kenya Trust

Oceania—SE Asia

- So many frogs: Melanesia
- Falls to Hotham Alpine Trail

Europe

- Persecuted carnivores bouncing back

Central Asia—Himalayas

- Territories of Life

Scree and Talus

Tools, Publications other Media

Mountain SG Committee



Wakhi, Shimshal women Photo: Marc Foggin

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 # 116 Editor: Gillian Anderson peopleinnature@bigpond.com

Global

Building the capacity of the Mountains Specialist Group

From *Peter Jacobs* Chair IUCN WCPA Mountain Specialist Group


The WCPA Mountain Specialist Group identified some time back that we need some institutional support to build our capacity to improve our networks and manage and promote projects. The work that we have been doing on the **Identification of Global Priorities for New Mountain Protected and Conserved Areas** has had great support but some ongoing institutional support will help move it along as discussions intensify over 30*30.

To that end we have secured an agreement with the Australian National University Research School of Biology and the Australian Mountain Research Facility to partner with our Mountains Group and provide some of that much needed rigour, energy and support.

The Australian Mountain Research Facility is being launched on International Mountains Day, 11 December, in Kosciuszko National Park (part of the Australian Alps national parks) where I will be presenting on global priorities for mountain protection. We hope this will lead to refinement of this work and publication, along with other new exciting initiatives for the Mountains Specialist Group.




Walking in the Australian Alps photo: *peopleinnature*




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.

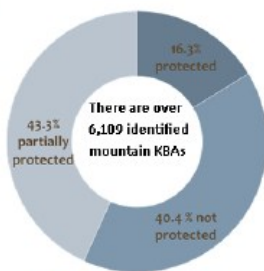
Employing a range of indicators, a new decision support tool helps determine where protection or conservation efforts need to be focussed.



MAKING IT HAPPEN: JOIN US!

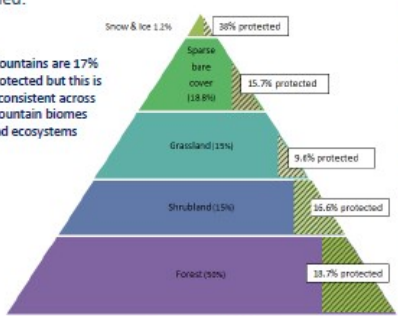
The Decision Support Tool (Microsoft Excel document) and Paper can be found on the IUCN WCPA Mountains web page here: [Mountains Paper and Decision Support Tool](#)

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.



Key Biodiversity Areas

There are over 6,109 identified mountain KBAs



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

Mountain Biomes

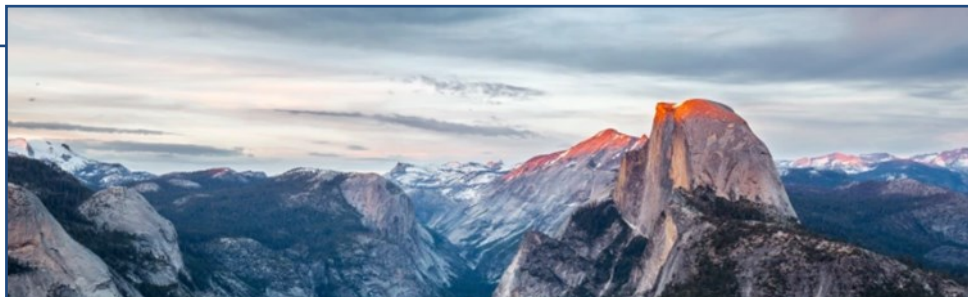
Please go to <https://youtu.be/NuY89TWscl> a short video of Protecting Mountains IUCN WCC presentation by *Peter Jacobs* (Chair Mountain Specialist Group).

Global (cont.)

World Heritage Glaciers

UNESCO & ABC News November 2022

Some of the world's most famous glaciers will disappear by 2050 due to global warming, whatever the temperature rise scenario, according to a UNESCO report.



Yosemite NP, USA

Key points:

- A third of glaciers across 50 of its World Heritage sites are set to disappear by 2050
- Almost half of those glaciers could almost entirely disappear by 2100

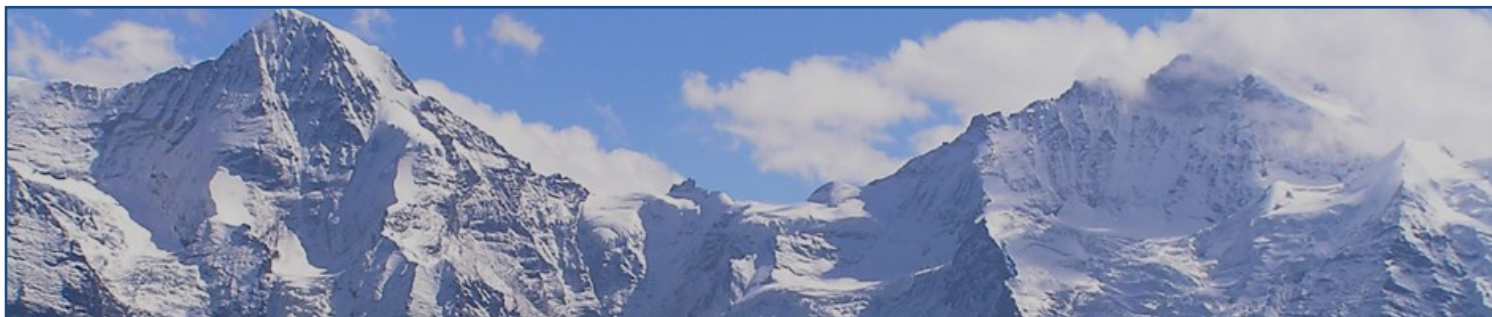
UNESCO said that World Heritage glaciers lose on average some 58 billion tons of ice every year. They include in the **Dolomites** in Italy, the **Yosemite** and **Yellowstone** national parks in the USA and **Mount Kilimanjaro** in Tanzania.

The United Nations cultural agency UNESCO monitors some 18,600 glaciers across 50 of its World Heritage sites and said that a third of those are set to disappear by 2050.

While the rest can be saved by keeping global temperature rise below 1.5 degree Celsius relative to pre-industrial levels, in a business-as-usual emissions scenario, about 50 per cent of these World Heritage glaciers could almost entirely disappear by 2100.

The report said the single most important protective measure to prevent major glacier retreat worldwide would be to drastically reduce carbon emissions.

UNESCO recommends that given the inevitable further shrinking of many of these glaciers in the near future, local authorities should make glaciers a focus of policy, by improving monitoring and research and by implementing disaster risk reduction measures. As glacier lakes fill up, they can burst and can cause catastrophic floods downstream.



Jungfrau, Switzerland

Beyond COP27?

Taken from *The Conversation* November 2022

For 30 years, developing nations have fought to establish an international fund to pay for the “loss and damage” they suffer as a result of climate change. As the COP27 climate summit in Egypt wrapped up, they finally succeeded.

While it's a historic moment, the agreement of loss and damage financing left many details yet to be sorted out. What's more, many critics have lamented the overall outcome of COP27, saying it falls well short of a sufficient response to the climate crisis – especially with **very little progress on mitigating emissions**. And while the world dithers, the window of opportunity to respond effectively to the climate crisis continues to close.

In the end, delegates signed off on an inadequate agreement.

It's important to note, that while COPs are clearly significant in the international response to the climate crisis, they're not the only answer.

Public mobilisation and activism, market forces, aid and development programs, and legislation at local, state and national levels are all important sites of climate politics – and potentially, significant change.

America—south

How bears “make” a forest: Andes

Extracts from Mongabay Commentary by Enrique Ortiz September 2022

Perhaps due to its size or almost human habits, the ukuku has always fascinated people. It is represented in the iconography of ancient pre-Columbian cultures, and for the mountain dweller, it is a symbol of the cloud forests, equivalent to the condor, the Andean “King of the skies”.

The bear’s fame even reached Europe, where it is known by generations of English children who grew up reading the story of Paddington, “the little bear that came to London from the darkest of Peru.”

Weighing approximately 100 kilos and with a stocky body, the ukuku is the only bear that lives in South America. It is an elusive species that can be found mainly on the eastern slope of the Andes, the Amazonian cloud forest.

The destruction of its natural habitat has placed this bear on the list of species threatened with extinction, and in countries like Venezuela it has almost disappeared. Fortunately, today it is protected in several conservation areas in the region.

The forest maker

Perhaps one of the ukuku’s most remarkable roles is that the ukuku “makes” its own forest, dispersing the seeds of the plants that will later feed it and creating the environment for new plants.

This makes it a keystone species in the forests’ natural regeneration.

The Andean inhabitants, for whom the ukuku is a much loved and even revered creature, have understood this very well, protecting it, and giving to it a special place in their traditional folklore.

The bear is often a main character in Andean dances and customs, such as that of the Virgen del Carmen in Paucartambo, Cuzco.

In recognition of the ukuku’s special place in Andean cultural traditions and ecology, the local communities of Jajahuana and Juan Velasco Alvarado in Cuzco— together with the authorities and other local partners—have proudly inaugurated the **Andean Bear Interpretation Center** at a spectacular site adjacent to the world-renown Manu National Park. On the grounds of the Wayqecha Biological Station managed by the NGO Conservación Amazónica in the Kosñipata valley, visitors can walk along the paths where the bear lives, taste its food, learn about its habits, and enjoy the stories of the bear’s relationship with people as told by the villagers themselves. The center also offers the opportunity to explore the cloud forest treetops.



Mariano Huilca, a local community member and guide at the Wayqecha Biological Station in Cuzco-Peru, checks out a bromeliad that was eaten by an Andean bear. Photo credit: Ruthmery Pillco – Conservación Amazónica ACCA.



Andean bear “Ukuku” in a Andean grasslands ecosystem at 3500 meters above sea level close to the community Juan Velasco Alvarado. Photo: Conservación Amazónica ACCA.



The ukuku likes to eat ground and arboreal bromeliads – those “air-plants” that are relatives of pineapples – in addition to picking berries. Occasionally, it climbs trees to take advantage of honey from wild bees. Photo: Murry Cooper ICFC



Ruthmery Pillco, leading scientist & National Geographic Explorer, guiding the community members of the local Jajahuana community at Andean Bear Interpretation Center “Ukukuq wasichan”, or “the little house of the Andean Bear”, in Quechua. Photo: Conservación Amazónica ACCA.

America— north



In one corner...

From The Guardian October 2022

An agile climber with knife-like horns. America’s largest wild sheep. They are locked in a significantly one-sided combat in the US Rocky mountains, in a battle over resources uncovered by the region’s vanishing glaciers.

In study sites across a 1,500-mile span of the **Rocky Mountains**, scientists have documented mountain goats (above R) and bighorn sheep (above L) competing over mineral deposits among the rocks, at elevations of up to 14,000ft.

These contests, never previously outlined in detail, show that two of the US’s heftiest native mammals are involved in a struggle that may be influenced by the climate crisis, as the mountains’ snow and ice rapidly dwindles. Conflict between such species “may be reflective of climate degradation coupled with the changing nature of coveted resources”, the [new study states](#).

About 300 glaciers have disappeared from the Rocky Mountains over the past century as global heating has winnowed away the region’s snow and ice. Scientists have said it is now “inevitable” that places such as the celebrated **Glacier National Park** will lose all of their major ice formations within the coming decades.

This upheaval is disrupting ecosystems and raising concerns for communities in the US west that rely upon water that comes from rivers and streams fed by melting glaciers. The melt is also uncovering deposits of salt and potassium that are valued by the goats and sheep, who need to lick these mineral deposits in order to gain crucial nutrients.

These animals, able to move deftly up rocky inclines, are now able to venture higher into the mountains for these resources as the ice retreats. This may be leading to more of these irate interactions, although it’s not clear whether the conflicts are increasing in number as no previous work has been done on the topic.

Joel Berger, lead author of the research and senior scientist at the Wildlife Conservation Society and Colorado State University, said he was “flabbergasted” to see the number of skirmishes between the two ungulate species, with the mountain goats appearing to have the upper hand, or hoof.

Of the observed battles, the goats triumphed 98% of the time, clearly making them the superior mountain brawler.

“They are the badasses of the mountains,” said Berger. “They have these saber-like horns; they are bolder, more aggressive. The goats just have a very high win rate.”

Glacier National Park, USA

A showcase of melting glaciers, alpine meadows, carved valleys, and spectacular lakes. With over 700 miles of trails, Glacier is for adventurous visitors seeking wilderness steeped in human history. There are historic chalets, lodges, and the famous Going-to-the-Sun Road.

NPS web



Thunderbird Mountain, Glacier NP photo: NPS

Africa

Help Protect Mount Kenya



Climbing to 5,199 meters, Mount Kenya is the second tallest mountain in Africa. The scenery surrounding this designated World Heritage Site is breath-taking.

It is pristine wilderness with lakes, tarns, glaciers, dense forest, mineral springs and a selection of rare and endangered species of animals, high altitude adapted plains game and unique montane and alpine vegetation.

Adapted from Mount Kenya Trust (MKT) web site

Successful conservation projects put people at the centre – whether it is rangers on the mountain or communities on the forest boundary. Only with community support can work continue, and MKT has worked hard over the past two decades to build long term, sustainable and trusted partnerships with the communities on Mt Kenya.

This also includes the sustainable use of water, community health and environmental education.

Wildlife: Elephant Corridors, Patrol Teams and Human Wildlife Mitigation

The mountain is well known for its biodiversity, geology and cultural importance and is a designated UNESCO World Heritage Site. The Forest Reserve and National Park have a great diversity of habitats with over 1000 plant species as well as several endemic plants, mammals, reptiles and chameleons. The status of a World Heritage Site confers certain obligations, one of which is to protect endangered or rare species from becoming locally extinct.

The Horseback Patrol Team covers vast distances to monitor the forests and moorlands, with high altitude satellite camps extending their reach. Our Marania Guards were set up 20 years ago as a team of ex-poachers, working closely with the Kenya Wildlife Service for multi-day camping patrols to combat poaching.

Forests

Mount Kenya's forests suffered considerably in the past decades, when large areas were cleared to provide timber and land for rapid population growth and urbanisation. Over the past decade, MKT have successfully planted over 1.5 million trees at several tree planting sites, with new sites opening up each year.

There are 6 major vegetation zones which have been classified according to altitude and floristic composition.

- Montane forest 1,600-2,400 m
- Bamboo thickets 2,400-2,850 m
- *Hagenia-Hypericum* woodland 2,850-3,000 m
- *Erica* bushland/shrubland 3,000-3,300 m
- Alpine zone 3,300-4,350 m
- Nival zone 4,350-5,199 m



Australian Alps rangers are raising money for the Mount Kenya Trust by hiking the 650 km Australian Alps Walking Track, completing the walk in Tharwa (near Canberra) on **International Mountain Day**. Funds raised through the Australian Alps Ranger Relay will go to the purchase of equipment - including boots, hydration packs, torches and tents - for community Rangers in the Mount Kenya region.

These Rangers are working to protect the area from poaching and forest destruction through illegal extraction of timber and charcoal production on the mountain. They face harsh terrain, high altitudes and challenging weather conditions on a daily basis to protect Mount Kenya's ecosystem. Being properly equipped will not only make it easier for them to traverse the Mount Kenya National Park and Forest Reserve, but it will also ensure that they are able to effectively carry out their mandate of protecting the ecosystem.

Link to donation page [Australian Alps Ranger Relay \(thingreenline.org.au\)](http://thingreenline.org.au)

SE Asia—Oceania

So many frogs! Melanesia

Read the whole article by Paul Oliver & Deborah Bower [HERE](#)
From *The Conversation* November 2022



A chocolate treefrog that looks like a Freddo. Burrowing frogs which live in trees. Long-nosed frogs named after Pinocchio. Frogs which go straight from egg to froglet without stopping at tadpole. And large treefrogs which can glide from tree to tree.

All these and many more are found only in Melanesia. This tiny region in the South Pacific is a global hotspot of cultural and biological diversity. And we still don't know the full extent of its extreme biological riches.

Centred on the world's largest tropical island, New Guinea, Melanesia is home to 534 types of frog. As [new research](#) shows, that's 7% of all the world's frog species living on just 0.7% of the world's land. And there are more to come. Almost 40% of these frogs have only been scientifically described in the last two decades.

Melanesia's many islands have fertile soil and often have extraordinarily varied landscapes. New Guinea, for instance, goes from sea level to highlands and mountains almost 5,000 m high, with a few peaks still holding their last ice. Frog populations can easily become isolated, which speeds up the development of new species.

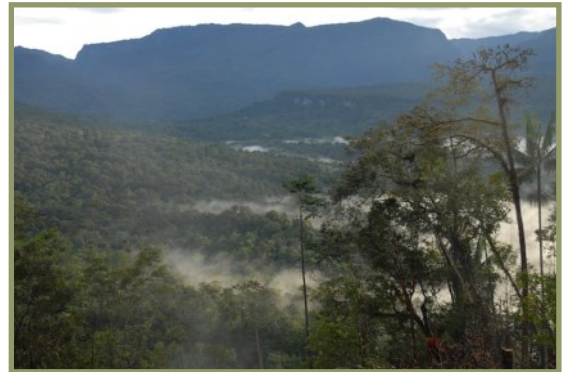
New Guinea, for instance, contains an estimated 7% of the world's species on a fraction of the land area.

Researchers also suspect the arrival of the direct-developing frog family have further supercharged species diversity in Melanesian frogs.

These frogs don't have free-living tadpoles able to be dispersed by floods or along streams. This stay-at-home disposition may increase their chances of becoming isolated and evolving into distinct species.

PNG's eastern biodiversity hotspot around Milne Bay is most at risk. Six species are threatened here by forest loss, while plans for oil palm plantations threaten many frog species.

Documenting Melanesia's wealth of frogs and other species will help conservation efforts. This region is special.



Complex landscapes increases the chance populations will become isolated and ultimately evolve into separate species. Photo: S.Richards



Forest loss around Mt Simpson near Milne Bay threatens at least six recently described frog species. Photo: Fred Kraus

Indonesia's disappearing glaciers

Australian adventurer and conservationist Tim Jarvis has visited the glaciers of Puncak Jaya. He heads a project called 25zero which is charting the disappearing icefields in six equatorial nations: Ecuador, Colombia, Tanzania, Uganda, Kenya and Indonesia.



The tiny little glaciers are up on **Puncak Jaya**, Indonesia's highest mountain at 4884m. But these mini icefields are disappearing, and fast. Here's why this matters:

- It matters because they are geographical treasures in their own right;
- It matters because glaciers in tropical areas like Indonesia provide valuable runoff for farmers and nearby communities. The creeks that flow out of glaciers are perennial, which means they always flow. Until the glacier goes;
- And it matters because these are visible symbols of the effects of climate change. <https://www.25zero.com/>

Australia—Oceania

Time to rescue the Alpine National Park – again!



Adapted from Park Watch (Victorian National Parks Association) *Phil Ingamells*

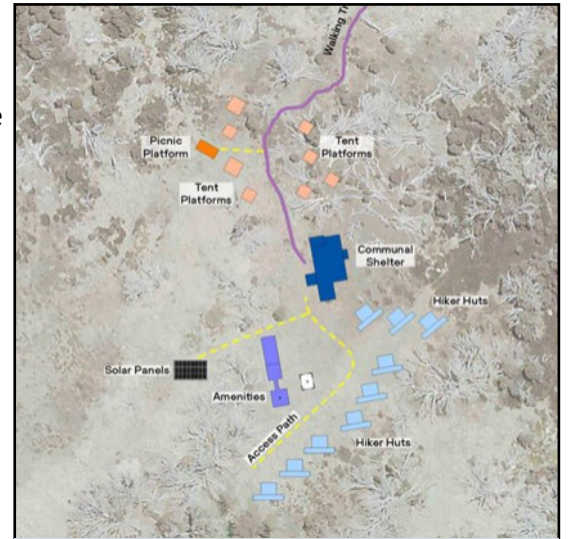
The Alpine National Park is one of Australia’s most important protected areas; it is one of very few also awarded National Heritage status. That listing speaks strongly of the importance of Australia’s alpine parks, as “... one of the most important areas in the southern half of Australia for endemism and species richness”. The listing also notes that the “powerful, aesthetic inspirational qualities of the landscape ... have been recognised over a long period of time”. The heritage listing specifically draws attention to Victoria’s magnificent Mt Feathertop and the sublime moss-bedded Bogong High Plains in this regard, both of which will be significantly impacted by Parks Victoria’s development proposal.

The existing Falls to Hotham Alpine Crossing is an overnight adventure trek usually achieved in a couple of days. It has been popular with minimal-impact bushwalkers for many years. Tourism interests now want to ‘upgrade’ that experience, and have proposed a five-day walk featuring four commercially operated accommodation ‘hubs’ along the way. Existing tracks will be widened, and new tracks constructed. The walk will also be diverted up the steep and treacherous Diamantina Spur Track to take in views from Mt Feathertop.

The alpine region of south-eastern Australia seems large, but it’s actually a tiny percentage of the continent, and protects a vast range of specialised plants and animals highly vulnerable to climate impacts and other threats. Since its formation in 1952, VNPA has been fighting hard for protection of Victoria’s precious high country. That effort has included campaigning to end logging and cattle grazing, avoid unnecessary infrastructure and, most critically, winning legislated conservation protection for the bulk of Victoria’s alpine region in national parks.

Importantly, the park boundary has always carefully excluded both the Falls Creek and Hotham Alpine Resorts. The idea was to constrain future developments to those areas, leaving the national park free from development pressures.

And when the 650 km Australian Alps Walking Track (AAWT) was developed the promise was made that this would not mean the introduction of built accommodation to the remote areas the track traversed. Indeed, the recent Australian Alps Walking Track Strategy 2021-2025, agreed to by the park agencies of Victoria, NSW and the ACT, re-affirms that policy by saying “track users are expected to be self-sufficient” and “not reliant on huts for shelter”. It adds that “walkers often choose to make use of commercial accommodation at resort areas or nearby settlements along the AAWT”.



Walker hubs will involve 80 commercial structures in pristine alpine locations.



New commercial development proposals are popping up in national parks, right across Australia—for more information go to:

www.keepitwild.com.au



Europe

Brown Bears to Grey Wolves: Europe's persecuted carnivores are bouncing back

The Guardian October 2022 by Sophie Ledger

Wildlife has an amazing ability to recover – but only if we keep vital legal protections in place

Among the 50 species followed, all five of Europe's large carnivores – brown bears, grey wolves, Iberian and Eurasian lynxes, and wolverines – showed increases in their average relative abundance over recent decades.

Now, while it might sound counterintuitive when referring to predatory species, the increase and expansion of large carnivores across Europe is actually positive for biodiversity and for the health of our wider ecosystem. Predators hold great influence within ecosystems – regulating other species in the food web from the top down. Through predation and scavenging they also contribute to vital ecosystem processes such as nutrient cycling and carbon-storing processes, and can help control disease and invasive species. What's more, large mammal species (both carnivores and herbivores) significantly influence the structure and composition of natural habitats. These factors all contribute towards boosting the capacity of an ecosystem to withstand changes and diversifying the provisioning services upon which we depend.

For some of these species, such as the Iberian lynx, their recoveries remain highly conservation-dependent, and ongoing work will be vital to ensure that their fragile positive trajectories are maintained to become self-sustainable.

For others, the ability to adapt and tolerate human activity sets them up well for recoveries with minimal interventions, as long as they have the space they need, and any pressures on them are kept in check. For species previously overexploited through hunting or persecution, maintaining regulations and protective measures will be key.



Hohe Tauern National Park, Austria Photo: *peopleinnature*

Through Wild Central Austria

From Alparc News 2022

The Lynx Trail is a long-distance trail with 11 stages through three large internationally recognised protected areas and fringes Austria's first UNESCO World Natural Heritage Site (beech forests).



It goes through Austria's wild, wooded central area, repeatedly recognised by the Alpine Convention as a pilot region for its ecological network.

The lynx is the symbol of the mystery of wilderness. The trail follows ecological stepping-stones created for the lynx and takes you right through its habitat. You can feel its presence. The trail can give walkers a spiritual connection with wilderness and reawakens our need for a primal connection with nature. Hikers on the trail are in the presence of something wonderful, even if they don't see a lynx.



Central Asia & Himalayas

Territories of Life



From Marc Foggin Mountain SG Committee November 2022

Extracts - read Marc Foggin's whole blog [HERE](#) Reflections on Visits to Pakistan

...Well aware of how Pakistan is facing heat waves and floods, yet hopeful that the mountains were spared some of these challenges, we focused on the far north. Here, we had a double purpose — to return to cherished landscapes and communities, and to explore projects that could simultaneously support community development and conservation.

We knew that environmental concerns and local development, though often seen as opposed, could be brought together through the sustainable use of resources such as rangelands and wildlife. We also were convinced there was an urgent need to combine these dimensions, especially in critical landscapes where mountain livelihoods and priority conservation areas overlap.

...Our conversations with local communities and with our friends and colleagues highlighted for us the enormous achievements that have been made over the past few decades in terms of local socioeconomic development, including community-led hunting tourism and building new water channels for irrigated farming, alongside wildlife and forest conservation. Each of these local initiatives have been distinctly enabled by the more inclusive approaches that are made possible by community associations.

Yet in many places, poor road conditions are still limiting access to services, mountain hazards are very real and the risk of climate-induced disasters remains a constant factor in everyday life. Relations between the communities and formal national parks also must be improved in several instances.

What is necessary for these changes is already present: the information, knowledge, insights and experience for bringing these changes was heard from many sources. Many innovative individuals and institutions are clearly committed and are now seeking to strengthen and to build resilience in these fragile regions...

Marc and companion travelled to Upper Chitral, situated along the border with Afghanistan, up the Yarkhun valley to the gateway of Broghil valley as well as to the Upper Hunza, passing through one of the most infamous (dangerous) mountain roads in the world to visit Shimshal village. Photos above & below: Marc Foggin



Territories of life in West and Central Asia & the Caucasus—diversity, present status, and threats

For a comprehensive look at a regional review of ICCAs in West and Central Asia please go to the ICCA Consortium website dedicated to the reports on Territories of life, <https://report.territoriesoflife.org/>

The report has three primary aims: a) to illustrate the diversity and current status of territories and areas governed, managed, and conserved by custodian indigenous peoples and local communities (ICCAs or territories of life) in the West and Central Asian region, b) to outline some of the main threats to and opportunities for territories of life in the region, and c) to offer a starting point for deeper and broader documentation, exploration, analysis, advocacy, and strengthening of territories of life across West and Central Asia.

This is both an interesting and enlightening document well worth reading!

Scree and Talus

Ethical Space from Y2Y October 2022

When it comes to conservation, the environment, and communities we work with, we must take time to understand perspectives other than the ones we may be used to and most comfortable with, to make more ethical decisions and better our relationships with each other and nature.

The [Ethical Space approach](#) introduces an opportunity to deepen understanding of Indigenous Peoples' worldviews and authority, which is integral to Truth and Reconciliation efforts and to effectively supporting Indigenous-led conservation.

Through the Ethical Space series, more than 800 people from all backgrounds have come together to discuss how Indigenous Peoples and non-Indigenous people and organizations can collaborate to create and sustain prosperous communities and healthy landscapes.



Canada's wild **Purcell Mountains**, Jumbo Valley is core territory for Ktunaxa Nation and home to the grizzly bear spirit. Known as Qat'muk, this place is central to the Ktunaxa people's cultural and spiritual identity. Photo: shutterstock

Earth's top 'geoheritage' sites

The International Union of Geological Sciences has marked its 60th anniversary by announcing [a list of 100 "geoheritage" sites that have substantially influenced understanding of Earth's deep history](#). The global list, released in collaboration with UNESCO, is meant to foster conservation and tourism.

The sites include familiar ones, such as the Grand Canyon's "great unconformity," a billion-year gap in the rock record erased by erosion. More exotic examples include limestones in Germany that preserve *Archaeopteryx*, a feathered fossil that links dinosaurs to birds, and the Canary Islands' Taburiente Caldera which gave such volcanic formations their name.



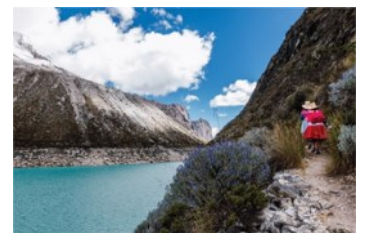
Caldera de Taburiente NP photo: Espana Tourism

Peruvian Andean people have accumulated genetic adaptations to high elevation over thousands of years

From Science News September 2022

Over the course of 50,000 years, humans left Africa and expanded to many environments around the world. These migrations resulted in exposure and adaptation to selective pressures. Caro-Consuegra *et al.* analyzed genetic data from 196 Peruvian individuals from three ecological regions: the Andean highlands, the arid coast, and the Amazon rainforest.

They found that Andean highlanders experienced selection of genes affecting heart function, hypoxia, and other systems affected by living at high altitudes. By contrast, the coastal and rainforest populations both showed population-specific selection in different aspects of the immune system. These findings show the strength of selection toward local adaptation even in populations that are geographically close.



Spanish police guide bear back from city centre to mountains

Residents of Ponferrada were advised to take care after animal spotted by taxi driver in early hours. The Fundación Oso Pardo (Brown Bear Foundation) said the ursine metropolitan incursion was no cause for alarm. Everything suggests this was a bear headed for a nearby mountain to eat acorns (which is what all bears are doing as winter approaches), who got disoriented.

According to the foundation, there are about 330 brown bears spread across the northern Spanish regions of Galicia, Asturias, Cantabria and Castilla y León, and an estimated 70 in the Pyrenees between Spain and France.



Scree and Talus cont.

[Tiny African kingdom has skiing as Europe sweats summer heat](#)

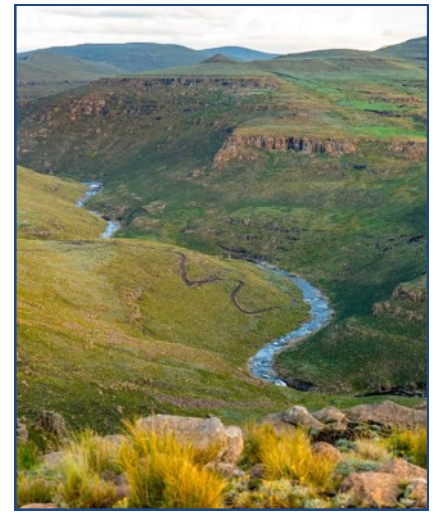
From AP News August 2022 / Afriski

Lesotho has an obscure geographical claim to fame: It's the only country on Earth where every inch of its territory sits more than 1,400 metres above sea level.

That gives Lesotho snow in the southern hemisphere's winters. And while cold winters aren't rare in southern Africa, snow is and ski resorts are even rarer. At an altitude of 3,000 meters, Afriski in Lesotho's **Maluti Mountains** is Africa's only operating ski resort south of the equator.

Although surrounded by South Africa, Lesotho has retained a distinct cultural identity thanks to the protective mountain peaks that ring the kingdom.

Lesotho is also one of Africa's last surviving monarchies.



Maloti Mountains, Lesotho

[Native forest timber harvesting continues to be a contested issue in Australia](#)

From The Conversation November 2022

In November the Supreme Court ruled state-owned logging company VicForests broke the law by failing to protect threatened species. Despite this old growth forests continue to be cleared.

Greater gliders (photo L), Leadbeater's possums and other forest-dwelling animals are facing a greater risk of extinction, and logging is one of the key threats. Without a significant change in protection, their numbers will continue to decline.



[Tiny and very rare vole](#) From EWS

The Bavarian pine vole evolved in the last Ice Age as its population was isolated in the **Rofan mountains**. The very tiny animals live in underground passageway and are herbivores, feeding on roots, grasses and herbs.

The only known population of this species lives in a few hectares of northern Tyrol near the German-Austrian border. Its habitat is a montane, mixed open forest with several wild streams. Although naturally managed at the time of the vole's rediscovery in 2004, much of this wooded area has been cleared for cattle grazing. The remaining forest is unprotected and threatened by logging.

Due to its extremely restricted range and habitat disappearance, the IUCN has designated *Microtus bavaricus* as "Critically Endangered". This makes it one of the only critically endangered mammals in Europe, along with the European mink and European hamster. Unlike these two species however, the Bavarian pine vole is not protected.



Geographically, the Rofan Mountains are actually part of the Brandenberg Alps

[Ongoing campaign to save Sinjajevina](#) Pablo Domínguez Save Sinjajevina Campaign

"This is an evolving crisis in Sinjajevina's territories of life", stresses Milka Chipkorir, Coordinator on defending territories of life of the ICCA Consortium. "Occupying private and common lands in Sinjajevina, where a military testing range was opened in 2019 while people were still on their pastures, severely threatens pastoralist and farming communities and the unique ecosystems they care for through their ways of life."

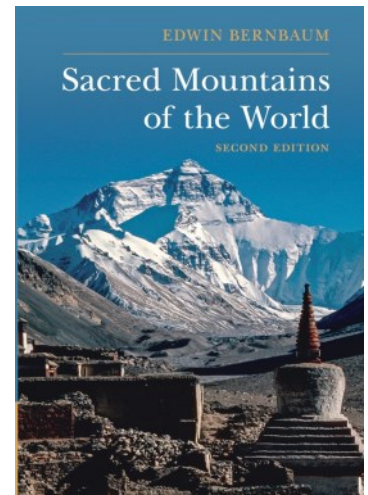
"Sinjajevina is a global cause. We are very concerned about pasturelands becoming inaccessible to those who have managed them sustainably for centuries, creating a unique biodiversity. Securing the rights of local communities to their territories is the best strategy to protect nature and reverse the degradation of ecosystems" adds Sabine Pallas of the International Land Coalition.

Tools, Publications and other Media

Sacred Mountains of the World from author *Edwin Bernbaum*

The 2nd edition published by Cambridge University Press is substantially updated and revised, adding a number of new mountains including new sections on climate change and environmental conservation.

Also work I did with the pilgrimage shrine of Badrinath in the Indian Himalaya, National Parks in the US with The Mountain Institute, and a proposed nomination of World Heritage status for Mount Kailas in Tibet with ICIMOD. I've included new research and experiences on mountains that I hadn't been able to visit before the first edition. More information from IUCN News [HERE](#)



From ICIMOD *Nakul Chettri*

[Protected Areas in the Hindu Kush Himalaya: a regional assessment of the status, distribution, and gaps](#)

ICIMOD undertook a similar pioneering paper in 2008 in the HKH; considering protected area, important bird and biodiversity areas and representation within Ecoregions and biodiversity hotspots.

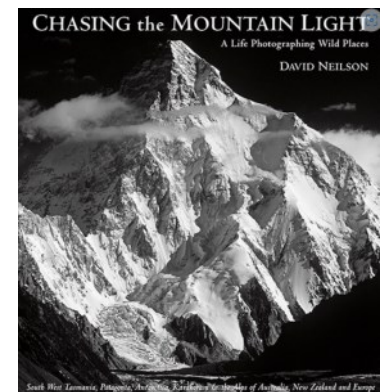
ICIMOD revisited and compared between 2008 and 2021 data with added value in this paper. Again, this is the most comprehensive analytical paper on protected area coverage for the HKH. The transboundary cooperation and connectivity corridors have been emphasized in the paper.

Also from ICIMOD [Nature's contributions to people and the Sustainable Development Goals in Nepal](#)

This is the first attempt from the Himalayan region where we tried to use IPBES Framework to see the link between biodiversity/ecosystems and SDGs through systematic review and rationalise importance of biodiversity/ecosystem services.

From the summits of Australia to some of the remotest peaks in the world **David Neilson** has spent his life exploring and capturing photos of natural beauty.

In his latest book, [Chasing the Mountain Light](#), he's taking a look back at his own life. Childhood adventures in Australia inspired David Neilson to pursue as a career his twin loves of the mountain realm and photography. He has made multiple expeditions to South West Tasmania, Patagonia, and Antarctica and published critically acclaimed photographic books about each of these places; he has also carried his camera into the Karakoram mountains in Pakistan, and the Alps of Australia, New Zealand, and Europe.



From **Fausto O. Sarmiento, Ph.D** Professor of Mountain Science

Call for Submissions for contributors on the topic of "**Perspectives on Mountain Conservation**" to be published as a Special Issue of the journal **LAND**. IUCN's Mountain Specialists could contribute with either their original research, practitioner experience, or academic review of the most compelling issues of mountain conservation.

https://www.mdpi.com/journal/land/special_issues/W96U911L7U

From **Marc Foggin**

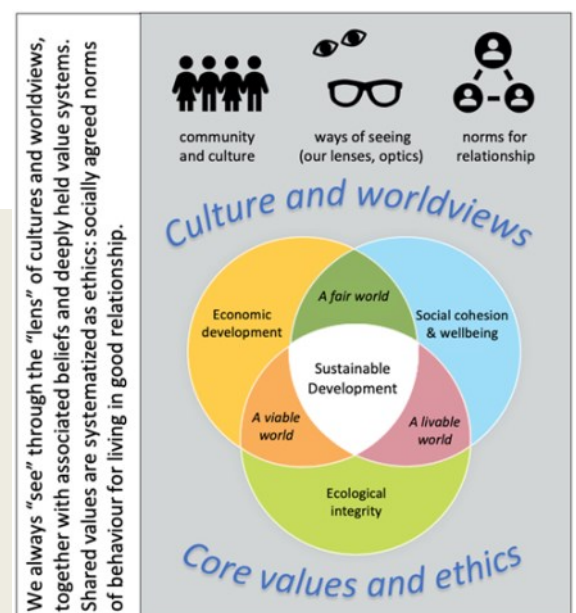
A 'special issue' in the journal **Sustainability**, "**The Roles of Culture and Values in Sustainable Development**" as outlined at

https://www.mdpi.com/journal/sustainability/special_issues/F3X70UZ220,

also at <http://www.marcfoggin.com/roles-of-culture-and-values/>

And

Regional review of ICCAs in West and Central Asia will be published online on the ICCA Consortium website dedicated to the reports on Territories of life, <https://report.territoriesoflife.org/>



Tools, Publications and other Media

[The Last Tourist](#) Film: the world needs travel, but not the kind of tourism that's being done now.

The film, written and directed by Tyson Sadler and produced by Bruce Poon Tip (also the founder of G Adventures), is a feature-length production that dives deeply into the range of issues plaguing tourism today. We need people not to stop traveling, but to change the way they approach it. They should strive to be mindful, respectful, and to do extensive research before visiting to ensure their visit can have a greatest positive impact.

Jane Goodall, who appears throughout the film, agrees. "Responsible tourism can be really beneficial to the animals, to the environment, to the local people, to the government, and to the tourist."

[Wildlife Connect](#)

WWF, the Center for Large Landscape Conservation and the IUCN World Commission on Protected Areas Connectivity Conservation Specialist Group have launched a new initiative to conserve nature's connections: [Wildlife Connect](#).

The initiative aims to secure ecological connectivity, defined by the Convention on Migratory Species as the **"unimpeded movement of species and the flow of natural processes that sustain life on Earth."** From great migrations of wildlife across landscapes and continents to river flows from mountain to sea, nature's circulatory system of connections is essential for a healthy planet. Yet they are rapidly disappearing, destabilizing ecosystems and the essential benefits they provide for us all.

While the ambition of the initiative is global, Wildlife Connect will coalesce around four demonstration landscapes, one each in Africa, Asia, Europe (Carpathians), and Latin America.

From *Martin Hawes* Wilderness Specialist Group (WSG)

The IUCN's World Commission on Protected Areas (WCPA) has just published a Technical Note '**Considerations of Remoteness to the Design and Protection of Wilderness Areas**'.

Our Technical Note discusses ways in which remoteness contributes to the values of wilderness areas. It also discusses ways of measuring remoteness (particularly in the context of wilderness mapping) and offers guidelines for taking remoteness into account in the identification, protection, management and restoration of wilderness areas.

It can be regarded as supplementary to WSG's *Management Guidelines for IUCN Category 1b Protected Areas*, which was published in 2016. **Considerations of Remoteness to the Design and Protection of Wilderness Areas** can be downloaded here [Technical Note 10](#)

Australian Alps national parks

Anyone who lives, works or just loves the Australian Alps need to know about the **Australian Alps national parks Co-operative Management Program**.

And the Alps Program is? It's a simple, great idea -to ignore the state boundaries and get everyone –agency staff, community, volunteers, researchers and visitors –working together to look after the Alps. This all started almost 40 years ago when the states and territories that straddle the mountains signed a memorandum of understanding with the Commonwealth government and set the Program in place. Since then, the Program's been flat out supporting people who protect and care for our Alps. Read more in [E-Blast #85 – November 2022](#)

[IUCN WCPA Technical Note 8: Role of Protected Areas in Climate Change Mitigation and Biodiversity Conservation](#)

[IUCN WCPA Technical Note No. 9 The Global Biodiversity Framework \(GBF\): Target 3 and the term "Sustainable Development Areas": A technical brief](#)

New MRD Talks From BioOne September 2022

In a recent BioOne Partner Forum Sarah-Lan Mathez-Stiefel, Associate Editor for *Mountain Research and Development*, told us about the journal's new project – *MRD Talks*. This exciting initiative has now launched, and the inaugural session can be viewed here:

[Climate change adaptation in mountains: How to close the gap between policies and local realities? - YouTube](#)

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!



In this edition is a quick sample of what the Program's been up to –a dance down memory lane for many.



Important links

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

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

Some events of interest

[Events - MRI - Mountain Research Initiative](#)

Mountain Partnerships Events [Here](#)

WCPA Mountain Specialist Group Committee		
Executive Committee	Name	Email
Chair	Peter Jacobs	Buffalo_springs@bigpond.com
	Patrizia Rossi	patriziarossi.rossi@gmail.com
	Mike Tollefson	miketollefson1@gmail.com
	Fausto Sarmiento	fsarmien@uga.edu
Editor Mountain Update	Gillian Anderson	peopleinnature@bigpond.com
WCPA Regional Representatives	Name	Email
Southern Africa (Eastern & Southern)	Clinton Carbutt	Clinton.Carbutt@kznwildlife.com
West and Central Africa	Sonigitu Ekpe	sonigitu.ekpe@graduateinstitute.ch
North Africa, West Asia & Middle East	Dawud M.H. Al-Eisawi	aleisawi.d@gmail.com
East Asia	Chaozhi Zhang	zhchzhi@mail.sysu.edu.cn
North Eurasia (Central Asia)	Marc Foggin	marc.foggin@gmail.com
Oceania	Shane Orchard	orchard.dse@gmail.com
South America	Matias Ayarragaray	matiasayarra@gmail.com
South Asia (Pakistan)	Ashiq Ahmad Khan	ashiqahmad@gmail.com
South Asia	Pradeep Mehta	pmehtanainital@gmail.com
South Asia	Ruchi Badola	ruchi@wii.gov.in
Europe (Austria)	Michael Jungmeier	jungmeier@e-c-o.at
Europe (eastern)	Oğuz Kurdoğlu	oguzkurdoglu@gmail.com
North America	Erik Beever	ebeever10@gmail.com
Central America—Caribbean	Rolando Ramirez	rolandorami2010@gmail.com
Young Professional Group	Shailyn Drukis	shailyn.drukis@gmail.com

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: [WCPA Get Involved](#)

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

I look forward to hearing from you soon!