



2023
VOL 17 ISSUE 1

current conservation

What is conservation? [5](#) | Whose grassland is it anyway? [9](#) | Labour perspectives on frontline conservation work [19](#) | For "Anyone who has an eye (and a brain)" [30](#)



Special issue
Conservation
social science

Current Conservation carries the latest in research news from natural and social science facets of conservation, such as conservation biology, environmental history, anthropology, sociology, ecological economics and landscape ecology.

For more details, visit our website at www.currentconservation.org

This magazine is produced with support from:



ISSN 0974-0953

COPYRIGHTS

All content in Current Conservation is, unless otherwise noted, licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)
You are free to copy, distribute and transmit the work, and to remix or adapt the work under the following conditions:

- You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).
- You may not use the material for commercial purposes.
- For any other reuse, adaptation or distribution, you must share your version under the same license as the original, while making clear to others the license terms of this work.

Any of the above conditions can be waived if you get permission from the copyright holder.
Nothing in this license impairs or restricts the author's moral rights.

The full text of this license is available at:
<https://creativecommons.org/licenses/by-nc-sa/4.0/>



Contents



introduction

3 Introduction

Chris Sandbrook & Madhuri Ramesh

perspective

5 What is conservation?

Rogelio Luque-Lora

perspective

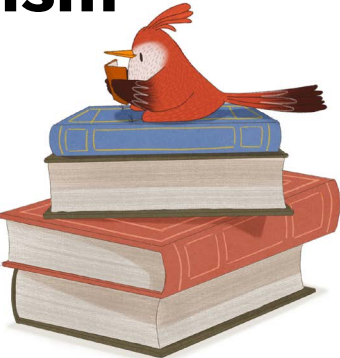
9 Whose grassland is it anyway?

Ramya Ravi

field notes

14 Identity and access in conservation and (eco)tourism

Revati Pandya



feature

19 Labour perspectives on frontline conservation work

Trishant Simlai, Anwesha Dutta et al.

interview

24 An interview with Bill Adams

Hari Sridhar

column

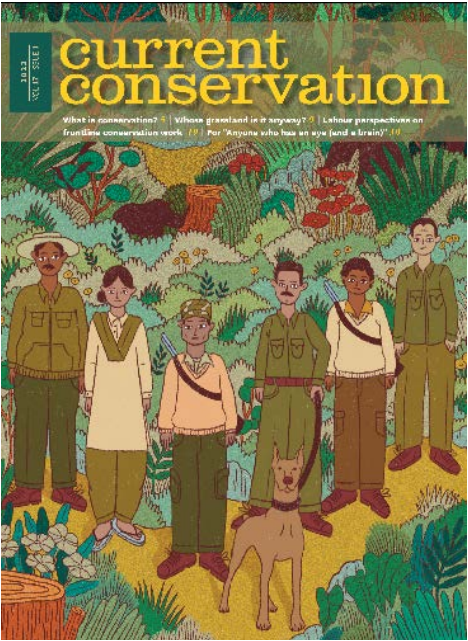
30 For “Anyone who has an eye (and a brain)”

Madhuri Ramesh

perspective

34 The social implications of the 30x30 initiative

Diana Raquel Vela Almeida & Teklehaymanot Weldemich



Cover art **Pearl D'Souza**

Conservation is considered a ‘wicked problem’ due to its complex and interconnected nature, conflicting interests and values, uncertainties, long-term impacts, resource limitations and scale dependency. Addressing it requires interdisciplinary collaboration, adaptive approaches, stakeholder engagement, and an acknowledgment of the inherent challenges and trade-offs involved. Naturally, the field has evolved significantly over the years, calling for innovative approaches that move beyond traditional ecological frameworks. Conservation social science has since emerged as a vital discipline, helping us understand and address the complex web of social, cultural, economic, and political factors that shape conservation practice and policy.

Hari Sridhar and I first conceptualised a political ecology-themed issue at the end of 2020. There have been several detours and delays along the way, but I am ecstatic to finally be writing this note, even if the contents are a tad different from what we had imagined. Regardless, this special edition is a dream come true because it was curated by two people – Madhuri Ramesh and Chris Sandbrook – who have played a key role in shaping the way I think about conservation. I’m even more pleased that it includes Hari’s insightful interview with Bill Adams, another role model and doyen of political ecology. From answering the seemingly simple question “What is conservation?” to uncovering the human dimensions of conservation, this issue is an eye-opener. I hope you enjoy reading it.

– **Devathi Parashuram**

Editor

Kartik Shanker

Executive Editor

Devathi Parashuram

**Managing Editor
(Art & Design)**

Shivangi Pant

**Managing
Editor**

Greta Ann Sam

Associate Editors

Caitlin Kight

Eduardo Gallo-Cajiao

Kanchi Kohli

Marianne Manuel

Payal Bal

Tarsh Thekaekara

Handling Editors

Daniel Read

Geri Unger

Jonathan Barzdo

Copy Editor

Devathi Parashuram

Chief RiT Editor

Krishnapriya Tamma

RiT Editors

Abhishek Harihar

Archana Anand

Geetha Ramaswami

Madhuri Ramesh

Raza Kazmi

Tammy Cloutier

Advisory Board

Ananda Banerjee

Annu Jalais

Bram Büscher

Brendan Godley

Chris Sandbrook

Eben Goodale

Ferenc Jordan

Fred Nelson

Gladys Kalema-Zikusoka

Josh Donlan

Kalyan Varma

Simon Pooley

CC Kids Editors

Caitlin Kight

Payal Bal

Introduction

Authors **Chris Sandbrook & Madhuri Ramesh** | *Illustrator* **Karunya Baskar**

It is now widely recognised that conservation is as much about people as it is about the rest of life on Earth. Writing earlier this year, Inger Andersen, Executive Secretary of the UN Environment Program, said: “The conservation of biological diversity is, at heart, a social issue, cutting across the political, economic, social, and cultural spheres of human life.” If conservation is a social issue, it follows that the social sciences can play a valuable role in helping us understand the dynamics of how humans interact with, and seek to conserve, non-human life. Indeed, the last few decades have seen the emergence and gradual coalescence of the new field of ‘conservation social science’. The quote from Andersen above is taken from the foreword to a new book by that name.

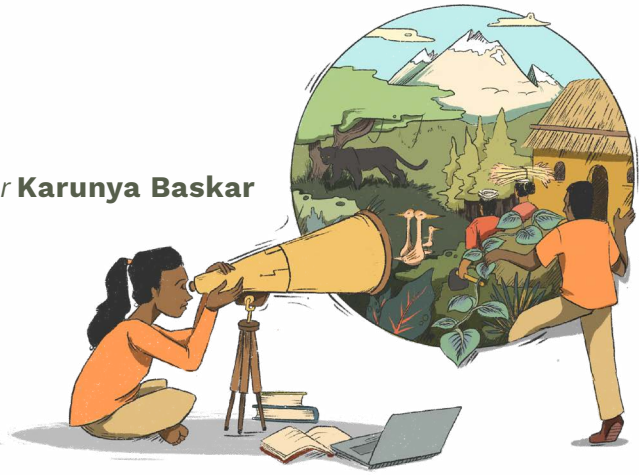
Bennet and colleagues, writing in 2017, identified multiple different ways in which the social sciences, ranging from economics to anthropology, can add value to conservation: for example, by helping us to diagnose the aspects that create challenges as well as contribute to successes, stimulating periodic reflection on how and why conservation occurs, assisting in the planning and management of current programmes and so on. In other words, the social sciences can provide a multidimensional understanding of conservation by serving different functions. Through these various contributions, social science can be ‘for’ conservation in support of its normative aims, but also ‘on’ conservation, helping to understand conservation practice (and practitioners) as a social phenomenon.

Until the end of the 20th century, social scientists working on and/or for conservation were few and far between. However, as the recognition of the need for conservation social science scholarship has grown, so too have the number of researchers taking up the challenge. Various specialist degree programmes have sprung up, and conservation organisations are increasingly looking to

hire trained social scientists. As a result, there has been a recent wave of early career social science professionals studying conservation issues and often working to implement conservation practice.

Bringing together these two trends, this issue of *Current Conservation* seeks to highlight the important role of scholarship on the human dimensions of conservation, with a particular emphasis on showcasing the work of early career authors who are conducting critical social science research on conservation. The articles in the issue represent a wide range of different approaches to studying the social tensions and relations that influence conservation discourse and practice. However, they are united in their willingness to ask difficult questions and to engage with the political dimensions of conservation, rather than adopting the ‘apolitical’ stance usually found in scientific studies of biodiversity loss, protected area effectiveness and so on.

Opening the issue, Rogelio Luque Lora makes a fresh attempt to answer a fundamental question: *What is conservation?* His approach seeks to identify what distinguishes conservation from related concerns such as the welfare of individual animals, and how conservation is concerned with maintaining life forms over particular time scales. On the other hand, Diana Vela-Almeida and Teklehaymanot Weldemichel remind us of the well-established reservations



about protectionism even as we mull over the newly agreed Convention on Biological Diversity 30x30 target. More fine-grained accounts are presented by the rest of our contributors: Revati Pandya describes why local women engage with tourism projects around the Corbett Tiger Reserve, which is one of the most well-known protected areas in India. While conservationists may believe (eco)tourism is all about saving the tiger, local women confess that their personal reasons vary from finding relief from wage labour to retaining connections to ancestral land and a desire to sidestep patriarchy. Ramya Ravi continues the theme of diverse perspectives within communities in her article on the *Maldhari* voices in the Banni—in reality they are not one but 21 pastoral communities! Different governance regimes operate simultaneously in this landscape and Ramya shares an overview of how the different sections of *Maldharis* negotiate for access and rights to resources. Next, Trishant Simlai and colleagues direct our attention to the difference between popular portrayals of forest guards as singular heroes or villains versus the social complexity and inequity such frontline workers themselves contend with as they labour to implement conservation policies.

Together these articles showcase how the social sciences deepen our conceptual and empirical understanding

Further Reading

Bennett, N. J., R. Roth, S. C. Klain., K. Chan, P. Christie, D. A. Clark, G. Cullman et al. 2017. Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological conservation* 205: 93–108. doi.org/10.1016/j.biocon.2016.10.006

Miller, D. C., I. R. Scales and M. B. Mascia. 2023. *Conservation social science: Understanding people, conserving biodiversity*. 1st edition. West Sussex, UK: Wiley.

Madhuri Ramesh teaches in the School of Development, Azim Premji University. Her research focuses on the politics of biodiversity conservation and she is interested in inclusive forms of resource management.

of what it means to engage in conservation. They remind us that as much as we speak about biological diversity, we need to remain conscious of social diversity along with all the richness and tensions that brings to the table.

Finally, and in contrast to the early career contributors, we hear the perspectives of Bill Adams, a founding father of political ecology research on conservation, captured in an interview by Hari Sridhar. As Bill observes, “The world remains a strange and complex place—wonderful, mismanaged, and unjust.[...]. You need to go well beyond ecological science, to learn how people think and how societies and institutions work, if you want to understand how nature is exploited, why conservation is needed, and why it succeeds and fails.” He goes on to build a thoughtful case for why we need to do political ecology in particular, although he admits, “[it is] a bit like Banksy’s art—we know what it is when we see it, but we don’t know who is doing it.”

We hope this special issue of *Current Conservation* gives readers a glimpse of some of the fresh voices in this field and their attempt to go beyond simplistic narratives of conservation.

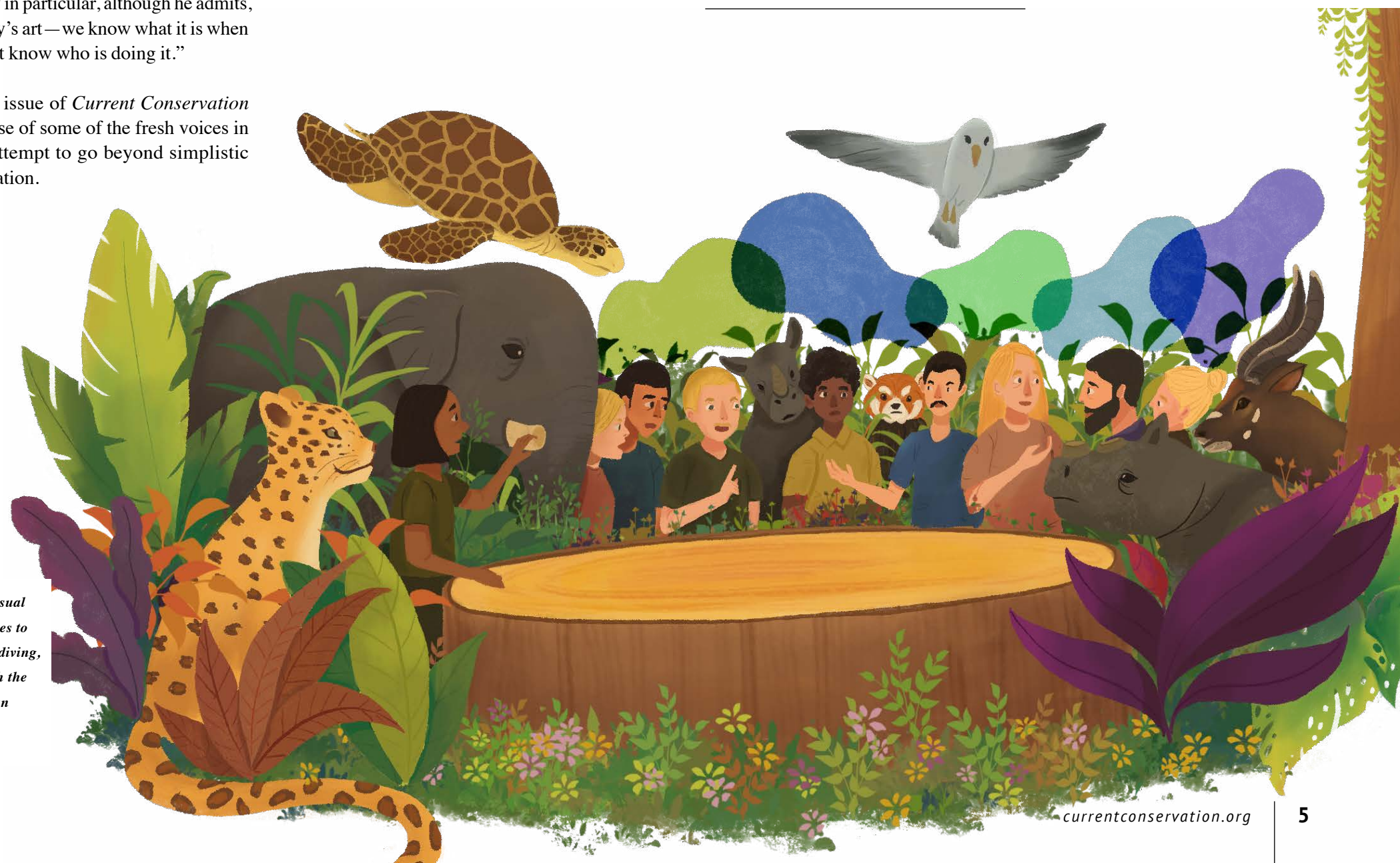
Chris Sandbrook is Professor of Conservation and Society and Director of the MPhil in Conservation Leadership at the University of Cambridge.

Karunya Baskar is a visual designer and artist who loves to travel. Whether it is scuba diving, surfing or trekking through the hills, she is always up for an outdoor adventure.

What is conservation?

The struggle over boundaries and definitions

Author **Rogelio Luque-Lora** | Illustrator **Rutuja Pardeshi**



Why conserve? How to conserve?

The last decade saw heated disputes about the proper goals of conservation. Many conservationists have placed increasing emphasis on the value of nature for human beings, framing the benefits provided by nature in terms of ecosystem services and natural capital. For others, this amounts to a betrayal of nature's 'intrinsic value': its value for itself, regardless of its contributions to (or detractions from) human interests.

Other controversies have focused on how conservationists should relate to changing ecological conditions, particularly changes brought about by human activities. Should conservation try to arrest anthropogenic change, by trying to keep ecosystems in as close a state as possible to a supposed pre-human baseline? Or should they embrace these changes and promote whatever resulting values they produce, such as novel ecosystems and the potential to adapt to climate change?

Even more recently, advocates of so-called 'compassionate conservation' have helped foreground the tension between conserving ecological wholes (such as species and ecosystems) and protecting the wellbeing of individual animals. The core controversy here relates to the suffering and death brought to individual animals by certain conservation interventions, such as predator control and the eradication of non-native species.

All these debates have been underlain by the more basic question of what conservation is, and indeed who can be considered a conservationist. But so far, definitions of conservation have either been exclusively narrow or excessively broad.

Historically, narrow understandings of conservation as proper hunting ethics (in the times of the British Empire) or the preservation of biological entities and processes (in recent times) have served to exclude those who do not view the living world and their relations with it on those terms. On the other hand, attempts to broaden our understanding of what conservation is in the interest of inclusivity have sometimes cast the net

too wide, and thereby not allowed us to distinguish conservation from other ways of relating to the natural world, such as human development and the protection of animal wellbeing.

What is needed is a conceptualisation that is sufficiently wide to accommodate diverse forms of conservation, but also sufficiently contained to delimit conservation from altogether different ways of relating to the living world. What follows is my attempt to build such a conceptualisation.

Conservation in extended human time

Even if many conservationists disagree about *why* the living world is valuable (whether it is valuable owing to its contributions to human wellbeing, or valuable independently of those contributions), all conservationists agree that something of value exists in the living world. In other words, all conservationists agree that the living world *is* valuable, despite their disagreements over what this value consists of. This is the first step in building the definition I propose.

The second step has to do with the kind of harm to valuable things that most concerns conservationists. Conservationists have frequently disagreed about *which* harms are most important. While many have blamed the activities that directly harm wildlife, such as agricultural expansion and unsustainable hunting, political ecologists have typically pointed their fingers at the underlying political and economic structures that support those harms.

But what distinguishes conservationists from other groups is their overarching concern with irrecoverable loss rather than with temporary harm. As I view it, conservation is centrally preoccupied with the avoidance of extinction and other forms of permanent damage. This is why I think conservation is about promoting the *continued existence* of valuable things, rather than just their temporary states.

The third and last step in my proposed definition seeks to identify the right timescale for conserving valuable

things. Attempts to conserve individual animals and plants (except extraordinarily long-lived ones) is generally futile from the human point of view: individual beings are born and destroyed too quickly for it to make sense to conserve them. But ecological wholes, such as species and ecosystems, can far outlive human generations, and so their conservation—from the human standpoint—is feasible, at least in principle. As Ishmael, the narrator of Herman Melville's *Moby-Dick*, concludes his assessment of the sustainability of 19th century whaling practices: 'We account the whale immortal in his species, however perishable in his individuality.'

On the other end of the spectrum, though, even the conservation of species and ecosystems is futile. On geological timescales, ecological wholes also come and go on a continuous basis. On these scales of time, even their conservation is finally futile. This is why I propose that the right timescale for conservation is 'extended human time': stretches of time longer than a single human generation, but short enough that humans with whom we can identify still exist (humans who might be able to understand, perhaps even share, some of our ethical motivations and aspired relations with the living world). It is at this temporal scale that humans are able to find meaning in their endeavours, and it is at this scale that conservation is intelligible.

Taken together, these three steps allow me to propose that conservation is the promotion of the continued existence of valuable things in the living world in extended human time.

Conservation, ecological change, and the wellbeing of nonhuman beings

Viewing conservation as unfolding in extended human time helps shed light on the tensions between conserving ecological wholes, on the one hand, and caring about the welfare of individual plants and animals, on the other. The fact that, as Ishmael perceived, species can outlive the individuals that compose them, is why I think that conservation has mostly focused on ensuring the continued existence of ecological wholes rather than individual beings. In and of itself, concern with the welfare of individual animals is not, I think, conservation.

By disentangling conservation goals from the protection of animal welfare, we can gain a better understanding of the relationship between the two.

At times this relationship is positive. In my experience, both in the field (mostly in Chile) and in the office, many conservationists care sincerely about the goods and evils experienced by sentient beings. On many occasions, protecting individual animals can advance conservation goals: for instance, protecting individual whales generally benefits whale species as a whole. In turn, protecting habitats and ecosystems often benefits the individual plants and animals who make those places their homes.

At other times, harming or culling individual beings is necessary to ensure the continued survival of certain species (think of the eradication of rodents on oceanic islands to save the seabirds on whose chicks the rodents predate). In this context, viewing the welfare of those beings as conceptually separate from conservation can also help clarify our aims. Where this harm is truly inevitable, and where it is gauged that saving a species justifies the harm involved, conservationists should strive to



inflict that harm with a heavy heart, aware of the tragic choices they face. At times, they may even decide to forsake conservation goals in the interest of not causing widespread damage to individual animals and plants.

Seeing conservation as primarily concerned with promoting the continued existence of valuable things can also clarify the relationship between conservation and the adaptation to, or even embrace of, ecological change. In many cases, embracing change is a good strategy to boost the chances of certain ecological entities to survive broader changes, such as those to do with land use and climate. Assisted migration is a good example of this: rather than trying to keep everything as it is, helping species relocate to more favourable habitats can help avoid their extinction.

Another way of seeing the embrace of ecological change as enhancing the continued existence of valuable things is to focus less on ecological *entities* (such as species and ecosystems) and more on ecological *processes* (such as evolution and nutrient cycling). Embracing some forms of ecological change can help promote the continued existence of these valuable ecological processes. For example, changing biological and climatic conditions create new evolutionary pressures that can—eventually—result in the appearance of new species.

There are important limitations to my proposed definition of conservation. For one thing, I have elaborated it by drawing largely from Western debates about what matters in conservation, and by using concepts, such as ‘the living world’ and ‘human time’, that are grounded in a Western view of the world. In this sense, my definition can rightly be challenged by those who do not view conservation and the living world on the same terms as me.

For this reason, the definition I have proposed can never pretend—and *should* never pretend—to be universal. Rather, the main political motivation behind my retracing the boundaries of conservation has been to bring at once openness and clarity to the question of what conservation is and what it is not.

This is a bold and ambitious task, but I hope that by proposing that conservation is chiefly concerned with avoiding permanent loss rather than reversible damage, and by arguing that conservation unfolds in timescales longer than a single human generation, but shorter than geological time, my proposed new definition can help shed light on what conservation is and what it is for.

Further Reading

Luque-Lora, R. 2023. What conservation is: a contemporary inquiry. *Conservation and society* 21(1): 73–82.

Sandbrook, C. 2015. *What is conservation?* Oryx 49(4): 565–566.

Rogelio Luque-Lora has recently completed his PhD in Geography at the University of Cambridge. His work focuses on environmental values: conceptions of how and why the living world matters.

Rutuja Pardeshi is an illustrator, visual development artist, and a former engineering graduate. She works as an illustrator at Parchai Studio and as a freelance artist.



perspective

Whose grassland is it anyway?

Author **Ramya Ravi** | Illustrator **Aditi Rajan**

“A rainbow has seven colors, no one color is the same. A hand has five fingers, they’re all different. That’s the way of things. Banni is no different. No one monsoon is the same, no one year is the same, not every Maldhari is the same. Even the landscape changes all the time, it’s dynamic. That’s its way, Banni’s way. Our way.”
— a Maldhari elder

I have spent a large part of the last decade studying Banni grassland for my doctoral work. It is a landscape

that I have come to love for its veiled beauty, dynamism, and complexity. An arid grassland system, Banni is an important wildlife habitat spread across 3857 sq. kilometres in the Kutch district of Gujarat, India. The grassland has a unique community of 40 species of salt and drought tolerant grasses. The landscape supports an array of Palearctic and Central Asian flyway birds—upto 273 resident and migratory bird species—serving as important foraging, roosting,



nesting, staging and wintering grounds. Meanwhile, the grassland is among the few in the country where all four species of wild canids found in India co-occur. Banni is, therefore, ecologically quite significant.

The grassland is also home to centuries-old traditional pastoralist communities, the *Maldharis* (*Maal* = livestock, *Dhari* = owners). Known for their animal husbandry, the *Maldharis* have specially bred the Banni buffalo and Kankrej cattle that are drought tolerant, and are highly productive despite climatic vagaries. The *Maldharis'* lives, identity, and economy is intricately tied to these vagaries. A good rain can boost the milk economy of these communities, and an above normal rainfall can lead to floods, displacing people and animals alike. A single drought can affect income for the year, whereas a prolonged drought can force members of this now semi-sedentarised pastoralist community to sell their livestock, migrate, and have lasting effects on the wellbeing of poorer pastoralists. These challenges, however, are not unknown to pastoralist cultures that are built around scarcity. A major reason why pastoralism has persisted for as many centuries, lies in the ability of pastoralists to adapt and sustain diverse environmental and social challenges. The *Maldharis* are no exception to this. Nonetheless, *Maldharis* are quite vulnerable—as are the grasslands they depend on.

“Banni is now changing, has changed. It changed when things around us changed. The land changed. The people changed. Our traditions have also changed. As pastoralists, we’ve changed. Is change negative or positive? We’ll know, probably. It will depend on how close or far we are from that point.”

Despite its resilience, the *Maldhari* way and the grassland is showing signs of wear and tear. Colonial regime, market forces, and privatisation, along with extreme climatic conditions (that are typical to this arid system) intermingled with climate change, have heightened a sense of vulnerability in this deeply entwined human and natural system.

How exactly, you may wonder that the ghost of colonialism haunts

conservation management approaches of grasslands, and by extension, its people—the pastoralists.

Let's rewind back to circa 1860 when the Indian Forest Department was created, to address concerns for the denuded state of Indian forests from overharvesting of timber, and leading to the introduction of scientific forest management across the British Raj. With revenue generation as the principal goal of this department, forest resources began to be ‘conserved and protected’. Forests provided timber, and timber was a valuable resource that drove colonial expansion. Meanwhile, grasslands, devoid of timber, were categorised as ‘wastelands’.



Common to forests and grasslands, however, was the exclusion and criminalisation of forest-dependent communities and pastoralists from these landscapes. This categorisation was also a reflection of the colonial viewpoint of pastoralism as a pre-agricultural, primitive way of life that needed to be sedentarised and integrated with agriculture.

Colonial records describe the province of Kutch as a ‘bare country’ with no trees. The rulers of Kutch, who were completely aligned with colonial power, remedied this situation. They created forests with drought-resistant trees, existing forests were heavily guarded, and grasslands, locally called *rakhals*, were closed off to prevent grazing, taxes were imposed to regulate grazing and livestock impounded. Partly used as game reserves, *rakhals* were used as grass farms that fed the royal stables, and were sites of extensive reforestation policies.

The new policies saw a permanent change in pastoralists' relationship with natural resources. Villagers and

pastoralists resented these new policies, and several Indian papers of the time were reported to have criticised the Maharao for prioritising his ‘passion for wildlife over people’s needs’. Over time, these policies were normalised, but this new normal also presented new problems. The protection offered to the animals within these ‘artificially preserved’ spaces led to complaints and accusations from people and local leaders that ‘panthers, wild pigs, and deer’ were steadily working their way through cattle and crops. Gaming rules were

relaxed, meaning that *rakhals* were also thrown open to wild grazing, with the effect that indiscriminate hunting led to an alarming decrease in wildlife. This in turn led to the reinstatement of previous regulations—only tighter.

This must sound familiar, right?

After the accession of the princely rule to the Republic of India in 1948, forest management policies from the colonial era continued. Banni was primed for the same afforestation policies that were broadly considered successful in other parts of Kutch. Under independent India, pastoral communities not only had to contend with a fully ingrained wasteland discourse and related policies that barely accounted for pastoralist challenges and realities, but they also had to contend with the loss of traditional rights.

As a wasteland, the administration of Banni was under the Gujarat Revenue Department. But after being declared a Protected Area in 1955, the administration also came to be with the Gujarat Forest Department. This puzzling arrangement continues to this day. Banni is managed by both departments, which makes it a grassland, a wasteland and a protected area, all at once! And, because these are legitimate categories in government records, the battle for community rights under Section 3(1)(i) of the Indian Forest Rights Act (2006) remains unresolved to this day.

Despite the resilience of this centuries-old pastoralist system, the increasing fear of eviction has already strained the traditional patterns of resource sharing. Moreover, lingering uncertainty over the future has pushed several villages inside this grassland to privatise this commons land, raising tensions among the



Maldharis. When the *Maldhari* elder remarked that not all fingers on a hand were the same size, he was referring to the embedded diversity of the landscape. Banni is made up of 19 panchayats and 54 villages with 21 different pastoral communities that are grouped under this one *Maldhari* identity. These communities are diverse in their social classes, family sizes, livestock holdings, a range of income sources, and a host of responsibilities that make up the tapestry of each household. From uneven development to unequal access to government relief measures, these 21 different communities have to contend with a diverse set of

circumstances. The wear and tear is beginning to show in how the commons land is viewed in Banni now.

“Under the forest law, boundaries were drawn where none previously existed. We have no rights, we are strangers in our own land. Banni is ours. We have been here for centuries. Why should an outsider—like these private companies—occupy our land? Why should the Forest Department restrict us? If we don’t privatise it, these people will. Otherwise, we will lose it all.”

A sentiment that is widely shared by several old and

young *Maldharis*. With the question of rights, or lack thereof, looming large over the landscape, there has been an alarming rise in privatisation of the landscape. Redirection of commons to rainfed agricultural parcels or tourist resorts (that service the annual winter festival—the White Rann festival) has affected the traditional ties that bind this heterogeneous community. This is evident from the counter claims of three panchayats that would prefer revenue rights, rejecting claims for commons.

But alas, Banni is a protected area, and non-forest activity is not permitted. So, a bid was made in 2018 to halt privatisation or ‘encroachment of forest land’ by filing a case against the encroachers with the National Green Tribunal in 2018—a Banni vs. Banni situation. The following year, the Tribunal ruled against the encroachments and ordered the immediate removal of all non-forest activity. While there was celebration that Banni is finally being recognised as a forest land and the *Maldharis* well on their way to get their rights, ugly scenes of conflict between the Forest Department and people were unfolding across Banni over removal of the encroachments, and revival of enclosures that would keep people out. As Karl Marx once said, “History repeats itself, first as tragedy, second as farce.”

This unending sequence of events lead me to ask the question: whose grassland is this anyway? *Maldharis*? Revenue Department’s? Forest Department’s? Or the wildlife?

Tellingly, conservation concerns have taken a backseat. If conservation needs to be addressed, then the locals need their rights to facilitate co-existence. But in continuing to alienate them, Banni has become another site where conservation goals remain elusive. Is there hope for the grassland, this unique yet frustratingly complex system that several of us love? Perhaps. Instead of making the sweeping generalisation that local people are always the best custodians of a landscape, I would say that they remain the best bet in the absence of more successful, cohesive and inclusive approaches.

And it’s about time we trashed that wasteland discourse!

Ramya Ravi is a doctoral scholar at ATREE.

*She has studied the transformation of Banni grasslands due to the invasion of *Prosopis juliflora* at the complex intersection between invasive species, grasslands, pastoralists, livelihoods, and history. Her broad interests lie in applying interdisciplinary frameworks to better understand social ecological systems.*

Aditi Rajan is a conservation biologist by training with a keen focus on making science accessible and an interest in creative visualisation, she is the Head of Communications for Wildlife Conservation Society-India.



Snapshots from the field:

Identity and access in conservation and (eco)tourism

Author **Revati Pandya** | Illustrator **Sriya Singh**



Identity and access are multifaceted and tied to questions of equity and justice. This piece is set in the context of wildlife conservation and (eco)tourism at Corbett Tiger Reserve in Uttarakhand, India. Nature guides and labour for hotels are two common forms of (eco)tourism work for villagers. I offer two vignettes or snapshots from the field that capture the lived experiences of such villagers. They speak of the impacts of (eco)tourism, and more specifically the different people's engagement with (eco)tourism in the context of their everyday lives that confront rural realities, identities, and conservation. Albeit snapshots, these instances are playing out in the same context and offer insights on how differential engagement or villagers' relationship with (eco)tourism is, particularly when their identities differ.

The elephant in the village and forest

It's dark inside the room and I hear my name being called out through the window. I open my eyes, disoriented but rapidly gaining awareness that there must be an important reason for my being woken up at what feels like the middle of the night. I'm about to open the door when I hear "elephant, elephant!"

I run out of the room and follow family members of the house where I am living in Kumer* village. We walk carefully and swiftly through the early morning fog, on a narrow path that connects their home to other homes and farms in the village. We all feel a combination of excitement and fear at the likelihood of spotting an elephant close by. I am told that we need to make sure that the *haathi* (elephant) doesn't go further inside the village—it could damage more crops, property, or life. The key is to make loud sounds in the hope that the elephant can be rerouted to the forest. Not having seen any signs of the elephant in the village, we assume it has returned to the forest.

**We return home and survey the damage to the paddy crop.
This is a seasonal phenomenon: elephants love the paddy flowers,**

*A pseudonym is used for the village name.

and annually raid the paddy fields. It is a constant challenge for the villagers to protect their crops from elephants, and other animals including nilgai, and sometimes boars.

This village, where I was living, lies close to the Corbett Tiger Reserve (CTR) located in the northern state of Uttarakhand. In 1973, Corbett Tiger Reserve became one of the first areas designated to be set aside for tiger protection. Since then, villages around the protected area have been significantly influenced and impacted by the tiger reserve. One of the major influencing factors has been (eco) tourism. Ecotourism is promoted as a means for educating tourists about nature and wildlife, providing employment to local people, and contributing to the protection of wildlife or forests. Ecotourism is meant to be low impact and create minimal disturbance to the landscape and people. However, CTR's proximity to the National Capital Region—which encompasses Delhi and several districts surrounding it from the states of Haryana, Uttar Pradesh and Rajasthan—makes it more accessible, which has also contributed to the growth of all kinds of other tourism. One of the most common forms of ecotourism at CTR is safaris.

So how is the elephant incident relevant here? For most tourists visiting this landscape, at least one jungle safari is part of their itinerary. Jeep safaris are led by a guide and a driver both of whom are generally from the nearby villages. Spotting elephants and of course tigers is a sign of a successful safari. Tourists in safari jeeps passing one another ask whether they have spotted a tiger, or any other majestic wildlife.

During peak tourist season (winter months) there can be over 200 safaris per day. And the hope—for the jeep drivers, guides, and tourists—is to spot a tiger, or at least an elephant. The guides or drivers often have their own crops damaged by elephants, yet the value of spotting an elephant or other wildlife during the safari ties into the material benefits they gain. But for the villagers outside the CTR boundaries, spotting a tiger or elephant in their villages has no benefits—it only brings crop loss, property damage or loss of life.

Women's work and precarity

"I helped build that hotel. I would walk up two and three floors with a load on my head. Today, no one will speak up to say who built that hotel." In conversations with women whose families are unable to own land due to disadvantaged class and caste, (eco)tourism work has a different level of precarity. Another woman who works as farm labour adds, "There is more land sold and less farm work for us. There will be more and more hotels, and villagers will go away. The villagers have their land, our daily wage often comes from farming on their lands. So, if they have sold their lands, where will we get work from?"

These are only two of the hundreds of stories of women who work as labour in the village, households, and (eco)tourism, and whose work remains invisible. As some villagers have become entrepreneurs and shifted away or reduced farming, such women have reduced access to traditional livelihood work, or they become part of the (eco)tourism economy. The face of the tourism enterprise, households and land is men, yet a significant amount of labour work is put in by women. Women who come from landowning families have been able to engage with the (eco)tourism market in the form of homestay work or administrative work in hotels. For some, (eco)tourism-based work provides marginal mobility with continued precarity. This is true of all tourism-based work.

Women continue to walk a tightrope as they try to tap into forms of agency, while navigating the realities of the patriarchy. Their involvement with the market offers an avenue to understand how culture, market values, and agency coexist and contradict each other. It is in such spaces of women's work or guides' decision making towards their land use, that one could locate where and how agency can be expressed and amplified.



Negotiating (eco)tourism

The Corbett landscape is notorious for the contentious use of land for tourism and infrastructure influenced by powerful actors. All these factors have contributed to changes in livelihoods and change in the physical landscape. The rural landscape around CTR has several hotels, guest houses, resorts, restaurants, shops, and tea stalls. While farming and livestock keeping have been common livelihood practices here, (eco)tourism has become a common avenue for diversifying household incomes or shifting away from traditional livelihoods.

Simultaneously, there is a common understanding of the symbolic value of land, beyond the material. Socio-economically well-off villagers have been able to set up their own enterprises and engage with tourism as owners or managers rather than labour. Despite the seasonal nature of tourism, engaging with (eco)tourism is a matter of surviving market dominance, and one way to continue to live in their homes rather than out-migrate.

This was the context for my doctoral research: examining how local people are negotiating and responding to Corbett Tiger Reserve (eco)tourism. Using a critical feminist political ecology lens, it was important to understand how and why people are engaging with (eco)tourism. This lens helped locate the complexities of peoples' responses, which were shaped by their socio-economic identity, and the extent to which they can navigate a changing rural landscape.

The landscape is thus riddled with contradictions and shifting positionalities as villagers, over the years, have learnt to negotiate and engage with the (eco)tourism market. The benefits or losses from tourism are variable, and it is precisely this complexity that calls for more attention. The focus on identity in my research

Labour perspectives on frontline conservation work

Authors **Trishant Simlai, Anwesha Dutta et al.** | Illustrator **Pearl D'Souza**



was a result of the variations in access and abilities to engage with the market or continue farming. Identity is also tied to agency, and for conservation governance, it is crucial to understand who is affected by conservation policies, why and how, if we are to work towards equity and justice.

Further Reading

Pandya, R., Dev, H.S., Rai, N.D. and R. Fletcher (2022) Rendering land touristifiable: (eco)tourism and land use change. *Tourism geographies* 25(4): 1068–1084.

Pandya, R. 2022. Micro-politics and the prospects for convivial conservation: Insights from the Corbett Tiger Reserve, India. *Conservation and Society* (20)2: 146–155.

Pandya, R. 2022a. An intersectional approach to neoliberal environmentalism: Women's engagement with ecotourism at Corbett Tiger Reserve, India. *Environment and planning E: Nature and space* 6(1): 355–372.

Revati Pandya is a researcher and practitioner in the field of feminist political ecology in India. She is currently teaching at Azim Premji University, Bangalore.

Sriya Singh is a Bangalore-based artist and illustrator. Her unique style draws inspiration from human experiences, nature, and imagination, creating a beautiful world through art.



“The biggest challenge for all frontline forest staff is our 24 hours duty. No other public department has this kind of working hours, the police and even the army have shifts. We have no shifts! Our work never ends!”

The quote above was a lament by a frontline forest worker from the Corbett Tiger Reserve in north India to one of the authors during their PhD fieldwork. Such perceptions about the realities of ranger work remain invisible in popular narratives about rangers working in biodiversity conservation.

Recent conservation social science work on rangers highlights the importance of rangers as the primary actors in doing the work of conservation in protected areas. Such work thus positions rangers as both the most important as well as the most vulnerable actors in addressing wildlife crime, including but not limited to illegal hunting and poaching, illicit logging and collection of non-timber forest products. Rangers more broadly are on the ground, engaged in protecting and conserving wildlife, forests, and achieving intertwined social and ecological objectives of conservation and human development. Yet, despite the multifaceted nature of ranger work and the political economic and socio-cultural contexts they operate in, rangers and their work are often portrayed in simplistic terms.

Mainstream discourse in conservation natural sciences and policy, for example, often tends to portray rangers as heroes fighting against villainous poachers. On the

other hand, some critical approaches in conservation social science, like political ecology, can be quick to point to rangers as wielders of unjust violence in pursuit of conservation objectives. While we recognise that rangers do often use violence and are also important actors in conserving biodiversity and saving particular species, any binary or simplistic portrayal of rangers and their work risks glossing over more complex realities that are important to understanding the challenges



and opportunities in supporting rangers, and the broader social and ecological objectives of biodiversity conservation that their work underpins.

The social and political dimensions of conservation labour

A recent survey conducted by the World Wide Fund for Nature (WWF) and the Ranger Federation of Asia revealed that ‘rangers’ in Asia work in dangerous conditions with low pay, poor facilities, and spend long durations away from their families. The survey collectively refers to all frontline conservation staff as “rangers”, which includes forest guards, foresters, wildlife wardens, scouts, and watchers. However, in frontline conservation work particularly in the Global South, rangers often work under rigid social hierarchies, often shaped by caste, class, gender, and race.

For example, during our fieldwork across several national parks in India, we found that indigenous and lower caste persons were usually employed as daily wage workers with little job security. They have also been conceptualised as "vulnerable chowkidars" (see Further Reading section) as well as forest watchers working in precarious working conditions without fixed term contracts. In our research with rangers in India, we find systemic caste discrimination and exploitation in frontline forest work, where upper caste forest guards coerce lower caste daily wage forest watchers to do chores associated with their caste occupation, such as clean toilets and wash clothes.

Additionally, dominant popular conservation discourses surrounding illegal wildlife trade and poaching often draw on unhelpful, simplified, and often racialized binaries of helpless dead animals killed by “bad” people (read poachers) who are then caught and sometimes killed by conservation heroes (read rangers or other law enforcement or security personnel). The realities of poaching and the work of rangers to address this are often much more complex and contextually situated.

As highlighted by geographers studying labour, the social and political conditions in which work is done is fundamental to the processes that define power relations between workers (rangers, in this case) and those

whom they work for. The same conditions also shape and limit the ways in which workers are able to struggle to improve the terms and conditions of their employment.

We thus need to pay close attention to power relations, social hierarchies, working conditions, and related political and social conflicts (e.g. strikes, wages, working contracts and salaries, levels of informality and insecurity). However, scientists, practitioners and policymakers invested in designing and implementing biodiversity conservation policies have still to embrace these insights, leading to a limited understanding of how people are put to work for conservation, under what conditions they work, and how conservation affects labour dynamics and related conflicts, and vice versa. Consequently, the lack of attention to labour in conservation research, practice and policy can contribute to inadequate and poorly designed conservation policies, initiatives and projects.

For example, conservation interventions in India concerning frontline labour have been limited to providing equipment, such as jackets, shoes, water filters and solar cookers, without focusing on systemic factors of labour exploitation and oppression, such as low wages and lack of social security. Most daily wage labour in protected areas across India is done in contravention to the Factories Act, 1948, which states: “*No employee is supposed to work for more than 48 hours in a week and 9 hours in a day. Any employee who works for more than this period is eligible for overtime remuneration prescribed as twice the amount of ordinary wages.*”

This example alone highlights a set of questions that are usually neglected in conservation research, advocacy, and policymaking: To what extent are conservation workers systematically exploited and/or over-worked? And what are the consequences for them and the conservation work they do? Do labour relations in conservation exist outside of formal labour regulations, and if so, how and why? How do conservation initiatives benefit economically from, and at the same time depend on the exploitation and informalisation of workers? What are the spaces for mobilisation, organisation, and protest that exist for conservation workers and how are these spaces constrained and undermined?



The militarisation of conservation

Our own preliminary research in South Asia and Eastern and Southern Africa indicates that the current militarised approach to conservation is reshaping the priorities of rangers' work, how they are trained, and ultimately what their roles and responsibilities as frontline conservation workers are.

Militarisation of conservation, for instance, inevitably leads to the militarisation of conservation labour, affecting how rangers are trained and who does this training, along with shifts in their roles, responsibilities and daily priorities.

For example, in some conservation areas of South Africa and Mozambique, rangers have been increasingly engaging in more dangerous, narrow, paramilitary anti-poaching work with very little to no core ecological and conservation work, such as vegetation and species monitoring, landscape assessments or

community engagement. Organisations supporting rangers have documented increased levels of trauma and PTSD-related mental health challenges as a result of this change in their work. This new form of labour is often supported by the use of surveillance technologies, weapons and counterinsurgency training for frontline conservation workers, and through the involvement of ex-military personnel or war veterans as part of the changing conservation labour force.

Recent research on the impacts of surveillance technologies, such as ranger-based law enforcement monitoring software, suggests that such technologies result in both empowerment and disempowerment, deskilling and upskilling, control and autonomy of labourers and the labour process. For instance, younger tech savvy forest guards in the Corbett Tiger Reserve find the introduction of smartphones and digital methods of data collection as upskilling, while older forest guards and forest watchers believe that their traditional or tacit knowledge of natural history is rapidly getting deteriorated when data collection or patrolling are done with a smartphone.

We are in a key moment for the future of biodiversity conservation. The establishment of protected areas for biodiversity conservation is set for major growth in the coming decade with the passage of 30x30 targets. This is positioned as a lynchpin of integrated and global environmental action and finance that aims to protect species, respond to climate change and achieve a 'green' post-pandemic economic recovery. Conservation workers will play a frontline role in implementing these highly ambitious, controversial and conflict-laden goals. Understanding who works in conservation, in what capacities, how this is changing with and responding to shifts in conservation policy and practice is vital. A stronger understanding of the changing role and nature of labour in conservation is thus crucial for advancing a theoretically relevant and socially just conservation science, design, practice and implementation. To this end, a transdisciplinary approach is necessary, combining conservation social science with labour studies from but not limited to geography, sociology and economics.

Further Reading

Runacres, A. 2021. Doing *chowkidaari*: Vulnerability in village-forest relations and the compulsion of forest work. *Conservation and society* 19(4): 271–281.

Trishant Simlai holds a PhD in Geography and is currently a Postdoctoral Research Associate at the University of Cambridge.

Anwesha Dutta is a Senior Researcher at the Chr. Michelsen Institute (CMI) in Bergen, Norway. Trained as political ecologist, she works at intersections of biodiversity conservation, ethnic conflict, and rural livelihoods.

Amber Huff holds a PhD in anthropology and is a Research Fellow at the Institute of Development Studies at the University of Sussex.

Jevgeniy Bluwstein holds a PhD in Political Ecology, and is currently based at the University of Bern/Switzerland.

Francis Massé is an Assistant Professor at Dept of Geography and Environmental Sciences, Northumbria University.

Pearl D'Souza is an illustrator and visual artist from Goa, India. Her work reflects her passion for mental health, gender, feminism, body positivity and social good. She also has a keen eye for local design and storytelling, and is fascinated by market places.



All nature is political:

An interview with Bill Adams



Author **Hari Sridhar** | Illustrator **Akshita Sinha**

William (Bill) M. Adams is a geographer who worked in the University of Cambridge from 1984 to 2020. Bill got an undergraduate degree in geography and, in the course of his PhD, made the shift from being an ecologist to a social scientist. His research interests lie at the intersection of conservation and development, viewed through the lenses of political ecology and environmental history. Bill has written a number of books on these interests, of which the most recent, co-authored with Kent Redford is called *Strange Natures: Conservation in the Era of Synthetic Biology*. In this conversation with Hari Sridhar, Bill talks about the origins of his interests in geography and conservation, the 'political ecology turn' in his work and thinking, and his views on what political ecology has to offer to our understanding of questions around conservation and development.

Hari Sridhar: You did a BA in Geography and an MSc in Conservation. Looking back, how would you trace the origins of your interest in these two disciplines and their intersection?

Bill Adams: I have spent most of my adult life researching or teaching in the discipline of geography. It is an amazingly interdisciplinary subject, stretching right from the humanities through the social sciences to natural science. Its focus is the Earth, how human society and the natural world interact, and all the differ-

ent patterns and outcomes of that interaction. I had an inspiring geography teacher at school, Don Pirkis, and I remember him on a field trip, standing on the chalk hills south of London and explaining how the landscape laid out below fitted together—geology, water, soils, forests and fields, settlements, roads and retail parks: places emerging, evolving and changing over time.

Geography had recently undergone a revolution, changing from a descriptive subject to an analytical one. At university, I had to study everything from glaciology to development theory—the degree required us to understand both social and physical processes, with all that implied in terms of different kinds of theory and different methods, from the analysis of historical archives to counting pollen grains in sediment cores. Since then, Geography has gone through a succession of intellectual revolutions, but it is still recognisably the same: turbulent, diverse, and restless. Geography attracts and rewards the curious. The world remains a strange and complex place—wonderful, mismanaged, and unjust.

When I finished my Geography degree, I wanted to find work in the environment or conservation (after all, this was the 1970s, the

decade of *Limits to Growth* and the Stockholm Conference). I eventually got a place on the MSc in Conservation at University College London. Postgrad courses in the environment were few and far between in those days, and disciplines like Conservation Biology didn't yet exist. The UCL course had its roots in ecology, but was very interdisciplinary. It seemed a natural extension of a Geography degree. I met an amazing and iconoclastic group of fellow students and staff who had the time (and inclination) to talk and argue, and a host of visiting speakers from the practical conservation world. I started to understand how the nature conservation movement had emerged, how it worked, and why it might sometimes make enemies of the people whose lives it impacted. In the 1970s, the UCL course was strongly focused on the UK, but the breadth of its approach to conservation has been just as relevant everywhere else I have worked since.

Above all, my Masters began to show me the importance of an interdisciplinary approach to understanding conservation—one that combines an understanding of species and ecosystems with knowledge of communities, landowners, businesses and policy-makers, and the conflicts they are too often embroiled in. You need to go well beyond ecological science, to learn how people think and how societies and institutions work, if you want to understand how nature is exploited, why conservation is needed, and why it succeeds and fails.

HS: When we reached out to you about doing this interview you said political ecology is “a bit like Banksy’s art—we know what it is when we see it, but we don’t know who is doing it.” For someone who is hearing the phrase “political ecology” for the first time, could you explain this a little more? When would you say your own work started taking the “political ecology turn”?

BA: Well, that was not a thought-through comment! I think what I had in mind was that political ecology is recognisable when it is done, but it is not a tightly-regimented discipline. People come to political ecology from a lot of different homes across the natural and social sciences and the humanities: anthropology, conservation biology, ecology, geography, history, political science—the list is potentially endless. This gives the field a characteristic hybridity which is an important source of its energy. And it does not matter how people get into political ecology—what matters is what they do when they get there. As a field, political ecology is wonderfully rambunctious and diverse. It can be messy and is often passionate,



but (in my opinion) rarely boring—and sadly that is not something that can be said for all academic study! Most political ecologists have no degree entitled “political ecology”, and while there are specialist journals (like the delightful *Journal of Political Ecology*), research gets published in a lot of different places.



Political ecology emerged as a field in the 1980s, when radical social scientists started taking environmental change seriously—political economy meeting ecology. I first came across it in work, mostly by geographers, on drought and famine in the Sahel. Between 1972 and 1974 the rains failed in the Sahel, and many people starved. The conventional explanation of the drought was neo-Malthusian, that it was the result of biogeophysical feedback caused by human population growth and overgrazing.

But scholars like Keith Hewitt showed the political dimensions of so-called ‘natural disasters’ such as famine (for example his 1983 collection *Interpretations of Calamity*), while Mike Watts (in *Silent Violence* 1983) challenged the conventional story of human ‘misuse’ of West African drylands, pointing to the history of colonial exploitation and agricultural commercialisation.

It is now conventional to observe that there is a politics to hunger, to the way land is allocated and used, and to degradation of the environment. Piers Blaikie’s 1987 book *The Political Economy of Soil Erosion* neatly caught the political ecologist’s argument that the state of the environment is as much the result of political processes (who owns land, who has the power to shape its management) as of variability in natural systems. The core question addressed by political ecology—how the powerless and the powerful (smallholder or corporation) interact to shape landscapes and human futures—is as important in industrial zones as drylands.

It is easy, looking back, to assume that the evolution of academic ideas is seamless, and obvious from the first. For myself, I began to use the term political ecology (as opposed to its way of thinking about society and nature) in the 1990s. I remember reading a review paper by Raymond Bryant in *Political Geography* in 1992 (“Political Ecology: an emerging research agenda in Third World Studies”), and thinking ‘Oh—so that’s what I do!’. Recognition of the field (for example in *Liberation Ecologies*, edited by Richard Peet and Michael Watts in 1996) slowly began to make the study of the environment and development more academically respectable.

Since then, the evolution of political ecology has been rapid and continuous. Political ecologists have analysed the way power is exercised to shape nature, and how that shaping intersects with questions of human justice, in many different contexts—in the industrialised as well as developing world, in cities as well as rural areas. They have also explored the ways ideas about nature, or about the categories of ‘human’ and ‘natural’, shape non-human lives and the struggles that emerge between people for justice and livelihood. Political ecologists have argued repeatedly that questions of nature are always and everywhere political.

HS: Would a political ecologist also argue that questions of nature are always and everywhere about capitalism?

BA: Well, certainly the grip of capitalism on nature has been a key focus in political ecology. Historically, capitalism’s search for cheap material and labour, its drive



to open up and transform markets, has had radical impacts. Nature has been reshaped at every scale from the global to the sub-cellular, from the release of greenhouse gases to the manipulation and patenting of crop genomes. Indeed, with private sector space exploration we might need to start wondering how capitalism will change inter-planetary natures.

So, yes, nature is everywhere entrained by the juggernaut of capitalism: crushed, transformed, made to flourish or to die. But the scale of that transformation varies from place to place. In the Southern Ocean we might see a relatively discrete range of impacts, such as the unsustainable killing of seals, whales, fish and krill, and of course, anthropogenic climate change. Urbanised or farmed landscapes might reveal more profound human transformations of nature over long timeframes, and more diverse entanglement between capitalism and nature. To me, it is the complexity of the engagements between human societies and nature (the living and non-living more-than-human world) that is so interesting about political ecology.

But not all the politics around nature is necessarily the direct outcome of the workings of capital. You can find complex arguments about access to nature at a local scale, where the broader effects of global capitalism are no more than a distant buzz. There can be significant

conflicts between men and women about water rights in locally-managed irrigation systems, between neighbours in reef fisheries, or between local dog walkers and conservation managers in popular nature reserves. Like larger conflicts, these can also range from the material to the conceptual, from disagreement about where people can go and what they can do, to disagreements about what ‘nature’ is and how it works. ‘Is this a hunting ground, a delicate ecosystem or a ‘natural place’?’ Ways of framing nature code directly into conflict.

HS: If questions around nature and the environment are always political, what about the sciences that address these questions, for example Conservation Biology? I ask this because science is viewed as impartial or neutral, and therefore one would think that conservation decisions based on scientific evidence will be apolitical.

BA: Well, Conservation Biology is interesting because it makes a foundational claim that it is (and should be) ‘mission-driven’. To me, this is

inherently political—evidently, not everyone will agree with the conservation ‘mission’. The discipline’s ideological heart creates an inevitable politics as conservationists engage with others. I see nothing wrong with that.

In science, a huge amount of effort goes into making sure that experiments are free from bias. But most science takes place far from the classic environment of the laboratory, and in interdisciplinary fields like conservation, a lot of tricky issues can arise. For example, there is a politics to choosing which questions get asked, and to deciding how they are framed.

The identity of the people doing research is another issue to think about. The conservation literature is still dominated by white men working in universities in the Global North. This kind of narrow social base can lead to narrowly framed questions. In medicine, it is recognised that the assumption that all people are the same can lead to failure to recognise that diseases or treatments can affect women differently from men, or people of colour differently from white people. In conservation, too, the way research questions are framed may make the ‘scientific facts’ misleading. So, for example, if you are interested in the impacts of illegal hunting on declining species, you might ask whether illegal hunting is a significant driver of population decline, whether game guards extort money from rural households, or whether children in hunting households suffer protein deficiency. It is quite possible that the answer to all these questions might be yes. So the challenge is to decide which question to ask. The question you choose will shape how the ‘conservation problem’ is defined, and in turn what might be done to address it: is the solution poverty alleviation or more guns?

The issue of how research questions are framed is particularly important when conservation biologists study social issues. There is a lot of great conservation social science being done these days, but not everybody gets it right. It is only too easy to build questions that reflect simplistic ideas about how societies work, for example assuming that ‘cultures’ or ‘communities’

are standardised and unchanging things: bias can creep in if research questions are badly framed.

I worry sometimes about the enthusiasm of conservation biologists for ‘speed-feeding’ their work into policy. This is often seen as an attempt to avoid ‘politics’, as if politics were simply a way of wasting time. But by trying to avoid debate, scientists are in fact being deliberately political—bypassing wider interrogation of results, for example by people who might be affected. Unfortunately, the application of scientific findings is unavoidably political. The messiness of the policy processes can be very frustrating for scientists, but wide debate allows the answers to poorly framed questions to be seen for what they are, and it allows some kind of agreement to be reached on what should be done. Politics is fundamental to human freedoms.

So, yes, science is really important in conservation, but it is definitely not apolitical.

HS: This interview is being published in *Current Conservation*, a magazine that aims to “tell stories from the field of conservation in a manner that engages both scientific and non-scientific audiences”. As a political ecologist, what might be the questions that come to your mind in evaluating the influence of conservation magazines, like *Current Conservation*, that aim to reach a non-scientific audience?

BA: Magazines like *Current Conservation* have excellent coverage of conservation issues. The quality of photography is extraordinary, and there is some great writing. The ease of electronic communication also makes it more possible (in theory at least) to publish voices ‘from the ground’, rather than sticking to the old ‘explorer mode’, where a metropolitan writer (classically a white journalist) travels to an exotic place to view wildlife. I suppose that, as a political ecologist, I am more interested in the possibility of articles that go beyond the celebration of charismatic species and places, and beyond simplistic narratives of threat and protection. I value writing that is truly ecological—that looks



beyond cute quadrupeds to describe less obvious species (termites? fungi? grasses? the microbiome?) and the complex connectivities among them. I also think that the way conservation stories include people as part of the ecological whole is really important. So much conservation involves making trade-offs between conservation and people. Indeed, all too often, conservation imposes significant social and economic costs on somebody, usually people who are poor and lack political voice. And to many people, nature is not always lovely—lions may look great if you are a tourist, but are bad news if your children are herding your livestock. So the diversity of relations between humans and other species (love, hate, collaboration, dependence, fear) is really important, as is the political question of the negative impacts that conservation may have (and how these might be dealt with).

Above all, I think, it is important for writing about nature to talk about the real world and not some imaginary Edenic version of it. No part of planet earth is wholly ‘pristine’ (if only because of climate change), and writing about ‘precious places’ or ‘the wonders of nature’ potentially distracts attention from the actual scale of human transformation of nature. So, for me, a critical challenge for biodiversity conservation writing is to explain the unsustainability of human society (at all scales from the rural hamlet to the mega city, and from a shack to a millionaire’s pad).

Capitalism, and its patterns of production and consumption, are the fundamental drivers of global biodiversity loss. Mundane questions of consumption are therefore important conservation issues—whether palm oil or soya in the cooking pot, kerosene powering the ecotourist’s jet, mined rare earths in phones, or the burgeoning ‘internet of things’.

So it is really important for conservation writing to look beyond the surviving wonders of nature, to explore and explain the world we are creating—to look at biodiversity in industrial farming landscapes, in polluted and drying rivers and the sterile concrete and grass parks of cities. Here, too—in the environments where the majority of humans live—there is nature. Here too, conservationists work their magic to allow nature to come back and thrive. There are lots of exciting stories beyond threatened species and wild places.

Hari Sridhar is a researcher at the Konrad Lorenz Institute for Evolution and Cognition Research (Austria) and the Archives at NCBS (Bengaluru). He’s interested in questions around the making of ecological knowledge and its intersection with conservation practice.

Akshita Sinha is an illustrator, comic artist with a passion of storytelling and drawing wide eyed characters!

Author **Madhuri Ramesh** | Illustrator **Ekisha Poddar**



**FOR “ANYONE WHO HAS AN EYE
(AND A BRAIN)”**

Watching birds is an intensely absorbing and ancient activity. For instance, the tombs of the pharaohs of Egypt feature numerous paintings that could only have been painted by an earnest birder. Consider the chapel of Queen Itet: it is famous for its beautiful mural of three species collectively dubbed the ‘Meidum geese’. The mural dates back to 2575–2551 BC. Nevertheless, it is evident that some ancient artist clearly paid close attention to geese because the details are so accurate that contemporary scientists have been able to identify two out of the three species in the mural. One is the greylag goose *Anser anser* and the other is the greater white-fronted goose *Anser albifrons*. (The third does not match any species currently known to science and might well be a long-extinct one.)

In general, there were three common reasons why people watched birds earlier: to lure them into the cooking pot, to tame and add them to menageries, or to shoot and display them in personal or museum collections.

This changed in the 1600s due to the collaborative work of a pair of classmates from Cambridge—Francis Willughby and his mentor, John

Ray. They built up an extensive collection of specimens, along with meticulous anatomical and field-based observations. After the former’s untimely death, Ray published their findings in 1678 under the generous title *The ornithology of Francis Willughby of Middleton*. The book was a path-breaking one because it presented systematic species descriptions. In addition, it contained a detailed classification system that laid the foundations of ornithology and inspired later scientists such as Georges Cuvier and Carl Linnaeus.

But birding as we know it today, i.e. observing birds in their natural habitat for recreational or scientific reasons, did not become a popular activity until the 1900s. In the United Kingdom, one of the pioneers of birding (I will resist early bird puns) was Harry Witherby, who from 1897 onwards, wrote a column titled ‘British Ornithological Notes’ for a magazine called *Knowledge*. Subsequently, in 1907, Witherby launched *British Birds*—an illustrated monthly journal that continues to be in print. He also went on to co-author *The Handbook of British Birds* in 1938, which enabled many a citizen to become an active observer of birds. Across the pond, in the United States, Edmund Selous is credited with having a similar impact with his book *Bird Watching*, which was published in 1901.

Selous wrote, “... the pleasure that belongs to observation and inference is, really, far greater

than that which attends any kind of skill or dexterity, even when death and pain add their zest to the latter. [...] Let anyone who has an eye and a brain (especially the latter), lay down the gun and take up the glasses for a week, a day, even for an hour, if he is lucky, and he will never wish to change back again.”

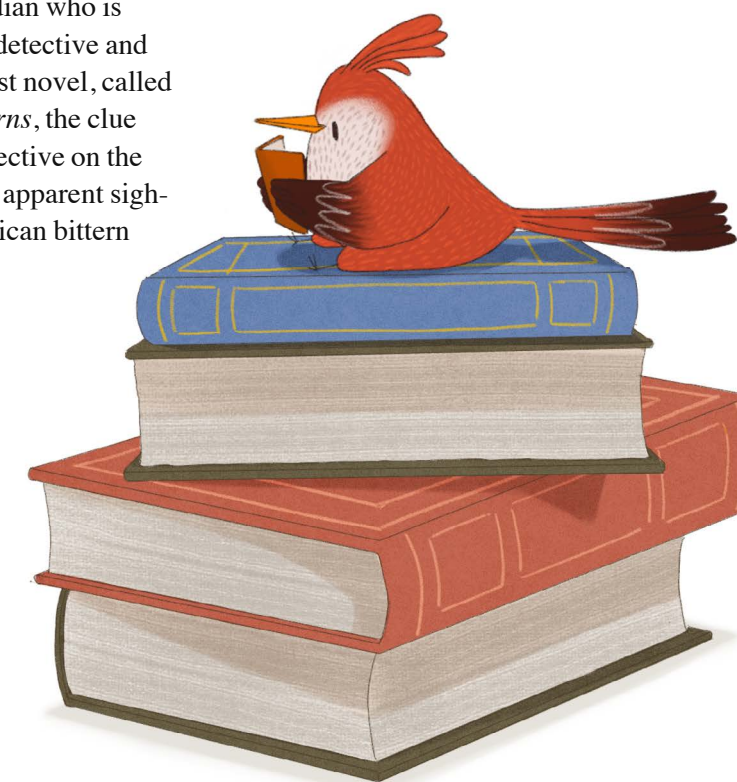
One could say that in this book, he made an eloquent case for watching birds and a sarcastic one for hunting them. (And therefore, managed to kill two birds with one stone?)

In the intervening decades, numerous others have written about birding, both as a simple hobby as well as a form of knowledge production that is enabled by certain configurations of class, gender, nationality, etc. For example, in *Birders of Africa: History of a Network*, Nancy Jacobs describes the colonial connections that enabled European ornithologists to take credit for ‘scientific documentation’ of birdlife, while the African guides and hunters on whose knowledge they heavily depended, often remained on the periphery as nameless ‘local informants’. However, one of the most hard-hitting accounts of how racial inequalities percolate birding is

described in a short piece by Drew Lanham titled ‘9 rules for the black birdwatcher’. For instance, his rule number three is a terse “Don’t bird in a hoodie. Ever.”

If birding can provide such rich insights on social contestations of different periods, could fiction writers be far behind? There is, of course, Ian Fleming who famously named his Agent 007 after an ornithologist, James Bond, who studied Caribbean birds. Another old yet popular book is Carl Hiaasen’s *Hoot*, which describes the efforts of two middle schoolers who set out to save a colony of burrowing owls from a development project (their dedication to birds can be judged from the fact that the said project was the construction of a pancake house). But more recently, I came across a series by Steve Burrows which features a reclusive Canadian who is both a brilliant detective and birder. In the first novel, called *A Siege of Bitterns*, the clue that sets the detective on the right track is an apparent sighting of an American bittern

in the marshes of Norfolk (UK). And lest you think this is a vagrant number, let me assure you that ornithological details continue to play a key role in the rest of this series (and contribute to beguiling titles such as *A Foreboding of Petrels*). The plots are also garnished with references to windmill farms, environmental activism, indigenous territories, carbon sequestration, eco-tourism, and all the other vectors that make conservation such a great pot-boiler of a topic. The next book on my reading list is Stephen Alter’s *Birdwatching*, which despite the title is a work of fiction—the central figure is an American ornithologist who becomes a CIA agent and prowls along the Himalayas, collecting notes on birds and military intelligence (shades of Dillon Ripley spring to mind). However, I must admit the poets as always, capture the fascination and intensity of birding the best: “Among twenty snowy mountains,/The only moving thing/Was the eye of the blackbird.”



Further Reading

Birkhead, T. 2022. Birds and us: *A 12,000-year history from cave art to conservation*. USA: Princeton University Press.

Lanham, D. 2013. 9 rules for the black birdwatcher. *Orion Magazine*. <https://orionmagazine.org/article/9-rules-for-the-black-birdwatcher/>. Accessed on January 15, 2023.

Stevens, W. 1954. Thirteen ways of looking at a blackbird. <https://poets.org/poem/thirteen-ways-looking-blackbird>. Accessed on January 15, 2023.

Madhuri Ramesh teaches in the School of Development, Azim Premji University. Her research focuses on the politics of biodiversity conservation and she is interested in inclusive forms of resource management.

Ekisha Poddar is an illustrator and hand poke tattoo artist based in Delhi. She enjoys storytelling through whatever medium she can get her hands on.

How does political ecology help us understand the social implications of the 30x30 conservation initiative?

Authors **Diana Raquel Vela Almeida & Teklehaymanot Weldemich**

Imagine you live in a simple mud house you built with your family in a beautiful landscape that provides you with all that you need to live well. You have a small herd of livestock that you move freely depending on the season, from which you make your living. You have a few chickens that run around the yard and a small dog that plays with your children and guards the house. You have a good relationship with your community and you collectively decide grazing arrangements and manage your livestock in ways that do not deplete pasture. You lead a calm life, develop good kinship relationships with the people that live next to you and take from the land what you need to survive, while taking care of it.

One day, somebody from far away comes to tell you that you have to move from the place you have known your whole life and where you see yourself getting older. Leaving your home is mandatory, even though it is your homeland and you do not know anything else, you do not have the right to decide. They blame you for not taking good care of the wildlife that you and your ancestors have convivially shared the landscape with. They tell you that without you and your neighbours, wildlife will be better off. All your past and present connections to the land, the nature and the people are lost and they order you to reinvent a life somewhere else that you had never imagined living. If you reject this, you will be violently evicted, the government security forces will burn your house and they will threaten your life.

That was the story of Ole Sophia, a Tanzanian Maasai from Ololosokwan village near the world famous

Serengeti National Park. His family along with hundreds of other families were evicted from their land by the British colonial administration in the 1950s. Six decades later, the area where Ole Sophia and his community lived is now designated as an important wildlife corridor and dispersal area of the national park. Despite ongoing violence by the Tanzanian security forces, his community continued to resist forced eviction. In August 2017, Ole Sophia was shot, his house set ablaze, and his livestock confiscated and publicly auctioned because of his relentless fight for access to their ancestral land and livelihood and for justice for pastoralists.

This was not an isolated case, there are plenty of cases of community leaders and environmental defenders being attacked, murdered and subjected to different forms of violence to protect their land. Many of these cases are consequences of global conservation initiatives that, perhaps well-intended, in reality do not contribute to further biodiversity conservation or prevent environmental degradation, but instead accumulate heavy violence and gross violations of human rights.

Why would untouched protected areas actually worsen environmental degradation, when their aim is to stop the harm? The answer lies in a kind of created separation that wedges human beings from their connection to and stewardship of a place. Conservation practice

Photograph by Teklehaymanot Weldemich

has been founded on a Eurocentric idea called ‘Cartesian nature-culture dualism’, which separated humans from the rest of nature and suggested that in order to conserve nature, we need to remove people from it. What we are not told is that there is a particular nature that gets to be conserved and there is a particular group of people that gets removed. This nature is normally located in tropical, biodiversity-rich regions and where poor, marginal and racialised communities live. These places are normally located in sub-Saharan Africa, indigenous US or Canada, the Amazon, and much of South and Southeast Asia.

For years, academics, policymakers and NGOs have labelled these communities as the drivers of environmental damage, when as a matter of fact, more and more evidence points to their role in maintaining biodiversity and nature in general. More often than not, access to land set aside for conservation is given to multinational corporations and local elites who establish high-end tourism businesses. In the process, communities that have historically lived in and protected the environment, have been dispossessed from their lands to create protected areas. This has been an ill-conceived policy idea that remains today.

The 30 by 30 conservation initiative

At the COP15 Biodiversity Conference held in Montreal, Canada, in December 2022, world governments reached an agreement to protect 30 percent of Earth’s lands, oceans, coastal areas and inland waters by 2030. This so-called 30x30 agreement is hailed as historic and is argued to secure the future of the planet’s living beings. This is not the first time that global bodies have put their conservation hopes in the creation of protected

areas. The size of untouched or restricted-use conservation areas has significantly increased over the last several decades—from two percent in the early 1960s to around 17 percent today. Yet, this has been proven to fail in halting biodiversity decline.

What the agreement does not address is the ways that the expansion of protected areas to cover 30 percent of the earth’s surface will play out in practice. For the last several decades, human populations in biodiversity-rich parts of the world have paid a heavy price due to the expansion of certain forms of protected area that either led to extreme violence and forced displacements, or placed increasing restrictions on their livelihood practices. In Tanzania, where almost 40 percent of land is under some form of protection, government security forces continue to militarise conservation and forcefully evict, torture and abuse people living in areas that conservation experts and organisations suggest should be free of people in order to protect wildlife.

Another important feature of recent conservation initiatives that prioritise expansion of biodiversity spaces has been the call for increased involvement of the private sector, irrespective of their background and intentions. For example, multinational oil companies such as Shell, ExxonMobil, among others historically responsible for enormous environmental damage, have recently mobilised several millions of dollars in proposals for conservation around Nature Positive or nature-based soluti-

ons to offset the continuation of their carbon-intensive business as usual. Neither conservation organisations nor governments seem to strongly question the emergence of this private funding. The more concerning fact is that it is becoming quite common to see many conservation organisations working in close collaboration with multinational mining and fossil fuel corporations. But, can we tell whether they actually contribute to the solutions for biodiversity loss or climate change they have facilitated (if not caused) in the first place?

The 30x30 initiative reinforces mainstream efforts that blind us to work in dismantling the real causes of biodiversity loss: intensive industrial farming and large-scale extractive sectors. In other words, biodiversity loss is a consequence of greedy economic marginalisation and capital accumulation. That is why it is hard to celebrate supposed achievements that have already proven to create no meaningful change and even worse, distract us from fruitful transformative work that revolves around imposing structural limits to destructive economic growth. Other policymakers and actors would argue differently as they seem to benefit from the results. Perhaps they have major wins to celebrate as many corporations will be able to offset their environmental damages by financing the conservation of landscape patches. The solution is to be found somewhere else.

Ours is not an anti-conservation argument. There are countless areas inhabited and managed by self-governed indigenous peoples. Some communities in the Amazon, for example, use non-market oriented conservation schemes to protect their land against extractive activities. It is therefore necessary to study each policy

Further Reading

Adams, W. 2017. Sleeping with the enemy? Biodiversity conservation, corporations and the green economy. *Journal of political ecology* 24: 243–257.

Estrada, A., P. A. Garber, S. Gouveia, Á. Fernández-Llamazares, F. Ascensão, A. Fuentes, S. T. Garnett et al. 2022. Global importance of Indigenous Peoples, their lands, and knowledge systems for saving the world's primates from extinction. *Science advances* 8(32): eabn2927. DOI: 10.1126/sciadv.abn2927

initiative with utmost attention and each context with extreme care for the social implications of such policies for conservation.

How can political ecology contribute to conservation practice?

The contentious nature of such a global decision for conservation makes it important to focus on who decides certain actions over others or what type of social implications the 30x30 initiative or any other conservation initiatives have. Political ecology does precisely that—it helps us analyse the uneven power relations that are not necessarily proximal to the ecological symptoms, but ultimately create the ecological crises. This fundamentally helps us to challenge dominant narratives about the causes of environmental damage that tend to blame people like Ole Sopia. A political ecology lens enables us to question mainstream narratives that justify and enable land dispossession from communities to benefit a wealthy few.

For anybody that is interested in deeply thinking about the causes and solutions to the ecological crises today or in thinking about any conservation effort, the decision needs to be accompanied by a set of key questions such as: Which natures are being protected and which ones are discarded? Who can access and make decisions realting to nature? Whose ideas are recognised, who decides when, where and how, and who gets ignored? How do the affected populations put their lives, experiences, and knowledge at stake because of externally designed solutions? How are claims for environmental justice and social marginalisation articulated? And overall, who are the winners and who are the losers of any decision? These are questions political ecology offers as a way to clear the air between solutions that further social and ecological harm to people in nature and those that prioritise justice, self-determination and reparative relationships with nature.

Diana Vela Almeida is an Assistant Professor of political ecology at the Copernicus Institute of Sustainable Development, Utrecht University.

Teklehaymanot G. Weldemichel is a postdoctoral fellow in Geography at the Norwegian University of Science and Technology.

Interested in conservation, environment, and climate?

GET YOUR COPIES NOW!

Email us at editor.ccmagazine@gmail.com



current conservation

currentconservation.org