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Conservation abandonment is a policy blind spot

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Standfirst: Amidst the collective push to establish nature conservation initiatives, little attention has been paid to ensuring they persist over time. The abandonment of conservation programmes is a blind spot that threatens progress toward global environmental goals.

This year marks the halfway point for multiple global environmental goals, including plans to nearly double the extent of area-based conservation to 30% of the world's surface by 2030 under the 2022 Kunming-Montreal Global Biodiversity Framework. This and other treaties, including the UN Framework Convention on Climate Change, have collectively ignited a race to scale conservation of species and ecosystems; fueled by more than \$87 billion in public and private investments annually¹. To date, however, international efforts have been inadequate to halt global nature loss. One likely contributor to this shortfall is the abandonment of conservation initiatives, which is often unreported but may be widespread. A greater understanding of the extent and consequences of conservation abandonment is imperative to maximize the effectiveness of conservation investments.

We consider conservation abandonment to include both abdication of resource management responsibilities (in other words, where responsible parties fail to fulfil their duties) and changes to governing laws, policies and other agreements that result in tempering, shrinking or abolishing of formalized protections (**Fig. 1**). Nearly all documentation of conservation abandonment comes from protected areas such as national parks, reflecting their high public profiles and history as the cornerstone of global nature conservation. These records demonstrate widespread abandonment through both abdication of management responsibilities, which results in parks that exist on paper but achieve little or no protection⁵ and through formal protected area downgrading, downsizing or degazettement⁴, known as PADDD. Opportunistic data collected in 73 countries identified 3,749 PADDD events between 1892 and 2018, collectively tempering and eliminating environmental protections from a total area the size of Greenland² (**Fig. 2**). Approximately two-thirds of these PADDD events were directly linked to industrial-scale resource extraction². Yet, this evidence is incomplete. The management effectiveness tracking tool (METT) – a potential proxy for ‘paper parks’ – has only been applied in 6.9% of protected areas⁶, while comprehensive cataloging of PADDD has only occurred in a relative handful of countries globally².

Moreover, the US\$87 billion annually committed to conservation increasingly funds a range of measures beyond traditional protected areas¹, including community-based conservation, eco-certification, and payments for ecosystem services. There is virtually no understanding of the extent, patterns, and trends of abandonment of these initiatives, but abandonment in such instances may have causes and consequences that differ from abandonment of protected areas, and will require different methodologies of detection, monitoring, and mitigation. Scientific monitoring and policy responses to conservation abandonment have failed to keep pace with the growth and diversification of conservation practices.

The unknown scale of abandonment of conservation initiatives

Although systematic data remain scarce, emerging evidence indicates that conservation abandonment routinely occurs across contexts. In Chile, for example, 22% of Territorial Use Rights in Fisheries assigned to fishing communities were later discontinued through the abdication of management responsibilities⁸. Similarly, experts in southern and eastern Africa estimated that, on average, one-third (33%) of local groups (of varied size and composition) who initially engaged with nine national community conservation initiatives later abdicated their management responsibilities or formally reversed governing rules and boundaries (**Fig. 2b**)⁷. These estimates may be conservative if some experts, such as government officials, were motivated to overstate persistence. Even government-designated “other effective area-based conservation measures” (OECMs) – an officially recognized alternative to protected areas under the Global Biodiversity Framework – have been abandoned in various ways. For instance, formal downgrading permitted exploratory oil drilling in 26,450 km² of a marine OECM in Canada, while Canada and Morocco collectively disestablished seven OECMs totaling 2,412 km²³.

Conservation abandonment is likely similarly pervasive in initiatives that are not strictly defined and monitored by their geographical extent. Among its 23 targets, the Global Biodiversity

Framework also aims to mitigate invasive species introductions, reduce biodiversity-harming pollution, and promote sustainable use of plants and wildlife. Many of these goals, like transitions to sustainable production systems, are also crucial for mitigating climate change. Meeting these targets will require diverse regulatory and voluntary initiatives, such as campaigns to reduce demand for rhino horn, programs to control invasive lionfish, or schemes encouraging reduced meat consumption. Abandonment among these programs may be even harder to track and mitigate than initiatives with clearly defined boundaries.

Although we lack a comprehensive understanding of the most pressing drivers of abandonment outside protected areas, existing evidence suggests multiple contributory factors. First and foremost, abandonment appears more likely in locations that face higher land use pressures, as well as larger sites. Moreover, while short-term funding can result in durable institutional change, implementation often wanes or ceases altogether once external funding ends (for example, see ref 9). Other causes might include misalignments in conservation goals and the priorities of local communities, especially in the face of changing socio-ecological conditions, such as pressures induced by climate change¹⁰. Broader cultural shifts can also undermine the persistence of conservation programming. For example, increasing secularism has weakened conservation through sacred sites, and rural-urban migration can decrease local ecosystem stewardship. These drivers are less deliberate than the direct lobbying for formal reversals by industrial producers that is frequently seen in protected areas², but still jeopardize progress made toward global nature conservation.

Recent global political events further threaten to erode the conservation gains associated with international climate and biodiversity commitments, both through direct legal reversals and by legitimizing the informal abdication of environmental commitments. In February 2025, for example, the United States government eliminated \$365 million in international conservation funding, which included support for hundreds of protected areas and other conservation initiatives around the world. The U.S. government subsequently eliminated formal protections from keystone areas such as the Pacific Islands Heritage Marine National Monument and all 18 of California’s national forests. In Europe, multiple right-wing populist parties oppose the European Union’s Green Deal and other environmental policies. Other regions have also seen rollbacks of environmental and social protections, such as the disinvestment in enforcement of anti-deforestation policy and resulting encroachment into Indigenous forests in Brazil during Jair Bolsonaro’s presidency in 2019-2023. These events foreshadow an acceleration in conservation abandonment on a global scale, crippling our ability to fight biodiversity decline and limit global warming to 1.5°C. Given the emerging state of knowledge, two policy and science responses are required: systematic understanding of abandonment; and establishing tailored conservation policies and processes that address it.

Understanding conservation abandonment

Abandonment of conservation initiatives is not always “bad,” but it does merit careful study and evidence-informed policy responses. For example, the conservation implications of abandoning a national park would differ depending on whether the site subsequently became an open-pit coal mine or a community forest reserve. Moreover, recovering complex ecosystems with long

succession sequences will take centuries, demanding enduring implementation of initiatives where threats persist. Indeed, the very process of establishing and then abandoning initiatives can be harmful, leaving local actors less willing to engage in future pro-conservation behaviors.

Signals of widespread conservation abandonment point to an urgent need for more comprehensive understanding. Systematic global monitoring – ideally as part of a broader effort to examine the diversity and dynamics of environmental governance systems¹¹ – would reveal a greater picture of conservation abandonment, as well as trends across geographies, ecosystems, and initiative types. Building on these basic descriptive data, scientists could then explore the proximate causes of abandonment (and, conversely, persistence), as well as its ecological and social impacts – analogous to research in agriculture and health where program discontinuation is itself a topic of study.

A range of approaches could advance the study and monitoring of abandonment. Formal instruments for documenting paper parks (i.e., the METT) and PADDD (i.e., PADDDtracker.org) have been available since 2002 and 2012, respectively. Yet, in both cases, these monitoring approaches are not comprehensively applied. Therefore, there is a clear need to provide greater funding and political support for the implementation of these existing measures. Furthermore, while PADDD and METT concentrate on protected areas, equivalent instruments are required to track abandonment trends in the wide diversity of other types of conservation measures. Supporting this, the Management Effectiveness of Protected and Conserved Areas Indicator, recently launched by the UK Joint Nature Conservation Committee, could be used to identify the abdication of management responsibilities within OECMs. Furthermore, as an interim step toward a census of the formal status of all conservation measures globally, significant and immediate gains can be made through representative sampling methodologies, adapting approaches used in household surveys and ecological research¹². For example, researchers could evaluate the presence of wildlife-trade customs measures, enrollment in payment for ecosystem service schemes, or adherence among major companies to their environmental commitments, using representative sampling approaches to produce regionally or globally generalizable findings.

Abdication of management responsibilities is often more difficult to directly observe than formal rollbacks. Abdication is largely undocumented and may escape detection in systematic global monitoring. Recent advancements in environmental impact evaluation might help overcome this challenge. High-resolution remote sensing is now able to count changes in the number of individual trees across countries (e.g.,¹³), with similar advances in marine environments through global tracking of fishing vessels and seafloor patterns. By pairing these outcome measures with methods in causal inference, researchers might track the long-term effectiveness of initiatives, allowing one to infer where conservation practices are persistent or have been effectively abandoned.

At smaller scales, ethnographic methods can directly observe and help conceptualize abandonment through the abdication of management responsibilities, its causes, and its consequences, especially in sensitive settings. Abandonment can be a taboo subject, creating disincentives to its disclosure and study. In this context, conducting in-depth qualitative case

study research on abandonment using methods tailored to examining sensitive behaviors is essential. This work may help to identify novel indicators of abandonment observable in social data or satellite imagery, as well as generate ideas to address its causes.

Addressing conservation abandonment

Although we lack a comprehensive understanding of the drivers of abandonment, some drivers and potential responses are evident. In response to insufficient financing, for example, Project Finance for Permanence programs use trust funds, debt-for-nature swaps, and other financing mechanisms to strengthen long-term resource management. Project Finance for Permanence programs have proliferated rapidly (e.g., the Amazon Region Protected Areas Program), but mostly within the context of protected areas. Similar long-term financing mechanisms are needed for other types of conservation measures. International pledges for billions of dollars to support local stewardship, such as the 2021 Indigenous Peoples and Local Communities Forest Tenure Pledge and the 2024 Cali Fund, are promising initial steps. However, the policy actions necessary to address weakening or abandonment of Indigenous land rights, corporate eco-certification, or payment systems for ecosystem services may differ markedly from responses necessary to address state-managed protected areas. For example, a core insight from Diffusion of Innovations theory is that actions offering benefits compatible with actors' needs are more likely to be adopted¹⁴. Conversely, measures that fail to deliver tangible benefits are at risk of abandonment, especially if imposed using top-down "coercive scaling" approaches¹⁵. Thus, persistent conservation measures must be designed to align with the priorities of those expected to adopt them, whether they are local communities, conservation organizations, businesses, or national governments.

Other tailored solutions to conservation abandonment may include capacity development, enforcement assistance, judicial support, legal codification of informal governance systems, and technology access. For example, private conservation easements in the United States are binding agreements attached to the land title, providing a strong legal foundation for permanence because they can only be removed if both parties agree. According to the National Conservation Easement Database (www.conservationeasement.us), over 200,000 easements had been established in the United States as of January 2025 (the database has since ceased updates due to funding shortages). Although their ultimate impact is still to be determined, they offer an illustrative template for lasting environmental stewardship. Overall, while financing constraints continue to threaten persistence, much greater attention should be directed toward designing conservation measures that align interests, priorities, and incentive structures across actors.

Governments, philanthropies, nonprofit organizations, and communities are understandably racing to scale conservation initiatives to combat biodiversity and climate crises, but the pressure to scale new initiatives and meet ambitious targets may jeopardize long-term success. Tracking the establishment of new initiatives without accounting for abandonment will inevitably inflate estimates of real-world progress and lead to misguided policies. Focusing on establishment and overlooking abandonment will also lead to perverse resource allocation, with overinvestment in establishing new conservation initiatives and underinvestment in the durability and efficacy of

existing ones. Finally, we cannot learn to establish effective, just, and enduring conservation initiatives if we do not understand the causes and consequences of abandonment¹⁵. The launch of a conservation initiative is merely an early milestone on the road to a more sustainable future. Only by embracing the “long road” of conservation – designing for, monitoring, and investing in persistence – can we secure lasting ecological and social benefits for generations to come.

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Competing interests

Authors declare that they have no competing interests.

Fig. 1. A conceptual framework for abandonment of nature conservation initiatives The left column illustrates three types of abdication of management responsibilities (thematic, spatial, and full); abdication entails a failure to fulfil a responsibility or duty where legal, contractual, or other formal responsibilities remain. The right column illustrates three analogous types of reversals (downgrading, downsizing, and disestablishment) that undo the legislative, policy, contractual, and other formal agreements that establish the basis for conservation. These forms of reversals draw on research on protected areas²⁻⁴.

Fig. 2. Examples of abandonment of conservation initiatives. (A) The yearly count of enacted protected area downgrading (green), downsizing (orange), and degazettement (purple) (PADDD) events from 1950 to 2021 (data from ref. 2). (B) The estimated percentage of local groups who had engaged but then subsequently stopped implementing management activities in nine area-based community conservation initiatives in southern and eastern Africa ('stopped implementing' refers to when a local group no longer implements some or all management activities; this abandonment could involve reversals [e.g., officially terminating agreements] or abdication [e.g., no active management]). Data from ref. 7; points represent mean estimates, and whiskers represent one standard deviation. Key: CC = Community Conservancy; PFM = Participatory Forest Management; CFR = Co-management of Forest Reserves; VFA = Village Forest Areas; WMA = Community Wildlife Management Areas; CBFM = Community-Based Forest Management; CFM = Collaborative Forest Management; CF = Community Forests.

Conservation abandonment



Abdication of management responsibilities

Thematic abdication

Failure to fulfill a specific type of management responsibility



Spatial abdication

Failure to fulfill management responsibilities in a specific area



Full abdication

Failure to fulfill any management responsibilities across an entire area



Reversal of formalized restrictions

Downgrading

Tempering formalized restrictions on human activities

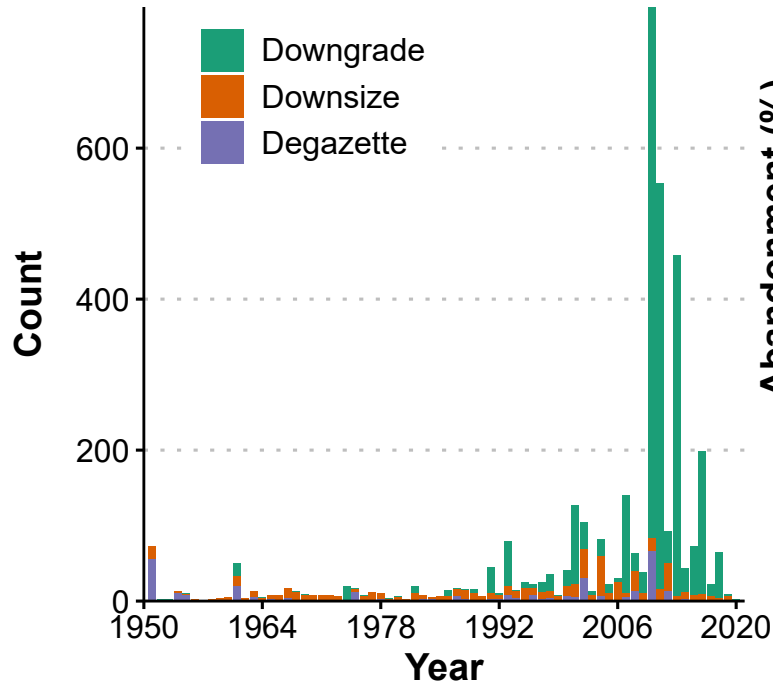
Downsizing

Shrinking the spatial extent of formalized restrictions

Disestablishment

Abolishment of formalized restrictions across an entire area

(A) Global PADDD across time



(B) African community conservation

