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Policy Forums

Passando a boiada: degazettement and downsizing threaten protected areas in the Brazilian Amazon

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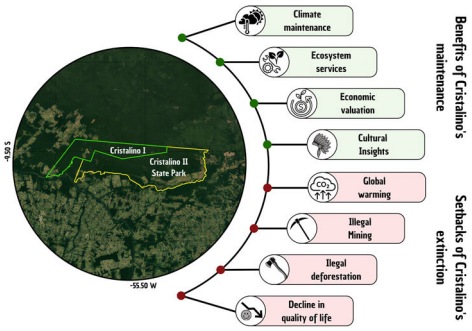
HIGHLIGHTS

- Biodiversity conservation requires the protection and maintenance of protected areas
- Protected areas store carbon and regulate ecosystem processes
- Protected areas prevent deforestation and conserve ecosystems and biodiversity

GRAPHICAL ABSTRACT



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ABSTRACT

This article addresses the reduction and elimination of protected areas in the Brazilian Amazon. This impacts Brazil's conservation efforts, ecosystem processes, and climate change mitigation. The phrase "*Passando a boiada*" (Passing the herd through) originated from a statement by Brazil's then-Minister of the Environment, Ricardo Salles in a 2020 ministerial meeting and reflects the 2019–2022 Jair Bolsonaro presidential administration`s dismantling of environmental policies. Despite the current President's efforts to restore environmental protections, the Ruralist Front's control of the National Congress continues to threaten protected areas. Cristalino II State Park, located in the southern Amazon in Mato Grosso state, is facing elimination due to fraudulent land claims. Reducing protected areas undermines biodiversity conservation and climate mitigation. Maintaining these areas is crucial for Brazil to fulfill its COP 15 commitment to achieve zero deforestation by 2030. The situation demands urgent global attention to uphold conservation commitments and to prevent further ecosystem degradation.

Passando a boiada

Protected areas (hereafter PAs) have been degazetted worldwide (Azevedo et al., 2024), despite increases in post-2020 conservation targets (Visconti et al., 2019). In Brazil strong forces inhibit both establishing new "conservation units" (CUs: Brazil's PAs for protecting biodiversity) and defending existing CUs against degazettement (Loos, 2021). Given that Brazil is the most biodiverse country in the world and a global leader in the establishment and management of PAs (Pack et al., 2016), downsizing, downgrading and degazetting of Brazil's PAs have global consequences for biodiversity, ecosystem conservation, and climate change. There is strong political pressure in Brazil to pass laws that would reduce the area of private legal reserves (such as Federal Bill 3334/2023 and Mato Grosso State Bill 337/2022). This pressure is not limited to private areas: it also drives PADDD (protected-area downsizing, downgrading, and degazettement) in protected government land in the Amazon (Pack et al., 2016).

"*Passando a boiada*" (Passing the herd through) became a widely known expression in Brazil after a 2020 ministerial meeting, where this phrase was used by Ricardo Salles, the Minister of Environment during Jair Bolsonaro's notoriously anti-environmental presidential administration. Sales urged his fellow ministers to dismantle the country's environmental regulations, seizing the "opportunity" created by the media's focus on the COVID-19 health emergency. Salles, who was supposed to be safeguarding the environment, was filmed making this statement, and the footage was later made public by Brazil`s Supreme Court. His words essentially summarized the Bolsonaro administration's approach to environmental policy (Figueira et al., 2021).

Unfortunately, "*Passando a boiada*" remains highly relevant despite the efforts of the presidential administration of Luiz Inácio Lula da Silva (known as "Lula") that began in 2023. The Lula administration is in the process of restoring Brazil's robust legal framework for environmental protections that were established over 40 years ago and are grounded in the Federal Constitution as a fundamental right. The Lula administration has reinstated initiatives such as the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) through Decree 11,367 of January 1, 2023, and reaffirmed international commitments by creating the Interministerial Committee on Climate Change (Decree No. 11,550, June 5, 2023), and strengthening the Paris Agreement.

The influence of "*Passando a boiada*" is widespread in Brazil's National Congress, where 57% of the seats in the Chamber of Deputies and 62% of the seats in the Senate are controlled by "ruralists" in the Agriculture and Ranching Parliamentary Front (FPA, 2024), which represents historically the interests of large landholders. This group has given significant support to the public policies implemented during Jair Bolsonaro's administration to dismantle environmental protections, which have had lasting impacts. A notable example is the weakening of environmental agencies like IBAMA (Brazilian Institute of the Environment and Renewable Natural Resources) and ICMBio (Chico Mendes Institute for Biodiversity Conservation) (Duarte et al., 2023). Almost no new environmental staff were hired during the Bolsonaro administration, and the budget for environmental inspections was drastically cut, leading to a significant reduction in fines and property embargoes for environmental crimes (Giffoni Pinto and Malerba, 2022). This also undermined the credibility of the environmental agencies, fostering the notion that environmental protection hinders economic development.

Bolsonaro continues to take pride in this dismantling nearly two years after his presidency. In a public speech in September 2024 he boasted: "We revoked more than 5000 environmental regulations and there were no public hires for IBAMA or ICMBio." Lula, the current president, is still grappling with the challenge of fully restoring the environmental policy sector after almost two years in office, and the restoration is not progressing at the necessary pace.

Cristalino State Park in Mato Grosso: its importance and challenges

The state of Mato Grosso encompasses three major phytophysiognomic units (officially designated as "biomes" in Brazil) across a total area of 903,357 km^2. Of this, 55,661.34 km^2 (6.1%) is designated as conservation units (CUs), with eight CUs managed federally, 41 by state governments, 37 by municipal governments, and 20 as either state or federal "Private Natural Heritage Reserves" (RPPNs) (SEMA, 2024). Over half (55%) of the area in PAs in the state of Mato Grosso is managed by the State Secretariat of the Environment. While private and municipal protected areas are generally small, their combined coverage is significant, comprising 2.5% and 9.37% of the total protected area of the state, respectively. However, some state and municipal areas are not specifically intended for full biodiversity conservation, and their protection goals can vary substantially.

The Amazon "biome," which covers approximately 52% of Mato Grosso, is well represented, with 30,439.35 km^2 (54.7%) designated as conservation units. Responsibility for environmental protection in the Amazonian portion of the state is relatively balanced, with nearly half (54%) of Mato Grosso's CUs under state management. Cristalino State Park II plays a crucial role as a protected area and represents 7.2% of the area of PAs Mato Grosso's under state-government management (Fig. 1).

Mato Grosso is a state heavily impacted by unsustainable economic activities and is consistently at the forefront of deforestation rates in Brazil. Agribusiness wields significant influence over environmental policy due to its substantial contribution to Brazil's GDP. While agribusiness claims it contributes 23.8% of the country's GDP, official statistics from the Brazilian Institute of Geography and Statistics (IBGE) indicate the percentage as only 7,14% (OC, 2024; Salim and Pacheco, 2024). Agrobusiness influence is strong in agricultural states like Mato Grosso, where "ruralists" dominate political decisions. Several anti-environmental bills (e.g., State Complementary Bill No. 18/2024) are currently either under consideration or being voted on at both the state and federal levels. An urgent case is a move to abolish Mato Grosso's Cristalino II State Park (Tribunal de Justiça de Mato Grosso,

2024; Coelho-Junior et al., 2024). Among the conservation units in southern Amazonia, this one stands out for being the most biodiverse; it has dense and open submontane rainforest (*terra-firme* forest and liana forest), dense alluvial rainforest, semideciduous seasonal forest, campinaranas (an ecosystem characterized by open savannas, scrub, and forests growing on infertile white-sand soils), and Amazonian rock fields. It also harbors a rich fauna, with 1010 recorded butterfly species and many species listed as endangered, such as the harpy eagle (*Harpia harpyja*) and the white-cheeked spider monkey (*Ateles marginatus*).

This conservation unit is now enduring the consequences of Brazil's ongoing loosening of environmental laws (e.g., Ruaro et al., 2022). The 118,000-hectare park was created in 2000, and since 2011 several lawsuits have been filed seeking its abolition. In 2022 it was summarily abolished by a court ruling favoring private landholders who had illegally claimed the land (Coelho-Junior et al., 2024). The Mato Grosso Public Prosecutor's Office successfully appealed to restore the park's protection, but in April 2024 the Mato Grosso Court of Justice ruled to abolish the park in response to a request from the agribusiness company Sociedade Comercial e Agropecuária Triângulo Ltda.

An analysis of the land-tenure situation shows that, at the time of its creation, the park was covered by forests that belonged to the federal government (i.e., public lands), which were transferred to the State of Mato Grosso in 2010 by then-President Luis Inácio Lula da Silva (Law 12,310 of 19 August 2010). The transfer of these lands to Mato Grosso should guarantee their status as public lands, and they cannot be requisitioned by the private sector. This highlights the ongoing conflict between conservation efforts and private interests and shows the urgent need for robust legal structures and their consistent application to ensure the long-term protection of Brazil's natural resources.

Despite public outcry and opposition from environmentalists and scientists, the Mato Grosso Public Prosecutor's Office and the state Attorney General have remained silent on the issue. The current governor declared in a television interview that the state has no intention of appealing. State deputies in the Mato Grosso Legislative Assembly generated a public commotion in opposition to the decision, and the Federal Attorney General's Office (AGU) requested to join the civil public, arguing that the company does not have legitimacy to request the park's extinction. According to the AGU, the company holds invalid titles based on materially false certificates, allegedly issued by the state land office (Instituto de Terras do Mato Grosso, or INTERMAT), and the AGU therefore requested that the court decision to abolish the park be annulled. Due to the mobilization of various stakeholder groups, the Mato Grosso state government now admits that it can appeal but remains committed to compensating the "owners" of the area allocated to the park, despite the designation of these "owners" as illegal by the AGU. The illegal acquisition of documents for public lands in the Amazon is a long-standing problem, often perpetrated by rural elites, police, and those who hold government and judicial power (Kröger, 2024).

Attacks on protected areas in Brazil have a long history, but in 2012, changes to the Brazilian Forest Code, now officially termed the "Native Vegetation Protection Law," facilitated obtaining environmental licenses for deforestation and the suppression of non-forest ecosystems and granted amnesty to offenders who committed environmental crimes up to 2008 (Soares-Filho et al., 2014). Mato Grosso leads Brazil in agricultural production, resulting in strong political support for reducing environmental restrictions. In 2005, Blairo Maggi, the then-Governor of Mato Grosso, received the Greenpeace Golden Chainsaw award for contributing the most to Amazon deforestation (Fearnside, 2018). Threats to protected areas are common in the southern Amazon, including Mato Grosso. For instance, the Guariba Roosevelt Extractive Reserve saw its area reduced from 164,224 ha to 57,630 ha via Legislative Decree 51/2016. This decree was later nullified by the Judiciary in response to a public civil suit initiated by the Mato Grosso Public Prosecutor's Office. Similarly, the Serra Ricardo Franco State Park (158, 620 ha), established in 1997 to protect diverse ecosystems in Mato Grosso, is threatened with abolition by Bill 02/17, which is currently under review in the Mato Grosso Legislative Assembly.

Throughout Brazil various bills propose the reduction or elimination of protected areas, with bills in the National Congress threatening to remove over 2.1 million hectares of protected areas in the Amazon alone (Bernard et al., 2014). Economic interests frequently drive this phenomenon, known as "PADDD" (Protected Area Downgrading, Downsizing, and Degazettement). Attempts to reduce or eliminate protected areas often exploit limitations in financial and human resources, land disputes, and judicial delays. As in other cases, the Cristalino II process advanced without consulting civil society, reflecting a shift in

Fig. 1. Location of Cristalino State Park, Mato Grosso, Brazil. This is one of the only conservation units in the Arc of Deforestation and is of great importance for the conservation of biodiversity in the southern Amazon. This area is currently under threat due to its lack of official protection.

government policies to favor the removal or downgrading of protection status for these areas. This scenario points to a political trend of easing restrictions on conservation units, thus threatening the integrity of many of these areas. Similar examples include Bill 6024/2019, which threatens the Serra do Divisor National Park in Acre by proposing its reclassification as an Environmental Protection Area (APA) — which would allow natural resource extraction currently prohibited in a national park (Koga et al., 2022). Another case is Iguaçu National Park, which faces threats from illegal activities and from a bill proposing to amend Law 9985/2000, lowering the park's "full protection" status to "sustainable use" and enabling the construction of a road (Prasniewski et al., 2022).

Protected areas are key to biodiversity preservation, provision of ecosystem services, and mitigation of the climate crisis (Pereira et al., 2024). Because of their importance in biodiversity conservation and as barriers to deforestation in the southern Amazon, protected areas also receive funding from the Amazon Protected Areas Program (ARPA), including the three conservation units mentioned. Losing these protected areas would set a dangerous precedent, undermining the core principles of Brazil's National System of Conservation Units. The loss of these protected areas could have significant global impacts, given their role in regulating temperatures and mitigating climate change (Pereira et al., 2024). For instance, in 2014, protected areas in Brazil`s Amazon "biome" contained 32.7 petagrams of carbon, or 58.5% of the total carbon stored. The Cristalino State Park alone preserved around ten megatons of carbon, placing it among the top six protected areas for carbon sequestration in the southern Amazon (see Table S8 in Nogueira et al., 2018).

Intense pressure on this area in recent years has put these carbon stocks at risk. Since the first attempt to extinguish the park in 2022, more than 60 requests have been submitted for mining permits in the Cristalino II State Park. Similar threats endanger other protected areas in the southern Amazon, such as Igarapés do Juruena State Park (227,817 ha) and Serra Ricardo Franco State Park (158,620.85 ha). These areas have had and continue to have problems with illegal gold extraction within their boundaries or nearby, which could cause irreversible environmental damage. Mining poses both direct and indirect threats to Indigenous lands and traditional populations (Prasniewski et al., 2024). Mining in these areas threatens vital ecosystem processes and would contribute to the global climate and sociobiodiversity crises.

Maintaining existing protected areas and establishing new ones is crucial to fulfilling the commitments Brazil made in 2015 at COP 21 in Paris and in President Lula's proposal in 2023 to achieve zero deforestation in the Brazilian Amazon by 2030 (Vieira and Silva, 2024). Failure to implement these actions undermines the achievement of the Post-2020 Global Biodiversity Framework (GBF), which aims to reverse biodiversity loss by 2030 and to reduce threats to ecosystem services. Brazil's current administration has made some important advances in conservation, but agendas for democratic institutions and sustainability remain unsettled (Fernandes et al., 2023), especially at the state level. The Cristalino II State Park case runs counter to the priorities of some parts of Brazilian agribusiness sector that have now incorporated biodiversity conservation and ecosystem-service protection into their social and environmental responsibility policies. The trend to revoking or reducing protected areas threatens biodiversity and human well-being and must be resisted throughout the world.

Conclusion

The case of Brazil's Cristalino II State Park highlights critical challenges in protected-area management, where economic pressures and political interests often outweigh conservation priorities. This situation jeopardizes Brazil's commitment to international conservation goals, such as those Brazil endorsed at COP 21 of the Climate Convention and in the Kunming-Montreal Global Biodiversity Framework. It also accelerates biodiversity loss and weakens ecosystem resilience. The implications extend beyond national borders, as preserving these areas is essential for maintaining biodiversity, climate, and human well-being worldwide. Strengthening legal protections and securing public involvement in conservation policy are essential steps for safeguarding these critical natural resources both within Brazil and globally.

CRediT authorship contribution statement

D.J.R.; T.S.-S.; M.P; T.S.P.T.; A.F.G.; T.J.I.; F.R.B.; M.O.C.N.; G.W.F.; F.O.R.; C.C.P. and P.M.F. conceived the research. D.J.R.; T.S.-S.; M.P.; T. S.P.T.; T.J.I.; F.R.B.; G.W.F.; H.S.; G.E.O; C.C.P. and P.M.F. wrote the manuscript draft. All authors contributed to the final version of the manuscript.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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