



CONTRIBUTION OF PROTECTED AREAS TO BIODIVERSITY PROTECTION IN BRAZIL, WITH EMPHASIS ON THE STATE OF MATO GROSSO

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ABSTRACT

The anthropocentric view of human beings led a large part of the world's population to behave as exceptional consumers towards other living beings. In an attempt to improve environmental standards and, above all, to raise awareness among humans about the orderly use of natural resources, it was noted that from these concerns, initiatives emerged aimed at solving environmental problems, such as the creation of protected areas. This text aims to reflect on the creation of protected areas from a perspective of the extent of these areas in Brazilian territory and in the state of Mato Grosso. Although it is possible to observe many advances in the processes of creating and managing protected areas in recent times, there are still many gaps to be filled, factors that can be minimized with the maintenance and expansion of monitoring and management systems.

Keywords: Protected Areas; Biodiversity Protection; Brazil; Mato Grosso.

INTRODUCTION

As human beings began to appropriate natural resources to satisfy their needs, environmental problems emerged due to the disorderly use of these resources. Thus, the anthropocentric view of humans led a large part of the world's population to behave as expert consumers in relation to other living beings. A few decades later, in an attempt to improve environmental standards and raise awareness among humans about the orderly use of natural resources, initiatives such as the creation of protected areas emerged. Considering the need to promote the creation and strengthening of these areas, especially in Brazilian territory and in the state of Mato Grosso, this text aims to contribute to the reflections already put forward on the subject in question.

METHODOLOGY

The literature review aimed to develop a historical background of the creation of protected areas, as well as an overview of the extent of these areas in Brazilian

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territory, with an emphasis on the state of Mato Grosso.

RESULTS

The first protected areas emerged with the purpose of ensuring the preservation of sites for spiritual and religious activities. But as studies advanced, there was an expansion in the sense of protection and conservation of these areas, allowing human activities within them, provided they are carried out in a way that does not harm the ecosystems. From there, new perspectives and methodologies emerge to recognize the importance of these interactions in protected areas, as well as the characterization, categorization, and new nomenclatures for protected areas, starting with the formulation of a specific concept for these areas. Thus, we understand a protected area as:

[...] a clearly defined geographical space, recognized, with a specific objective and managed through effective means, whether legal or otherwise, to achieve long-term nature conservation, with associated ecosystem services and cultural values. (Borrini-Feyerabend, et al., 2017, p. 05).

In the 1990s, the IUCN (International Union for Conservation of Nature) developed and began adopting measures aimed at standardizing actions that would guide the processes of biodiversity conservation. It is precisely during this period that the term "Conservation Units" (CUs) emerged as a synonym for "Protected Areas."

In this context, in Brazil, in the 80s, 90s, and 2000s, environmental policy gained some instruments that support biodiversity conservation. According to the SNUC, the UCs are classified into Sustainable Use Units and/or Integral Protection Units. These, in turn, are divided into subcategories, making it possible to differentiate one group from another based on the objectives and permissions regarding the activities that can be carried out in these locations.

Brazil is one of the countries that stand out in terms of biodiversity conservation, as according to Medeiros et al. (2011), by the year 2010 the country had about 15% of its territory protected by Conservation Units, already constituting the fourth largest protected terrestrial area. And according to WWF (2019), there was a jump to 30.2% of Brazilian territory covered by Conservation Units, totaling approximately 1.6 million km². But only 6% of the area in protected areas in Brazil is in





full protection units, that is, those that allow the indirect use of natural resources and activities such as education, scientific research, and tourism.

Focusing on the state of Mato Grosso, it is the third largest Brazilian state in area (905,000 km²) and one of the few that encompasses the greatest diversity of biomes, namely Amazon, Cerrado, and Pantanal, presenting a high level of biodiversity, as well as a wealth of water resources and fertile soils. Mato Grosso also stands out for its high rate of biodiversity loss due to human occupation and consequently anthropogenic activities. These and other factors led to the creation of Law 9.502 on January 14, 2011, establishing the State System of Conservation Units (SEUC). This system is managed by the State Department of the Environment (SEMA) in partnership with municipal agencies, having among its functions the role of supporting the creation and administration of Conservation Units.

Currently, there are 106 Conservation Units throughout the Mato Grosso territory. In this sense, according to SEMA-MT (2021), this quantity of protected areas is distributed as follows: 21 federal Conservation Units, 48 state Conservation Units, and 37 municipal Conservation Units. Thus, the protected areas in Mato Grosso total 90,680,600.00 ha and are distributed as follows: Amazon (5.57%), Cerrado (6.68%), and Pantanal (9.88%) (Table 1).

Table 1 – Conservation Units by Biomes in Mato Grosso

BIOME	AREA (ha)	RELATIONSHIP BIOME/STATE (%)	UC/BIOME RELATIONSHIP (%)
Amazônia	49.053.882,81	54,10	5,57
Cerrado	36.326.680,81	40,06	6,68
Pantanal	4.938.865,40	5,45	9,88
TOTAL	90.680.600,00		

Source: SEMA (2021), organized by the authors.

Among the states that make up the Legal Amazon, the state of Mato Grosso has the smallest proportion of areas protected by Conservation Units, which amounts to 4% of its territory. (WWF, SEMA-MT & ICMBio, 2018).

The data presented here indicate a long road ahead in the pursuit of improving the management of protected areas, especially by respecting the characteristics of each one and the connection with current environmental policies. Even so, it is believed





that the identification of threats should be a constant, even in the face of actions aimed at minimizing the aggressions that threaten these environments.

CONCLUSION

Although it is possible to observe many advances in the processes of creating and managing protected areas in recent times, there are still many gaps to be filled, factors that can be minimized with the maintenance and expansion of monitoring systems and the feeding of databases with records of the main events and occurrences within the UCs, the development and use of new tools and methodologies, and the awareness and establishment of partnerships with surrounding communities, in addition to the establishment of a network of contacts with other protected areas in order to strengthen and expand conservation and give greater visibility and highlight the importance of these areas.

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