

## **Human and inhuman oppositions to the buffaloes of the Guaporé Valley – In Rondônia**

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### **ABSTRACT**

This article is a research that has the ability to analyze the possibilities of the existence or not of human and legal impediments related to the buffaloes of the Guaporé Valley, in Rondônia, and whether there is a link between the presence of these animals and regional environmental preservation. Thus, in this excerpt, the correlation between buffalo breeding in this territory and the environmental maintenance of the region was investigated. The methodology applied was based on a survey of bibliographic references, questionnaires and a graphic demonstration of results aimed at clarifying the theses that were raised. And the work is justified by its thematic relevance, since it enables a reflection on the benefit of preserving buffaloes in coexistence with humans. This is in a weighing and analysis of the damage caused by man in the misuse of nature, with the devastation of forests, aquifers and their incident and serious reflex – such as the consequent energy crisis, dust clouds, the desertification of large areas and their rivers – arising as a result of this environmental imbalance: unemployment, increased poverty and hunger.

**Keywords:** Buffalo preservation, Climate rebalancing, Law change.

### **INTRODUCTION**

Preliminarily, it is worth mentioning that this article is the result of a research already carried out on the occasion of the master's studies of the Graduate Program in Sociology and Law at the Fluminense Federal University/UFF. The dissertation entitled "Border Buffaloes X Chimera of a sustainable economy" sought to assess the urgency of the need to pay attention to the preservation of buffalo life, since such an initiative represents a possibility to guarantee environmental preservation and human life itself.

It is appropriate to say that the dissertation text was developed with the authorship of Terezinha Azevedo de Oliveira, under the guidance of Prof. Dr. Marcus Fabiano Gonçalves (UFF) and technical supervision of editing and revision by Prof. Dr. Adriana Fernandes de Oliveira (FCR). It also had the collaboration of illustrious thinking masters and participants and co-authors of this article – since the first discussions were developed in the classroom, focusing on the objective of verifying the impediments

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posed by humans, through laws, to the buffaloes of the Guaporé Valley, in Rondônia, while analyzing the possible link between the existence of these buffaloes in the preservation of the environment of this Region. In the dissertation, it was sought to demonstrate whether there was a coexisting relationship between the presence of buffalo and the environmental maintenance index. To this end, the investigation was justified by the possibility of presenting, through data collection aimed at the promotion of the master's dissertation already concluded, if there is or was a correlation between the preservation of nature and ecosystems, where it was sought to assess whether only the existence of buffaloes in the Guaporé Valley/RO would be an impediment for humans to advance in this space with their inhuman and thoughtless attitudes of destruction.

In this focus, the methodology applied and developed was carried out through a survey of bibliographic references and questionnaires made with the population of that area, with a graphic demonstration of the results, seeking to clarify the established theses and the implications that involve the theme when dealing with the right of buffaloes to exist, as well as the coexistence of these animals with humans, despite being inhuman.

## **THEORETICAL AND METHODOLOGICAL FOUNDATION**

To weave the non-anthropocentric foundations, we used the theoretical and methodological references of some authors, such as: Brugger (2009)<sup>5</sup>; Belchior (2017)<sup>6</sup> – that in her book entitled *Environmental Legal Hermeneutics*, the author brings philosophical hermeneutics as a foundation, under the focus of deduction and induction, to justify the application of environmental legal hermeneutics.

As abstracted from the article by Marco C. Pereira, *The island of the buffaloes*<sup>7</sup>, it is noted that on the Island of Marajó/PA, there is a peaceful coexistence between men and buffaloes. In turn, in the dissertation of Diana Maria Meireles Pereira<sup>8</sup>, with the theme: *Animals: subjects of rights or rights of a subject?*, it is noted that, currently, there is a greater concern with ensuring the rights of animals.

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<sup>5</sup> BRUGGER, Paula. Us and the other animals: speciesism, veganism and environmental education. *Linhas Críticas*, Brasília, v. 15, n. 29, jul - dez 2009, p. 197-214. Available at: <https://periodicos.unb.br/index.php/linhascriticas/article/view/3532>. Accessed on: 18 out. 2021.

<sup>6</sup> BELCHIOR, Germana Parente Neiva. *Environmental legal hermeneutics*. São Paulo: Saraiva, 2017. Available at: [https://books.google.com.br/books?hl=pt-BR&lr=&id=4x5nDwAAQBAJ&oi=fnd&pg=PT9&ots=ure7SpDaav&sig=jjJz3hACEwsWo2Atui\\_wGQOVp3g&redir\\_esc=y#v=onepage&q&f=false](https://books.google.com.br/books?hl=pt-BR&lr=&id=4x5nDwAAQBAJ&oi=fnd&pg=PT9&ots=ure7SpDaav&sig=jjJz3hACEwsWo2Atui_wGQOVp3g&redir_esc=y#v=onepage&q&f=false). Accessed on: 12 out. 2021.

<sup>7</sup> PEREIRA, Marco C. *The island of the buffaloes*. Available at: <https://www.got2globe.com/editorial/marajo-ilha-dos-bufalos/>. Accessed on: 20 out. 2021.

<sup>8</sup> PEREIRA, Diana Maria Meireles. *Animals: Subjects of Law or Rights of a Subject? Dissertation (Master's Degree in Law) - Faculty of Law, University of Coimbra, 2015*. Available at: <https://eg.uc.pt/handle/10316/34694>. Accessed on: 21 out. 2021.



Another work that brings a very interesting discussion is the article by Marco Aurélio de Castro Júnior and Aline de Oliveira Vital, entitled "Animal Rights and the Constitutional Guarantee of Prohibition of Cruelty",<sup>9</sup> in which it seeks to substantiate animal rights

It will also be assessed from the research of Waleska Mendes Cardoso and Gabriel Garmendia da Trindade, which asks: Why animals are not effectively protected: a study on the current anthropocentrism from an emblematic judgment<sup>10</sup>.

## **MEDIA REPERCUSSION OF THE CLIMATE OBSERVATORIES - OPERANTES**

For now, with the research completed, it is necessary to consider the news published in the local media about the changes that have occurred in the environment, such as, "Baixa do Rio Machado: level is close to the lowest historical quota reached in 2020" (Jornal de Rondônia, Rede Globo. 04/08/2021). In the national media, the news focuses on the "Biggest drought in more than 120 years – in the Pantanal" (Jornal Nacional, from: 05/08/2021).

The energy crisis is also part of this area:

In 2021, Brazil is experiencing a new energy crisis with the risk of a blackout. One of the causes of this scenario is, in the first place, the country's biggest water crisis in the last nine decades, marked by the scarcity of rainfall and a decrease in the level of hydroelectric reservoirs.<sup>11</sup>

Another highlight in the observation of climate change concerns the terrifying clouds of dust, as recorded in the testimony of Andrea Ramos: "First, there was this wind gust front exceeding 70 km; at Ribeirão Preto airport, 92 km were recorded; in our stations we even recorded 80 km, and, right after the gust, came the rains" (Marçal, 2021).<sup>12</sup>

In addition, we see the desertification of large areas, such as, for example, "In the Northeast region of Brazil, where it is estimated that about 230 thousand km<sup>2</sup> are already desertified (...). In the South region, this process is also serious; however, as it occurs in a region with a humid climate, with annual rainfall around 1400mm, it is called Sanding".<sup>13</sup>

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<sup>9</sup> CASTRO JÚNIOR, Marco Aurélio de; VITAL, Aline de Oliveira. Animal Rights and the Constitutional Guarantee of Prohibition of Cruelty. Brazilian Journal of Animal Law, Salvador, v. 10, n. 18, p. 137-150, 2015. Available at: <https://periodicos.ufba.br/index.php/RBDA/article/view/13825>. Accessed on: 19 out. 2021.

<sup>10</sup> CARDOSO, Waleska Mendes; TRINDADE, Gabriel Garmendia. Why animals are not effectively protected: a study on the current anthropocentrism based on an emblematic judgment. Brazilian Journal of Animal Law, Salvador, v. 8, n. 13, p. 201-214, 2013. Available at: <https://periodicos.ufba.br/index.php/RBDA/article/download/8643/6185>. Accessed on: 22 out. 2021.

<sup>11</sup> ENERGY CRISIS IN BRAZIL. Available at: <https://brasilecola.uol.com.br/historiab/crise-energetica-no-brasil.htm>. Accessed on: 24 out. 2021.

<sup>12</sup> MARÇAL, Gabriela. Dust cloud: understand the phenomenon that reached the interior of São Paulo. Metrôpoles, Rio de Janeiro, 27 set. 2021. Available at: <https://www.metropoles.com/brasil/nuvem-de-poeira-entenda-o-fenomeno-que-atingiu-o-interior-de-sao-paulo>. Accessed on: 19 out. 2021.

<sup>13</sup> PENA, Rodolfo Alves. Desertification of Brazil. Available at: <https://www.google.com/amp/s/mundoeducacao.uol.com.br/amp/geografia/desertificacao-no-brasil.htm>. Accessed on: 20 out. 2021.



And, in this list, the consequences arising from these phenomena arise, namely: unemployment, hunger, and the consequent increase in homeless people: "In March 2020, the estimated number of homeless people in Brazil was 221,869, which represents an increase of 140% when compared to the estimate in September 2012, which corresponded to 92,515 homeless people in the country".<sup>14</sup>

In view of the facts presented, many questions arise in the sense of reflecting on the following questions: what can be done for an effective change in this scenario that is presented? How can thoughtless human actions lead us to throw away the opportunity to exist and coexist with all living things? The main answer to such questions is that we must seek means for preservation. And, for the present study, it is defended by starting by preserving the buffaloes of the Guaporé Valley!

There are many problems caused by human negligence in the face of environmental preservation. An example of this concerns the treatment that has been given to water sources, which are fundamental for us to have a good quality of life, considering that they serve as sources of fresh and potable water for society; however, they need to be better preserved, since, despite being renewable, this good is scarce and, although renewable, this good is scarce and, therefore, it risks ending.

According to Pimenta *et al.* (2002), in most of the country, the water we consume is contaminated by sanitary sewage, which is a great concern for the authorities; The more sewage is thrown into waterways, the more investments should be directed to health. Because, as mentioned, contaminated waters are sources of disease.

The World Health Organization (WHO) reports on the importance of monitoring and controlling water quality for use and suggests that examinations and analyses be carried out to determine the content of elements and substances harmful to human health, such as protozoan cysts and helminth eggs, fecal coliforms, viruses and inorganic and organic chemical substances.

In Brazil, most of these substances make rivers polluted, generating serious environmental impacts, since they alter the natural composition of the entire ecosystem. This happens due to sewage discharges without proper treatment, generated by human activities. In addition, the lack of investments in basic sanitation leaves the country in a critical situation in relation to this issue, with more than half of the sewage generated by the population without adequate treatment. According to the National Health Foundation (FUNASA, 1994), the ratio of investment in sanitation is approximately 1 to 4, that is, for every R\$1.00 invested in the sector, we have about R\$4.00 reais saved on health.<sup>15</sup>

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<sup>14</sup> SOUSA, Luciana Maria Pereira de. What do we know about the hunger of the homeless population in Brazil? Hunger and Pandemic, Brazil in fact, 2 May 2021. Available at: <https://www.brasildefatopb.com.br/2021/05/02/o-que-sabemos-sobre-a-fome-da-populacao-em-situacao-de-rua-no-brasil>. Available on: 23 Oct. 2021.

<sup>15</sup> Information taken from the foundation's website. Available at: <https://www.funasa.gov.br/web/guest/institucional> Accessed on: 26 out. 2023.



Therefore, the lack of sanitation in Brazil has serious consequences on the quality of life of the population, especially the poorest, living on the outskirts of large, medium and small cities in the interior and their rural areas.

With the increase in the Brazilian population and the disorderly occupation of areas installed without basic infrastructure, especially without domestic and sanitary sewage collection and treatment services, the residents of these places are exposed to various types of diseases, because, at the end of their journey, the effluents produced by the households end up being dumped into the ground without any treatment and, They often end up reaching free bodies of water and aquifers.

Septic tanks are one of the most used ways to capture effluents produced in urban and rural households in places where there is partial or no existing sanitary sewage collection infrastructure. In addition, it is noteworthy that of the 49.1 million households in Brazil, about 8.6 million (17.5%) are not served by the general water supply network. In addition, 25.6 million households (52.0%) did not have access to sanitary sewage collection systems (IBGE, 2000).<sup>16</sup>

According to Pimenta *et al.* (2002), the presence of these tanks can represent a risk to underground aquifers, in view of the infiltration into the soil and the offensive effects of the decomposition of organic matter. This is because these sewers can carry with them, to these water reservoirs, pathogenic microorganisms that transmit numerous harms to humans such as diseases caused by the ingestion of contaminated water (FERREIRA, 2021).

In view of the above, it is possible to say that the neglect of the environment in Brazil has historical roots. To exemplify, Professor Albert David Ditchfield's argument is quite coherent when dealing with the Amazon and adjacent regions of the Brazilian cerrado. For Ditchfield, before the arrival of the Europeans, the ecology of these regions "did not represent something natural, but rather an environment artificially modified by the first humans who landed in the region thousands of years before Columbus 'discovered' America".<sup>17</sup>

According to the professor, in the Amazon, these primitive humans or Paleo-Indians also modified the floristic composition of the forest in the surroundings where they lived. This human intervention seems to be the most plausible explanation for the origin of terra preta and the presence of fruit trees in its surroundings. Along the great Amazonian rivers, there are dozens of localities where you can observe the occurrence of black earth that marks the sites of old villages. The hypothesis is that it was these indigenous people who were responsible for the dispersion of some species throughout the region. The

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<sup>16</sup> Information taken from the Institute's website. Available at: <https://www.ibge.gov.br/estatisticas/sociais/administracao-publica-e-participacao-politica/9663-censo-demografico-2000.html> - Accessed on: 26 out. 2023.

<sup>17</sup> The full essay is available on the website: <https://agazetadoacre.com/2013/03/espaco-do-leitor/c84-espaco-do-leitor/os-bufalos-do-guapore-e-a-reintegracao-da-megafauna-na-amazonia/> - Accessed on: 26 out. 2023.



Brazil nut tree is often cited as an example of an artificially dispersed plant. In favor of this argument, we have in Acre the mysterious limit of dispersion of this plant represented by the Purus River. Chestnut trees are not found naturally in forests of the Juruá River valley; A mystery that has not been clarified.

Thus, if we consider that the Amazon region, since the arrival of primitive man, has not been a natural environment, the solution for buffaloes in the Guaporé Valley necessarily involves the need to manage these animals. However, among the many questions that arise, the main one is to reflect on what would happen to the ecosystem of this region if the buffaloes were suddenly exterminated?

On this, Professor Ditchfield elucidates the following:

In the past, Brazilian megafauna supported bears, saber-toothed tigers, dogwolves, and other large predators that coexisted with jaguars and ocelots. The extinction of Brazilian megafauna probably led to the disappearance of saber-toothed tigers, American lions, and other carnivores only found in paleontological museums.<sup>18</sup>

Another researcher who follows this same line of thought is Mauro Galetti, from the University of São Paulo. The aforementioned professor even proposes the creation of 'Pleistocene Parks' in the Brazilian Cerrado and Pantanal for the management of exotic megafauna, imported from Africa. His idea is very pertinent, since many historical facts show that less than 10,000 years ago, the savannas of South America – specifically the Cerrado and Pantanal – were more spectacular than the savannas of Africa. And he exemplifies with the following comparison: "while in Africa there are only five mammals that weigh more than a ton – elephant, two species of rhinoceroses, hippopotamus and the male giraffe, in South America, there were between 10 and 12 species over a ton." <sup>19</sup>

Galetti also asserts that the megafauna extinct after the arrival of man has always played an important role in the structure of vegetation and the effects of this premature extinction are still poorly known. The rapid elimination of South American megafauna has favored an environmental imbalance, since the dominance of some plants has resulted in an accumulation of dry plant biomass and, therefore, susceptible to fire. For the author, the question that arises is not whether there should be the management of megafauna in these environments, but rather how to do this. According to him, the introduction into controlled densities, for example, of animals such as horses, cows and wild pigs is important considering that these animals are dispersers of large seeds and controllers of invasive weeds.

Therefore, the presence of the buffaloes in the Guaporé Valley, inhabiting and draining the wetlands as the Toxodons probably did in the past, suggests that they are restoring the Amazon ecosystem

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<sup>18</sup> Read the essay in full, available on the website: <https://agazetadoacre.com/2013/03/espaco-do-leitor/c84-espaco-do-leitor/os-bufalos-do-guapore-e-a-reintegracao-da-megafauna-na-amazonia/> - Accessed on: 26 out. 2023.

<sup>19</sup> See on: <https://agazetadoacre.com/2013/03/espaco-do-leitor/c84-espaco-do-leitor/os-bufalos-do-guapore-e-a-reintegracao-da-megafauna-na-amazonia/> - Accessed on: 26 out. 2023.



after a 10,000-year hiatus. Thus, the existence of buffaloes in the Amazon region represents a great research opportunity for scholars who defend the reintroduction of megafauna in South America (FERREIRA, 2021).

## **LEGISLATIVE CONTRIBUTION ON THE SUBJECT IN THE FACE OF HUMAN DEGRADATION ACTION**

Article 54 of the Federal Constitution – CF (BRASIL, 1998) provides for penalties of an equal nature in case of pollution of any nature at levels that may result or result in damage to human health or, consequently, cause the death of animals or the significant destruction of flora:

Article 54. Causing pollution of any kind at levels that result or may result in damage to human health, or that cause the death of animals or the significant destruction of flora:

Penalty - imprisonment, from one to four years, and fine.

Paragraph 1 - If the crime is culpable:

Penalty - detention, from six months to one year, and fine.

Paragraph 2 - If the crime:

I - to make an area, urban or rural, unfit for human occupation;

II - cause atmospheric pollution that causes the removal, even momentary, of the inhabitants of the affected areas, or that causes direct damage to the health of the population;

III - cause water pollution that makes it necessary to interrupt the public water supply of a community;

IV - hinder or prevent the public use of the beaches;

V – occurs by the release of solid, liquid or gaseous waste, or debris, oils or oily substances, in disagreement with the requirements established in laws or regulations:

Penalty - imprisonment, from one to five years.

Paragraph 3 - Anyone who fails to adopt, when required by the competent authority, precautionary measures in case of risk of serious or irreversible environmental damage (BRASIL, 1998) shall incur the same penalties provided for in the previous paragraph

In this context, it can be inferred that concern for the environment has become a flagrant theme in the contemporary world and our Magna Carta recognizes the right to an ecologically balanced environment. However, in view of the various environmental problems that have occurred in Brazil and in the world, it is necessary to discuss and analyze, from a legal perspective, the environmental issues that affect the balance of ecosystems and consequently directly affect society.

In this sense, ecological problems have taken on prominence today, requiring the active participation of all in the defense of life and the environment. And, in view of this problem, it is essential to establish a dialogue aimed at maintaining the coexistence between men and buffaloes; because the consequent preservation reflected in nature and in the surrounding area is remarkable.



## **OPEN CONSIDERATIONS FOR CONCLUSION ABOUT THE GLARING FACTS OF TODAY - AND IN CONSTANT CONSTRUCTION**

In this article, the result of research already developed on the occasion of the master's studies, we sought to verify the impediments placed by humans, through laws, to the buffaloes of the Guaporé Valley, in Rondônia, as well as to assess the possibility of a link between the buffaloes and the preservation of this Region.

From this investigation, the initial proposal was to reflect on the possibility of a coexisting relationship between the buffalo presence in the Amazon territory and the environmental preservation index. In this focus, the work also sought to present a justification of the relevance of collecting data for this master's dissertation already concluded, on the existence of a correlation between the preservation of nature and ecosystems and the presence of buffaloes in this area.

In this way, and beforehand, it was already verified that its existence alone is an impediment for humans to advance in this space with inhuman attitudes of destruction.

And, with this scientific purpose, the methodology used sought to survey the bibliographic reference and apply questionnaires aimed at the population of that area, as well as the graphic demonstration of its results.

Thus, through the data obtained, it was possible to obtain clarifications of the theses preliminarily established and their implications on the subject, regarding the right of buffaloes to exist and to coexist with humans, despite being inhuman.

From these surveys, it was also possible to verify that the maintenance of these animals in the Guaporé Valley region contributes to the coexistence of current humanity and the next generations. And this discussion could be verified based on the data tabulated from the interviews with local residents and the bibliographic survey on the subject.

The whole discussion around the attribution of rights to non-human animals was based on whether or not these sentient beings should have their own legal-civil regime in which they are recognized as having rights or whether, on the contrary, they should maintain the legal status, still coming from Roman law, of *res mobiles*, having the same legal treatment as, for example, a car.

Although, in our Civil Code, the non-human animal is still considered a thing, the hope for evolution and legal adequacy is increasing, namely because most foreign legal systems have operated to create a specific regime for non-human animals, leading to their non-consideration as *res mobiles*, as well as the fact that, in Portugal, Law No. 69/2014, of August 29, which criminalizes the mistreatment of companion animals, thus envisioning a legal, social, cultural and even political paradigm shift.

But this change, as strange as it may seem, is also not consensual among animal rights defenders. In fact, a very pertinent question arises: since the non-human animal is considered a center of imputation





of rights, then what are the extensions of these same rights? That is, by attributing to the non-human animal a set of rights – and whether these should be absolute, thus proclaiming a complete animal liberation, or, on the contrary, should they be relativized, with there always being a suffering imputed to the non-human animal that is considered necessary? This is how animal welfare advocates and animal rights advocates emerge.

This is the perception that guided the conclusion of this study and that it establishes the possibility of reflection through scientific data already collected in favor of the preservation of the buffalo and of ourselves as human beings, giving the populations living in those areas – the quilombolas and the indigenous people – quality of life.

Another possible reflection concerns how man can look at himself in this possibility of reversing the game of life. Since the right of buffaloes to live can be correlated with giving humans the chance of survival, in the face of the chaos of climate imbalance, and all the consequences arising from the damage caused by man in the misuse of nature, such as, for example, the drought witnessed in Amazonas (Garcia; Galgaro, 2023).<sup>20</sup>

It was from the assumptions presented in this study that it was possible to abstract whether or not the devastation of forests, aquifers, which are drying up, the energy crisis, the dust clouds and the desertification of large areas and large rivers have a pertinent relationship with the disastrous consequences so far observed in the media. In addition, the urgent reflection is how man can seek ways to expand his environmental awareness regarding the protection of reserves and their natural resources, which involves the perception that this will only be possible with the understanding of the real value of the natural environment.

Society as a whole must understand that preserving the environment is preserving itself; and weakening the environment is weakening its own life. It is, therefore, essential to make society aware of the need to preserve its natural resources to ensure a sustainable life for the next generations. Thus, this awareness must be above all a political act aimed at social transformation, focusing on a perspective of holistic action that relates man and nature.

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<sup>20</sup> GARCIA, Mariana; CALGARO, Fernanda. Unusual drought in rivers in the Amazon is related to El Niño and warming of the North Atlantic. G1 -28/09/2023. Available at: <https://g1.globo.com/meio-ambiente/noticia/2023/09/28/seca-fora-do-normal-em-rios-a-amazonia-tem-relacao-com-el-nino-e-aquecimento-do-atlantico-norte-entenda.ghtml> - Accessed in: Oct. 2023.



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