


Human and ihuman oppositions to the buffaloes of the Guaporé Valley – in Rondônia

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ABSTRACT

This article is a research that has the power to analyze the possibilities of the existence or not of human and legal impediments related to buffaloes in 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, it was investigated what is the correlation between buffalo breeding in this territory and the environmental maintenance of the region. The methodology applied was based on a survey of bibliographic references, questionnaires, and graphic demonstration of results to clarify 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 done in a weighing and analysis of the damage caused by man in the misuse of nature, with the devastation of forests, aquifers and its incident and serious consequences – 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: Bufalin preservation, Climate rebalancing, Change of law.

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INTRODUCTION

Preliminarily, it is worth mentioning that this article is the result of a research already carried out during the master's studies of the Graduate Program in Sociology and Law of the Fluminense Federal University/UFF. The dissertation entitled "Frontier 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 authorship by 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 the 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 posed by humans, through laws, to the buffaloes of the Guaporé Valley, in Rondônia, at the same time that the possible link between the existence of these buffaloes in the preservation of the environment of this Region was analyzed. In the dissertation, we sought to demonstrate whether there was a coexisting relationship between the presence of bufalin 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 if 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 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 existence of buffaloes, as well as the coexistence of these animals with humans. despite being inhuman.

THEORETICAL AND METHODOLOGICAL BACKGROUND

For the weaving of the non-anthropocentric foundations, the theoretical and methodological references of some authors were used, such as: Brugger (2009);⁵ Belchior (2017)⁶ – that in her book

⁵BRUGGER, Paula. Nós e os outros animais: especismo, veganismo e educação ambiental. *Linhas Críticas*, Brasília, v. 15, n. 29, jul - dez 2009, p. 197-214. Disponível em: <https://periodicos.unb.br/index.php/linhascriticas/article/view/3532>. Acesso em: 18 out. 2021.

⁶BELCHIOR, Germana Parente Neiva. *Hermenêutica jurídica ambiental*. São Paulo: Saraiva, 2017. Disponível em: https://books.google.com.br/books?hl=pt-BR&lr=&id=4x5nDwAAQBAJ&oi=fnd&pg=PT9&ots=ure7SpDaav&sig=jpJz3hACEwsWo2Atui_wGQOVp3g&redir_esc=y#v=onepage&q&f=false. Acesso em: 12 out. 2021..



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*⁷, it is noted that on the Island of Marajó/PA, there is a peaceful coexistence between men and buffaloes. On the other hand, in the dissertation of Diana Maria Meireles Pereira⁸, with the theme: *Animals: subjects of law or rights of a subject?*, it is noted that, currently, there is a greater concern to ensure the rights of animals.

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*",⁹ in which it is sought 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*¹⁰.

MEDIA REPERCUSSION OF CLIMATE OBSERVATORIES - OPERANTES

For now, once the research is 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:

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

⁷PEREIRA, Marco C. A ilha dos búfalos. Disponível em: <https://www.got2globe.com/editorial/marajo-ilha-dos-bufalos/>. Acesso em: 20 out. 2021.

⁸PEREIRA, Diana Maria Meireles. *Animais: Sujeitos de Direito ou Direitos de um Sujeito?* Dissertação (Mestrado em Direito) - Faculdade de Direito, Universidade de Coimbra, 2015. Disponível em: <https://eg.uc.pt/handle/10316/34694>. Acesso em: 21 out. 2021.

⁹CASTRO JÚNIOR, Marco Aurélio de; VITAL, Aline de Oliveira. *Direitos dos Animais e a Garantia Constitucional de Vedação à Crueldade*. *Revista Brasileira de Direito Animal*, Salvador, v. 10, n. 18, p. 137-150, 2015. Disponível em: <https://periodicos.ufba.br/index.php/RBDA/article/view/13825>. Acesso em: 19 out. 2021.

¹⁰CARDOSO, Waleska Mendes; TRINDADE, Gabriel Garmendia. *Porque os animais não são efetivamente protegidos: estudo sobre o antropocentrismo vigente a partir de um julgado emblemático*. *Revista Brasileira de Direito Animal*, Salvador, v. 8, n. 13, p. 201-214, 2013. Disponível em: <https://periodicos.ufba.br/index.php/RBDA/article/download/8643/6185>. Acesso em: 22 out. 2021.

¹⁰CRISE ENERGÉTICA NO BRASIL. Disponível em: <https://brasilecola.uol.com.br/historiab/crise-energetica-no-brasil.htm>. Acesso em: 24 out. 2021.

¹¹CRISE ENERGÉTICA NO BRASIL. Disponível em: <https://brasilecola.uol.com.br/historiab/crise-energetica-no-brasil.htm>. Acesso em: 24 out. 2021.



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 front with a gust of wind exceeding 70 km; at Ribeirão Preto airport, 92 km were recorded; in our stations we even recorded 80 km, and, right behind the gust, the rains came" (Marçal, 2021).¹²

In addition, one can see the desertification of large areas, such as, for example, "In the Northeast region of Brazil, where it is estimated that about 230 thousand km² 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 of around 1400mm, it is called Arenization".¹³

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".¹⁴

In view of the facts presented, many questions arise in order to reflect on the following questions: what is possible to do 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 beings? 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 resource is scarce and, therefore, it is in danger of running out.

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

¹²MARÇAL, Gabriela. Nuvem de poeira: entenda o fenômeno que atingiu o interior de SP. Metrôpoles, Rio de Janeiro, 27 set. 2021. Disponível em: <https://www.metropoles.com/brasil/nuvem-de-poeira-entenda-o-fenomeno-que-atingiu-o-interior-de-sao-paulo>. Acesso em: 19 out. 2021.

¹³PENA, Rodolfo Alves. Desertificação do Brasil. Disponível em: <https://www.google.com/amp/s/mundoeducacao.uol.com.br/amp/geografia/desertificacao-no-brasil.htm>. Acesso em: 20 out. 2021.

¹⁴SOUSA, Luciana Maria Pereira de. O que sabemos sobre a fome da população em situação de rua no Brasil? Fome e Pandemia, Brasil de fato, 2 maio 2021. Disponível em: <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.



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 pollute rivers, 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 investment 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 saved with health.¹⁵

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 installed areas 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 households end up being dumped into the soil without any treatment and, They often end up in free water bodies 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 a general water supply network. In addition, 25.6 million households (52.0%) did not have access to sanitary sewage collection systems (IBGE, 2000).¹⁶

According to Pimenta *et al.* (2002), the presence of these cesspools can pose a risk to underground aquifers, in view of soil infiltration and offensive effects from 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 savannah. For Ditchfield, before the arrival of Europeans, the ecology of these regions "did not represent something natural, but rather an

¹⁵Informações retiradas do site da fundação. Disponível em: <https://www.funasa.gov.br/web/guest/institucional> Acesso em: 26 out. 2023.

¹⁶Informações retiradas do site do Instituto. Disponível em: <https://www.ibge.gov.br/estatisticas/sociais/administracao-publica-e-participacao-politica/9663-censo-demografico-2000.html> - Accessed on: 26 out. 2023.



environment artificially modified by the first humans who landed in the region thousands of years before Columbus 'discovered' America."¹⁷

According to the professor, in the Amazon, these primitive humans or Paleoindians 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 one can observe the occurrence of black earth that marks the sites of ancient villages. The hypothesis is that it was these indigenous people who were responsible for the dispersion of some species throughout the region. The chestnut 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. Brazil nut trees are not found naturally in the forests of the Juruá River valley; a mystery that has not been solved.

Thus, if we consider that the Amazon region, since the arrival of primitive man, is not a natural environment, the solution for the 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 exterminated from one moment to the next?

On this, Professor Ditchfield elucidates the following:

In the past, Brazilian megafauna supported bears, saber-toothed tigers, dog wolves, and other large predators that coexisted with jaguars and ocelots. The extinction of Brazil's megafauna probably led to the disappearance of saber-toothed tigers, American lions, and other carnivores only found in paleontological museums.¹⁸

Another researcher who follows this same line of thought is Mauro Galetti, from the University of São Paulo. The 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 demonstrate 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 one ton – elephant, two species of rhinoceroses, hippopotamus and the male giraffe, in South America, there were between 10 and 12 species above one ton." ¹⁹

¹⁷O ensaio na íntegra está disponível no site: <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.

¹⁸Read the full essay, 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.

¹⁹View 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.



Galetti also asserts that megafauna that became 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 understood. The rapid elimination of South American megafauna favored an environmental imbalance, since the dominance of some plants 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 management of megafauna in these environments, but rather how to do it. According to him, the introduction of animals such as horses, cows and wild pigs in controlled densities, for example, is important given that these animals are dispersers of large seeds and controllers of invasive weeds.

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

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

Article 54 of the Federal Constitution (BRASIL, 1998) provides for equal penalties in the 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:

Art. 54. Cause pollution of any kind at such levels as to result or likely to result in harm to human health, or to cause the death of animals or the significant destruction of flora:

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

§ 1 If the crime is culpable:

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

§ 2 If the crime:

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

II - cause air pollution that causes the evacuation, even if 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 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.

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

In this context, it can be inferred that concern for the environment has become a blatant 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 coexistence between men and buffaloes; for the consequent preservation of it is remarkable, reflected in nature and all around.

OPEN CONSIDERATIONS FOR CONCLUSION ON THE GLARING FACTS OF THE PRESENT DAY - 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 posed 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 presence of buffalo 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, for this purpose of a scientific nature, 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 preliminarily established theses and their implications on the subject, with regard to the right of buffaloes to exist and 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 tabulated data from the interviews with the local residents and the bibliographic survey on the subject.

The whole discussion about 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 or whether, on the contrary, they should maintain the legal status, still arising 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 of evolution and legal adequacy is increasing, namely because most of the foreign legal systems have operated to create a specific regime for non-human animals, leading to the non-consideration of these as *res mobiles*, as well as the fact that, in Portugal, Law No. 69/2014, of 29 August, which criminalizes the mistreatment of pets, has recently come into force, thus envisioning a change in paradigm both legal, social, cultural and even political.

But this change, strange as it may seem, is also not consensual among animal rights advocates. In fact, a very pertinent question arises: since the nonhuman animal is considered a center for the attribution 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 the non-human animal always being considered necessary suffering? This is where animal welfare advocates and animal rights defenders come in.

This is the perception that guided the conclusion of this study and that establishes the possibility of reflection through scientific data already collected for the benefit of the preservation of 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 in 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 the Amazon (Garcia; Galgaro, 2023).²⁰

It was based on 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 are pertinently related to the disastrous consequences so far observed in the media. In addition, the urgent reflection is how man can seek ways to increase 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 to preserve the environment is to preserve oneself; and to weaken the environment is to weaken one's own life. It is, therefore, essential to make society

²⁰GARCIA, 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 on: Oct. 2023.



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, with a focus on a perspective of holistic action that relates man and nature.



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