

ANITA PAULOVICS* – SZILVIA VETTER**

Sustainable Animal Welfare: A 21st Century Imperative and Transnational Legal Considerations, with Emphasis on Hungary***

ABSTRACT: In the 21st century, Sustainable Animal Protection (SAP) has emerged as a critical imperative, intertwining ethical, environmental, and legal considerations. This article explores the multifaceted nature of SAP, with a focus on its potential legal dimensions within Hungary. SAP extends beyond mere humane treatment, encompassing broader sustainability goals, such as environmental preservation and economic viability. The legal landscape governing animal welfare is complex, requiring a delicate balance between advancing animal welfare and addressing economic interests. International conventions and supranational legislation guide in promoting sustainable practices, emphasizing the importance of transnational cooperation. However, further legal research is needed to address critical areas such as legal harmonization, enforcement mechanisms, public participation, and stakeholder capacity-building. By aligning national legislation with EU standards, participating in international agreements, the appointment of dedicated officials, and the establishment of advisory bodies, Hungary contributes to global efforts in sustainable animal welfare. However, challenges remain in translating legal frameworks into effective action, particularly in enforcement and public commitment. Moving forward, prioritizing SAP within policy agendas and fostering collaboration across sectors and borders will be essential to ensure the well-being of animals while advancing sustainability goals in the 21st century. By integrating sustainability principles into all aspects of animal protection, investing in research and education, and promoting responsible animal-keeping practices, nations can work collaboratively to achieve a more sustainable future for both animals and humans.

* Prof. Dr. LL.M., Educational and General Vice Dean, Faculty of Law, University of Miskolc, Hungary. anita.paulovics@uni-miskolc.hu.

** PhD. LL.M., Head of Centre for Animal Welfare, University of Veterinary Medicine, Hungary. vetter.szilvia@univet.hu.

*** This study was prepared as part of the linkage project of the Humboldt Research Group "On the systematisation of criminal responsibility of and in enterprises" led by the University of Heidelberg and the University of Miskolc (2020-2025).

KEYWORDS: sustainable animal protection, environmental conservation, one health, one welfare, biophilia hypothesis, deadly link.

1. Introduction

In the 21st century, the concept of Sustainable Animal Protection (SAP) has emerged as a goal in the environment-sensitive global society.¹ This term, now being endeavored to be integrated by experts in Hungary, not only encompasses the ethical treatment of animals but also the legal frameworks that support their protection.. While the experts are working on localizing this concept, public interest in this topic is increasing significantly. SAP is gaining traction as a vital aspect of contemporary discourse, prompting a closer examination of its legal aspects. It is a field that not only evokes strong emotions but also requires expertise from a multidisciplinary perspective. What sets the viewpoint of sustainable animal welfare apart from the traditional understanding of animal welfare is its focus on aspects that can win over the majority of society in the long term, while also considering economic factors. This article delves into the multifaceted nature of SAP as a goal for the 21st century, with a particular focus on its potential legal dimensions within the Hungarian context.

2. Animal Protection in the Light of Sustainability

The scientific approach to animal protection highlights human responsibility in the relationship with animals, as animal protection is the practical manifestation of the obligation towards them.² From another point of view, sustainable environmental sustainability could be defined as a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity.³ It is an essential component of sustainability and a dynamically evolving pillar of circular economy, requiring evidence-based, balanced approaches free from exaggeration. The well-being of animals is intertwined with environmental, social, and economic considerations, it is increasingly recognized as an

¹ Vetter, 2024.

² Csintalan et al.,2016, p. 110.

³ Morelli, 2011.

integral part of sustainability goals worldwide. SAP goes beyond simply ensuring humane treatment; it involves creating systems and practices that promote the health and welfare of animals while also taking into account their ecological impact and the needs of future generations. This includes developing policies and regulations that prioritize animal welfare and promoting responsible consumption and production practices.

2.1. Animal Protection in Sustainability

Sustainability, as defined in the 1987 report of the United Nations, entails meeting the current needs of humanity while preserving the environment and natural resources for future generations.⁴ In this context, SAP represents an approach that emphasizes the long-term viability of the animal protection system, it aims to ensure the well-being of animals in harmony with the sustainable use and preservation of environmental resources, social considerations, and economic factors. The '3P' theory, which stands for People, Planet, and Profit, is a framework often used in sustainable development.⁵ In the context of sustainable animal welfare, this theory emphasizes the importance of balancing the well-being of animals for the benefit of human society (People), the preservation of the environment (Planet), and economic viability (Profit).

The goal of SAP is to avoid harmful negative externalities on the environment,⁶ such as environmental pollution. By adopting sustainable animal welfare practices in animal husbandries, we can reduce the release of pollutants into the environment, such as excess nutrients from animal waste, greenhouse gas emissions from livestock, and chemical residues from veterinary treatments.

When discussing animals in the context of SAP, it's important to consider all categories of animals. Certain authors argue that non-human animals are often overlooked in discussions of sustainability and related accounting efforts due to an ontology that fails to integrate them adequately.⁷ The general public often associates animal protection with *pet animals*, such as dogs and cats. These animals provide companionship and emotional support, requiring responsible ownership practices. Animal welfare research primarily focuses on livestock, on *farm animals*. Through

⁴ UN, 1987.

⁵ Slingerland et al., 2003.

⁶ Vetter et al., 2014.

⁷ Vinnari and Vinnari, 2022.

interdisciplinary approaches, researchers investigate the physiological, behavioral, and psychological aspects of animal well-being, informing evidence-based practices and policies. Ultimately, these findings have a significant impact on shaping legal regulations and guidelines concerning animal care and management. Sustainable practices here involve ethical treatment standards and minimizing environmental impact. Biodiversity conservation is focusing on *wild animals* in their natural habitats, conservation efforts include habitat preservation and combating illegal wildlife trade. Integrating these aspects is crucial for a comprehensive approach to SAP, considering the welfare of all animals in various contexts.

2.2 Sustainability in Animal Protection

Establishing sustainability in animal protection entails more than just ensuring the well-being of animals. It must be integrated with broader social and environmental goals. This includes creating a stable economic background to support sustainable practices. It is essential to develop infrastructure that is not only sustainable for farm animals but also addresses the needs of stray and wild animals. Moreover, for these initiatives to be successful, the operators of these institutions must possess adequate knowledge of economics, management, and marketing. Institutions have to develop strategies that not only benefit animal welfare but also contribute to economic stability and environmental conservation.

2.3 Relating concepts

Interconnectedness of various fundamental ideas and principles can be found within the realm of animal welfare and conservation. This section explores the synergy between the One Health approach, which emphasizes the interdependence of human, animal, and environmental health, the biophilia hypothesis, which suggests an innate connection and affinity between humans and other living organisms and finally the concept of the “deadly link,” which examines the correlation between animal cruelty and violence against humans. By examining these interconnected concepts, we gain insights into the complex web of relationships that shape our approach to sustainable animal protection and environmental stewardship.

2.3.1 One Health, One Welfare Concept

The “One Health, One Welfare” approach is a collaborative, multisectoral, and multidisciplinary framework rooted in the understanding that human health is intimately linked with animal health and the state of our shared environment. With the world's population growing and expanding into new territories, humans are in closer physical proximity to animals than ever before. This, coupled with international tourism and trade, exposes millions of people and animals to zoonotic diseases annually worldwide.⁸

Less frequently acknowledged, yet equally significant, are the intertwined and parallel patterns between human and animal well-being, extending beyond narrow health considerations.⁹ Both “positive” aspects, related to healthy psychological functioning, and “negative” elements, such as maladaptive or deviant behaviors, demonstrate a close interaction between humans and animals. The “One Health, One Welfare” approach recognizes the intricate relationships among humans, animals, and the environment, emphasizing the importance of considering all these factors holistically for sustainable health and welfare.

2.3.2 Biophilia Hypothesis

The term “biophilia” was first used by Fromm (1973) to describe a passionate love for all living things.¹⁰ According to Wilson's (1984) biophilia hypothesis, humans are innately attracted to animals and living organisms. From an evolutionary perspective, paying attention to animals enhances an individual's chances of survival, as animal behavior reliably signals safety and warns of danger.¹¹ Animals, especially those in motion, capture human attention, aiding in diverting focus during stressful situations. This contributes to achieving a more relaxed state, and regular relaxation helps to maintain overall health. The psychological significance of animal welfare is undeniable: a series of studies confirm the positive effects of animals on human health, well-being, and personality

⁸ Center for Disease Control and Prevention, One Health Basics. Available at: <https://www.cdc.gov/onehealth/basics/index.html> (Accessed: 30 August 2023).

⁹ Tarazona et al., 2020.

¹⁰ Fromm, 1973.

¹¹ Wilson et al., 1984.

development. These are the foundations of the widely used animal-assisted interventions today.¹²

2.3.3 The „Deadly Link”

The entire interconnected system of animal cruelty, interpersonal violence, and its societal implications is often referred to as the “Deadly Link”. This term encapsulates the intricate relationship between childhood cruelty to animals, domestic violence, and broader patterns of violent behavior in society. Throughout history, numerous great thinkers, philosophers, and naturalists have recognized the connections between animal cruelty and violence against humans. Sparse references to this issue appeared in scientific literature from the 19th century, but it wasn't until the second half of the 20th century that studies on this topic became more prevalent. Noteworthy is John MacDonald's controversial triad from 1961¹³ and studies that found links between childhood animal abuse and later violent behavior. Another important finding is the link between animal cruelty and domestic violence, where aggression often starts with animals and extends to family members. Children who witness animal abuse are more likely to be exposed to domestic violence. Studies from different countries have found significant rates of simultaneous exposure to animal abuse and domestic violence among victims.¹⁴ The limited Hungarian sources also support this correlation,¹⁵ highlighting how acts of animal cruelty often go unreported to authorities, although victims mention them during interviews. These findings underscore the complex relationship between animal cruelty, domestic violence, and societal behavior.¹⁶

3. Exploring Transnational Legal Dimensions of Sustainable Animal Protection with a Spotlight on Hungary

The task of legislators in developing animal protection laws is challenging, as they must strike a delicate balance between advancing animal welfare and considering economic interests. On one hand, there is a growing societal

¹² Babos, 2013.

¹³ Macdonald et al., 1961.

¹⁴ Vetter, 2024.

¹⁵ For example Kárteszi, 2023.

¹⁶ Vetter, 2023.

demand for stronger animal protection measures to ensure the well-being of animals. On the other hand, there are economic considerations, such as the interests of industries that rely on animal products. Legislators must navigate this complex landscape, taking into account ethical considerations, scientific evidence, and economic factors.

According to some authors, the prevailing ideas of sustainability and the safeguarding of animals exhibit a gap, largely due to the anthropocentric focus of most sustainability frameworks, including sustainable development. Criticisms of this divergence typically stem from the context of industrial animal agriculture, and as of yet, a comprehensive model embracing all species within the concept of sustainability has not materialized.¹⁷ However, it is crucial to note that the legislation regarding animal welfare is also largely governed by the *paradox of anthropocentric empathy*: legal efforts to protect animals are discernible, yet these efforts are "human-centered," creating unresolved contradictions within the legal framework.¹⁸

Animal welfare provisions are present at both local and global levels, in the form of national and supranational legal sources. It is important to emphasize that legal provisions protecting animals – especially regulations aimed at ensuring the welfare of animals under human control – do not define the optimal or best possible animal husbandry, but rather set minimum requirements. Failure to comply with these requirements can lead to negative legal consequences. The role of regulation is to establish the threshold at which a violation, sometimes animal cruelty, occurs, rather than to outline an ideal system of animal care.

To halt and reverse harmful trends affecting biodiversity, it is necessary to strengthen environmental, nature, and climate protection efforts, and ultimately, to adopt an individual-focused approach to animal welfare. These efforts should also be reflected in transboundary legislation. The principles of sustainability are increasingly reflected in international conventions that guide efforts in animal protection. For instance, the United Nations Framework Convention on Climate Change (UNFCCC)¹⁹ and the Convention on Biological Diversity (CBD)²⁰ specifically address sustainability issues related to animals. The UNFCCC emphasizes the role of animals in climate change and the importance of their protection for

¹⁷ Bergmann, 2019.

¹⁸ Vetter, 2020.

¹⁹ UN, 1992.

²⁰ CBD, 2011.

sustainable development. The CBD sets goals for the conservation and sustainable use of biodiversity, including the protection of animals and their habitats. The CBD was adopted because the state of biodiversity was rapidly deteriorating. Biological diversity is a measure of the variation in genes, species, and ecosystems. It is valuable because diversity is the base of the stability and sustainable function of natural systems of its enormously wide range for potential and unexplored uses. Human intervention has resulted in a profound modification of the original landscape, through deforestation, agriculture, drainage of wetlands, mining, and urbanization. As a result, many species had to find refuge in relatively small enclaves, sometimes only possible in legally designated protection areas.²¹ The erosion of biodiversity also has an impact on domestic animals. Biological diversity is not only the result of the natural evolution of the environment but also of the selection of species by human societies. Even if the number of domesticated animals is limited in comparison with wild species, these domesticated species are very significant for human societies, as food staples or to fulfill basic needs.²²

In the European Union, sustainability has become a central theme in animal welfare legislation. The protection of animals is a fundamental value within the EU, enshrined in Article 13 of the Treaty on the Functioning of the European Union.²³ While the Member States of the European Union collaborate on certain aspects of foreign policy, justice, and internal affairs, the Union was primarily established for economic reasons, aiming to boost trade and create a single market. Therefore, greater emphasis is placed on issues directly impacting the economy. The EU has implemented various directives and regulations aimed at promoting sustainable practices in farm animal husbandry, transport, and slaughter. For example, the EU Regulation on the protection of animals during transport and related operations²⁴ sets out requirements to ensure the welfare of animals during transportation, also with a focus on sustainability. Additionally, the EU's Farm to Fork Strategy emphasizes the importance of sustainable food systems, including animal

²¹ Pearce and Moran, 1994.

²² Boisvert and Vivien, 2005.

²³ The consolidated version of the Treaty on the Functioning of the European Union, Art. 13.

²⁴ Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations.

welfare, in achieving environmental and health objectives.²⁵ EU legislation increasingly reflects the interconnectedness of animal welfare and sustainability, signaling a commitment to addressing these issues holistically.

Hungary participates in international agreements and conventions that promote sustainable animal protection. For instance, the country is a signatory to the Convention on Biological Diversity, which emphasizes the conservation of biodiversity and the sustainable use of natural resources. Hungary also joined the agreement concerning the international trade of wild, protected animals and plants. This Convention was adopted in Washington in 1973.²⁶ When the idea for CITES was first formed in the 1960s, international discussion of the regulation of wildlife trade for conservation purposes was something relatively new.²⁷ The Washington Agreement regulates the international trade of endangered wild animals. It is very important, because some of these animals have already become extinct, while others seriously endangered. This situation was sped up by hunting and capturing of these animals for illegal trade.²⁸ An important objective of the Convention is to reduce illegal wildlife trade. Hungary joined this Agreement in 1985. In Hungary after the accession to the Agreement, legal regulation concerning these species became stricter. In 1997, the Convention on the Conservation of Migratory Species of Wild Animals, shortly the Bonn Convention entered into force.²⁹ All parties accepted that wild animals living in several forms are irreparable part of the natural system of the Earth, therefore they should be preserved for the sake of humanity. Wild animals possess an increasing value in environmental, ecological, scientific, cultural, educational, social and economical aspects. Protected animals that migrate through borders deserve special attention. Appendix I. lists endangered migrant species. These are the species that are entitled to be endangered under reliable dates. Appendix II. lists migratory species which have an unfavorable conservation status, and which require international agreements for their conservation and management, as well as those that have a conservation status that would significantly benefit from

²⁵ Farm to Fork strategy for a fair, healthy and environmentally-friendly food system. Available at: https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en (Accessed: 23 March 2024).

²⁶ CITES, 2019.

²⁷ Perczel, 1992.

²⁸ Paulovics and Bragyova, 2018.

²⁹ CMS, 1979.

the international cooperation that could be achieved by an international agreement. Several Agreements have been concluded to date under the auspices of CMS. They aim to conserve for example bats in Europe, Marine turtles, or the Siberian Crane. Hungary acceded to the CMS in 1986.³⁰ Since the adoption of the CMS, climate change impacts have posed a serious threat to the migratory wild species and their natural habitat. Climate change is complicating the enterprise of international cooperation for migratory wildlife conservation, on account of the shifting ranges and particular vulnerabilities to climate change of migratory species. The CMS regime has in fact already begun to come to terms with the novel challenge of helping migratory species adapt to climate change with minimal losses.³¹ The Bonn Convention has been criticized as being too weak to effectively protect endangered species. However, it should not be forgotten that it is up to the contracting parties to effectively implement protective measures. On a European level, for example, this is achieved through the Bern Convention on the Conservation of European Wildlife and Natural Habitat 1979 and pertinent nature conservation laws, such as the Bird Directive 1979.³² The aims of the Bern Convention are to conserve flora and fauna and their habitats, especially those species and habitats whose conservation requires the cooperation of several states, and to promote such cooperation. Particular emphasis is given to endangered and vulnerable species, including endangered and vulnerable migratory species. Each Contracting Party has to take steps to promote national policies for the conservation of wild flora, wild fauna, and natural habitats. COPs have to promote education and disseminate general information on the need to conserve species of wild flora, fauna and their habitats. Parties should prohibit all means of capturing or exterminating, actions that can cause local disappearance or serious disturbance of wild animals. Each party can make exceptions to the control regulations and bans if other solutions are not available and it does not cause damage to maintaining the populations. In the aspect of migrant species, the Agreement contains separate regulations.³³ The Convention on Wetlands of International Importance especially as Waterfowl Habitat was adopted in 1971.³⁴ This is an agreement about the

³⁰ Paulovics, 2003.

³¹ Trouwborst, 2012.

³² Sellheim and Schumacher, 2022.

³³ Paulovics, 2003.

³⁴ UNESCO, 1994.

protection of wild waters and the natural habitat of water birds. Hungary joined the agreement in 1979. Ramsar Convention was the first of the modern global intergovernmental treaties on conservation and wise use of natural resources, but, compared with more recent ones, its provisions are relatively straightforward and general. Over the years the Conference of the Contracting Parties has further developed and interpreted the basic tenets of the treaty text and succeeded in keeping the work of the Convention abreast of changing world perceptions, priorities, and trends in environmental thinking. Over the years, however, the Convention has broadened its scope to cover all aspects of wetlands conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities.³⁵ Under the Ramsar Convention conservation and wide use means that parties must promote the conservation of listed wetlands and the wise use of all other wetlands. In 1987, the third meeting of the parties of the Ramsar Convention accepted the following definition of wise use. The wise use of wetlands is their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem.³⁶

In the context of the EU's supranational influence, Hungary implements EU regulations on animal welfare and aligns its national legislation accordingly. This integration ensures that Hungary's approach to animal protection is in line with the broader sustainability objectives of the EU. By adhering to supranational standards and agreements, Hungary contributes to the collective efforts of the EU and the international community to promote sustainable practices in animal protection.

Since 2020, Hungary has taken significant steps towards SAP by appointing a single government official responsible for animal welfare. Initially, this role was designated as a ministerial commissioner subordinate to the Minister of Agriculture.³⁷ In 2022, Hungary elevated its commitment to SAP by appointing a government commissioner responsible for developing and implementing an animal welfare action plan. This commissioner collaborates closely with relevant ministries, organizations, and civil society groups to enhance coordination and cooperation in

³⁵ Paulovics, 2003.

³⁶ Farrier and Tucker, 2000.

³⁷ The directive of the Minister of Agriculture 7/2020. (IX. 30.) AM regarding the appointment of a ministerial commissioner.

promoting sustainable animal welfare practices.³⁸ Additionally, Hungary established the National Animal Welfare Council in 2021 to serve as a recommending, consulting, and advisory body in discussions related to animal protection.³⁹ In addition to governmental initiatives, Hungary established the “Our Common Cause Animal Protection Foundation” in 2023 to promote sustainable animal welfare practices. Operating under the Ministry of Justice, the foundation aims to disseminate information, coordinate conferences, manage grants, and support initiatives that align with SAP.⁴⁰ Through these efforts, Hungary seeks to foster a culture of responsible animal keeping that contributes to long-term environmental and social well-being.

4. Conclusions and Recommendations

In conclusion, Sustainable Animal Protection (SAP) represents a crucial imperative for the 21st century, requiring a multidimensional approach that integrates ethical, environmental, and legal considerations. SAP is increasingly recognized as an essential component of sustainable development, reflecting the interconnectedness of animal welfare, environmental conservation, and human well-being.

The legal dimensions of SAP present both challenges and opportunities for policymakers. While there is growing societal demand for stronger animal protection measures, legislators must navigate complex economic interests and ethical considerations to develop effective legal frameworks. International conventions and supranational legislation provide valuable guidance in promoting sustainable practices in animal protection, highlighting the importance of transnational cooperation in addressing global challenges.

There is a pressing need for further legal research to address critical areas within the realm of animal welfare. Firstly, legal harmonization across jurisdictions warrants comprehensive analysis to *identify best practices in*

³⁸ Government Decree No. 1271 of 2022 about appointing and defining the tasks of the government commissioner responsible for the development and implementation of the animal welfare action plan.

³⁹ Government Decree No. 1124 of 2021 about regarding the National Animal Welfare Council.

⁴⁰ Government Decree No. 1531 of 2022 about on the establishment of the "Our Common Cause Animal Protection" Foundation and the provision of necessary conditions and resources for its operation.

animal protection legislation. By conducting comparative legal studies, policymakers can glean insights into effective approaches and mechanisms for harmonizing national laws with international standards, while also considering contextual variations. Secondly, the *effectiveness of existing enforcement mechanisms requires thorough investigation*. This entails assessing the implementation and enforcement of animal welfare regulations, identifying gaps or deficiencies in current enforcement practices, and proposing enhancements to ensure greater compliance with established standards. Thirdly, *mechanisms for enhancing public participation* in the development and implementation of animal protection policies merit further examination. Lastly, *capacity building among relevant stakeholders* is essential for the effective implementation of animal protection laws. This includes identifying opportunities for training and professional development among law enforcement agencies, veterinary professionals, and animal welfare organizations.

In the Hungarian context, recent government initiatives demonstrate a commitment to advancing SAP through the appointment of dedicated government officials, the establishment of advisory bodies, and the creation of supportive institutions. By aligning national legislation with EU standards and participating in international agreements, Hungary contributes to broader efforts to promote sustainable animal welfare practices.

Moving forward, it is essential for Hungary and other nations to continue prioritizing SAP within their policy agendas, integrating sustainability principles into all aspects of animal protection. This includes fostering public awareness, promoting responsible animal-keeping practices, and investing in research and education to support evidence-based policymaking. By working collaboratively across sectors and borders, we can ensure the well-being of animals while advancing the goals of sustainability and environmental stewardship in the 21st century.

Bibliography

- [1] Babos, E. (2013) 'Állatasszisztált terápia. Módszertani előtanulmány óvodáskorú gyerekek kutyával történő fejlesztésére', *Alkalmazott pszichológia*, 13(3), pp. 59-81.
- [2] Bergmann, I. M. (2019) 'Interspecies Sustainability to Ensure Animal Protection: Lessons from the Thoroughbred Racing Industry', *Sustainability*, 11(19), 5539; <https://doi.org/10.3390/su11195539>.
- [3] Boisvert, V., Vivien, F. D. (2005) 'The Convention on Biological Diversity', *Ecological Economics*, 53(4), pp. 461-472; <https://doi.org/10.1016/j.ecolecon.2004.06.030>.
- [4] Csintalan, Cs., Fodor K., Gyertyán I., Ózsvári L., Visnyei, L. (2016) *Az állatvédelem általános és jogi vonatkozásai*. Egyetemi jegyzet. Második, átdolgozott kiadás. Budapest: SZIE-ÁOTK, Állategészségügyi Igazgatástani és Agrárgazdaságtani Tanszék.
- [5] Farrier, D., Tucker, L. (2000) 'Wise use of Wetlands under the Ramsar Convention: a challenge for meaningful implementation of international law', *Journal of Environmental Law*, 12(1), pp. 21-42; <https://doi.org/10.1093/jel/12.1.21>.
- [6] Fromm, E. (1973) *The Anatomy of Human Destructiveness*. First ed. New York: Holt Rinehart and Winston.
- [7] Kárteszi, N. (2023) *Állatkínzás és emberek elleni erőszak összefüggése, különös tekintettel az állatkínzás és a családon belüli erőszak közötti kapcsolatra*. Szakdolgozat. Miskolc: Miskolci Egyetem.
- [8] Macdonald, J. M., Boyd, S., Galvin, J. A. (1961) *The murderer and his victim*. Springfield, IL: CC Thomas.
- [9] Morelli, J. (2011) 'Environmental sustainability: A Definition for Environmental Professionals', *Journal of Environmental Sustainability*, 1(1), pp. 1-9; <https://doi.org/10.14448/jes.01.0002>.

-
- [10] Paulovics, A. (2003) *Problematical Aspects of Legal Regulations Concerning Animal Protection*. Miskolc: Bíbor.
- [11] Paulovics, A., Bragyova, A. (2018) ‘The Protection of Wildlife’, in Kékesi, T. (ed.) *Multiscience XXXII. MicroCAD International Multidisciplinary Scientific Conference*, Miskolc: University of Miskolc, pp. 1-7; <https://doi.org/10.26649/musci.2018.041>.
- [12] Pearce, D., Moran, D. (1994) *The Economic Value of Biodiversity*. First ed. London: Routledge.
- [13] Perczel, Gy. (1992) ‘Adalékok a környezetvédelem intézményesülésének történetéhez’, *Magyar Közigazgatás*, 42(1), pp. 31-37.
- [14] Sellheim, N., Schumacher J. (2022) ‘Increasing the Effectiveness of the Bonn Convention on the Conservation of Migratory Species’, *Journal of International Wildlife and Policy*, 25(4), pp. 367-383; <https://doi.org/10.1080/13880292.2022.2153461>.
- [15] Slingerland, M. A., Klijn, J. A., Jongman, R. H. G., van der Schans, J. W. (2003) *The unifying power of sustainable development; towards balanced choices between people, planet and profit in agricultural production chains and rural land use: the role of science*. (WUR-report). Wageningen: Wageningen University.
- [16] Tarazona, A. M., Ceballos, M. C., Broom, D. M. (2020) ‘Human Relationships with Domestic and Other Animals: One Health, One Welfare, One Biology’, *Animals*, 10(1), 43; <https://doi.org/10.3390/ani10010043>.
- [17] Trouwborst, A. (2012) ‘Transboundary Wildlife Conservation in a Changing Climate: Adaptation of the Bonn Convention on Migratory Species and Its Daughter Instruments to Climate Change’, *Diversity*, 2012/4, pp. 258-300; <https://doi.org/10.3390/d4030258>

- [18] Vetter, Sz. (2020) *Az állatkínzás szabályozása gazdasági és társadalmi mutatók tükrében*. PhD thesis, Gödöllő: Szent István Egyetem.
- [19] Vetter, Sz. (2023) ‘Az állatkínzás büntetőjogi tényállásának szigorítása Magyarországon az elmúlt évtizedek kriminológiai és pszichológiai kutatásainak tükrében’, *Ügyészek lapja*, 2023(3), [Online]. Available at: <https://ugyeszeklapja.hu/?p=4216> (Accessed: 3 March 2024)
- [20] Vetter, Sz. (2024) *Állatvédelmi jog*. Budapest, L’Harmattan.
- [21] Vetter, Sz., Vasa, L., Ózsvári, L. (2014) ‘Economic Aspects of Animal Welfare’, *Acta polytechnica hungarica*, 11(7), pp. 119-134; <https://doi.org/10.12700/APH.11.07.2014.07.8>.
- [22] Vinnari, E., Vinnari, M. (2022) ‘Making the invisibles visible: Including animals in sustainability (and) accounting’, *Critical Perspectives on Accounting*, vol. 82, 102324; <https://doi.org/10.1016/j.cpa.2021.102324>.
- [23] Wilson, E. O. (1984) *Biophilia*. Cambridge, MA: Harvard University Press; <https://doi.org/10.4159/9780674045231>.
- [24] CMS (1979) Convention on the Conservation of Migratory Species of Wild Animals [Online]. Available at: https://www.cms.int/sites/default/files/instrument/CMS-text.en_.PDF (Accessed: 14 March 2024).
- [25] CITES (2019) Convention on International Trade in Endangered Species of Wild Fauna and Flora [Online]. Available at: https://cites.org/sites/default/files/I/Brochure_UNEP_CITES_eng.pdf (Accessed: 14 March 2024).
- [26] Convention on Biological Diversity. (2011) [Online]. Available at: <https://www.cbd.int/doc/legal/cbd-en.pdf> (Accessed: 14 March 2024).

-
- [27] UNESCO (1994) Convention on Wetlands of International Importance especially as Waterfowl Habitat [Online]. Available at: https://www.ramsar.org/sites/default/files/documents/library/current_convention_text_e.pdf (Accessed: 23 March 2024).
- [28] UN (1987) United Nations Report of the World Commission on Environment and Development: Our Common Future [Online]. Available at: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> (Accessed: 22 August 2023).
- [29] UN (1992) United Nations Framework Convention on Climate Change [Online]. Available at: https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf (Accessed: 14 March 2024).