

Criminal Liability for Fossil Sellers and Buyers as Protected Cultural Heritage Under the Law: A Case Study in Bojonegoro

Ayu Risma Wulandari¹, Andrianto Prabowo^{2*}, Dodik Wahyono³

^{1,2,3}Department of Law, Universitas Bojonegoro

¹akuayurisma@gmail.com, ^{2*}andriantoprabowo07@gmail.com, ³dodikwahyono13@gmail.com

Abstract

The preservation of fossils as part of cultural heritage in Indonesia continues to face various challenges, particularly those related to the low level of public legal awareness and the suboptimal implementation of law enforcement. Fossils that possess significant historical and scientific value are frequently transferred without complying with the applicable statutory provisions, thereby posing a risk to the preservation of national cultural heritage. This study aims to analyze the criminal liability of both sellers and buyers of fossils classified as protected cultural heritage, as well as to examine the enforcement of criminal law against such practices in Bojonegoro Regency. The research applies theories of criminal liability and cultural heritage protection, supported by a review of statutory regulations and scholarly legal opinions. This study employs a normative-empirical legal research method using statutory, conceptual, and empirical approaches. Data were collected through literature review and interviews. The findings indicate that both sellers and buyers of fossils may be held criminally liable under Law Number 11 of 2010 concerning Cultural Heritage; however, its implementation has not been carried out optimally. The study concludes that strengthening law enforcement and increasing public legal awareness are necessary to ensure the protection of fossils as part of cultural heritage.

Keywords: criminal liability, fossils, cultural heritage, law enforcement

Abstrak

Pelestarian fosil sebagai bagian dari cagar budaya di Indonesia masih menghadapi berbagai permasalahan, terutama berkaitan dengan rendahnya kesadaran hukum masyarakat dan belum optimalnya pelaksanaan penegakan hukum. Fosil yang memiliki nilai penting bagi sejarah dan ilmu pengetahuan kerap dipindahtangankan tanpa memenuhi ketentuan peraturan perundang-undangan, sehingga berpotensi menghilangkan warisan budaya bangsa. Penelitian ini bertujuan untuk menganalisis pertanggungjawaban pidana bagi penjual dan pembeli fosil sebagai cagar budaya yang dilindungi undang-undang, serta mengkaji penegakan hukum pidana terhadap praktik tersebut di Kabupaten Bojonegoro. Penelitian ini menggunakan teori pertanggungjawaban pidana dan teori perlindungan cagar budaya dengan kajian pustaka berupa peraturan perundang-undangan dan pendapat para ahli hukum. Metode penelitian yang digunakan adalah penelitian hukum normatif-empiris dengan pendekatan perundang-undangan, konseptual, dan empiris. Data diperoleh melalui studi kepustakaan dan wawancara. Hasil penelitian menunjukkan bahwa penjual dan pembeli fosil dapat dimintai pertanggungjawaban pidana berdasarkan Undang-Undang Nomor

***Andrianto Prabowo**

Email: andriantoprabowo07@gmail.com

This work is licensed under a [Creative Commons Attribution-Share](https://creativecommons.org/licenses/by-sa/4.0/)

[Alike 4.0](https://creativecommons.org/licenses/by-sa/4.0/)



11 Tahun 2010 tentang Cagar Budaya, namun penerapannya belum berjalan secara optimal. Penelitian ini menyimpulkan bahwa diperlukan penguatan penegakan hukum serta peningkatan kesadaran hukum masyarakat guna menjamin perlindungan fosil sebagai cagar budaya.

Kata Kunci: *pertanggungjawaban pidana, fosil, cagar budaya, penegakan hukum*

1. INTRODUCTION

The preservation of cultural heritage in Indonesia still faces serious challenges, primarily caused by a lack of understanding among local governments and the public regarding the importance of cultural heritage and the provisions of Law Number 11 of 2010 concerning Cultural Heritage.¹ This has led to the damage and loss of sites and objects with potential cultural heritage values.^{2,3} Geological heritage in the form of ancient fossils is an invaluable asset in Indonesia; however, despite being strictly protected, it remains under serious threat from illegal trade driven by the motivation to increase income and boost the economy.⁴

The lack of appreciation for cultural heritage objects is a contributing factor to the threats of theft and destruction. This condition reflects the low awareness of both the public and the government toward the significant values contained in cultural heritage, from both historical and scientific perspectives.⁵ Many people view fossils as cultural heritage only from an economic standpoint rather than for their preservation and educational value, which should be collectively maintained. Consequently, practices of buying and selling, hunting, and damaging cultural heritage objects still frequently occur in various regions in Indonesia.

This phenomenon is exacerbated by weak supervision and law enforcement against violations in the field of cultural heritage preservation. Although Law Number 11 of 2010

¹ Kurniawan, Ganda, Abdul Latif, and Siswantari Pratiwi. "Perlindungan Dan Pemanfaatan Cagar Budaya Berbasis Partisipasi Di Kota Metro Dalam Perspektif Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya." *VISA: Journal of Vision and Ideas* 5, no. 1.

² Hibatullah, Rafie Azhar, and Martiningsih Martiningsih. "Perlindungan Hukum Terhadap Watu Jaran Tanpa Kepala Di Desa Laren Kecamatan Bumiayu, Kabupaten Brebes Berdasarkan Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya." *Wijayakusuma Law Review* 5, no. 2 (December 10, 2023).

³ Kurniati, Rina. "Arahan Pelestarian Kampung Melayu Sebagai Kawasan Cagar Budaya (Berdasarkan Identifikasi Bangunan Bersejarah Dan Aktivitas Budaya)." *Ruang* 9, no. 1 (April 27, 2023): 12–23.

⁴ Sularsih, Sri. "Harmonisasi Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya Dan Undang-Undang Nomor 19 Tahun 2002 Tentang Hak Cipta Dalam Pelindungan Arsitektural Bangunan Cagar Budaya." *Jurnal Konservasi Cagar Budaya* 6, no. 1 (December 2, 2012): 50–59.

⁵ Prasetyo, Bagus. "Efektifitas Pelestarian Cagar Budaya Dalam Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya." *Jurnal Legislasi Indonesia* 15, no. 1 (May 8, 2018): 75–85.

concerning Cultural Heritage regulates protection, preservation, and sanctions for violators, its implementation in the field has not been optimal. There are still many cases of theft and illegal trade of cultural heritage objects that are not seriously followed up by law enforcement agencies, creating the impression that violations against cultural heritage are crimes that receive little attention.

Fundamentally, this issue stems from a general view that still places the responsibility for preservation on the Central Government and focuses only on forms or sites. In fact, the new paradigm mandated by Law Number 11 of 2010 emphasizes the implementation of preservation autonomously by each regional government, which is also reinforced by Law Number 23 of 2014 concerning Regional Government. However, although the spirit of decentralization has been regulated in legislation, its implementation still faces many challenges.

This condition indicates a gap between regulatory idealism and field practices. As a result, many objects of historical and scientific value remain legally unprotected, making them vulnerable to theft, illegal transfer of ownership, and destruction. Another problem arising from the weak implementation of preservation at the regional level is the increase in the buying and selling of cultural heritage objects, including ancient fossils of high historical value.

The prevalence of fossil trading reflects the low legal understanding of the public regarding the status of fossils as state-protected cultural heritage objects. Not a few people consider fossils as legitimate personal finds to be traded, even though such actions constitute a criminal offense as regulated in Article 26 and Article 101 of Law Number 11 of 2010 concerning Cultural Heritage. In this context, both the seller and the buyer have the potential for criminal liability.

From an academic perspective, this research is urgent because, to date, discussions regarding criminal liability for the buying and selling of fossils as cultural heritage are still very limited. Most previous studies have focused more on preservation from administrative, conservation, or cultural policy perspectives but have not highlighted the aspects of criminal law in depth. This lack of studies linking criminal law aspects with fossils as cultural heritage objects is the research gap that needs further investigation.

Therefore, this research is important to analyze the criminal liability for sellers and buyers of fossils as legally protected cultural heritage, both from normative provisions

and empirical implementation in the field. Through this research, it is expected that an appropriate model of criminal liability for perpetrators of fossil trading can be found as part of the criminal offense of violating cultural heritage protection, as well as providing a contribution to the development of criminal law in the field of cultural preservation now and in the future.

2. RESEARCH METHOD

The type of research conducted in this study is normative-empirical legal research. This approach is selected to examine the positive legal norms enshrined in Law Number 11 of 2010 concerning Cultural Heritage while simultaneously observing the implementation and effectiveness of law enforcement regarding the phenomenon of fossil trading in the field.⁶ The integration of these two methods aims to synchronize the *das sollen* (what ought to be) aspect of legal regulations with the *das sein* (what is) reality in society, particularly concerning the challenges of regional autonomy in cultural heritage preservation.

The data sources used in this study consist of primary and secondary data. Primary data is obtained directly through field research in the form of interviews with relevant informants, such as law enforcement officials or cultural preservation authorities at the regional level, to gain a real-world perspective on the obstacles to criminal prosecution. Meanwhile, secondary data includes primary legal materials consisting of statutory regulations (the Cultural Heritage Law and the Regional Government Law), secondary legal materials such as literary books, scientific journals, and relevant legal documents, as well as tertiary legal materials such as legal dictionaries and encyclopedias to support the interpretation of terms.

Data collection techniques are carried out through two main stages: library research to deepen the theoretical foundation of criminal liability, and in-depth interviews to explore empirical aspects. All collected data is then processed using qualitative analysis with a descriptive-analytical model. Through this method, the researcher presents the facts found in the field and subsequently analyzes them based on prevailing criminal law provisions to formulate an appropriate model of criminal liability for perpetrators of

⁶ Wiraguna, Sidi Ahyar. "Metode Normatif Dan Empiris Dalam Penelitian Hukum: Studi Eksploratif Di Indonesia." *Public Sphere: Jurnal Sosial Politik, Pemerintahan dan Hukum* 3, no. 3 (November 30, 2024).

ancient fossil trading.

3. RESULTS AND DISCUSSION

3.1 Criminal Liability for Sellers and Buyers of Fossils as Legally Protected Cultural Heritage

Criminal liability for sellers and buyers of fossils as legally protected cultural heritage is a vital instrument for safeguarding national cultural heritage from illegal exploitation. Sellers, as primary perpetrators, and buyers, as supporters of the demand, both face similar sanctions, with factors such as knowledge, scale, loss, and motivation playing a crucial role in determining the severity of the sentence. These findings emphasize the necessity of a holistic approach to law enforcement, including public education and enhanced supervision, to reduce illegal trade incidents and ensure the preservation of fossils as part of cultural identity. The discussion regarding the criminal liability of fossil sellers and buyers as protected cultural heritage is analyzed using the theory of criminal liability and the provisions of Law Number 11 of 2010 concerning Cultural Heritage. This analysis is conducted by examining the elements of criminal liability, which include legal subjects, unlawful acts (*onrechtmatige daad*), elements of fault (*mens rea*), and the basis for imposing criminal sanctions, thereby identifying the parties that can be held criminally liable in the practice of fossil trading.

Furthermore, the legal basis for fossil protection in Indonesia is explicitly governed by Law Number 11 of 2010 concerning Cultural Heritage, which designates fossils as cultural heritage objects due to their historical and scientific significance (Article 1 and Article 5). This Law strictly prohibits illegal exploitation and trade through the provisions of Articles 66 to 68.⁷ Technically, the management of fossil discoveries is also regulated under Government Regulation Number 10 of 2011 to prevent the loss of cultural assets. Although this legal framework is comprehensive, field evidence suggests significant challenges; as revealed in an interview with the Museum 13 authorities, fossil discoveries in Bojonegoro Regency remain highly vulnerable to illegal trade with outside parties, indicating that the implementation of these regulations has not yet been optimized.

Regarding criminal liability, fossil sellers often argue that discovered objects are

⁷Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

private property. However, legally, Article 6 of the Cultural Heritage Law emphasizes that all cultural heritage objects are under state control. Even if perpetrators claim ignorance of the regulation, the act of selling fossils still fulfills the elements of a criminal offense, as fossils possess irreplaceable intrinsic scientific value.⁸

The basis for prosecuting sellers is explicitly regulated under Article 102 of the Cultural Heritage Law, which mandates a maximum prison sentence of five years and a fine of IDR 500 million. Sellers are regarded as the primary legal subjects driving illegal trade. This liability may be aggravated under Article 103 if the seller is proven to have conducted or possessed knowledge of unauthorized excavations that damage the archaeological context of the fossil.⁹

This law enforcement aims to protect cultural heritage from commercialization that harms public interest. From a criminal law perspective, the element of intent (*mens rea*) is established when the seller recognizes the legal risks yet chooses to act for personal gain. Stringent sanctions are essential as a preventive measure to ensure that fossils remain under state management for the benefit of sustainable education and research.

Furthermore, criminal liability for buyers of fossils classified as cultural heritage is fundamentally as significant as the liability imposed on sellers. A buyer who acquires a fossil without official authorization can still be subject to criminal sanctions as stipulated in Article 103 of Law Number 11 of 2010 concerning Cultural Heritage, as the act of unauthorized purchasing is viewed as direct involvement in the illicit fossil trade.¹⁰ In the context of criminal law, the buyer can be positioned as an accomplice or a participant in the offense based on Article 55 of the Indonesian Criminal Code (KUHP), particularly if they are aware that the purchased fossil is a protected cultural heritage object prohibited from trade.¹¹ The rationale for holding the buyer accountable is that they also derive benefit from the proceeds of the crime. The presence of buyers allows the illegal fossil trade to persist and even flourish. Interview results indicate that buyers are not passive; rather, they actively seek out and offer high prices to the community for fossils, with some

⁸ Schultze, Hans-Peter. "The Start of the Scientific Journal 'Fossil Record.'" *Fossil Record* 27, no. 3 (December 30, 2024): 295–97.

⁹ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

¹⁰ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

¹¹ Tute, C., and F. U. Puluwulawa. "Analisis Pertimbangan Hakim Dalam Kasus Pidana Illegal Mining: Menelisik Akar Disparitas Putusan Di Peradilan." *Al-Zayn: Jurnal Ilmu Sosial & Hukum* 3, no. 6 (2025): 8521–37.

offers reaching hundreds of millions of rupiah.

This demonstrates an element of intent (*mens rea*) on the part of the buyer to possess a fossil known to have historical value; thus, the buyer cannot be exempted from criminal liability. Consequently, the buyer is seen as reinforcing the occurrence of violations against cultural heritage protection. However, there is a difference in emphasis between the liability of the seller and the buyer. Sellers generally face heavier sanctions as they are the party initiating, providing, and driving the transaction. Meanwhile, a buyer may receive a lighter sentence if it can be proven that they genuinely did not know the fossil status as cultural heritage. Yet, this condition is rare because, in practice, fossil buyers typically deal with black markets or unofficial sales channels, implying an awareness of the risks and the unlawful nature of their actions. Ultimately, both sellers and buyers can be held criminally liable, as both play a role in undermining the preservation efforts of cultural heritage objects that should be protected for the sake of science and future generations.

The analysis of criminal liability in the fossil trade cannot be separated from several determinant factors that influence the severity of the sanctions imposed. The first and most decisive factor is the level of intent (*mens rea*). Perpetrators who knowingly trade fossils without a permit are deemed to have committed a serious violation due to the element of will obtain personal gain at the expense of cultural preservation. This is reinforced by Article 103, paragraph (2) of the Cultural Heritage Law, which provides for higher penalties for intentional violations compared to negligence. In legal discourse, this degree of fault serves as the primary foundation for determining an individual's legal liability.¹²

The second factor relates to the inner attitude and behavior of the perpetrator during the law enforcement process. Based on Article 105 of the Cultural Heritage Law, judges have the discretionary power to consider lighter sentences for perpetrators who demonstrate good faith, such as being cooperative in returning fossils or exposing illegal trade networks. Such an attitude is viewed as an effort to mitigate the state's loss of historical objects. However, the urgency of this protection must also be viewed in a broader context, namely as a form of compliance with international standards prohibiting the illicit trade of cultural property. Strict law enforcement against the fossil trade is not

¹² Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

only a national mandate but also part of a global responsibility to safeguard world cultural heritage.¹³

Although the normative framework has regulated these factors, the effectiveness of criminal liability in the field is still hindered by external aspects. Based on author's interviews with the Museum 13 authorities, the weak role of local government is a crucial factor that undermines law enforcement. The lack of serious follow-up on reports of fossil trading practices creates a poor precedent where the public and collectors feel "safe" to continue illegal transactions. This phenomenon indicates that without consistent supervision and political will from local governments, the criminal instruments available in the law will remain merely symbolic without real deterrent power.¹⁴

3.2 Criminal Liability for Sellers and Buyers of Fossils as Legally Protected Cultural Heritage

The Indonesian legal framework provides a comprehensive basis for imposing criminal liability on individuals involved in the unauthorized trade and handling of fossils as protected cultural heritage under Law Number 11 of 2010. Article 101 establishes criminal sanctions for the unlawful transfer of ownership of cultural heritage objects without authorization, reflecting the seriousness of such offenses due to their potential to undermine historical, scientific, and cultural values.¹⁵ This provision is particularly relevant to fossil transactions, where illegal transfers may hinder preservation efforts and scientific research. However, empirical findings indicate that the enforcement of this provision remains suboptimal, largely due to limited supervision and insufficient public awareness.

Furthermore, Article 102 emphasizes the obligation to report the discovery of cultural heritage objects, criminalizing intentional failure to do so. The element of intent is central, indicating that criminal liability arises only when individuals knowingly neglect their reporting duties. In practice, non-compliance is often driven by economic

¹³ Benson, Emily, and Lexie Judd. "Trade Laws of Nature: Biodiversity Provisions and the AfCFTA." CSIS. Accessed March 30, 2026. <https://www.csis.org/analysis/trade-laws-nature-biodiversity-provisions-and-afcfta>.

¹⁴ Rahayu, Derita Prapti, Muhammad Rustamaji, Faisal Faisal, and Rafiqqa Sari. "Legal Effectiveness of Business Contracts in Tin Mining: Socio-Legal and Governance Challenges in Corporate–Community Relations in Indonesia." *Resources Policy* 111 (December 2025): 105767.

¹⁵ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

motives and misconceptions that fossils constitute private property, thereby reducing the effectiveness of this provision. Similarly, Article 103 prohibits unauthorized excavation or search activities, recognizing that unregulated fossil extraction not only violates legal norms but also risks damaging the scientific integrity of such objects.¹⁶ Despite this, enforcement challenges persist due to the normalization of such practices within local communities and the limited reach of regulatory oversight.

Additional provisions, including Articles 104 and 105, address intentional obstruction of preservation efforts and the deliberate destruction of cultural heritage, respectively.¹⁷ These provisions underscore the importance of safeguarding fossils not only from physical harm but also from actions that hinder conservation initiatives. In the context of fossil trading, damage often results from improper extraction or handling motivated by economic interests, further reinforcing the relevance of criminal sanctions as a deterrent mechanism.

Moreover, Article 106 extends criminal liability to acts of theft and receiving stolen cultural heritage, targeting the broader network of illegal fossil trade. Fossils frequently circulate through intermediaries, complicating traceability, and increasing the risk of losing valuable scientific data. Articles 107 and 108 further regulate the unauthorized transfer and separation of cultural heritage objects, emphasizing the need to preserve their contextual and structural integrity.¹⁸ In many cases, fossils are relocated or fragmented without proper authorization, resulting in the loss of archaeological context and diminishing their research value.¹⁹

Finally, Article 112 governs the unauthorized reproduction or commercial utilization of cultural heritage, highlighting that even non-destructive uses may have legal implications when conducted without proper authorization.²⁰ This provision reflects a

¹⁶ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

¹⁷ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

¹⁸ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

¹⁹ Kresna Dewi, Erik Setiyabudi, Riecca Oktavitanian, and Hanang Samodra. "Tinjauan Kontribusi Fosil Dalam Penetapan Warisan Geologi." *Jurnal Geologi dan Sumberdaya Mineral* 24, no. 4 (November 21, 2023): 225–33.

²⁰ Undang-undang (UU) Republik Indonesia Nomor 11 Tahun 2010 tentang Cagar Budaya

broader understanding of cultural heritage protection, encompassing both physical preservation and the responsible use of its symbolic and economic value.²¹

Overall, while the statutory framework governing criminal liability for fossil-related offenses in Indonesia is robust and comprehensive, its implementation in practice remains constrained by structural and socio-cultural factors, including limited enforcement capacity, low public legal awareness, and strong economic incentives within local communities.²² Empirical findings further demonstrate that preventive efforts are not yet optimally institutionalized, as reflected in the limited responsiveness of local authorities and the absence of effective coordination mechanisms. In this context, museums have emerged as important non-state actors in preventing illegal fossil trade, functioning not only as custodians of cultural heritage but also as proactive agents of legal and educational intervention. For instance, practical initiatives undertaken by local museums—such as acquiring fossils from informal markets for educational purposes and reporting illegal activities to authorities—illustrate their potential role as “gatekeepers” in cultural heritage protection, despite facing institutional limitations and weak governmental support. Furthermore, enforcement challenges are exacerbated by the lack of clear compensation mechanisms for fossil discoverers, inadequate public outreach, and the persistence of informal trading networks that offer immediate financial benefits, making illegal transactions more attractive than formal reporting procedures. These conditions are consistent with broader law enforcement theory, which emphasizes that legal effectiveness is shaped not only by statutory provisions but also by supporting factors such as institutional capacity, community awareness, cultural practices, and the availability of enforcement resources. Consequently, reliance on criminal law alone is insufficient; a more integrated approach is required, combining legal enforcement with preventive strategies, including public education, incentive-based reporting systems, strengthened institutional coordination, and enhanced support for museums as key actors in safeguarding fossils as part of the nation’s cultural heritage.

CONCLUSION AND SUGGESTION

²¹ Sukandarrumidi. *Paleontologi aplikasi: penuntun praktis untuk geologist muda*. Depok, Sleman, D.I. Yogyakarta: Gadjah Mada University Press, 2021, 2021.

²² Sudarmojo, Slamet. “Bojonegoro Pasar Gelap Fosil Binatang Purba.” *Antara News*, February 27, 2015. <https://www.antaraneews.com/berita/482471/bojonegoro-pasar-gelap-fosil-binatang-purba>.

Criminal liability for sellers and buyers of fossils classified as protected cultural heritage is not absolute but is grounded in the principle of fault, encompassing both intent (*dolus*) and negligence (*culpa*). Liability arises when the parties knew or reasonably should have known that the fossils being traded constitute protected cultural heritage, thereby fulfilling the element of culpability. This legal basis is primarily derived from Article 102 of Law Number 11 of 2010 on Cultural Heritage, which stipulates criminal sanctions for unlawful acts against cultural heritage objects. Furthermore, although the enforcement of criminal law against the trade of fossils in Bojonegoro Regency is supported by a clear legal framework, particularly under Articles 102 to 112 of the same law, its implementation remains suboptimal. This is evidenced by low levels of public legal awareness, weak supervision by local authorities, limited capacity of law enforcement agencies, and difficulties in proving the legal status of fossils as cultural heritage objects. Consequently, despite the existence of explicit penal provisions, the illicit trade of fossils persists and has yet to produce a significant deterrent effect on offenders.

It is recommended that the Police and the Cultural Office establish secure and transparent reporting mechanisms to ensure that individuals who have been involved in fossil transactions are encouraged to voluntarily return such objects to the state without fear of immediate criminal prosecution, provided that they demonstrate good faith. In addition, the Department of Culture and Tourism of Bojonegoro should undertake extensive public outreach programs reaching village-level communities through the installation of informational signage and direct educational initiatives. These efforts should emphasize that any discovery of fossils must be reported to the local authorities, accompanied by guarantees of legal protection and the provision of appropriate incentives or recognition for discoverers.

REFERENCE

- Benson, Emily, and Lexie Judd. "Trade Laws of Nature: Biodiversity Provisions and the AfCFTA." CSIS. Accessed March 30, 2026. <https://www.csis.org/analysis/trade-laws-nature-biodiversity-provisions-and-afcfta>.
- Hibatullah, Rafie Azhar, and Martiningsih Martiningsih. "Perlindungan Hukum Terhadap Watu Jaran Tanpa Kepala Di Desa Laren Kecamatan Bumiayu, Kabupaten Brebes Berdasarkan Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya." *Wijayakusuma Law Review* 5, no. 2 (December 10, 2023). <https://doi.org/10.51921/wlr.v5i2.255>.

- Indonesia. Undang-Undang Nomor 11 Tahun 2010 tentang Cagar Budaya. Lembaran Negara Republik Indonesia Tahun 2010 Nomor 130, Tambahan Lembaran Negara Nomor 5168. Jakarta. Kresna Dewi, Erik Setiyabudi, Riecca Oktavitania, and Hanang Samodra. "Tinjauan Kontribusi Fosil Dalam Penetapan Warisan Geologi." *Jurnal Geologi dan Sumberdaya Mineral* 24, no. 4 (November 21, 2023): 225–33. <https://doi.org/10.33332/jgsm.geologi.v24i4.804>.
- Kurniati, Rina. "Arahan Pelestarian Kampung Melayu Sebagai Kawasan Cagar Budaya (Berdasarkan Identifikasi Bangunan Bersejarah Dan Aktivitas Budaya)." *Ruang* 9, no. 1 (April 27, 2023): 12–23. <https://doi.org/10.14710/ruang.9.1.12-23>.
- Kurniawan, Ganda, Abdul Latif, and Siswantari Pratiwi. "Perlindungan Dan Pemanfaatan Cagar Budaya Berbasis Partisipasi Di Kota Metro Dalam Perspektif Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya." *VISA: Journal of Vision and Ideas* 5, no. 1 (January 4, 2025). <https://doi.org/10.47467/visa.v5i1.4715>.
- Prasetyo, Bagus. "EFEKTIFITAS PELESTARIAN CAGAR BUDAYA DALAM UNDANG-UNDANG NOMOR 11 TAHUN 2010 TENTANG CAGAR BUDAYA." *Jurnal Legislasi Indonesia* 15, no. 1 (May 8, 2018): 75–85. <https://doi.org/10.54629/jli.v15i1.9>.
- Rahayu, Derita Prapti, Muhammad Rustamaji, Faisal Faisal, and Rafiqah Sari. "Legal Effectiveness of Business Contracts in Tin Mining: Socio-Legal and Governance Challenges in Corporate–Community Relations in Indonesia." *Resources Policy* 111 (December 2025): 105767. <https://doi.org/10.1016/j.resourpol.2025.105767>.
- Schultze, Hans-Peter. "The Start of the Scientific Journal 'Fossil Record.'" *Fossil Record* 27, no. 3 (December 30, 2024): 295–97. <https://doi.org/10.3897/fr.27.141907>.
- Sudarmojo, Slamet. "Bojonegoro Pasar Gelap Fosil Binatang Purba." Antara News, February 27, 2015. <https://www.antaraneews.com/berita/482471/bojonegoro-pasar-gelap-fosil-binatang-purba>.
- Sukandarrumidi. *Paleontologi aplikasi: penuntun praktis untuk geologist muda*. Depok, Sleman, D.I. Yogyakarta: Gadjah Mada University Press, 2021, 2021.
- Sularsih, Sri. "Harmonisasi Undang-Undang Nomor 11 Tahun 2010 Tentang Cagar Budaya Dan Undang-Undang Nomor 19 Tahun 2002 Tentang Hak Cipta Dalam Pelindungan Arsitektural Bangunan Cagar Budaya." *Jurnal Konservasi Cagar Budaya* 6, no. 1 (December 2, 2012): 50–59. <https://doi.org/10.33374/jurnalkonservasicagarbudaya.v6i1.100>.
- Wiraguna, Sidi Ahyar. "Metode Normatif Dan Empiris Dalam Penelitian Hukum: Studi Eksploratif Di Indonesia." *Public Sphere: Jurnal Sosial Politik, Pemerintahan dan Hukum* 3, no. 3 (November 30, 2024). <https://doi.org/10.59818/jps.v3i3.1390>