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**COMPENSATION FOR ECOCIDE:  
THE 1991 GULF WAR EXPERIENCE FOR UKRAINE DURING  
AND AFTER RUSSIAN INVASION IN 2022–2023**

*This study investigates the theoretical and practical aspects of Russian ecocide against Ukraine during the first year of the full-scale invasion (2022–2023). By analyzing documents from international organizations, expert assessments, and analytical reports, we identify the primary indicators of ecocide and discuss the potential for criminalizing environmental crimes. The current lack of research on international compensation mechanisms for environmental damage highlights the importance of this study. We examine the 1990–1991 Gulf War case, in which Iraq compensated Kuwait for ecocide based on UN Security Council resolutions, and assess the UN Compensation Commission’s strengths and weaknesses.*

*However, we argue that this mechanism is not applicable to the Ukrainian context due to geopolitical changes and the weakening of the UN’s role, necessitating the development of new approaches. Our recommendations include Ukraine’s ratification of the Rome Statute of the International Criminal Court and the practical application of the ecocide concept, which could be instrumental in holding perpetrators accountable and seeking compensation. We also emphasize the need for accurate documentation of ecocide evidence,*

*involving the broader international community, for use in future criminal trials.*

**Keywords:** *Ukraine, Russia, full-scale war 2022–2023, ecocide, Gulf War 1990–1991, Iraq, Kuwait, UN Compensation Commission.*

### **Formulation of the problem.**

Russia's war against Ukraine, in addition to significant civilian and military casualties from the fighting, the destruction of infrastructure, industrial plants, institutions and housing, is causing significant damage to our country's environment. To bring the perpetrators to justice and force Russia to compensate Ukraine for the damage caused, there is a need to examine the mechanisms already tried and tested to find the most effective and clarify further policies in this area. Already today, at the end of the first year of full-scale warfare, which began on 24 February 2022, the damage to Ukraine's environment is enormous — more than 2 trillion UAH (Epravda, 2023). The relevance of the study is determined by the fact that, as opposed to the direct, immediate and often catastrophic humanitarian, economic, and political consequences of military conflict, the damage to the natural environment, which usually fully manifests itself in the medium to long term, is either ignored or underestimated by politicians, the public, and academics.

**Historiography.** The negative impact of various military actions on the environment is obvious, but this topic attracted research interest only

after World War II. The most studied cases are following: the North Atlantic Treaty Organisation (NATO) bombing of Kosovo (1999) (Besic, L., Muhovic, I., Asic, A. & Kurtovic-Kozaric, A. 2017), conflicts in Afghanistan (2001–2021) (Atherton, K. D. 2021), the Iraq-Iran War (1980–1988) (CEOBS 2018), the Gulf Wars (1991 and 2003) (Linden, O., Jerneloev, A. & Egerup, J. 2004), the Yemeni civil war (2014 — present) (Weir, D. 2021) and the ongoing war in Syria (since 2011) (Mohamed, M. A. 2021).

Researchers determine the main areas of impact of military conflicts on the environment (Weir, D. 2017) (biodiversity (McNeely, J. A. 2003), air (El-Shobokshy, M. S. & Al-Saedi, Y. G. 1993), land (McNeely, J. A. 2003) and water (Rosner, K. 2016)), its real and potential consequences in the medium and long term (Westing, A. H. 1984) perspective. Much attention is paid to damage to the health of the affected population (National Academies of Sciences, Engineering, and Medicine. 2016), impact on agriculture (Hussona, J. 2019), economy (Watson Institute 2019) violation of human rights (Austin, J. E. & Bruch, C. E. 2010).

Explorations of Ukrainian scientists in this area are fragmented (Minka, S. V.



2006), their main attention is focused on the environmental consequences of Russian aggression from 2014 to full-scale war in 2022 that demonstrates the gap in research in this field.

In addition to the collection of empirical data, their expert evaluation and the prediction of the effects of military action on the environment and the population of the areas covered, the attention of the scientific community, politicians and lawyers is focused on the concept of ecocide. According to the European Law Institute, the idea of ecocide was first proposed in the 1970s during the Vietnam War by biology professor Arthur Galston when he protested the US military's use of the herbicide and defoliant chemical Agent Orange to destroy foliage and crops (European Law Institute, n.d.).

Although after the 1991 Gulf War the statute of the International Criminal Court included Article 8(2)(b)(iv), which makes it a war crime to commit an attack that is likely to cause excessive damage to the natural environment and which establishes individual criminal responsibility for ecocide, the lack of a generally accepted legal understanding of “excessive damage” makes it declaratory.

In order to transform the concept of ecocide from a dogma into an effective tool, even before the start of Russia's war against Ukraine, in November 2020, on the occasion of the 75th anniversary of the opening of the Nuremberg military trials against Nazi leaders,

the Stop Ecocide Foundation initiated the creation of a group of experts that developed “historic” definition of ecocide, which is expected to be adopted by the international criminal court to prosecute the most egregious crimes against the environment. The aim of this initiative is to criminalize ecocide and bring it into the Rome Statute of the International Criminal Court, allowing it to take its place alongside crimes such as genocide (Article 6), crimes against humanity (Article 7), war crimes (Article 8) and the crime of aggression (Article 8). 8 bis) — crimes classified as “the most serious crimes of concern to the international community as a whole” (Article 5) (Stockholm Environment Institute, n.d.).

In 2021, the independent Expert Panel proposed consensus definition of ecocide that means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts. The main features of ecocide should be viewed through the prism of such criteria: wanton, severe, widespread, long-term (Stop Ecocide, n.d.). However, the inclusion of this definition in the Rome Statute of the International Criminal Court has not yet taken place which, in our view, can be explained by the difficulty of agreeing on this definition among the various actors in the global community. It seems that consequences of the Russian aggression against

Ukraine, particularly, of its sharp phase, will form a powerful base of arguments which may contribute to more decisive steps of international community in this area.

**Purpose.** The purpose of this article is to study an international experience in establishing mechanisms for compensation for damage to the environment caused by military action, taking the example of Gulf War of 1991 as well as investigating Russian invasion of Ukraine in 2022–2023 through the prism of the ecocide concept. To do this, we will analyse documents, reports and expert assessments from various national and international organisations and academic research in this field.

**Main results of research.** The full-scale war in Ukraine can only be compared to the Second World War in terms of the number of weapons involved, the brutality and uncompromising violence. However, the scale of environmental destruction in just a year of the war obviously already exceeded its consequences. During the year of the full-scale war in Ukraine, more than 2,300 crimes against nature were documented, although in reality there are many more.

The war affects all components of Ukrainian ecosystems: it pollutes water and air, destroys soil, burns forests and unique protected areas, and kills thousands of animals. The war has damaged almost 3 million hectares of forest. This is almost

a third of Ukraine's forested area. Almost 500,000 hectares are now under temporary occupation or in the war. A fifth of the Ukrainian reserve fund has been affected by the hostilities. There are 10 national parks, 8 nature reserves, and 2 biosphere reserves under occupation. About 600 species of fauna and 750 species of flora are under threat of extinction. These include species from the Red Data Book. There have already been about a thousand recorded deaths of dolphins on the coasts of Ukraine, Bulgaria and Turkey. Due to the hostilities, 900 protected areas are now in danger. This is 1,2 million hectares, or 27% of the area of all protected areas in Ukraine (Ministry of Ecology and Natural Resources of Ukraine, n.d.).

The movement of heavy machinery, construction of fortifications and hostilities damaged the topsoil that caused landslides, waterlogging, soil subsidence, etc. This led to the degradation of vegetation and increases wind and water erosion. The formation of craters after explosions disrupted the air-water regime in the soil. Russia's invasion led to damage to agricultural land, the impossibility of sowing and, as a result, the lack of harvest on the land that was disturbed by military aggression. According to the data of the State Environmental Inspection of Ukraine, as of November 30, 2022, as a result of armed aggression, 291,826,950 m<sup>2</sup> were polluted and 8,099,793,440 m<sup>2</sup> of Ukrainian lands



were littered, the amount of damage is 448.9 billion UAH (Ukrainian Pravda, 2022). Independent experts state that about 40 % of the territory of Ukraine may be mined.

At the beginning of 2023, Ukrainian farmers will not be able to use approximately 25 % of the cultivated areas due to hostilities or the temporary occupation of the territories of Ukraine (Ukrinform, n.d.).

The attacks on the critical infrastructure and industrial facilities should be regarded as deliberate violent acts intended to cause maximum damage to the Ukrainian economy. As of December 2022, direct damage to Ukraine's infrastructure due to a full-scale war unleashed by Russia will reach \$137,8 billion (Epravda, 2023). However, they also have significant negative environmental consequences.

With a steady barrage of strikes on refineries, chemical plants, energy facilities, industrial depots or pipelines, Ukraine's air, water and soil of have been polluted by toxic substances, fires and building collapses, which can cause longer-term health threats like the risk of cancer and respiratory ailments. Damage to utilities results in contamination of the water layer with organic substances. In particular, the destruction of sewage pumping stations leads to the fact that wastewater from settlements flows into the Dnipro without any treatment. Untreated wastewater contains a large amount of organic matter, helminth eggs,

pathogenic bacteria, sulphates, and chlorides. Such pollution could lead to widespread blooms in the Dnipro and Black Sea once warmer weather sets in. Many of these issues can be considered transboundary, so the impacts will not only be felt in in Ukraine but collectively posing serious health risks to the population (OECD, n.d.). As a result of damage to water supply infrastructure, an estimated 1.4 million people in Ukraine have no access to safe water, and a further 4.6 million people have only limited access (OECD, n.d.).

Millions of tons of emissions are released into the atmosphere — fine dust, nitrogen oxides, sulphur oxides, aldehydes, anhydrides, etc. All these substances change the air quality and, undergoing chemical transformations, affect other components of the environment — the hydrosphere, biosphere, soil quality and even contribute to climate change. The detonation of missiles and artillery shells oxidises the surrounding soil, wood, turf, and structures, and produces a number of chemical compounds, including carbon monoxide, brown gas, nitrous oxide, nitrogen dioxide, formaldehyde, cyanide vapor, nitrogen, and a large number of toxic organic substances. In the atmosphere, sulphur and nitrogen oxides can cause acid rain, which changes the acidity of the soil and causes burns to plants, to which conifers are particularly sensitive.

Russia's actions are also contributing to the aggravation of the climate crisis.

The talk is about releasing additional direct CO<sub>2</sub> emissions into the atmosphere, which is about 33 million tons. Fires in forests, agricultural and other facilities during the hostilities alone have released more than 23 million tons of greenhouse gases into the atmosphere (Ministry of Ecology and Natural Resources of Ukraine, n.d.).

The new reality the world has faced during Russia's war against Ukraine is the seizure of nuclear power plants by military groups and nuclear terrorism. 2 out of 5 nuclear power plants in Ukraine were seized by Russian troops. Chernobyl NPP was under occupation for 35 days and suffered losses of 3,2 billion UAH. On the first day of the invasion, gamma radiation in the Chernobyl zone was reported to be approximately 28 times the annual limit. This was caused by the destruction of topsoil in the Chernobyl Alienation zone by the tracks of Russian tanks (Europa Youth, n.d.).

Since the seizure of the Zaporizhzhia nuclear power plant on 4 March 2022, the threat of a nuclear incident has been growing steadily. Russia's activities at the Kakhovka Reservoir could have enormous consequences not only to the hydrological regime of Dnipro River basin but also to the nuclear security. And it is not just the deprivation of drinking water for one million Ukrainians. A decrease in the water level in the reservoir can lead to the failure of the cooling systems at the Zaporizhzhia NPP.

The seizure of nuclear power plants by direct military attacks and shelling, their conversion into ammunition storage depots, and attempts to cut the connection to the Ukrainian energy system pose significant threats of a nuclear incident.

The above facts allow us to conclude that the activities of Russian forces in Ukraine are of significant scale, force, have often deliberate nature and negative long-term consequences, meeting the main hallmarks of ecocide. At the same time, one should take into account the fact that at the moment the war is still ongoing and environmental damage by the time it ends can be much greater.

In order to use this and much other evidence of ecocide to hold Russia accountable in the future and formulate claims for Russian reparations, an extensive, systematic and legally correct evidence-gathering process must be put in place. Today this work is being done by various actors (profile ministry, state environmental inspection and commissions established under military administrations, a number of international and non-governmental organizations) using mechanisms and methodologies developed by the international community in previous decades. A register of environmental crimes has also been created. A more detailed analysis is planned to be carried out after the hostilities cease.

However, documenting war crimes against the environment in Ukraine faces



many difficulties of an organizational, financial and legal nature and is a certain challenge. This is due to the fact that there are certain criteria for documenting such crimes, which were developed by the international community after the 1991 Gulf War, and only if they are observed can the collected evidence be taken into account in the process of compensation for damage (Institute for War & Peace Reporting, n.d.).

In connection with the war in Ukraine at the international level, they started talking louder about “ecocide”. On January 25, the Parliamentary Assembly of the Council of Europe (PACE) adopted a resolution on “The impact of armed conflicts on the environment”. On December 7, 27 principles of protection of the environment in relation to armed conflicts (PERAC) were adopted by the UN General Assembly (International Law Commission, 2022).

The resolution recognizes that environmental damage resulting from armed conflicts can be multifaceted, serious, long-lasting and mostly irreversible. They not only damage natural habitats and ecosystems, but can also affect people’s health far beyond the conflict zone and long after the conflict has ended. In this way, human rights to life and a clean environment are violated. The Resolution, in particular, refers to the need to codify the concept of “ecocide”. We are talking about codification both at the national and international level. The Assembly strongly supports efforts to amend

the Rome Statute of the International Criminal Court to add ecocide as a new crime. The Assembly reiterates its call contained in Resolution 2398 (2021) “Addressing criminal and civil liability issues in the context of climate change”, for the need to “recognize universal jurisdiction for ecocide and the most serious environmental crimes” and to introduce “the crime of ecocide into national criminal law”. The Resolution states that member states are obliged to take all necessary measures to prohibit the use of prohibited weapons during armed conflicts. It is worth emphasizing that such weapons disproportionately affect the environment, causing significant damage to it, and also make it impossible for people to live in the war zone (Council of Europe: Parliamentary Assembly, n.d.).

However, Ukraine is not a party to the Rome Statute — the international agreement on the basis of which the International Criminal Court was founded and operates, although it gave the International Criminal Court the right to investigate crimes on its territory. Therefore, the ratification of the Rome Statute is relevant for Ukraine and is widely discussed in Ukraine.

Of course, Russia’s crimes against the environment will be considered in the context of a wider range of war crimes, perhaps in the context of genocide against the Ukrainian people. Therefore, the form of the compensation mechanism (reparations) for the damage will depend on whether

it will be under the jurisdiction of a special international tribunal for Russia or the International Criminal Court or some other mechanisms which the international community will be able to agree on.

Our task, as historians, is to analyse the cases that already exist in this field and determine their positive and negative sides, which can be taken into account in Ukraine's future strategy on this issue. At the moment, the only successful case regarding compensation for the damage, including environmental is the establishment of United Nations Compensation Commission (UNCC). It was created in 1991 as a subsidiary organ of the United Nations Security Council according to Security Council resolutions to process claims and pay compensation for losses and damage suffered as a direct result of Iraq's unlawful invasion and occupation of Kuwait in 1990–1991.

During the 1991 Gulf War, that Iraq has been conducted against Kuwait, the country's environment, as well as that of the entire Gulf, has been severely damaged which is estimated at \$40 billion (The Guardian, 2003). In total over 84,000 tons of bombs were dropped over an area of about 4,000 square miles during 43 days of war. More than 800 oil wells were blown up, of which more than 600 caught fire and burned, and about 50 wells spilled oil on the ground (Linden, O., Jernelöv, A. & Egerup, J. 2004). 10 million barrels of oil were released into the Gulf,

affecting coastline along 1500 km and costing more than \$700 million to clean up (The Guardian, 2003).

The maximum amount of oil and gas in oil fires was about 355,000 tons and 35 million m<sup>3</sup>, respectively, per day. These fires have long-term consequences not only for Kuwait, but for our entire planet. Thus, experts estimate soot emissions from oil and gas combustion at about 20,000 tons per day, total SO<sub>2</sub> emissions at about 24,000 tons per day, and CO<sub>2</sub> emissions at about 130–140 million tons, which corresponds to 2–3 % of the global annual anthropogenic contribution from the use of fossil and modern fuels. Soot fell with rain and dew mainly over the Arabian Peninsula. A large number of particles in the air has greatly affected the climate of Kuwait and neighboring countries. During the nine months that the wells burned, average air temperatures fell by 10 degrees as a result of reduced light from the sun. Soot and oil covered vast areas of Kuwait, Northern Saudi Arabia and the Persian Gulf (Linden, O., Jernelöv, A. & Egerup, J. 2004). Also, as far away as 250 km from the burning Kuwait oil fields a reduction in mid-day temperature of 5–8 degrees C was recorded. Seawater temperatures in the Gulf were considerably lower during 1991 as compared to previous years. A lot of flora and fauna, in particular the unique mangrove swamps, was damaged. It was estimated that about 100,000 waders were killed directly





or indirectly by the oil spill in 1991. L. Edgerton characterizes Kuwait's actions during this war as eco-terrorism (Harrington, S. 1993).

The basis for the compensation were the resolutions of the UN Security Council. Hence, in 1991, the Security Council held Iraq liable for ecocide in their Kuwaiti invasion through the adoption of Resolution 687 that stated it "liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations, as a result of Iraq's unlawful invasion and occupation of Kuwait" (Hough, P. 2021).

On this ground, the Kuwaiti Government filed claims against Iraq for damages to its natural resources and related public health concerns. This was the reason for the creation of the Compensation Commission indicated above. In December 1996, its Governing Council approved an award of \$610 million to Kuwait (Hough, P. 2021). Therefore, the Saddam government of Iraq became the first and, to date, only government to be charged for military ecocide.

As a consequence of this precedent, the UN General Assembly in November 1992 adopted a resolution on "the protection of the environment in time of conflict", which stated that the "destruction of the environment not justified by military necessity and carried out wantonly, is clearly contrary

to international law" (UN General Assembly, 1993).

A total of about 2,7 million claims were filed for a claimed sum of \$352,5 billion, but the UNCC approved a payment of \$52,4 billion, covering 1,5 million settled claims. This was, among other things, due to the improper documentation of the evidence of ecocide. The biggest claim accepted by the UNCC was for losses of \$14,7 billion caused by the Kuwait Petroleum Corporation (KPC) after Iraqi troops set fire to oil wells. Funds to pay compensation were drawn from the United Nations Compensation Fund which received a percentage of the proceeds generated by the export sales of Iraqi petroleum and petroleum products. This percentage was originally set at 30% and was reduced over the years under various Security Council resolutions and Governing Council decisions. In 2013, the UN Security Council revised the terms and, amid improving relations between the two countries, the commission was reduced to 3%. On 9 February 2022, Commission marked the fulfilment of its mandate after nearly 31 years and on 9 December 2022, on 31 December 2022, the commission was closed as required under Security Council resolution 2621 (United Nations Compensation Commission, n.d.).

Despite such seemingly positive results that are presented as an unprecedented success, the work of this commission faced a number

of difficulties. Iraq has refused to honor its treaty obligations and development an agreement demanded from international community enormous efforts. The operational costs of this commission were several times higher than the sums paid as compensation. For the first five years of its work, the UNCC's operating budget exceeded claims payments by a factor of two. Total operating costs during 31 years probably exceeded payments tenfold. Members of Commission has faced waning political support from members of the UN, which have faced growing pressure from the international business community to reintegrate Iraq into the world economy (Owen, L. C. 2021).

Can the Iraqi experience be used for Ukraine? Obviously not, at least from the prospect of compensation from Russia because UN General Assembly resolutions are recommendatory in nature, i.e. they are not binding from the point of view of international law. Such documents have more of a political weight as they reflect the opinion of the international community. Therefore, it is unlikely that a resolution adopted by the UN General Assembly on November 14, 2022 stipulating Russia's responsibility to pay reparations to Ukraine (UN News, 2022) will lead to the same result as in the case of the 1991 Gulf War. In a situation of full-scale Russian war against Ukraine, such a resolution is more of a political nature, especially given Russia's disregard for such documents.

A legally binding decision to pay reparations could be taken by the International Criminal Court in The Hague (ICC). Its subject matter jurisdiction is limited to the prosecution of persons accused of genocide, as well as crimes against humanity, war crimes and crimes of aggression. However, in order for the court to initiate a case on charges of crimes of aggression (in this case, against Russia), a UN Security Council resolution is needed, and the Russian Federation, as a permanent member of the UN Security Council, is expected to veto this decision. Therefore, the creation of a special tribunal is currently being discussed.

**The facts presented by us allow us to draw a number of conclusions.**

Thus, the realities of Russia's full-scale war against Ukraine, which began in February 2022, demonstrate the need to develop radically new mechanisms of compensation for environmental damage. The mechanisms that were applied to Iraq 30 years ago will not lead to the desired result in today's geopolitical environment, because today the role of the UN as an organisation capable of making effective decisions has diminished considerably. Therefore, the agenda of the world community is not only to reform the UN and increase the organization's capacity, but also to find an international consensus in criminalizing Russia's military ecocide taking in account the weakness of the international law.



Ukraine's task is both to work actively with different countries to reach such a consensus and to strengthen and improve the documentation of evidence

of ecocide. Experienced and interested international actors and partners should be more actively involved as well as appropriate funding.

## REFERENCES

Atherton, K. D. (2021). U.S Forces are leaving a toxic environmental legacy in Afghanistan. *Scientific American*. URL: <https://www.scientificamerican.com/article/u-s-forces-are-leaving-a-toxic-environmental-legacy-in-afghanistan/> [Accessed: 05.10.2022]. [in English].

Austin, J. E. & Bruch, C. E. (2010). *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives*. Cambridge University Press. [in English].

Besic, L., Muhovic, I., Asic, A. & Kurtovic-Kozaric, A. (2017). Meta-analysis of depleted uranium levels in the Balkan region. *Journal of Environmental Radioactivity*, 172, pp. 207–217. DOI: 10.1016/j.jenvrad.2017.03.018. [in English].

Biswas, A. K. (2000). *Scientific assessment of the long-term environmental consequences of war*. In *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives*, pp. 303–315. URL: <https://thirdworldcentre.org/wp-content/uploads/2020/07/RPP-Jan-3-00-Scientific-Assessment-of-the-Long-Term-Environmental-Consequences-of-War.pdf> [Accessed: 05.10.2022]. [in English].

Conflict and Environment Observatory (CEOBS). (2018). Country Brief Iraq. URL: <https://ceobs.org/country-brief-iraq/> [Accessed: 05.10.2022]. [in English].

El-Shobokshy, M. S. & Al-Saedi, Y. G. (1993). The impact of the Gulf War on the Arabian environment — I. Particulate pollution and reduction of solar irradiance. *International Journal of Environmental Studies*, 43 (1–2), pp. 19–28. DOI: 10.1080/00207239308710881. [in English].

Fathi, R. A., Matti, L. Y., Al-Salih, H. S. & Godbold, D. (2013). Environmental pollution by depleted uranium in Iraq with special reference to Mosul and possible effects on cancer and birth defect rates. *Medicine, Conflict and Survival*, 29(1), pp. 7–25. DOI: 10.1080/13623699.2013.765173. [in English].

Harrington, S. (1993). Eco-terrorist acts during the Persian gulf war: is international law sufficient to hold Iraq liable? *Georgia Journal of International and Comparative Law*, 23, pp. 179–198. URL: <https://digitalcommons.law.uga.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1509&context=gjicl> [Accessed: 05.10.2022]. [in English].

Hough, P. (2021). Trying to end the war on the world: the campaign to proscribe military ecocide. *The Journal of Environmental Law*, 33 (1), pp. 1–26. DOI: 10.1093/jel/eqaa018. [in English].

Hussona, J. (2019). The reverberating effects of explosive violence on agriculture in Afghanistan. *Action on Armed Violence (AOAV)*. URL: <https://aoav.org.uk/2019/the-reverberating-effects-of-explosive-violence-on-agriculture-in-afghanistan> [Accessed: 05.10.2022]. [in English].

International Law Commission. (2022). Draft principles on protection of the environment in relation to armed conflicts 2022. URL: [https://legal.un.org/ilc/texts/instruments/english/draft\\_articles/8\\_7\\_2022.pdf](https://legal.un.org/ilc/texts/instruments/english/draft_articles/8_7_2022.pdf) [Accessed: 05.10.2022]. [in English].

Linden, O., Jernelöv, A. & Egerup, J. (2004). The Environmental Impacts of the Gulf War 1991. International Institute for Applied Systems Analysis (IIASA). URL: <http://pure.iiasa.ac.at/7427/> [Accessed: 05.10.2022]. [in English].

Linden, O., Jernelöv, A. & Egerup, J. (2004). The Environmental Impacts of the Gulf War 1991. IIASA Interim Report, IR-04-019. Laxenburg, Austria: International Institute for Applied Systems Analysis. [in English].

McNeely, J. A. (2003). Conserving forest biodiversity in times of violent conflict. *Oryx*, 37 (2), pp. 166–176. DOI: 10.1017/S0030605303000339. [in English].

Minka, S. V. (2006). Ecological consequences of local military conflicts. *Systems of Information Processing*, (3), pp. 198–202. URL: [http://nbuv.gov.ua/UJRN/soi\\_2006\\_3\\_35](http://nbuv.gov.ua/UJRN/soi_2006_3_35) [Accessed: 05.10.2022]. [in English].

Mohamed, M. A. (2021). An Assessment of Forest Cover Change and Its Driving Forces in the Syrian Coastal Region during a Period of Conflict, 2010 to 2020. *Land*, 10 (2), p. 191. DOI: 10.3390/land10020191. [in English].

National Academies of Sciences, Engineering, and Medicine. (2016). Gulf War and Health: Volume 10: Update of Health Effects of Serving in the Gulf War. The National Academies Press. DOI: 10.17226/21840. [in English].

Owen, L. C. (2021). Between Iraq and a Hard Place: The U.N. Compensation Commission and Its Treatment of Gulf War Claims. *Vanderbilt Law Review*, 31 (2), pp. 499–532. URL: <https://scholarship.law.vanderbilt.edu/vjtl/vol31/iss2/4> [Accessed: 05.10.2022]. [in English].

Rosner, K. (2016). Water and electric power in Iraq and Syria: Conflict and fragility implications for the future. Robert Strauss Centre. URL: <https://www.strausscenter.org/wp-content/uploads/Water-and-Electric-Power-in-Iraq-and-Syria-2016.pdf> [Accessed: 05.10.2022]. [in English].

Saba, D. S. (2001). Afghanistan: Environmental degradation in a fragile ecological setting. *International Journal of Sustainable Development and World Ecology*, 8, pp. 279–289. DOI: 10.1080/13504500109470086. [in English].

UN General Assembly. (1993). Protection of the environment in times of armed conflict: Resolution / adopted by the General Assembly. 47th sess. URL: <https://digitallibrary.un.org/record/146765?ln=en> [Accessed: 05.10.2022]. [in English].

Weir, D. (2017). Conflict Pollution and the Toxic Remnants of War. A Global Problem that receives too little attention. UNEP. URL: <https://www.unep.org/resources/perspective-series/issue-no-24-conflict-pollution-and-toxic-remnants-war-global-proble> [Accessed: 05.10.2022]. [in English].

Weir, D. (2021). Report: Protected area conservation in Yemen's conflict. Conflict and Environment Observatory (CEOBS). URL: <https://ceobs.org/protected-area-conservation-in-yemens-conflict/> [Accessed: 05.10.2022]. [in English].



Westing, A. H. (1984). *Herbicides in War: The Long-Term Ecological and Human Consequences*. Taylor & Francis. URL: <https://digitallibrary.un.org/record/101319?ln=en> [Accessed: 05.10.2022]. [in English].

Minka, S. V. (2006). Ecological studies of local military conflicts. *Information processing systems*, 3, p. 198–202. URL: [http://nbuv.gov.ua/UJRN/soi\\_2006\\_3\\_35](http://nbuv.gov.ua/UJRN/soi_2006_3_35) [Accessed: 05.10.2022]. [in Ukrainian].

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**КОМПЕНСАЦІЯ ЗА ЕКОЦИД:  
ДОСВІД ВІЙНИ В ЗАТОЦІ 1991 РОКУ ДЛЯ УКРАЇНИ  
ПІД ЧАС ТА ПІСЛЯ ВТОРГНЕННЯ РОСІЇ  
У 2022–2023 РОКАХ**

Стаття присвячена теоретичним та практичним аспектам дослідження екоциду Росії проти України під час першого року широкомасштабного вторгнення (2022–2023). На основі аналізу документів різних міжнародних організацій, експертних оцінок та аналітичних доповідей виявлено головні ознаки екоциду та розглянуто перспективи та механізми криміналізації злочинів проти навколишнього середовища. Зроблено висновок про недостатнє дослідження міжнародного досвіду компенсації за завдану довікілью шкоду в українській історичній науці, що зумовлює актуальність дослідження.

Проаналізовано кейс компенсації за екоцид у результаті війни у Перській затоці 1990–1991 рр., яку Ірак виплатив Кувейту. Встановлено, що в його основі — виконання резолюцій Ради Безпеки ООН. Зроблено висновок, що це перший і поки що єдиний успішний кейс в історії міжнародних відносин. Розглянуто діяльність Компенсаційної Комісії ООН, створеної у 1991 р. для

виконання цього завдання, її результати, а також слабкі та сильні сторони. Зроблено висновок, що цей досвід не підходить для російського вторгнення в Україну внаслідок зміни геополітичної ситуації та послаблення ролі ООН, що зумовлює необхідність розроблення кардинально нових механізмів.

Надано рекомендації щодо необхідності ратифікації Україною Римського статуту Міжнародного кримінального суду, оскільки практичне застосування концепції екоциду після внесення до нього відповідного визначення представляється авторам одним із реальних механізмів притягнення винних до відповідальності та стягнення з них компенсації. Вказано на важливість правильного документування свідчень екоциду, які можна буде використовувати під час майбутніх кримінальних процесів, до чого мають бути залучені ширші кола міжнародної спільноти.

**Ключові слова:** Україна, Росія, повномасштабна війна 2022–2023, екоцид, війна у Перській затоці 1990–1991, Ірак, Кувейт, Компенсаційна комісія ООН.