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**Executive Summary of the Thematic Report**

**“ON THE BRINK OF SURVIVAL:  
DAMAGE TO THE ENVIRONMENT DURING ARMED CONFLICT IN  
EAST OF UKRAINE”**

Kyiv, 2017

This publication contains complex analysis of the state of environment under conditions of the armed conflict in the eastern Ukraine. It also describes international legal obligations of the states concerning environment protection during the armed conflict as well as peculiarities of bringing to responsibility for the ecological damage caused. Based on the open sources examination and results of UHHRU's field monitoring, the state of affairs has been defined as well as major problematic issues in connection to environment protection in the eastern Ukraine have been highlighted.

The group of authors consists of Alla Blaga, Igor Zagorodnyuk, Timur Korotkyy, Oleg Martynenko, Marina Medvedyeva, Viktor Parkhomenko. General Editor is Arkadiy Bushchenko. Field monitoring mission was coordinated by Oleksiy Bida.

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## Foreword



Under initiative of the UN General Assembly, November 6 is annually marked as the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict. Its purpose is drawing attention to ecological consequences of the war and importance of refusal of meaningless damage caused to ecosystems while trying to hit military objectives. The UN notes that damage to the environment amid an armed conflict impairs ecosystems and natural resources long beyond the period of conflict and often extends beyond the limits of national territories and lifetime of a generation.

As it is known, in May 2016, the United Nations Environment Assembly adopted a resolution concerning commitment to protection of the environment in areas affected by an armed conflict. Now the UN International Law Commission revises the international legislation regarding protection of the environment prior to a conflict, during and afterwards with the purpose of developing guidelines, which will more effectively contribute to preservation of the environment, especially in natural reserve and environmentally sensitive areas that can be massively affected by war.

This problem absolutely relates to the situation in Donbas. Natural resources of Donetsk and Luhansk oblasts were being exploited for a long period of time that has led to negative impact at all objects of the environment, which in its turn resulted in significant environmental degradation. Even before the outbreak of hostilities, experts described the environmental situation in east of Ukraine as crisis. The armed conflict and related activities of military agents and local residents has led to a significant environmental destruction and to destruction of the established forms of use of natural resources. In particular, there are facts of deforestation in so-called "gray zone"; use of preserved areas and natural landmarks in the ATO zone and surrounding areas for military purposes; as well as systematic mapping was not assured when creating mine fields (including in the natural reserve areas) etc. Unfortunately, modern laws ignore the majority of the environmental consequences of war.

In frames of the given study, authors and experts were trying to seek for answers to the voiced above problematic issues and plenty of other ones. The paper gives description of international legal obligations of the states to protect the environment during armed conflict and analyses specific aspects of imposing liability for environmental damage caused by war conflict. Based on research of open sources and results of the own monitoring visit, the condition and problems of environmental protection in east of Ukraine were analysed. We hope that elaborated recommendations will be useful for authorities while developing strategic documents and programs in the area of human rights protection in context of the ATO.

Ukrainian Helsinki Human Rights Union would like to express its sincere gratitude to the Global Affairs Canada and the Government of Canada, as well as to the United States Agency for International Development (USAID) and the United States Government for their financial contribution into preparation of this publication.

Arkadiy Bushchenko,  
UHHRU Executive Director

## Summary

The armed conflict in eastern Ukraine not only led to heavy casualties, but also caused significant damage to ecosystems and natural resources as a result of the violation of international principles of and national law. The environmental situation in Donbas, after going through a crisis for some time now, has become a full-fledged environmental disaster due to the hostilities.

That is why the study is aimed both at assessing the damage done as well as at the issue of accountability for the environmental damage caused in the course of the hostilities. The study shows that heavy metal contamination (e.g. titanium, vanadium, strontium) due to shelling, water poisoning, occurrences of radioactive water in the Sea of Azov and the Siverskyi Donets caused by the flooding of mines, and the destruction of flora and fauna could lead to a Chernobyl-level environmental disaster. Already out of 135 objects of the Nature Reserve Fund (NRF)<sup>1</sup> located in the antiterrorist operation (ATO) zone 38 have been damaged or destroyed altogether, and 17% of forests and 24% of steppes have been damaged by fires caused by military actions. Damage to Regional Landscape Park “Donetskyi Kriazh” is especially severe, with over 3,000 hectares burned up completely. The hostilities are also accompanied by large-scale deforestation in the “gray zone”, use of environmental protection areas and landmarks for military purposes, and indiscriminate mine laying.

Emphasizing the issue of calling the Russian Federation, as the aggressor state, to account for the damage done to the environment of Ukraine, the authors suggest establishing a special commission within the UN and strengthening national legal mechanisms by adopting the laws “On Compensation of Damage Caused to Ukraine by the Aggression of the Russian Federation” and “On Criminal Punishment of Individuals for Crimes of Aggression, Crimes Against Humanity and War Crimes Committed in the Course of the Aggression of the Russian Federation Against Ukraine”.

In addition, the need to develop a methodology for documenting and assessing the damage done to the environment in the course of the hostilities has been demonstrated. Such methodology should include preparation of acts indicating the number and size of shell-holes, ordnance waste and the level of contamination it caused, length of trenches, damage from fires, etc. It is advisable to draw a map of territories damaged in the course of the hostilities in the ATO zone, taking into account mine contamination as a source of pollution as well as demining costs when determining the scale of environmental damage.

Certain of recommendations concerning improvement of the national policy in the sphere of use of the natural resources and environmental protection in conditions of armed conflict are addressed to the Ministry of Environment and Natural Resources, the Ministry of Defense, as well as to the leadership of military and civil administrations.

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<sup>1</sup> The Nature Reserve Fund of Ukraine is defined as areas of land and water space, natural complexes and objects which have special environmental, scientific, aesthetic, recreational and other value and are singled out with the purpose of preserving the natural diversity of landscapes, gene pool of flora and fauna, maintenance of general ecological balance and ensure background monitoring of the natural environment. NRF shall be protected as a national inheritance.

## Conclusion and recommendations

1. There are various ways of bringing the occupying state violating international law for responsibility for the damage caused to the environment, cultural objects and natural resources in the course of war.

As the aggressor state, the Russian Federation is responsible for any damage caused in the course of its aggression against Ukraine, including that to the environment of Ukraine, particularly to the environment of Crimea as well as Donetsk and Luhansk oblasts, in accordance with the international customary laws codified in the Articles on the Responsibility of States for Internationally Wrongful Acts and the rules of customary international humanitarian law.

As a party to an international armed conflict, Russia must provide compensation for the damage caused as a result of violating the provisions of the Geneva Conventions and Art. 91 of the 1977 Protocol to said Conventions (Additional Protocol I). Such violations may include failure to comply with par. 3, Art. 35 and Art. 55 of Additional Protocol I that prohibit causing wide-spread, long-term and severe damage to the natural environment, as well as violations of other provisions of the Geneva Conventions or Additional Protocol I on indiscriminate attacks (Art. 48 and Art. 52 of Additional Protocol I), attacks on the works and installations containing dangerous forces (Art. 56 of Additional Protocol I) and other violations of international humanitarian law that cause excessive (incidental) damage to the environment. Moreover, Russia's actions can be construed as violating Protocol III on Prohibitions or Restrictions on the use of Incendiary Weapons to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (1980). Protocol III prohibits making forests and other plants the object of attack by incendiary weapons.

As the occupying state, Russia is liable for the damage caused in the course of its aggression to the natural environment of Ukraine and natural resources of Donbas and Crimea. This liability stems from the violations by the aggressor state of Art. 53 of the Fourth Geneva Convention and Art. 91 of Additional Protocol I. In accordance with Art. 3 of the Hague Convention respecting the Laws and Customs of War on Land (1907), Russia is responsible for violating Art. 55 and Art. 56 of the Regulations respecting the Laws and Customs of War on Land that form the Annex to the 1907 Convention.

Russia is responsible for violating bilateral agreements with Ukraine on environmental protection and consequently causing major damage to Ukraine, which makes Russia liable to provide compensation in accordance with international law. As a result of Russian aggression, Ukraine is unable to perform its responsibilities within international law under a number of multilateral environmental agreements, particularly in occupied Donbas and Crimea.

Russia may be held liable for causing damage to the environment of Ukraine as part of the damage caused in the course of Russian aggression against Ukraine by using international legal instruments as well as the rulings of quasi-judicial bodies. Holding Russia liable through international courts is a complicated process, which makes it necessary to use international instruments of alternative dispute resolution as well.

An important part of this will be the development of a methodology for collecting evidence to be used for holding Russia liable for the damage caused to the environment of Ukraine in the course of Russian aggression against Ukraine.

*Therefore, the authors:*

- Advising Ukraine to use diplomatic means (i.e. UN General Assembly and its committees) to lower the international liability threshold of environmental damage caused during armed conflicts in the Draft Principles of the Protection of the Environment in Relation to Armed Conflicts prepared by the UN International Law Commission.

- Advising Ukrainian state authorities to make full use of international legal instruments in order to hold Russia liable for the damage caused to the environment of Ukraine as a result of Russian aggression against Ukraine.

*as well as recommending:*

- To study positive and negative experience of using international legal instruments and anticipating the results of Ukraine turning to international adjudication bodies.

- To establish a special commission within the UN similar to the UN Compensation Commission, to be used as a means of collecting compensation from Russia for environmental and other damage caused as a result of Russian aggression against Ukraine; or alternatively to include a provision regarding the establishment of a commission on claims and compensation in the future peace treaty with Russia and authorize the commission to handle cases related to environmental damage.

- To incorporate the environmental component in the concept of “damage” to be used in the draft Consolidated Claim against Russia.

- To collect evidence to substantiate claims against Russia regarding the damage it caused in Crimea, to Ukraine’s continental shelf as well as the basins of the Black Sea and the Sea of Azov as part of the arbitration proceedings in accordance with Annex VII to the UN Convention on the Law of the Sea.

- To adopt the Laws of Ukraine “On compensation of damage caused to Ukraine by the aggression of the Russian Federation” and “On criminal punishment of individuals for crimes of aggression, crimes against humanity and war crimes committed in the course of the aggression of the Russian Federation against Ukraine”<sup>2</sup>;

- Considering that in light of the fragmentary and limited nature of the claim against Russia submitted by Ukraine to the UN International Court of Justice (terrorism financing and racial discrimination), as well as the fact that arbitration proceedings under the UN Convention on the Law of the Sea are limited to the territory of annexed Crimea, Ukraine should prepare and submit a Consolidated Claim where to specifically demand compensation for environmental damage caused by Russian aggression. Recommend to include in the Consolidated Claim against Russia and/or in the future peace treaty provisions on compensation of expenses incurred in the process of demining and removal of other remnants of war.

- To study the reports of international organizations on post-conflict assessment of environmental repercussions of armed conflicts in order to develop a methodology for assessing environmental damage; to involve international organizations, particularly UNEP, in expert post-conflict assessment of the environmental effect of the war in eastern Ukraine.

- To collect evidence for calling Russia to account for the damage done to the environment of Ukraine as a result of Russian aggression against Ukraine, substantiating and recording the following:

- (1) facts of the involvement of Russian armed forces in the hostilities in Ukraine;

- (2) Russia’s control over self-proclaimed Luhansk People’s Republic (LPR) and Donetsk People’s Republic (DPR) and anti-government paramilitary forces;

- (3) violations of customary and codified principles of international humanitarian law by Russian armed forces in the course of Russian aggression against Ukraine;

- (4) violations of customary and codified norms of international humanitarian law (IHL) by Russia-controlled self-proclaimed LPR, DPR and anti-government paramilitary forces;

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<sup>2</sup> The laws were suggested by Doctor of Legal Sciences, Professor V. Vasylenko.

(5) record and assess the damage done to the environment of Ukraine as a result of Russian aggression against Ukraine, including the destruction of and harm to the environment of Ukraine and natural resources of Donbas and Crimea, as well as illegal mining operations;

(6) record and assess the damage done to the environment of Ukraine by Russia-controlled “LPR” and “DPR” and anti-government paramilitary forces;

(7) record and assess the damage done to the environment of Ukraine as a result of military actions, particularly the actions of Russian armed forces and Russia-controlled anti-government paramilitary forces;

(8) prove the connection between the violation (Russian aggression against Ukraine) and the damage done to the environment of Ukraine;

(9) prove the connection between the military actions of Russian armed forces and Russia-controlled anti-government paramilitary forces, violations of IHL, and the damage done to the environment of Ukraine;

(10) prove the connection between the actions of self-proclaimed LPR and DPR and the damage caused by them to the environment of Ukraine as a result of violating relevant IHL norms.

2. International Criminal Court (ICC) is an important international instrument for calling to account persons responsible for war crimes and other international crimes. Ukraine accepted ICC jurisdiction but neither ratified its Rome Statute nor reformed criminal legislation regarding war crimes and crimes against humanity.

In accordance with international law, the grounds for criminal liability of Russia’s leaders and commanding officers of Russian armed forces for the damage done to the environment as a result of Russian aggression against Ukraine under Art. 35 and Art. 55 of Protocol I to the Geneva Conventions (Additional Protocol I) and Art. 8.2.b.iv of the Rome Statute of the ICC, must be evidence of such damage of severe, wide-spread and long-term nature. It is a complicated task due to the lack of appropriate experts and special methodology in Ukraine. The next step will be to submit this evidence to the Office of the ICC Prosecutor, for calling persons to account under Art. 8.2.b.iv of the Rome Statute of the ICC. Since as of today no international criminal tribunal has ever imposed criminal liability on individuals for environmental crimes, including those committed during armed conflicts, it is highly unlikely that the ICC will convict Russia’s leaders or commanding officers of Russian armed forces. This could lead to impunity for environmental crimes committed during the war in eastern Ukraine.

The leaders of self-proclaimed DPR and LPR and commanding officers of anti-government paramilitary forces will be called to account for environmental damage, which will be assessed based on the customary norms of IHL (Norms 43-45) and the national criminal law of Ukraine. When classifying actions of such persons during international armed conflicts and applying relevant IHL norms, they may be called to account under Art. 35 and Art. 55 of Additional Protocol I and Art. 8.2.b.iv of the Rome Statute of the ICC. However, only terrorism charges are normally brought against such persons, without taking into account the articles pertaining to war crimes.

*In light of this, the authors recommend:*

- Taking measures aimed at the ratification of the Rome Statute by Ukraine, for the sake of more efficient cooperation with the ICC in investigating war crimes pertaining to unlawful damage to the environment caused in the course of the armed conflict.

- Developing a methodology for recording and substantiating the damage done to the environment during the hostilities, as well as a methodology for determining the attribution of blame for the damage caused by Russian armed forces and leaders of self-proclaimed DPR and LPR or Russia-controlled anti-government paramilitary forces.

- Should it prove impossible to impose criminal liability on Russia's leaders or commanding officers of Russian armed forces for the separate crime under Art. 8.2.b.iv of the Rome Statute, Ukraine should: (1) take measures to have environmental crimes recognized as a means or instruments for committing other crimes - war crimes and/or crimes against humanity; (2) seek to prove that the destruction of objects of the nature reserve fund and other parts of the environment in occupied Crimea and Donbas constitute the body of the crime "Destruction of civilian objects" as set in the Prosecutor's Report on the preliminary examination of the situation in Ukraine.

- Amending and expanding Ukraine's criminal law to make Art. 438 of the Criminal Code of Ukraine more specific and adjust it according to the modern practice of formulating the body of war crimes.

- Should the actions of the leaders of self-proclaimed DPR and LPR and commanding officers of anti-government paramilitary forces be classified as war crimes against the environment, they must be called to account in accordance with the norms of IHL.

- Holding training courses for the investigators of the Security Service of Ukraine and Military Prosecutor's Office of Ukraine regarding the classification of war crimes and interpretation of IHL norms pertaining to environmental protection during armed conflicts.

3. Legislative foundation of environmental protection in the ATO zone cannot be considered efficient. Problematic issues relate to the following:

- Establishing the boundaries of certain objects of the nature reserve fund (e.g. wildlife preserves and natural monuments), since the full list of the Nature Reserve Fund objects given in par. 4, Art. 47 of the Law of Ukraine "On Management of Land" does not include certain NRF types provided by Art. 3 of the Law of Ukraine "On the Nature Reserve Fund of Ukraine".

- Changing NRF boundaries, since the Law of Ukraine "On Civil-Military Administrations" only provides for the creation of new NRF objects, not alteration of already existing ones established by the decisions of regional councils.

- Issuing permits for the management of natural resources, since the Law of Ukraine "On Civil-Military Administrations" does not grant such powers to civil-military administrations.

- Illegal deforestation, particularly of forest belts, on the grounds of their being "no man's land".

- Protection of information and personal data in environmental bodies and institutions.

Legislative and law enforcement flaws that manifest themselves in the practice of environmental protection in the ATO zone, as well as the flaws in enforcing efficient management of natural resources entail the following risks: (1) deterioration of the social and economic situation of the population of Donetsk and Luhansk oblasts, (2) loss of prestige by the government in the eyes of the general population of Donetsk and Luhansk oblasts, (3) significant deterioration of the environment.

*In this connection, the authors recommend:*

- Amending par. 4, Art. 47 of the Law of Ukraine "On Management of Land" by adding "etc." after the words "zoological parks".

- Amending the section of the Law of Ukraine "On Civil-Military Administrations" which regulates the authority to grant permits for the management of natural resources to commercial entities.

- Amending the section of the Law of Ukraine “On Civil-Military Administrators” which regulates the authority of civil-military administrations to change the boundaries of NRF territories.
- Organizing the monitoring “Information security in state governing bodies and protection of human rights under conditions and in the course of the ATO”.

4. Studying the conflict’s impact on the environment in Ukraine-controlled territory as well as in territories beyond Government of Ukraine (GOU) control revealed a large number of issues:

- The Ministry of Ecology and Natural Resources of Ukraine does not pay enough attention to the special circumstances of operating in the ATO zone by the departments of ecology and natural resources, does not take into account the special circumstances of monitoring the environment under conditions of armed conflicts and providing information from within the war zone and mined territories.
- Insufficient effort to document and assess damage done in regions to the environment as a whole, and specific NRF areas in the course of the hostilities.
- Lack of any kind of monitoring of the environment and the state of NRF areas and objects located in the territories beyond GOU control.
- Issues with cooperation between representatives of executive powers responsible for state environmental policy, special administrations responsible for governing NRF areas and objects, and representatives of the Armed Forces of Ukraine, particularly in regards to the observance of environmental legislation and the working regime of NRF areas.

Cooperation between state governing bodies and civil society environmental and human rights organizations remains unsatisfactory when it comes to assessing damage to the environment, monitoring the environment before, during and after hostilities in Donbas, and protecting the rights of local population in court.

*In order to resolve these issues, the authors recommend:*

- Developing a methodology for determining and assessing the damage done to the environment as a result of shelling (shell-holes, ordnance waste, etc.).
- Developing a procedure for recording environmental repercussions of military actions (preparing acts containing the number and size of shell-holes, level of environmental pollution caused by ordnance and explosive waste, length of ditches, damage from fires, etc.).
- Improving cooperation with the officers of the Civil-Military Cooperation of the Armed Forces of Ukraine (CIMIC) in order to ensure the observance of environmental legislation and regime of NRF areas in the ATO zone by the military.
- Offering to inform the representatives of the Armed Forces of Ukraine and other military units of Ukraine regarding NRF areas and objects located in the ATO zone and the level of their vulnerability. It is advisable to distribute a map indicating NRF areas and objects located in the ATO zone, containing a brief description of the regimes of NRF areas and objects, among the commanding officers of the Armed Forces of Ukraine.
- Developing mechanisms of indirect monitoring of the environment and NRF areas and objects in territories beyond GOU control, in order to determine the damage done to the environment by self-proclaimed DPR and LPR, anti-government paramilitary forces and Russian armed forces in certain areas of Donetsk and Luhansk oblasts of Ukraine which are currently beyond GOU control.
- Preparing and publishing a map of the NRF located in the ATO zone indicating environmental protection areas that were damaged in the course of the hostilities, access to which is limited, and which are located in territories currently beyond GOU control.

- Using drones and other means of remote monitoring to determine the environmental damage done to the forests and NRF, should experts be unable to access such areas due to the threat of mines.
- Developing special methodologies for determining and assessing environmental damage caused by mine contamination and ordnance waste, and keeping records of demining costs.
- Conducting supplemental studies of the conflict's impact on the observance of human rights in the field of traditional management of natural resources: hunting, gathering of mushrooms, berries and firewood, the right to use water, etc.
- Developing a mechanism of cooperation between the commanding officers of the Armed Forces of Ukraine in the ATO zone, departments of ecology and natural resources, and heads of NRF institutions in determining locations in the ATO to be used as temporary proving grounds.
- Conducting scientific studies of the repercussions of the hostilities (existence and effects of ordnance waste, shell-holes, etc.) for the environmental situation, and determining environmental damage caused by this.
- Instituting and providing special funding for the program aimed at replacing damaged signs that mark the boundaries of NRF areas.
- Addressing the issue of making NRF objects damaged in the course of military actions the first in line to receive financial assistance from the National Environmental Protection Fund of Ukraine.
- Developing and creating mechanisms for involving specific communities (environmental, human rights, etc.) in providing aid to the NRF and its personnel, organizing volunteer assistance for NRF institutions and their personnel that suffered the greatest damage.
- Supporting the complaints submitted to the national courts by the residents of Donetsk and Luhansk oblasts regarding health-related problems that arose in connection with environmental pollution caused by Russian aggression in Donbas, and, provided all the requirements are met – to the European Court of Human Rights – on their violated right to privacy in accordance with Art. 8 of the European Convention on Human Rights (1950).

5. An important indicator of the impact of the armed conflict on the environment is the state of the nature reserve fund. The study provided important data that indicates not just the current state of the environment, but also the issues of NRF protection and impact of the armed conflict on the management of natural resources. It is safe to conclude that there is little actual cooperation between environmental institutions (departments of ecology, environmental inspections, administrations of the NRF institutions) and the military.

Since the assets of nature reserves were plundered by anti-government paramilitary forces and due to limited funding for NRF institutions, nature reserves are unable to replace lost property; their research departments lack resources, including remote monitoring equipment, to conduct scientific research.

Processing and summarizing the data collected while studying the materials allowed us to divide NRF objects and areas located in Stanychno-Luhanskyi and Tryokhizbenskyi districts of Luhansk oblast and Slovianskyi District of Donetsk oblast into following groups, based on the general level of violations committed in the course of military actions:

(1) Environmental protection areas that suffered severe damage as a result of military actions: Prydintsivska Zaplava (Prydintsivska Floodplain, Stanychno-Luhanske division of the Luhansk Nature Reserve); “Tryokhizbenskyi Steppe” (division of the Luhansk Nature Reserve); “Kreydova Flora” (Cretaceous Flora, branch of the Ukrainian Steppe Nature Reserve); wildlife preserves of Stanychno-Luhanskyi District.

(2) Environmental protection areas that suffered moderate damage as a result of military actions: National Nature Park “Sviati Hory”; nature reserve areas near the city of Sloviansk, Donetsk oblast; wildlife preserves of Popasnianskyi District, Luhansk oblast; Regional Landscape Park (RLP) “Kleban-Byk”; Regional Landscape Park “Kramatorskyi” of Donetsk oblast.

(3) Environmental protection areas that suffered minor damage as a result of military actions: NRF areas and objects of Kreminskyi District, Luhansk oblast.

*Thus, the authors recommend:*

- Demining the territory and neighborhood of the “Tryokhizbenskyi Steppe” reserve (division of the Luhansk Nature Reserve).
- Developing and approving a new territory organization project for RLP “Kramatorskyi” of Donetsk oblast, including an appropriate Provision.
- Considering the possibility of expanding the boundaries of the “Tryokhizbenskyi Steppe” reserve (division of the Luhansk Nature Reserve) along the Siverskyi Donets, to the east toward the Aidar.
- Considering the status of “Provalskyi Steppe” (division of the Luhansk Nature Reserve) and areas of National Nature Park “Meotyda” currently located in territories beyond GOU control.
- Studying the impact of hostilities on the flora using the example of the “Kreydova Flora” reserve by preparing its detailed geobotanical profile.
- Conducting a comprehensive inspection of all NRF territories (during the first stage – of those with national status) in search of mines and other explosive waste of war, preparing appropriate acts, briefing personnel and scientists of NRF institutions on mine security.
- Informing the commanding officers and personnel of the units of the Armed Forces of Ukraine deployed near or in NRF territories regarding the security regime of these territories and the need to minimize the impact on nature reserves; informing them of the environmental value of the NRF (important topics include “Nature in time of war” and “Nature reserves under conditions of the ATO”).
- Conducting a comprehensive inspection of NRF territories to determine conflict-related environmental damage and prepare appropriate acts.
- Conducting a remote assessment of environmental damage to NRF areas and objects located in territories beyond GOU control caused in the course of the hostilities as a result of the actions of the occupying power.
- Establishing cooperation between the Luhansk Nature Reserve and the military, and inspecting the territory of “Prydintsivska Zaplava” in order to prevent fires in ecosystems and damage to the soil, new roads, use of forests, etc. through Civil-Military Cooperation of the Armed Forces of Ukraine.
- Conducting comprehensive monitoring of the impact of the hostilities on the environment as part of research activities of state research institutions (including the National Academy of Sciences of Ukraine) and implementing comprehensive state research program “Monitoring of nature ecosystems as a result of the ATO” using governmental and non-governmental funds (grants).
- Increasing funding for nature reserves located in the ATO zone, supplying them with remote monitoring equipment (e.g. camera traps, drones, web cameras, equipment for collecting and processing such data); conducting an advocating campaign on the issue of the disruption of the activities of nature reserves in the course of the hostilities.