

Ecocide in Ukraine

Introduction

The Russo-Ukrainian war began in 2014 in Eastern Ukraine and re-escalated with the 2022 full scale invasion (Plochy, 2023). The Russian army during this invasion has committed acts of ecocide for military goals, to try and make Ukraine uninhabitable and in some cases for entertainment (Lukic and Marineau, 2023., Mordowanec, 2022). While the true extent is impossible to know because of the impossibility of investigating occupied areas, some examples include Shelling of sewage facilities causing pollution of water sources (Kireitseva et al., 2023); uncontrolled fires; toxic chemicals released when munitions detonate; oil spills in the Black and Azov seas killing dolphins and porpoises (Hartmane et al., 2024); disruption of bird migrations and increased radiation at the Chernobyl exclusion zone. The most discussed case is the breach of the Kakhovka dam

The legal side of ecocide

Ecocide is not currently its own crime under international law although in wartime it could be prosecuted under Article 8(2)(b)(iv) of the Rome statute which bans intentionally causing large-scale environmental damage, disproportionate to military advantage. Ecocide as an international crime was first proposed in the 1970s but recently discussions have been reinvigorated, with a proposed definition in 2021 : **“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”**.

Ecocide-genocide nexus

Ecocide is theorised in genocide studies, building on the work of Lemkin. Ecocide and genocide are linked as ecocide targets culture and survival which are components in genocide, they often happen together, have similar root causes, and ecocides increase the likelihood of a future genocide (Galligan, 2021)

Methodology

The research was carried out through interviews with 4 Ukrainians over email, who were found through personal connections and community organisations. These were undertaken considering the limitations of a study during the war and the ways that the topic may be painful to discuss.

Examples of ecocide

Kyiv

The main environmental problems have come from shelling. This has caused air pollution from the toxic chemicals released by munitions as well as from building debris and the usage of more unclean energy sources. The shelling also kills and shocks animals. The natural areas around Kyiv have been mined.

Kakhovka dam

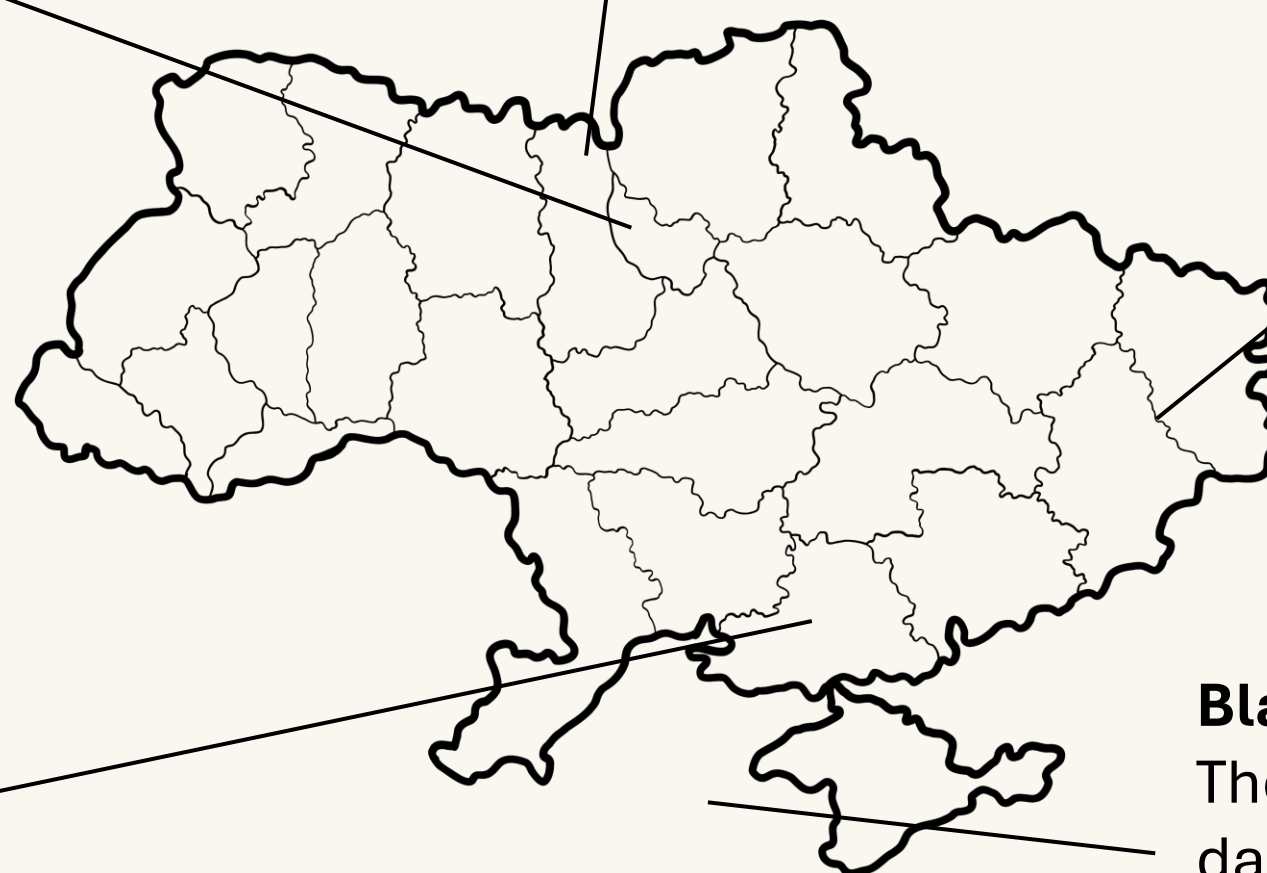
The destruction in 2023 which resulted in the flooding of 4 cities and dozens of villages caused among many other environmental problems: the transport of contaminated sediments damage to national parks the deaths of organisms in the reservoir and lower river, zoo animals and mussels in the black sea and the transport of landmines.

Chernobyl

Radiation has increased in the Chernobyl exclusion zone, possibly the result of fires and disruptions of the soil. The land has also been mined and a wild Przewalski's horse was killed.

Donbas region

One of the major problems is with abandoned mines flooding leading to release of methane, subsidence and pollution of drinking water



Black sea

The Black sea has faced many sources of environmental damage during the invasion. The collapse of the Kakhovka dam reached the black sea polluting the water and killing mussels. Additionally, oil spills have killed dolphins and porpoises

Temporality

Seen in multiple comparisons to WW2.

“To this day, the consequences of II World War are being found in Europe in the form of unexploded shells, bombs, shrapnel, etc. And after all, more than 80 years have passed...The intensity of military actions in Ukraine is higher”.

Memories from before the war, such as the wolves, boar and deer who lived in the steppes who likely won't survive.

The importance of remembering that the war started in 2014. Donbas has been experiencing ecocide since then.

“The flooding of the mines had many impacts including methane emissions and residential buildings collapsing due to the subsidence of soil” which “is directly associated with water quality”

Spatiality

Environmental damage will vary by area; in Kyiv the major environmental damage comes from drone and rocket fire which causes air pollution and kills animals. **“The air smells of burning, burning plastic and chemicals”**

Ecocide traps people and separates them from nature. **“at a time when you want to calm down, it is impossible to breathe fresh air, I had to give up walking.”**

The ecocide also mentally traps people as the extent is so widespread as to be incomprehensible. **“lost understanding of the extent of the damage and the purpose of these actions”**

This is worsened by confusion, the majority of people are not experts and so don't have the resources to know what is happening. **“I am unable to assess all the damage without analyses and samples of air, water and soil, for example, I do not know whether hazardous substances are entering groundwater, how much of them remains in the ground. Is it possible to eat food from a field or garden where missiles and debris fell?”**

Landmines

A key theme in all the interviews was the fear of landmines. Landmines represent permanent violence.

Ukraine has become one of the most mined regions of the world, and it could take centuries to demine (Shulzhenko, 2025). The two main impacts to the environment are physical damage to it and stopping people being able to interact with nature. Mines kill animals and cause soil degradation, impacting agriculture.

Mines limit access to nature for recreation and conservation.

“you can blow yourself up in the sea with mines nailed to the shore”

“I haven't visited the park that was next to this forest for more than 2 years, due to fear of mines and shells,”

“has reduced the ability to carry [conservation work] out due to mines being laid,”