



# THE WOUNDED EARTH: THE EXPLORATION OF WAR'S IMPACTS ON NATURE IN WAR LITERATURE

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**Abstract:** War has always had inevitable consequences for civilisations, from ancient times to the present. Throughout history, there is abundant evidence showing how war and its aftermath can devastate a country politically and economically. While war's effects on society and nations are obvious, nature often suffers from warfare in a more hidden way. The use of destructive weapons and the deliberate targeting of forests by military forces contribute to the degradation of the natural world. Since literature reflects social and cultural realities, many works explore war and its consequences, including its impact on nature and the environment. War literature highlights not only the social and cultural toll of conflict but also its environmental effects. Given that the natural world is an integral part of human life, this paper seeks to raise ecological awareness by examining how war alters the environment. The purview of the paper is to encourage those who declare war to consider the environmental damage it causes and protect ecosystems.

**Index Terms** - War, Warfare, Eco-centrism, Environmentalism, Militarism, Ecology, War and the Environment, War and Nature.

War is typically defined as a state of conflict between different nations or groups within a country, involving the use of armed forces and weaponry (Clapp 1). Additionally, Van Den Dennen quotes Von Clausewitz's definition of war in his article: "An act of violence intended to compel our opponents to fulfil our will and ...is nothing but a continuation of political intercourse, with a mixture of other means (3). Historically, wars have been waged primarily to seize land and resources. From ancient times to the present, conflicts have erupted over food, territory, and the desire to assert dominance over others. Although the motivations for war have varied from religious differences to financial gain, the impact is destruction. War invariably leads to widespread devastation, affecting entire nations and their civilizations. The consequences include the loss of human lives, destruction of property, and immense financial strain (Switek, 1). Additionally, the use of chemical weapons in warfare can result in long-term genetic health problems. As an act driven by human intent, war is a disruptive force that dismantles the interconnectedness of humans, animals, and the environment.

It is undeniable that war and military activities have a detrimental impact on the environment. Nature and ecosystems often suffer quietly in the background of conflict. War negatively affects humans, animals, and ecosystems alike (Bertram 11). Throughout history, societies have weakened their enemies by targeting vital resources such as crops, water, and land, aiming to cripple them economically. When a group or nation rises against another, their first move is often to destroy their adversary's essential sources of survival. The primary goal of war is to disrupt the key resources of the opponent.

Numerous historical examples demonstrate how nature is silently affected during wartime. The use of destructive weapons in Hiroshima, the Afghanistan War, the Gulf War, World Wars I and II, the Vietnam War, and the Syrian conflict has had severe environmental consequences. Modern advanced weaponry has been deployed with the intent to devastate entire nations. These weapons, including bombs and herbicides, not only cause human casualties but also devastate the ecosystems in which people

live. During the Indochina War, chemical herbicides were used to strip forest cover, destroy food sources, and wipe out industrial crops (Westing 218).

During World Wars I and II, forests and landscapes were severely damaged, with military forces deliberately targeting these areas to weaken enemy troops. The use of mass destructive weapons has left a lasting environmental impact, as seen in Hiroshima and Nagasaki, where the effects of the atomic bomb dropped at the end of World War I are still evident (Goodall, 283). In the Vietnam War, the primary objective of the Vietnamese military was to destroy forested areas (Hupy 415). Whether intentional or incidental, the landscape of Vietnam was profoundly altered by U.S. military actions, including the use of explosive munitions, herbicides, and land-clearing operations. Specialized bulldozers, known as 'Rome Plows', were employed to destroy dikes crucial to rice production. Additionally, 20 million gallons of herbicides were sprayed over vast areas of rice paddies and forests to disrupt agriculture and hinder military growth along the borders (Hupy, 416). The environmental effects of bombings still persist, and Vietnam's land has yet to fully recover from the chemical weapons used. Napalm, another devastating chemical weapon deployed by the U.S., caused widespread destruction to both human life and the environment (Verheyen 1).

Recently, Russia's invasion of Ukraine has inflicted irreversible damage not only on the regional environment but also on the global ecosystem. More than 70,000 species of rare and endemic flora and fauna have been destroyed. The artillery explosions have increased the risk of forest fires, such as the ones that burned 20,000 hectares in the Luhansk region in 2020. Furthermore, weapons, armour, and attacks on oil and gas facilities have disrupted Ukraine's energy supply, releasing large quantities of greenhouse gases and other pollutants into the atmosphere (Down to Earth).

Since literature reflects social and cultural issues, war literature serves as a medium to portray both the experiences of soldiers and the devastating consequences of war. Environmental and anti-war writers have highlighted how nature is often an overlooked victim of warfare, describing the disruption and destruction of ecosystems. In efforts to harm human populations, the natural environment is also severely impacted. Throughout history, conflicts have led to environmental crises, with military actions devastating natural resources and contributing to widespread deforestation. In England, the natural environment has been significantly altered by both war and the preparations for it:

...in the history of England's depletion of forests as a result of war or war preparation. During the so-called "Jacobean peace," the English presence in Ireland (chapter 7) contributed greatly to deforestation there because English colonial advisors working to expand the iron industry encouraged irresponsible clear-cutting. (Bertram 6)

Large-scale land clearances and topographical modifications were frequently necessary for military operations like the building of bases, airfields, and training grounds. A large portion of the countryside and farms were altered during World War II to aid in the construction of infrastructure and the cultivation of crops for food supply. Deforestation resulted from the clearing of forests for military and lumber uses. Environmental deterioration was also a result of the requirement for resources and raw materials to support military production. Further harming ecosystems were the long-lasting scars left on the land by the use of bombs, dynamite, and other heavy artillery. The long-lasting consequences of these changes kept having an influence on England's natural environment even after the wars ended.

The environmental crisis is primarily the result of human activities, driven by the belief that humans have control over nature. Almost every human action leads to anthropogenic changes in the environment. As we know, the excessive consumption of fossil fuels and the burning of oil today are major contributors to changes in the natural environment.

*Tamburlaine the Great* by Christopher Marlowe serves as a powerful representation of anthropogenic impact, illustrating how the biosphere is affected and transformed specifically for the purpose of warfare. Marlowe expresses;

Morocco: The spring is hindered by your smothering host,

For neither rain can fall upon the earth

Nor sun reflex his virtuous beams thereon,

The ground is mantled with such multitudes.

Bajazeth: All this is true as holy Mahomet,

And all the trees are blasted with our breathes. (*Tumberline* Act 3, Scene 1)

When large groups of humans unite for battle, the natural environment suffers. In the *Tumberline*, Morocco notes that rain and sunlight are unable to reach the earth due to human interference, leading to the oppression of spring. The mobilization of large troops, excessive consumption of water and food, and a sole focus on fortifying defences and enhancing weaponry resulted in significant alterations to the physical environment to meet military objectives. War brings about ecological changes within a country, and Marlowe's works illustrate historical moments where "human-on-human violence and violence against the planet are inextricably linked (Bertram 19).

It is well understood that environmental destruction ultimately leads to the destruction of humanity. During times of war and military preparation, a country's physical surroundings are altered, and this ecological devastation impacts both civilians and wildlife. In *Tamburlaine*, the ecosystem is ravaged when he commands the entire population to be drowned in the lake (Bertram 143).

In *A Farewell to Arms*, Ernest Hemingway portrays the hardships faced by people during World War I. In the first chapter, the protagonist, Frederic Henry, reflects on his wartime experience and describes his surroundings. He resides in a house in a village that overlooks the river and the plain, with a view of the mountains. The riverbed is filled with pebbles and boulders, and the water flows swiftly through the channels, clear and refreshing. This environment was pleasant and livable until the arrival of the troops in the village. However, after the invasion of the troops, the environment is disturbed. As Henry describes;

...dust they raised powdered the leaves of the trees. The trunks of the trees too were dusty and the leaves fell early that year and we saw the troops marching along the road and the dust raising and leaves, stirred by the breeze, falling and the soldiers marching and afterward the road bare and white except for the leaves. (Hemingway 3)

Henry notes that dust settles on the leaves and trunks of plants and trees whenever the army marches along the road. This dust becomes a permanent fixture, and even rain merely turns it into mud. Symbolically, the novel suggests that the presence of military forces will lead to changes in the ecosystem. At times, trees are felled to create shelters and campfires for the military, while resources like fruits and vegetables from the forest are excessively consumed. As a result, the environment suffers due to the overexploitation of natural resources by the military.

The war poem "Dulce et Decorum Est" by Wilfred Owen depicts the harrowing experiences of a group of soldiers in World War I, focusing on the traumatic death of a comrade and the aftermath of that event. The poet describes how the soldiers walk hunched over under the heavy weight of their packs, resembling beggars. As they make their way back to camp, their knees unsteady and bleeding, they cough like frail old men, struggling in misery. Despite someone shouting a warning about incoming gas shells, the soldiers fumble with their gas masks in a state of panic. Tragically, one soldier fails to heed the warning and suffers a painful death as the poison gas envelops the air. Meanwhile, his fellow soldiers watch helplessly and care for their friend, who is coughing up blood from his damaged lungs with each gasp. The poem highlights the devastating aftermath of gas bomb usage in warfare. Moreover, the poem exposes how the poisonous gas affects the natural environment.

And watch the white eye writhing in his face,  
His hanging face, like a devil's sick of him;  
If you could hear, at every jolt, the blood  
Come gargling from the froth-corrupted lungs,  
Obscene as cancer, bitter as the cud (Owen, 1917)

The consequences depicted in the poem illustrate how nature becomes toxic and impacts human health. With the poisonous gas mingling with the air, it harms the human body. Therefore, the poem exposes how nature becomes unfriendly due to anthropogenic actions.

Moreover, Kirmayer notes that war is often widespread, leading to a collective loss of meaning and social structure, the destruction of a way of life, and a worldview that may sometimes be irretrievably lost (135). War and its preparations can cause significant damage to the physical environment, including water, land, air, and outer space. The testing and use of weaponry can lead to pollution of lakes, rivers, streams, aquifers, land, and the atmosphere. Additionally, outer space may be harmed by the deployment of weapons. Nonrenewable resources can be consumed in the production, testing, and utilization of these weapons (Sidel et al. 24).

As Bertram points out, ecological awareness is inherently linked to an awareness of war (9), and the use of fuel and destructive bombs in warfare contributes to anthropogenic changes in the ecosystem.

Anthropogenic change—carbon emissions, deforestation, the destruction of wildlife and the ecosystems that sustain it, mining, and agriculture—is so great that humans have left an indelible mark on the planet. One argument in favor of naming a new epoch is that it gets us to focus on "our" responsibilities to fight for environmental justice. (Bertram 6)

To protect the ecosystem from the effects of warfare, it is essential to eliminate the underlying causes of conflict. Targeting specific weapons or military operations is necessary to mitigate the environmental consequences of war (Sidel et al. 31). By addressing these issues through surveillance, documentation, education, and awareness, we can reduce the negative impacts of war on nature. Education serves as a powerful tool for change and helps people understand the realities of life, potentially shifting perceptions about warfare by clearly revealing its impacts.

Robertson asserts that environmental management involves the government acting as a steward of nature, which encompasses more than just viewing nature as a resource; it includes everything from weather patterns to waste management. Effective environmental management entails not only utilization but also the knowledge required for conservation and protection (Robertson, 341). Moreover, in this century, the threat of war continues to exist globally. Therefore, it is essential for the government to implement eco-centric policies to safeguard nature from the impacts of warfare by promoting peace among nations, as the destruction of the environment ultimately leads to tremendous hazards for humanity as well.

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