

The Motherland of the Giant Hogweed How Giant Hogweed Became a Botanical Symbol of Contemporary Russia

Anastasia Sinitsyna
Università Ca' Foscari Venezia, Italia

Abstract Human intervention in ecosystems has led to the accelerated dissemination of species deemed 'invasive', often accompanied by a perception of inherent malevolence. In Russia, the rampant spread of the giant hogweed has emerged as one of the most debated ecological issues in recent decades. The giant hogweed (*Heracleum*), a herbaceous monocarpic plant first discovered in the Caucasus in 1944, now proliferates throughout the country, from Sochi to Yamal and from the Arctic to downtown Moscow. It is estimated that the giant hogweed occupies over 10% of continental Europe within Russia, with projections suggesting an increase to nearly 100% within the next 30 years. Frequently, the plant is likened to a botanical emblem of Russia or a symbol of Putin's regime, reflecting the social tensions that oscillate between apathy and antipathy toward the hogweed in media and activism spheres.

Keywords Ecocriticism. Post-Soviet landscapes. Invasive species. Russia. Giant hogweed. Political ecology. Ecological imperialism. Decolonial aesthetics.

Summary 1 Introduction. – 2 Conquering Nature: History of the Giant Hogweed Invasion. – 3 Externalising the Enemy. – 4 Transformative Narratives. – 5 Decolonial Aesthetics. – 6 From Post-Soviet Legacy to Botanical Symbol of Russia. – 7 Conclusion.



Peer review

Submitted 2023-03-31
Accepted 2023-07-06
Published 2023-09-04

Open access

© 2023 Sinitsyna |



Citation Sinitsyna, A. (2023). "The Motherland of the Giant Hogweed. How Giant Hogweed Became a Botanical Symbol of Contemporary Russia". *Lagoonscapes. The Venice Journal of Environmental Humanities*, 3(1), 61-76.

DOI 10.30687/LGSP/2785-2709/2023/01/006

1 Introduction

The role of humans in facilitating the uncontrollable spread of invasive species is considered one of the signs of the Anthropocene, an epoch in which humans have emerged as the primary geological and biological force driving planetary change (Simon 2016). In the Anthropocene, invasive species serve as a tangible manifestation of human-induced ecological disruptions and transformations, highlighting the significant role of human activities in altering global biodiversity and ecosystems.

Invasive plant management and campaigns raise thought-provoking questions about various dualisms, such as the dichotomy between nature and culture, native and alien species, the concepts of good and evil, with power relations and political discourse influencing these relationships. In the post-Soviet context, the giant hogweed stands out as a notable example, as it has rapidly expanded over underdeveloped and abandoned lands in former Soviet territories over the past 30 years, illustrating the profound ecological impacts of its invasion.

The giant hogweed, scientifically known as *Heracleum*, is a herbaceous monocarpic plant that reaches heights of 3 to 6 metres. Its stout stem can grow up to 12 centimetres in diameter, while its massive green leaves and large umbels bear tiny white flowers. With its remarkable fertility, the hogweed releases approximately 20,000 seeds annually, each capable of germinating for up to four years. Exposure to sunlight, in combination with contact with the plant's sap, can lead to photosensitivity and severe burns. The hogweed's immense size often gives rise to comparisons with alien landscapes. It is estimated that more than 15% of the European part of Russia has been overtaken by the giant hogweed (Mironova 2022).

The impact of the giant hogweed extends beyond physical landscapes; it has permeated the cultural and media fabric of Russia. The plant has become a subject of internet memes, folklore, and even mainstream culture, finding its place in the “no-brow culture” of the Russian establishment. It has been featured in prime time television news segments, shared on social media through maps documenting its expansion, and even incorporated as a decorative element in high-end art fairs and fashionable attire.¹ These multifaceted representations of the hogweed, while potentially contributing to the

¹ This could possibly lead to the creation of what Natasha Myers has referred to as the “Planthropocene”, an episteme in which people learn to collaborate with plants in order to create livable worlds. In Natasha Myers’ article “From the anthropocene to the planthropocene: Designing gardens for plant/people involution”, she argues that “to cultivate the Planthropocene is to cultivate a deep attentiveness to the ways in which plants and people co-constitute one another, to the ways in which we are always-already entangled in multispecies assemblages and relationships of care, to the

stigmatisation of the plant, are still relatively new within the Russian cultural and environmental milieu. The significance attributed to the hogweed in contemporary Russian culture underscores the intricate and evolving relationship between humans and non-human entities. Nonetheless, its emergence within the Russian landscape is a recent phenomenon.

2 **Conquering Nature: History of the Giant Hogweed Invasion**

Introduction and cultivation of the giant hogweed should be read as part of a broader cultural and political agenda of the Soviet Union, in particular, the Stalin era (1927-53), which was characterised by a strong discourse of ‘conquering nature’. This discourse reflected the Soviet Union’s ambition to transform its vast and diverse territory into a unified and modern socialist state, as well as its aspiration to challenge the capitalist world order. In this context, nature was seen as a resource to be exploited, a barrier to be overcome, or an enemy to be defeated by the power of science and technology. According to Josephson (1995), the Soviet Union pursued several large-scale projects that aimed to transform nature and society, but often had disastrous effects on both. Stalin’s Great Plan for the Transformation of Nature, proposed in the Soviet Union in the late 1940s, aimed to improve agriculture through land development, agricultural practices, and water projects. It included the construction of irrigation canals in the southern Soviet Union and Central Asia, as well as the planting of extensive shelterbelts to combat drying winds and prevent drought.

One such example of ‘conquering nature’ narrative was the construction of the Volga-Don Canal (1947-52), the mega project aimed to connect the Caspian Sea with the Black Sea and shorten the distance between Leningrad and Astrakhan by connecting the River Volga with the River Don. This led to the displacement of more than 170.000 people, creation of huge lakes and wetlands, and altering the ecosystems along the canal route.

These projects were often done without regard for the unique ecological conditions of the affected areas and had detrimental effects on the environment and local communities. Additionally, the Soviet Union had a centralised system where Moscow made all the decisions, disregarding the knowledge and concerns of local communities.

One of the scientific fields that emerged and flourished in the Soviet Union during the Stalin era was epigenetics, which explored the

ways in which we are always-already located within particular ecological and geological contexts” (Myers 2017).

ways in which environmental factors could influence the development and traits of organisms (Roll-Hansen 2005). Epigenetics challenged the dominant genetic determinism of Western biology and offered a more dynamic and flexible view of life. Epigenetics also resonated with the Marxist-Leninist ideology of the Soviet Union, which emphasised the role of historical and material conditions in shaping human society and culture. Epigenetics provided a scientific basis for the belief that nature could be reshaped according to human needs and desires, and that humans could adapt to any environment. The rise of Lysenkoism and the triumph of Trofim Lysenko in the Soviet Union in 1948 can be understood in the context of a complex interplay between scientific, ideological, and political factors. Lysenko's rejection of classical genetics and his emphasis on a dialectical understanding of heredity aligned with the materialist ideology of the Soviet regime and resonated with philosophical themes of flux and development. Lysenko's ascendancy was aided by political support, including from influential figures like Georgii Malenkov, and culminated in Stalin's endorsement, which solidified Lysenko's position and led to the suppression of classical genetics. The specific circumstances of the Soviet Union during that time contributed to the unique dynamics of the Lysenko affair, sparking debates on the relationship between science and politics in authoritarian regimes.

However, this belief in the power of science to reshape nature was severely tested by the aftermath of World War II, which left the Soviet Union with a collapsed economy and widespread agricultural devastation. The war also exposed the environmental consequences of industrialisation, militarisation, and urbanisation, such as pollution, deforestation, soil erosion, and biodiversity loss. In response to these challenges, the Soviet Union intensified its efforts to use scientific innovation to improve agricultural productivity and address environmental problems.

The giant hogweed was one of the plants that was imported and cultivated as a potential solution for fodder shortages, reflecting the Soviet Union's faith in the ability of scientific innovation to overcome the limitations imposed by nature. The plant was first discovered by Ida Mandeeva in 1944 in the Caucasus and was named by Soviet botanist and Caucasus explorer Dmitrii Sosnowsky.

The hogweed, with its enormous, green leaves, was anticipated to become an excellent source of food for domesticated animals like cows and sheep. Almost immediately after the plant's discovery, it was transported from the Caucasus to Apatity, where agrobiologists from Polar Botanic Garden altered it and developed two new varieties of *H. Sosnowskyi*: *Victory* and *Northerner*. These new strains of *H. Sosnowskyi* have superior results in terms of fertility and resistance to frost (Heywood 2011).

The cultivation of giant hogweed as a potential fodder crop became a subject of research for specialists from several institutes in the Soviet Union with very different climate and soil conditions, such as the Botanical Institute of the Academy of Sciences (Leningrad – nowadays Saint Petersburg), the Institute of Biology of the Komi Science Centre (Syktyvkar), the Northwest Research Institute of Agriculture (Pushkin), the Institute of Fodder (Moscow Region), and the Leningrad Pedagogical Institute. A group for studying and introducing new and non-traditional fodder plants was also organised under the All-Union Academy of Agricultural Sciences (now the Russian Academy of Agricultural Sciences). The study of this introduced plant, conducted in Yerevan, Zhytomyr, Kyiv, Minsk, Naryan-Mar, Petrozavodsk, Leningrad (Saint Petersburg), Moscow and Syktyvkar, showed that the Non-Black Earth and Black Earth zones of the country were the best for growing this high-productive and resilient culture.

Hogweed was distributed to collective farms across the Soviet Union in the 1950s along with the instruction to mass-plant it so that it could be used as a feed for cattle. In the minds of governors in the Soviet administration, and notably Nikita Khrushchev, hogweed was a panacea for the problems of post-war poverty, famine, and degradation, as well as a weapon against food insecurity during the time of the Cold War (Krivosheina, Ozerova 2018).

In the Leningrad Region, as well as in many regions of Russia, hogweed has been cultivated since the 1960s as a promising fodder crop on an area of more than 1.000 hectares (Luneva 2013). In the second half of the last century, this species appeared on the territory of the Baltic republics as a fodder, ornamental, honey-bearing plant, and as a source of feed for birds (in the form of seeds) (Nielsen et al. 2005). Despite these high hopes, the Soviet experiment did not yield the expected results. As soon as cows started being given hogweed, there were reports that the milk produced by those cows was sour and potentially toxic. Farmers have observed that humans who come into contact with sap suffer from phytophotodermatitis and burns, which can be fatal. The root structure of the hogweed was wide and deep, and it completely displaced the local vegetation.

Public service announcements advocating hogweed for use as animal feed were shown on Soviet official television over opposition from local farmers. An example of this may be seen in a broadcast that was made in the year 1982 and was created by the prestigious and modern-day Moscow Timiryazev Agricultural Academy (Krivosheina, Ozerova 2019). However, there is no mention made of the burns, the infernal fertility, or the complete devastation of nature in the area around hogweed. Until 1984, the scientists maintained the optimism that they could create a new variety of hogweed that would not result in burns. However, in that year, it became clear that their endeavours, as well as the widespread use of hogweed in agricultural

settings, were ineffective. Despite this, the hogweed had already been seeded across the entirety of the Soviet Union and had begun its spread into the natural environment.

The collapse of the Soviet Union played a pivotal role in the rapid proliferation of the giant hogweed. While the precise factors triggering its aggressive spread remain unclear, the disintegration of numerous agricultural enterprises that cultivated the plant contributed to its uncontrolled expansion. As these enterprises dissolved, fields of hogweed were left unattended and unmanaged, leading to seed contamination in neighbouring areas. It is worth noting that hogweed was cultivated not only for animal fodder but also for seed production and the extraction of essential oils used in the perfume and cosmetics industries.

The conditions for the plant's spread had always existed: its exceptional fertility, coupled with seed dispersal by wind, birds, animals, humans, and vehicles, persisted throughout its 40-year cultivation. Nevertheless, hogweed remained confined to the cultivated fields where it was grown. It is possible that the favourable conditions provided within these agricultural settings did not stimulate the plant to invade new territories. However, following the collapse of the Soviet Union, the disruption in agricultural management inadvertently created an environment conducive to the rapid proliferation of giant hogweed across Russia. As Bogdanov, Nikolaev and Shmeleva (2010) state, "In the early stages of its expansion, the giant hogweed was found exclusively in disturbed habitats: it typically grew along roadsides, power line corridors, on wastelands, dumps, and abandoned agricultural lands. In recent years, it has surrounded villages, penetrated large cities, parks, and even nature reserves".

The term 'colonisation' has frequently been employed in both Russian and foreign literature to describe this expansion (e.g. Catterall et al. 2012). The spread of hogweed may have been constrained through land cultivation, ecosystem restoration, and active agriculture practices. Nonetheless, the plant extends its coverage by an additional ten percent each year and has autonomously occupied an area as large as 100.000 hectares (Mironova 2022).

Therefore, another analytical approach to understanding the giant hogweed involves situating it within the broader framework of colonial expansion. This perspective argues that European settlers achieved hegemonic control over other regions through the inadvertent or deliberate introduction of animals, plants, and diseases, resulting in significant ecological transformations and population declines among indigenous peoples (Crosby 1986). Applying this lens to the ecological impacts of Russian expansion and settlement in Siberia and Central Asia, the Russian Empire and the Soviet Union introduced various species of crops, livestock, and pests, leading to profound changes in natural landscapes and disrupting the

livelihoods of indigenous populations (Moon 2013). In the case of the giant hogweed, it exemplifies a reverse manifestation of ecological imperialism. Originating from the Caucasus region, the plant was introduced to the European territory of the Soviet Union by Soviet botanists, where it became an invasive and detrimental species, posing threats to local flora, fauna, as well as human health and safety (Pyšek, Prach 1993).

3 Externalising the Enemy

The ‘battle’ against giant hogweed has become ingrained in both everyday life and politics over the course of the post-soviet period, being reinforced by language and narratives of warfare in the official discourse. In May 2022, scientists from the Skolkovo Institute of Science and Technology used Artificial Intelligence to predict that by 2040, there may be no areas left in the European part of Russia that are not overrun by hogweed (Koldasbayeva et al. 2022). While the language of the original report was rather neutral, the media was mostly using verbs like ‘conquered’, ‘colonised’, ‘invaded’.

The phenomenon commonly referred to as the ‘hogweed invasion’ has assumed a significant role within the realm of political life, characterised by the widespread adoption of military-related metaphors. A notable example of this can be observed during the 2018 elections, where Andrei Vorobyov, the governor of the Moscow Region, orchestrated an anti-hogweed campaign as part of his political platform, with an estimated expenditure of 300 million rubles. In order to critically examine these eradication efforts, James Scott’s concept of “Seeing Like a State” offers a valuable analytical framework. In his influential work, Scott argues that the state tends to oversimplify and reduce complex social and ecological systems into easily manageable and comprehensible forms, often at the cost of neglecting a more nuanced understanding of the underlying issues (Scott 2008). The approach taken towards the giant hogweed exemplifies this reductionist tendency, as the plant is frequently categorised simply as a “noxious weed” (Flessner, Metzgar 2018, 1) and subjected to targeted elimination, without adequately considering the broader contextual factors that have facilitated its proliferation.

In the *Imagining Extinction: The Cultural Meanings of Endangered Species*, Ursula Heise contends that “biodiversity, endangered species, and extinction are primarily cultural issues, questions of what we value and what stories we tell, and only secondary issues of science” (Heise 2019, 5). This perspective aligns with the historical context of the anti-hogweed campaigns. In the 2000s, the initial campaigns against hogweed contributed to the perception of the plant as an ‘alien’ entity, while advocating for its complete eradication

through the use of pesticides that also posed risks to other forms of life. Notably, the Russian anti-hogweed campaign, known as *Bor-shevictory* (translated as ‘The Victory over the Giant Hogweed’), even developed a board game portraying hogweed as a disturbed research experiment gone wrong, seeking vengeance.

This narrative sheds light on the origins of the giant hogweed in the world. Originally deriving from Georgia, hogweed underwent modifications in an agrobiological laboratory, blurring the boundaries between what is considered ‘natural’ and ‘cultural’ or *artificial*. Ekaterina Nikitina, a posthumanist researcher and philosopher, further explored this narrative in her article titled “Hogweed vs. Sunroot: Zoemachy of Soviet Postanthropocentrism”. Drawing comparisons to Frankenstein, she depicted the plant as a “monster directed against Nature” with a capital “N” (Nikitina 2019), emphasising its transformative and disruptive nature within ecological frameworks.

4 Transformative Narratives

In the 2010s, the giant hogweed has come to represent the perceived authentic Russia beyond the glitz and glamour of Moscow within a significant segment of the contemporary art community in Russia. Two of the sixteen pieces that were considered for the short list for the Kandinsky Prize, which is a prize for contemporary art, investigated hogweed as a new cultural layer that was taking over abandoned post-soviet terrain. Another illustration of this may be seen in the artwork that was presented in 2019 by Alexandra Lerman (Lerman 2019). She displayed dried hogweed beside a plush dog and a massive glass anatomical model of a man. She also recorded a hogweed vengeance manifesto with a dark techno noise, which went as follows: “*The toxic miasm will reach your towns. / You are already late! / We have won and are invulnerable. / We are not scared of your herbicides*”.

The depiction of the hogweed as a menacing invader has faced criticism for oversimplifying the issue and perpetuating the “othering” of the plant. By portraying the hogweed as a villain, this narrative reinforced a militaristic approach of eradicating it at any cost, leading to the widespread use of harmful herbicides and mechanical mowing practices. Unfortunately, these efforts resulted in the destruction of surrounding ecosystems and the unintended consequence of the hogweed transitioning from an annual to a perennial plant.

In response to these negative outcomes, some activists and local communities have started exploring alternative narratives that seek to “de-alienate” the hogweed and find sustainable ways to co-exist with it. These efforts involve repurposing the plant for various beneficial uses. For example, the Research Institute of Mechanization and Electrification of Agriculture in Komi has proposed using

hogweed-derived sugar for bioethanol production, and students at Altai State University have discovered how to utilize hogweed extract for treating skin diseases (Mironova 2022).

These alternative narratives can be understood through the framework of Anna Tsing's concept of the "economy of appearances". According to Tsing, this economy is a speculative form of capitalism in which the imagination of profit precedes its extraction. In this context, images, expectations, and fantasies play a significant role in generating value and attracting investment. Furthermore, Tsing argues that the economy of appearances is influenced not only by economic interests but also by cultural beliefs, scientific knowledge, and political agendas. It thus reveals the intricate and context-dependent ways in which certain species are valued and perceived.

Examining the giant hogweed through the lens of the economy of appearances highlights the diverse roles and perceptions it has assumed over time and in different contexts. Whether as a fodder crop, an ornamental plant, a honey-bearing plant, a source of bird feed, an invasive species, a toxic weed, or a symbol of ecological imperialism, the giant hogweed has been valued and perceived differently.

In light of these discussions, it is worth revisiting Mark Davis's claim in his book *Invasion Biology* that species should be evaluated based on their impact on biodiversity, human health, ecological services, and economies rather than solely on their geographic origin. This perspective may resonate with a broad range of academics and observers, even if it encounters opposition (Davis 2009). However, it is important to acknowledge and address the concerns raised by Crystal Fortwangler, who questions whether it is necessary to evaluate plants solely within a utilitarian or functional framework and challenges our ability to truly see creatures in their entirety (Fortwangler 2013). These issues warrant further exploration and discussion.

Anna Martynenko's "Hogweed Museum" (2019) project served as an excellent example of engaging with the concepts of "*entangled worlds of contingency and uncertainty*". The project exemplified the idea of "entangled worlds" and the importance of taking a holistic approach to understanding the connections between humans and other beings. In the "Hogweed Museum" on the Okhta River, the stories and history of the hogweed plant were told from the perspective of its relationships with other species:

The museum was founded in August 2019 by activists of the Waterfront/Water Line project, dedicated to the development of the coastal areas of small rivers in St. Petersburg. The Okhta River is one of the oldest rivers in St. Petersburg, but its banks are overgrown with a poisonous plant – Hogweed. It was this plant that became the main hero of our museum. We trace its history from ancient times to the present day in a number of museum artefacts.

Most of these artefacts are the result of the study of the territory and archaeological excavations made in the area. It is these finds associated with the giant hogweed that make up the exposition museum". (Martynenko 2019)

Ilya Dolgov, another artist who has vastly used hogweed in his works, has called for a shift away from the trend of "urban jungle" Instagram aesthetics towards a focus on growing native, potentially challenging plants at home, such as hogweed and burdock (Sobaka 2021). Dolgov suggests that this type of immersion in ecosystems would allow for the cultivation of new relationships and accountabilities.²

Instead of seeing the hogweed as a harmful invader or as a commodity to be exploited, this perspective emphasised the importance of "attentive interactions with diverse lifeways" (Van Dooren, Kirksey, Münster 2016) in order to better understand and care for the ecosystems in which we are all entangled. One way to approach this is through the use of grassing techniques, such as seeding white clover, bluegrass, and *bromus inermis*, which have been shown to suppress hogweed growth and promote coexistence with the plant (Catford 2019). This approach involves a sense of passionate immersion and a willingness to learn and be affected by the diverse lifeways of multiple species (Van Dooren, Kirksey, Münster 2016).

5 Decolonial Aesthetics

The spread of giant hogweed in Russia has often been described as an instance of 'colonisation'. However, it is important to recognise that the plant's presence in the country can also be seen as a result of Russian colonialism and as a manifestation of Haraway's concept of the "plantationocene", which refers to the ways in which colonial and capitalist systems have shaped the global distribution and management of plants. As Haraway (2015, 162) writes,

Moving material semiotic generativity around the world for capital accumulation and profit - the rapid displacement and reformulation of germ plasm, genomes, cuttings, and all other names and forms of part organisms and of deracinated plants, animals, and people - is one defining operation of the Plantationocene, Capitalocene, and Anthropocene taken together.

² In that same year, I attended a concert by Alliance, a Soviet rock group that reached the height of its fame in the late 1980s. The concert took place in a former industrial neighbourhood of Moscow, amidst the remnants of abandoned factories. The venue was adorned with rusty Soviet cars, and towering dry hogweeds, reaching heights of 2-3 metres, added a very certain aesthetic of ruins and obsolescence to the setting.

Therefore, the introduction of giant hogweed to Russia as a potential commodity crop can be seen as an example of the efforts of the Soviet Union to exploit and control natural resources for a short-term economic gain, leading to the proliferation of monoculture and the displacement of indigenous knowledge systems.

The Komi region, infamous for ongoing ecological crises and the biggest oil spills in Russia in particular, has suffered greatly from the spread of giant hogweed, which has displaced native vegetation and disrupted local ecosystems (Chadin 2017). As Donna Haraway (2015) writes, colonization is a structure, not an event, and imperial structures do not go away just because the empires that deployed them have (at least temporarily) withdrawn.

Local Komi artist Varya Listopad began to use the long stems of the hogweed to create rain sticks, or *zer pu*, as they are called in the Komi language, turning the “deadly plant” into an artistic tool, as it was introduced in Posner’s (2020) article: “Looking at the lush, poisonous hogweed, I was inspired by the idea of creating a musical instrument from it with the thought that, although it is just a small step, I could help the environment of my village”. In 2019, the Darwin Museum hosted an exhibition “Hogweed Factory” with folk craft objects made from a dry plant and talks by scientists and activists representing alternative perspectives on the plant. The curators tried to enable other forms of existence and resistance that challenge the coloniality of power and knowledge, while considering how the giant hogweed itself is an agent and a victim of colonialism, as it was introduced, exploited, and demonised by different actors for different purposes.

6 From Post-Soviet Legacy to Botanical Symbol of Russia

The giant hogweed has been dubbed a “symbol of the Putin era stagnation” by the Dozhd’ (‘Rain’) TV Channel (2018), which used to be one of the most prominent news outlets affiliated with the Russian liberal opposition. The description of the video points to the plant as a ‘national symbol’: “As is well known, there are two deeply rooted evils in Russia - corruption and hogweed. And there is absolutely no hope of eradicating either of them, because corruption is not an obstacle, but the basis of the economy, and hogweed is no longer a weed, but a national symbol”.

The giant hogweed is a post-Soviet legacy, and its rapid spread throughout Russia can be seen as a reflection of the nation’s turbulent past and present:

In the case of the post-Soviet subject, the aspiration to surmount the ego’s spatio-temporal limitations, to see the continuation of oneself and one’s desires in all contexts, has its own distinctive

condition. The post-Soviet subject experiences a traumatic split with an the older Soviet symbolic universe; the ruination of a coherent historical narrative; the destruction of the familiar object world and its social context (from the practices of everyday life to industrial labour and now-destroyed factory buildings in which people clocked in and out every day); a discursive deficit associated with the insufficiency of the new languages required for depicting the new reality; the melancholic fixation upon the lost object of desire; the nostalgic attachment to what has gone that then engenders an excess of the past which the consciousness of society is unable to digest. (Kalinin 2019)

In 2019, three years before the war between Russia and Ukraine, the Voznesensky Center in Moscow, a multifunctional cultural institution named by a Soviet poet Voznesensky, featured an exhibition-installation dedicated to “I am Twenty”, the film of a Soviet filmmaker Marlen Khutsiev (a landmark of the soviet cinematograph of the 1960s) and the play “V.E.R.A.” (“F.A.I.T.H.”) by Andrey Rodionov and Ekaterina Troepolskaya (Tsentr Voznesenskogo 2019).

If we adopt an ecocritical approach, focusing on the giant hogweed as a motif in the exhibition, interestingly, we will discover the installation, although emulating scenes from the film, bears a striking resemblance to a modern-day hipster dwelling. This parallel highlights the importance of the giant hogweed’s presence, originally cultivated as fodder during the Khrushchev era, and its eventual ecological destruction and the “traumatic split” of the Post-Soviet era and the Cold War aftermath.

The performance primarily revolved around the heated exchanges between Khrushchev and Voznesensky, separated by a wall of giant hogweed. The play’s climax reenacts their famous confrontation with the creative intelligentsia, ultimately ending inconclusively. Despite the animosity between the characters, the poets’ youthfulness prevails, emphasising their resilience and strength. The narrative explores the legacy of the 1960s, touching upon themes of disillusionment, loss of purpose, and the role of poetry in uniting people.

However, as the performance reveals the devastating ecological impact of the giant hogweed, the tone shifts. Khrushchev, caught amidst the monstrous weeds, listens to discussions on nuclear warheads and the Cuban Missile Crisis, illustrating the juxtaposition of utopian dreams and the looming threat of atomic warfare. The play ultimately suggests that the 1960s cannot teach us resistance, protest, or any valuable lessons, except to never trust ourselves, the authorities, or our times. As foundations of faith inevitably crumble, the pain of disillusionment becomes ever more poignant, and the

population is left on the ruins of empire and its hopes.³

On the other hand, the notion of an existential threat, championed by German philosopher Carl Schmitt whose ideas influenced Vladimir Putin and Russian Neo-Authoritarianism, serves to unite society in the face of adversity in the post-Soviet era, signifying a continuation of Cold War paranoia and a post-apocalyptic vision of Russia's future (Kurylo 2016). In this context, the giant hogweed has become an unmistakable cultural artefact of contemporary Russia, symbolising both the resilience and despair that characterise its environmental and cultural landscapes.

In March 2023, a week before the deadline for submission of the essay, the neural network Midjourney drew a "Soviet" version of the popular TV series "The Last of Us" (*Tinkoff Journal* 2023). The author, Dasha Leizarenko, generated frames from the recent popular series about an epidemic of cordyceps fungus that engulfed humanity. In her version, the action takes place in the USSR in times of "epidemic of hogweed".

With its dystopian setting and epidemic of hogweed, the AI-generated "Soviet" version of "The Last of Us" encapsulates the relationship between state ideology and environmental degradation. The visual representation of a post-apocalyptic USSR overgrown with hogweed speaks to the lasting impact of imperialist policies on both the physical environment and the human psyche. The haunting images of decaying Soviet infrastructure, coupled with the relentless spread of the giant hogweed, serve as a stark reminder of the consequences of unchecked expansionism and militarism or as a bitter aftermath of the Cold war.⁴

7 Conclusion

Media and artistic projects about giant hogweed have focused on documenting the alienation, societal, and ecological issues surrounding the plant. These projects have provided a critical study of past and present nature-culture relations and the political discourse shaping these relations. As a result, public attention to the presence of giant hogweed has increased over time, especially with the development of

³ For more reflections on fetishization of the ruins of Soviet infrastructure, see Bennett 2020.

⁴ In the 2010s, artist Alexei Buldakov employed dried hogweed as an embellishment for VIP art fair dinners. These mutual exchanges, initially aimed at destigmatizing the hogweed, have now found their way to the entrance of an upscale café named "Friends" in the esteemed vicinity of Kutuzovsky Lane. The Russian luxury clothing brand Walk of Shame has unveiled its latest 2021 collection, featuring white dresses adorned with delicate Heracleum prints.

large artistic projects and exhibitions in state museums, making it an inseparable component of both the environmental and cultural landscapes of Russia, strongly associated as a country's botanical symbol.

Drawing on the framework provided, this analysis emphasises the need for a critical examination of state ideologies and their potential for destruction, both environmentally and sociopolitically, as we strive to better understand and address the complex interactions between human actions and the natural world. In the context of the giant hogweed, we can view its invasion and spread as a physical manifestation of the Soviet Union's imperial ambitions, expansionist policies, and subsequent decline. The environmental damage caused by the giant hogweed parallels the human and societal cost of imperial projects and military aggression. The invasive plant serves as a potent symbol of the Soviet empire's overreach in the political and cultural landscape of contemporary Russia, its destruction of native ecosystems, and the subsequent destabilisation of local environments, much like the military invasions and colonisation efforts throughout history.

Bibliography

- Bennett, M.M. (2020). "The Making of Post-Post-Soviet Ruins: Infrastructure Development and Disintegration in Contemporary Russia". *International Journal of Urban and Regional Research*, 44(3), 559-76. <https://doi.org/10.1111/1468-2427.12908>.
- Bogdanov, V.L.; Nikolaev, R.V.; Shmeleva, I.V. (2010). *Biological Pollution of the Territory by an Ecologically Dangerous Plant, Sosnovsky's Hogweed*. Fundamental Biomedical Sciences and Practical Healthcare: Sat. Scientific Tr.
- Catford, J.A., et al. (2019). "Grassland Invasion in a Changing Climate". Gibson, D.J., Newman J. (eds), *Grasslands and Climate Change*. Cambridge: Cambridge University Press, 149-71.
- Catterall, S., et al. (2012). "Accounting for Uncertainty in Colonization Times: A Novel Approach to Modeling the Spatiotemporal Dynamics of Alien Invasions Using Distribution Data". *Ecography*, 35(10), 901-11. <https://doi.org/10.1111/j.1600-0587.2011.07190.x>.
- Chadin, I. et al. (2017). "Distribution of the Invasive Plant Species *Heracleum sosnowskyi* Manden. in the Komi Republic (Russia)". *PhytoKeys*, 77, 71-9.
- Crosby, A.W. (1986). *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*. Cambridge: Cambridge University Press.
- Davis, M.A. (2009). *Invasion Biology*. Oxford: Oxford University Press.
- Flessner, M.; Metzgar, J. (2018). "Giant Hogweed: Identification and Control". <https://www.pubs.ext.vt.edu/SPES/SPES-48/SPES-48.html>.
- Fortwangler, C. (2013). "Untangling Introduced and Invasive Animals". *Environment and Society*, 4(1), 41-59.
- Haraway, D. (2015). "Making Kin: Anthropocene, Capitalocene, Plantationocene, Chthulucene". *Environmental Humanities*, (6), 159-65. <https://doi.org/10.1215/22011919-3615934>.

- Heise, U.K. (2019). *Imagining Extinction: The Cultural Meanings of Endangered Species*. Chicago: University of Chicago Press.
- Heywood, V.H. (2011). "The Role of Botanic Gardens as Resource and Introduction Centers in the Face of Global Change". *Biodiversity and Conservation*, 20(2), 221-39. <https://doi.org/10.1007/s10531-010-9781-5>.
- Josephson, P.R. (1995). "Projects of the Century in Soviet History: Large-Scale Technologies from Lenin to Gorbachev". *Technology and Culture*, 36(3), 519-59. <https://doi.org/10.2307/3107240>.
- Kalinin, I. (2019). "Soviet Atlantis". *Eurozine*. <https://www.eurozine.com/soviet-atlantis/>.
- Koldasbayeva, D. et al. (2022). "Large-Scale Forecasting of Heracleum Sosnowskyi Habitat Suitability Under the Climate Change on Publicly Available Data". *Scientific Reports*, 12, 6128. <https://doi.org/10.1038/s41598-022-09953-9>.
- Krivosheina, M.G.; Ozerova, N.A. (2018). "Patterns of Secondary Range Formation for Heracleum Sosnowskyi and H. Mantegazzianum on the Territory of Russia". *Russian Journal of Biological Invasions*, 9(2), 155-62. <https://doi.org/10.1134/S2075111718020091>.
- Krivosheina, M.G.; Ozerova, N.A. (2019). "Introduction of Sosnowsky's Hogweed as a Cause of Landscape Transformation". *IOP Conference Series: Earth and Environmental Science*, 350(1). <https://doi.org/10.1088/1755-1315/350/1/012013>.
- Kurylo, B. (2016). "Russia and Carl Schmitt: The Hybridity of Resistance in the Globalized World". *Palgrave Communications*, 2. <https://doi.org/10.1057/palcomms.2016.96>.
- Lerman, A. (2019). *Soldiers of the Sun or the Right to the Future Tense*. Saint Petersburg (Russia): Museum of Hygiene.
- Luneva, N.N. (2013). "Borshchevik Sosnovskogo v Rossii: sovremennyy status i aktual'nost' ego skoreishogo podavleniia" (Sosnowsky's Hogweed in Russia: Current Status and Urgency of Its Suppression). *Vestnik zashchity rastenii* (Bulletin of Plant Protection), 1, 29-43.
- Martynenko, A. (2019). "Hogweed Museum within the Framework of the Project 'Waterfront: Neighborhood & Community'". Музей Борщевика. <https://museum.annamartynenko.ru/page14.html>.
- Mironova, D.Y. et al. (2022). "Methods of Commercialization and Usage of Sosnowsky Hogweed Processing". *Recycling*, 7(5), 77. <https://doi.org/10.3390/recycling7050077>.
- Moon, D. (2013). *The Plough that Broke the Steppes: Agriculture and Environment on Russia's Grasslands, 1700-1914*. Oxford: Oxford University Press.
- Myers, N. (2017). "From the Anthropocene to the Planthropocene: Designing Gardens for Plant/People Involvement". *History and Anthropology*, 28(3), 297-301. <https://doi.org/10.1080/02757206.2017.1289934>.
- Nielsen, C. et al. (2005). *The Giant Hogweed Best Practice Manual: Guidelines for the management and control of an invasive weed in Europe*. Hørsholm Kongevej: Forest & Landscape Denmark.
- Nikitina, E. (2019). "Hogweed vs. Sunroot: Zoëmachy of Soviet Postanthropocentrism". *Przegląd Kulturoznawczy*, 40(2), 135-50.
- Posner, L. (2020). "Can Creativity Kill the Toxic Plant Known as Stalin's Revenge?". *The Calvert Journal*. <https://www.calvertjournal.com/features/show/12022/borshchik-heracleum-giant-hogweed-stalins-revenge-toxic-plant-creative-solutions>.

- Pyšek, P.; Prach, K. (1993). "Plant Invasions and the Role of Riparian Habitats: A Comparison of Four Species Alien to Central Europe". *Journal of Biogeography*, 20(4), 413-20. <https://doi.org/10.2307/2845589>.
- Roll-Hansen, N. (2005). "Why the Distinction Between Basic (Theoretical) and Applied (Practical) Research is Important in the Politics of Science". Edgerton, R.; Nye, R. (eds), *The Science Studies Reader*. London: Routledge, 315-29.
- Scott, J.C. (2008). *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. Yale: Yale University Press.
- Simon, N. (2016). "The Anthropocene: A Challenge for the History of Science, Technology, and the Environment". Feichtinger, J.P.; Pichler, P. (eds), *The Anthropocene Debate and Political Science*. London: Routledge, 15-31.
- Sobaka (2021). *Borshchevik Sosnovskogo: kak izbavitsia ot opasnoi rasteniia* (Sosnovsky's Hogweed: How to Get Rid of a Dangerous Plant). 12 October. <https://www.sobaka.ru/ecoLogY/ecoLogY/118409>.
- Telekanal Dozhd' (TV Rain Channel) (2018). *What is Common Between the Hogweed and Putin and How the Weed Can Save Russia* [Video]. 11 December. <https://www.youtube.com/watch?v=n01b6sRhIvg>.
- Tinkoff Journal (2023). *Kak iskusstvennyi intellekt sozdal sovetskuiu versiiu The Last of Us* (How Artificial Intelligence Created a Soviet Version of The Last of Us). 21 March. <https://journal.tinkoff.ru/ai-generated-soviet-tlou/>.
- Tsentr Voznesenskogo (2019). "V. E. R. A." Spektakl' Tsentra Voznesenskogo i Masterskoy Brusnikina ("V. E. R. A." Performance of the Voznesensky Center and Brusnikin Workshop). <https://voznenskycenter.ru/tvorcheskiy-vecher/v-e-r-a-spektakl-tsentra-voznensko-go-i-masterskoy-brusnikina/>.
- Tsing, A.L. (2000). "Inside the Economy of Appearances". *Public Culture*, 12(1), 115-44. <https://www.muse.jhu.edu/article/26191>.
- Van Dooren, T.; Kirksey, E.; Münster, U. (2016). "Multispecies Studies: Cultivating Arts of Attentiveness". *Environmental Humanities*, 8(1), 1-23. <https://doi.org/10.1215/22011919-3527695>.