https://soilculture.art/ .bsolnwob\etabqu-atab-etab-waste-data-uollos-2202\2007\vog.zam.www\\:zqtff nttps://www.epa.gov/ejscreen. Maria Patricia Tinajero https://www.mass.gov/doc/master-list-of-solid-waste-facilities-in-massachution may be published without the written permission of Julie Poitras Santos and .nslq-1918em-91sew-bilos/s9biug/vog.seem.www//:eqffd Texts | Julie Poitras Santos and Maria Patricia Tinajero, unless otherwise noted.

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General photography | Julie Poitras Santos and Maria Patricia Tinajero Logo and Map Design | Bella Tuo

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including a community walk on October 5, 2024. an artistic project created by Julie Poitras Santos and Maria Patricia Tinajero, This map is prepared in conjunction with Soil Culture, equitable system?

communities to whom we send our waste? How might we imagine a more to less privileged communities. What is our ethical responsibility to the and the solid waste system preserves this privilege by redistributing waste one's community. It is a mark of privilege to be distanced from one's waste, schools, nursing homes - modest and unassuming places that are somecommunities and communities of color, next to public housing complexes, sphere. These landfills are also located predominantly in lower income or degrade into the anathane of methane and other gasses into the atmowill eventually leak or leach out into the surrounding soils and groundwater, fills in the Commonwealth to be buried in perpetuity, although some portion largest portion - about 8% - is sent to one of the 15 remaining active land-England, and as far away as Pennsylvania, Ohio, and Alabama. The third out of state to mostly rural and less affluent communities throughout New some other community. The next largest portion – about 43% - is shipped of metals and other toxics, must be buried in special landfills onsite or in communities or even further. The ash, now containing high concentrations oxide and airborne particulates are carried downwind into neighboring may help power the facility or be fed into the grid. Gasses like nitrogen into electricity, gasses, and airborne particulates, and ash. The electricity Waste-to-Energy facilities in the state where it is incinerated, transformed Where does it all end up? The largest share – about 48% - is sent to five trucks, or trains, to continue its journey.

ious industry. From trash transfer stations, the waste is packed back onto parts of communities, where zoning directs heavy truck traffic and noxubiquitous, but the 17 largest ones are in the less visible and less affluent across the state to be sorted and consolidated. Trash transfer stations are and waste haulers and transported to one of 250 trash transfer stations about 6 million tons of solid waste, which is collected by garbage trucks system. Annually, Massachusetts businesses and residents throw away sive redistribution is an integral part of the Commonwealth's solid waste communities, rural communities, and communities of color. This regreswaste is primarily directed toward and concentrated in lower income ie<mark>r</mark> h<mark>ouseholds generate mor</mark>e was<mark>te t</mark>han less wealthy households, this every household and business generates solid waste, and although wealthplaces and other communities. This redistribution is inequitable. Although Where does our trash go when we throw it away? It is redistributed to other

WHERE DOES OUR TRASH GO?

deep understanding and respect for soil and the land with its histories, to work colonization and environmental degradation have caused. Soil Culture fosters a years. We recognize the interconnectedness of all beings and the deep loss that tucket bands of the Massachusett Tribe who have lived here for thousands of Soil Culture learns from the unceded ancestral land of the NaumKeag and Paw-

towards a more livable future where all beings can thrive.

entity intertwined with human culture and ecological systems. and empowering communities through the exploration of soil as a vital, dynamic non-hierarchical methods, Soil Culture is dedicated to fostering critical dialogue and inspire action towards an aesthetic view of soil. Through collaborative and logical thinking with first-hand immersive experiences to deepen understanding Located on a landfill in Essex County, Massachusetts, Soil Culture merges eco-

lios to stoadmi laioos bna what is often invisible, fostering embodied understandings of the environmental materials in landfills. Utilizing art as a catalyst, Soil Culture aims to make visible cycles, which result in the accumulation of trash, polluted debris, and wasted is exploited without redress. The project traces remnants of these extractive within the capitalist infrastructure of consumption and production, where soil Soil Culture is a creative project that scrutinizes soil degradation

THE WASTE PILE

The waste pile is distinct from the concept of waste. Waste, in its various forms—as a noun, an adjective, and a verb—reflects modal and temporal characteristics tied to the materiality of matter itself. In contrast, the waste pile draws our attention to the phenomenon of accumulation. How does this accumulation occur? Heaps of unwanted matter—at home, in the office, on the street, in the factory— are transformed into waste piles through aggregative processes. Despite their differences, waste and waste piles share close physical or material interactions that range from abstract touch to the tangible effects within a haptic field. This is evident in the toxic flow of unseen pollutants, such as the leaching of heavy metals into soil and groundwater.

We encounter hidden waste piles everywhere; they are buried under several feet of topsoil, resembling earth sculptures or ancient burial grounds. Interestingly, many of these concealed sites have been repurposed into recreational parks. However, despite their apparent greening, these areas continue to harbor the

persistent libidinal energy of PCBs, heavy metals, and black sewer waters. The waste pile reveals the dark side of interconnectivity—its porous nature. Hidden underground, these piles undergo physical interactions and material degradations that often go unnoticed.

The paradox of waste helps us understand the complex relationships and exchanges between consumption and production of materials and its life cycles that often ignore decomposition, decay, and death. If we consider waste piles as a form of human language, can we dive into the quality of our material relations with matter, specifically the material presence of unwanted matter?

ERRATIC & DRIFT

Enter deep time, where enormous bodies of ice once heaved across the landscape; building, sliding, scraping, and transforming the land touched by the weight of this glacial presence, the sheer heft and scale large enough to shift Earth's orbit around the sun. The Laurentide ice sheet comprised our most recent glaciation; around 23,000 years ago it advanced across Canada, New England and south of the Great Lakes. As the glacier retreated it released water into the ocean, raising sea levels, and the subsequent release of weight on the continent caused the land to rebound. These forces combined to create the geomorphology of the shorelines we know today. The maximum advance of the Laurentide is marked by glacial drift in the form of outwash plains; kettle ponds, moraines, till, silt, gravel, and large erratic boulders were deposited in its wake. Erratics, impenetrable stone masses often as big as houses, serve as indexes of glacial path and direction, reminding us of forces and timescales much larger than ourselves.

In addition to organic matter, soil is composed of mineral components Weathered by glaciers, wind, and water these mineral components of varying textures and sizes contribute to the structure and health of soil. Some of the most common minerals found in soil include iron, potassium, magnesium and calcium – minerals important for our own health. Our metabolic transit on Earth depends on and contributes to these shared materialities, and the cyclic nature of these systems alert us to the necessity of caring for the delicate balance of these ecologies intrinsic to human and non-human others. Soil is bound up in our lives and moves as we move, with us and within us, part of a larger planetary system.

BECOMING SOIL

What becomes soil? The obvious answer is matter decomposes and returns to the ground. Yes. But it is much more. Becoming soil, as a process, is a multi-directional ethical and aesthetic operation that capitalizes on soil's regenerative properties and dirt's latent state. It is a collective and collaborative effort supported by biological, social, and scientific approaches that emphasize the ethical-aesthetic return to home.

Becoming soil, as a journey, holds a profound significance. It's not just the nostalgic return to a familiar physical place, as with Homer's Odysseus. Instead, it emphasizes how matter, space and time undergo transformative changes not from the individual hero's perspective but as a multidirectional collective shift into the unknown. Becoming soil emphasizes the importance of being aware and intentional in our interactions with the physical world and awakens the spiritual and intangible dimension of soil's mysteries to shape new values.

HIDDEN ARCHITECTURE

Landfills and brownfields are hidden architectures within our everyday landscapes. These infrastructures remain out of sight and out of mind, yet they are among the most vulnerable to climate change. These sites are particularly susceptible to severe weather. The Brimbal Avenue solar field exemplifies these underground infrastructures. To understand what happens beneath the surface, we must imagine what lies underfoot. This site raises the questions: why are these infrastructures hidden from our sight, budgets, and desires? Are these the ghosts of overconsumption haunting us?

The working hypothesis of a landfill as a heterotopia centers on the structural function of hidden architectures. The structural violence of muck (pollution and waste) organizes itself peculiarly within the waste pile. This pile is formed, layer by layer, as trash, refuse, and waste are repeatedly dumped and covered by thin layers of other materials including crushed glass, gravel, and a thin layer of healthy topsoil to cap it. This

organization of matter creates a vertical order, enabling a praxis for critiquing incomplete soil remediation methods. Waste piles highlight the degenerative process of toxic material accumulation, transitioning from temporal accumulation to spatial excess, where the soil becomes both a site and a condition. It is at the waste pile that Soil Culture emerges as an aesthetic practice.

WALKING

Reciprocity and relationship form the heart of ecological thinking, and walking suggests a tender connection to the ecologies we pass through. Networks of pathways trace the landscape as a living exchange; at the same time, the land guides our steps; we read the ground with our feet. Investigating this complicated relational body and interdependency, we note the subtle shifts and connections between the foot and the ground ben<mark>eath it. Compa</mark>ction, friction, displacement; soil is kicked up, eroded by steps, moved by waters, buoyed by wind. Small soil bacteria translate and inoculate new mineral sites; bits of grasses and small stones catch a ride as our feet move across the land. As we move, so too the earth is moving all around us.

Collective Futures Fund

Walking with attention to these subtleties reveals a dialog with the land. Considering the agency of the wild and our entanglement within it, participation forms a central part of our understanding, touching on experiences of desire, yearning, longing, and loss. Walking affords a slow engagement with place, allowing access to information through sensual processes like seeing, listening, or touching, thus encompassing how we attend to our surroundings in ways that at times eludes language. Walking the landfill serves as an invitation to attend to the touch of our feet on the land, the shift of the earth beneath us, and to consider the agency of soil as a precious living entity that sustains life for humans and non-humans alike.

STONE WALL

Katherine Paige Farrington

There is something comforting about a stone wall at the edge of a meadow. Stone walls are unassuming. They draw their gray lines across meandering landscapes, sometimes without clear logic. Corners appear but rarely conform to the regular standards of right angles. Hand-placed stones carry design choices of unknown builders. What kind of energy was exerted digging stones out of the soil and lugging them to working piles? No two walls are alike. Some are level, some high, some low; others undulate like sea serpents. If you look carefully, you can sometimes see animated forms emerge – is that a bird? Is that a wolf? Is that a snake? Is that a face? They quietly sit in wooded dales and carry time in different ways than organic matter. Stones in stone walls are never hard-edged – they are covered in green and off-white lichens and capture cool moisture beneath their undersides. Openings frame leaves and colors of the forest like air prisms. They never move. That is their strength. Yet, stone walls hold mysteries too. Why do some stone walls scale hills? To keep sheep from wandering off perhaps, or to mark a fence between neighbors. But does that really tell the whole story? Sometimes they are beautiful,

sometimes unremarkable. Did you know that there are records from the 1600's with observations of over 10,000 miles of stone walls crisscrossing these lands when the first English settlers arrived? Did you know that humans walked these lands 10,000 years ago after the ice-age glaciers receded dropping erratics as they melted away? The record is written in the stones if you learn to read them. Landfills are mere babes in relation to stone walls. But if their toxins are the kind that don't break down, landfills and stone walls will grow old

together, side by side.

RESILIENT SPECIES

During summer, the landfill transforms into a lush habitat. Tall grasses, prairie flowers, and sumac trees create a tapestry of color and texture around the solar field. Solar panels create shaded microclimates for more verdant growth. This lushness also brings many new beings to the landfill. Japanese beetles, ticks, and poison ivy populate the daytime landscape; at night deer and raccoons visit the shrinking vernal pools to drink.

Japanese beetles and ticks have benefited from climate change and habitat fragmentation. Poison ivy also serves as a reminder that not all natural interactions are benign. In the Anthropocene, poison ivy is flourishing due to increased levels of CO², which enhances its growth and toxicity. This reflects how human-driven changes to the atmosphere can influence plant and insect physiology and behavior, often in ways that complicate our interactions with the more-than-human, highlighting the challenges of globalization and the unintended ecological disruptions that can follow. Bucolic pastoral landscapes are a bygone myth. Everywhere, place is

deeply interwoven with the human legacy of colonial influence and capitalism. These species, observed at the Brimbal Avenue landfill, remind us of the intricate and often delicate balance of our ecosystems. How can we coexist with other species from the animal and plant kingdoms? A necessary shift in perception involves not only arresting our contribution to the accelerated extinction of countless plants, insects, and animals, but also deepening our understanding of the resilience of many species that thrive in disturbed environments.

GHOST CROSSING

Walking across the surface of the Earth our feet touch the grasses and soils that compose the upper crust of the planet, brushing against small organisms and beings that create oxygen, decompose matter, and breathe with us in the shared process of creating atmospheres and vital ecologies. Pausing in our wandering, we might imagine what lies underfoot, hidden from view. The waste pile as mountain is inverted below us, a grand void extracted from within the earth that receives our waste and buries it out of sight. Like a tomb or a submerged monument, this physicalized memory of capitalist consumption appears as a ghost that haunts the everyday via curved tubes punctuating the landscape at regular intervals. Once noted, these methane tubes become a "search image" for the mind, suddenly appearing everywhere in the landscape, sprouting from the ground like phan-

toms. Landfills, or "zonas de sacrificio" in Spanish, comprise household and industrial waste, and emit methane gasses that significantly contribute to climate change. An invisible gas, the rise

in methane has contributed to a 30% rise in global temperature

since the Industrial Revolution; and landfills are the third largest source

of human-caused methane emissions in the United States. The specter of the landfill

creates a temporal disjunction, the past leaks into the present in the form of a gas, and foretells a ghostly future.

REGENERATION

Isabela Valencia

The layers of time and life beneath our feet remind us of the Earth's remarkable ability to regenerate and sustain life. To support these regenerative processes that sustain life, we must mobilize capital in ways that align with environmental and social goals. Partnerships between private investors, governments, and non-profits can fund large-scale regenerative projects. These collaborations help distribute risks, ensure financial viability, and amplify the environmental and social benefits.

Monetizing the carbon sequestration capabilities of healthy soils through carbon credits can create a new revenue stream for landowners, incentivizing sustainable practices. Additionally, green bonds, which are financial instruments specifically targeting soil regeneration projects, effectively raise finance for infrastructure projects delivering positive environmental impact.

Understanding and appreciating the regenerative processes beneath our feet is crucial for sustainable agriculture and environmental stewardship. Volunteering on farms in Ecuador, Brazil, Costa Rica, and France taught me that healthy soils are the foundation of ensuring that billions of people worldwide can be fed. Land use decisions must also prioritize the well-being of vulnerable communities so that they benefit from regenerative projects and are not disproportionately harmed by environmental degradation. By investing in these areas, we not only restore

ecosystems but also create sustainable economic opportunitie

