

# DUTCH MOUNTAINS:

## THE CASE OF ZEEASTERWEG LANDFILL IN LELYSTAD

Autumn Semester 2022

### Teachers:

Design & Research:

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The ‘Anthropocene’ denotes a time period in which human activities have altered the planet and its multiple systems and bodies extensively. It helps us understand how dramatically our species has transformed the planet and caused climate instability, political volatility, loss of biodiversity, pollution, and pandemic. As architects and designers, we are alert to space and spatial issues. It is essential for us develop new tools and ways of thinking in order to operate effectively in this era. Architectural projects – whether drawn, written, or built – change the way in which this time is lived and understood.

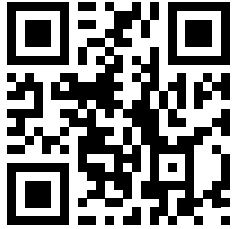
The title of the studio, Dutch Mountains, refers to a network of landfills in the Netherlands, where the ‘Anthropocene’ is highly tangible. While geological mountains are formed through the movements of the earth’s tectonic plates in the course of millions of years, landfills appear on the surface of the planet over the course of hours. They are new geographies where the traces of human effects on the planet are highly tangible. They are accumulation points. They are landmarks of the Anthropocene in the Dutch flat landscape. These mountains have been systematically located away from population centres to the edge of towns, cities, and municipalities: out-of-sight and out-of-mind.

The Dutch Mountains Studio approaches these landscapes as potent sites for the development of critical thought and spatial imagination. For the second time, the company Afvalzorg has collaborated with us to study and have access to the landfills owned and managed by them. In 2021, we worked on the Nauerna landfill site, located in Assendelft near the port of Amsterdam. After several decades, this site was approaching the end of its operational phase. In other words, the mountain it was “fully-formed.” This year we have worked on the Zeeasterweg landfill site in Lelystad. This site is in an earlier “mountain-forming” phase of its operation. Zeeasterweg is surrounded from three sides by Natuurpark Lelystad and from one side it faces agricultural lands. The highway separates the landfill from the city.

The studio has an interdisciplinary character, weaving together theory, research, design, and art practices. The students were asked to develop their research and understanding of the landfill in a film-essay. In one way or another, the research should have responded to the more general theme of the post-Anthropocene. Each student took a position and approached it differently. Based on the outcomes of this research, they developed their own design proposals and curated the intended outcome to communicate that.

# PIONEER PLANTS

ANTONIA RIESS



<https://vimeo.com/788747241>

When I first visited Zeeasterweg landfill in Lelystad, what caught my attention was the new ecologies that appeared on parts of this very humanmade landscape. Right next to the compartments, which are currently being landfilled, is a storage area for multiple kinds of soil. Those various piles stay there for days, months or possibly years before they usually get sold again. And for a certain period of time, as long as humans do not intervene with these soils, a seemingly random biotope develops there, with various plants and surprisingly diverse.

Where do these soils come from? What kinds of plants are able to adapt to such a barren environment that quickly? How do these plants distribute? What kind of rhythm and pattern can I identify?

These research questions led me to the pioneer plants. A hardy, resilient species that is the first to colonize barren land and develops an interesting biodiversity within a short time. We call them weeds and we usually try to get rid of them, but many of those plants even have beneficial reasons.

My design is not about planning a biodiverse future once the landfill is done, but about highlighting the biodiversity that the pioneer plants create on those stored piles of soil right now.

The intervention that I called “the teahouse” hosts an exhibition of various types of soil, piled up in a human scale and providing a habitat for a variety of pioneer plants. On the basis of this blank canvas, the focus is directed to the piles of earth. Independent from what happens outside the walls, the rhythm of those plants can be studied, a beautiful result of the random interaction of











*Cirsium arvense*



*Senecio inaequidens*



*Rumex obtusifolius*



*Chenopodium ficifolium*



*Artemisia vulgaris*



*Buddleja davidii*



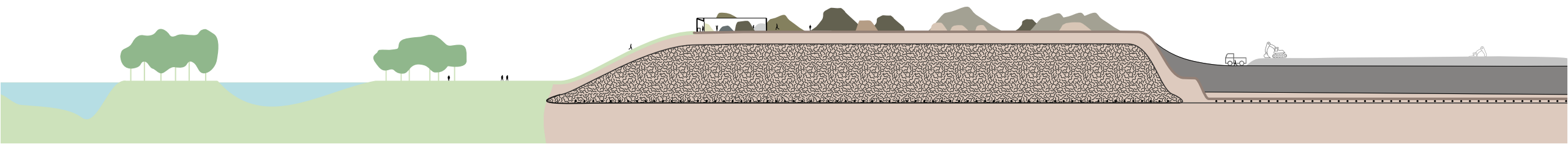
*Leucanthemum vulgare*







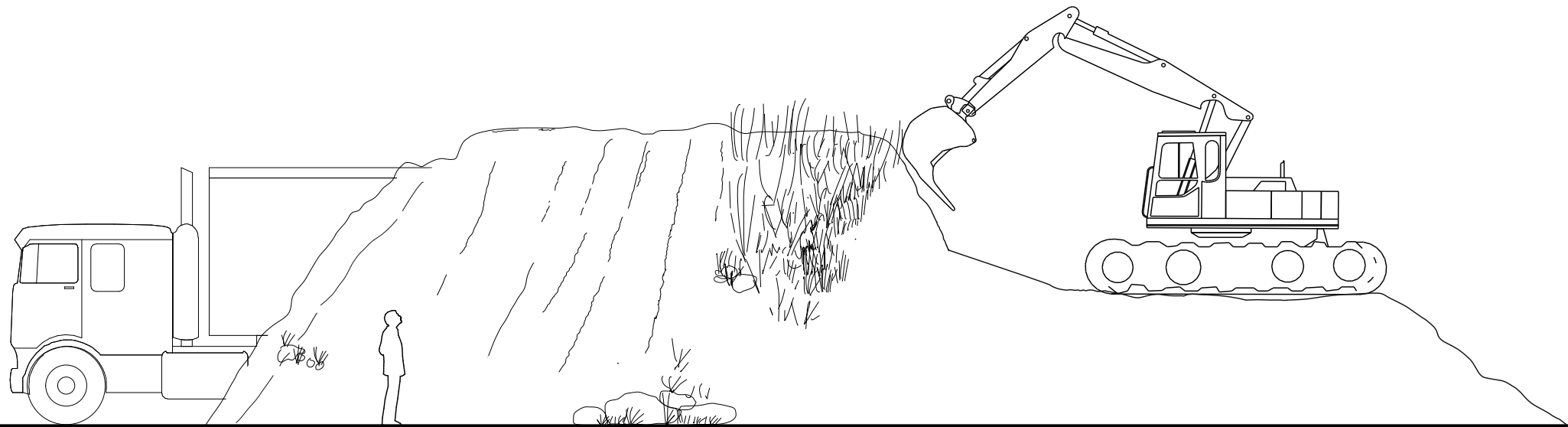








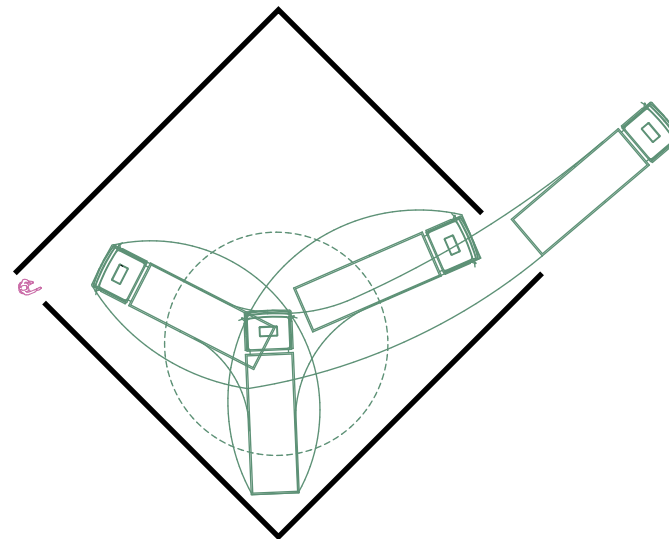
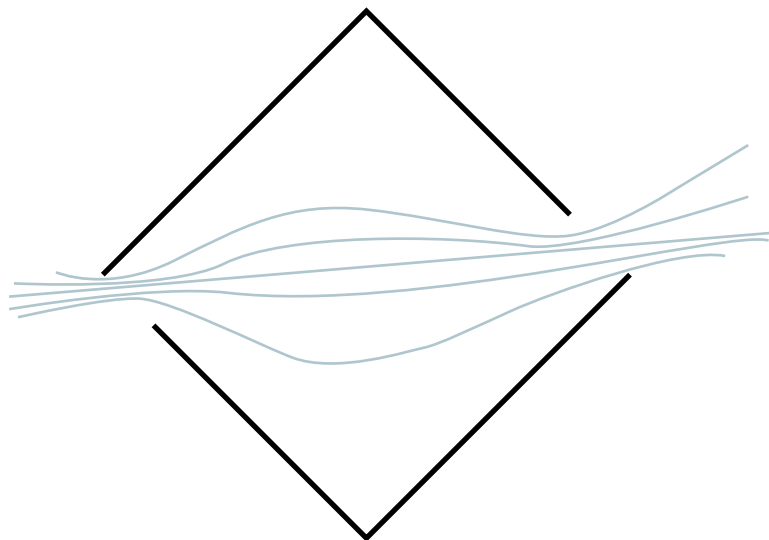
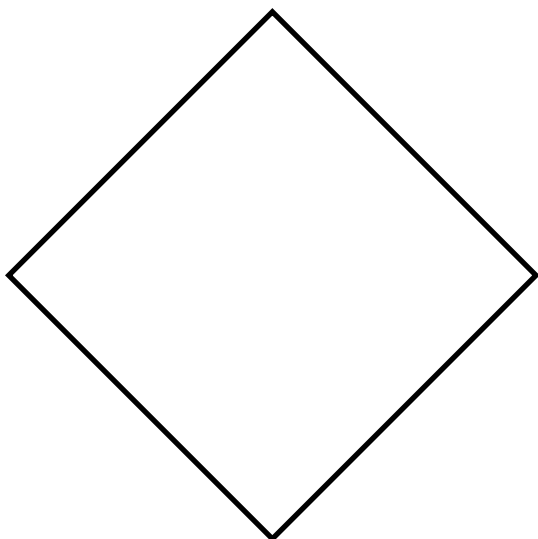


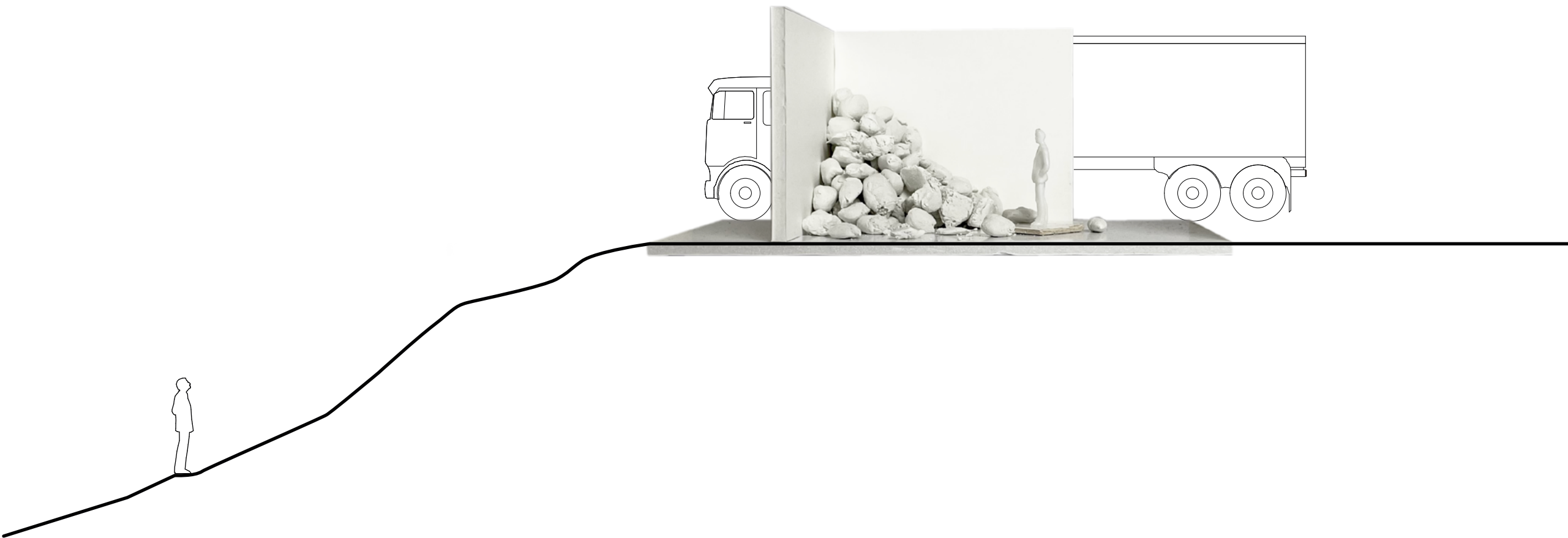




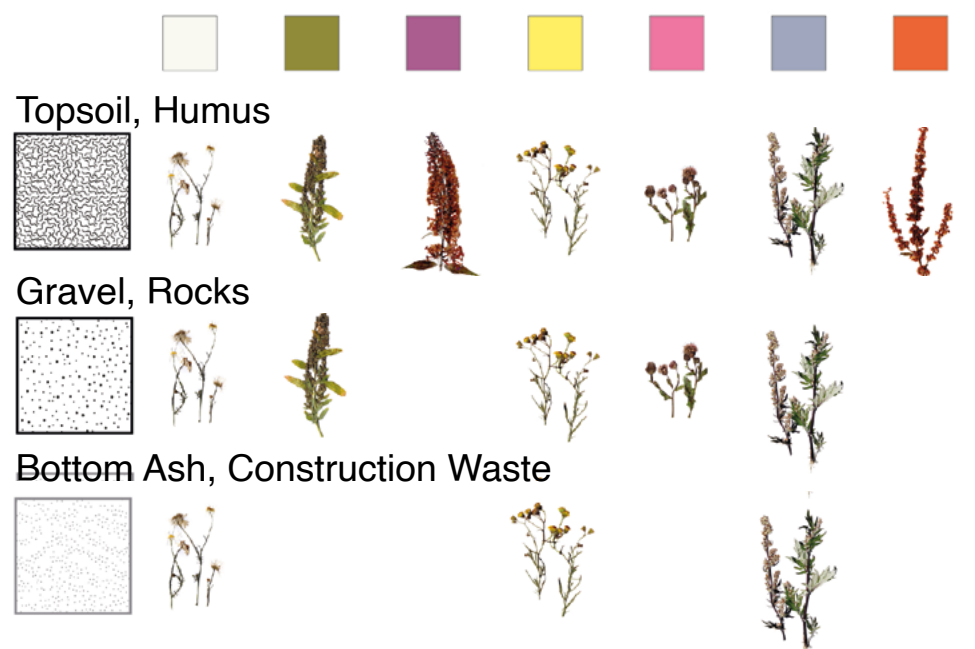
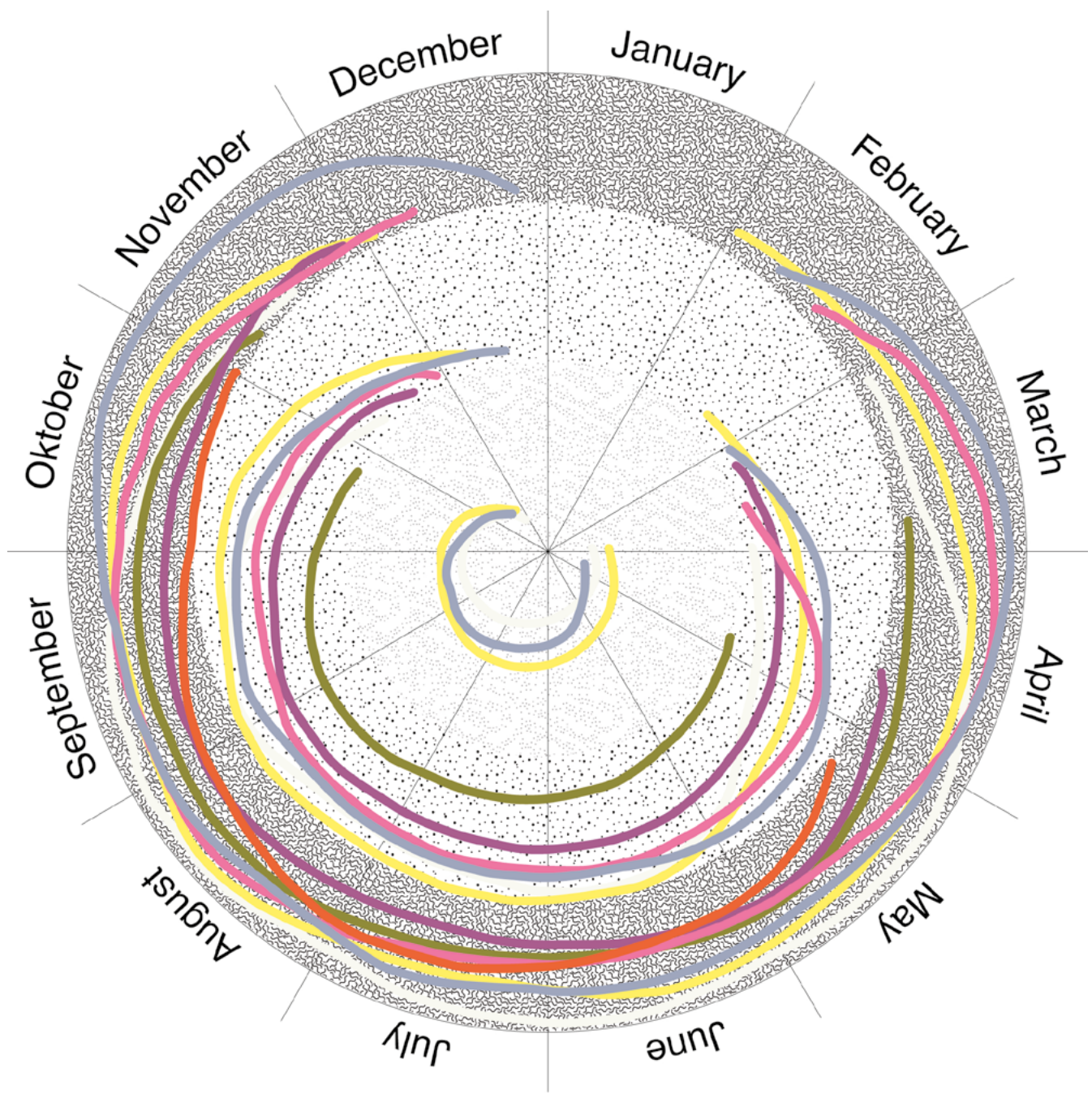
















topsoil II

Rocks

topsoil I

Bottom Ash

Gravel

Construction Waste

## Products that can be made out of those seven pioneer plants

### TEA

*Matricaria chamomilla*: against menstrual pain, diabetes, anxiety

*Rumex obtusifolius*: helps against cough

*Artemisia vulgaris*: for lucid dreams

### SOUP/DISHES

*Cirsium arvense*: e.g. soup of young thistle roots

*Chenopodium album*: several dishes with *Bathua*, like dips, soups, flatbread

*Rumex obtusifolius*: dried seeds as powder in bread

*Artemisia vulgaris*: use young stems as vegetable, e.g. in soup or wok

### PRODUCTS

*Matricaria chamomilla*: yellow-brown fabric dye

*Rumex obtusifolius*: leaves external on skin help with blister, burns, scalds

*Buddleja davidii*: light yellow/green fabric dye



*Matricaria chamomilla*



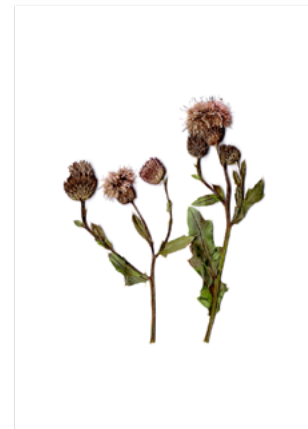
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