

003 post-productive nature

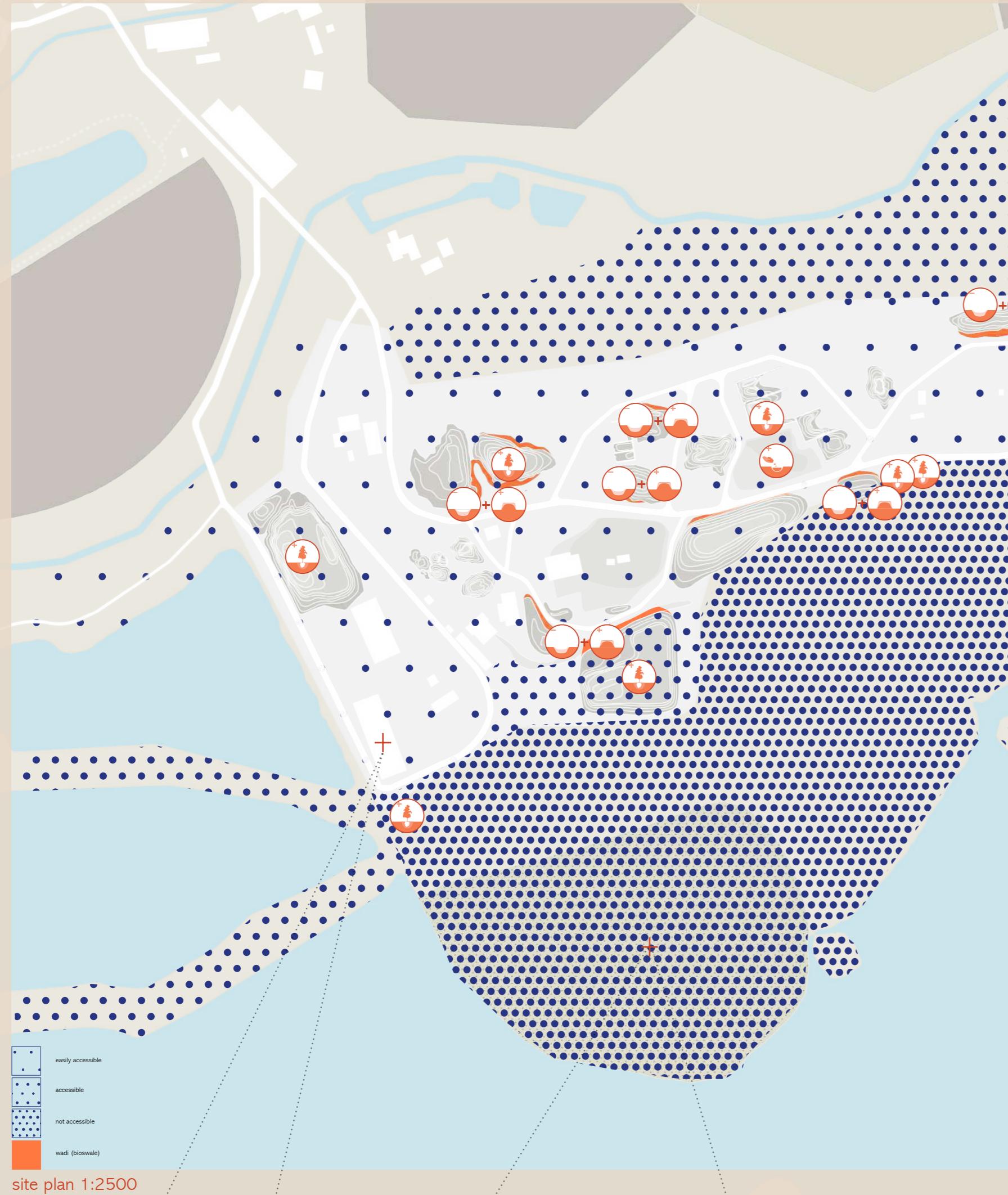
natura relabi - rest relapse regenerate

natura relabi

natura relabi is a future for a post-extractivist landscape - a gravelpit in Marchtrenk, Upper Austria. It consists of three design notions:

- the gravelpit landscape is a third landscape (not fully wild nor fully cultivated)
- the landscape deserves to rest (after decades of constant disturbance and exploitation)
- rest is productive (doing nothing is doing something).

These three notions inform its three design principals which are set as minimal interventions on the site, acting as impulses for the relapse of nature into the gravel pit, by inviting spontaneous life through the natural ecological succession of the riparian forest. Through shifting, adding & planting, native trees and shrubs can repopulate the area. Where no impulses are set, the landscape rests. The accessibility for the humansphere is changed by the set impulses and allows for the establishment of a rare yet native ecosystem at the peninsula of the gravelpit: a floodplain dry-grassland.

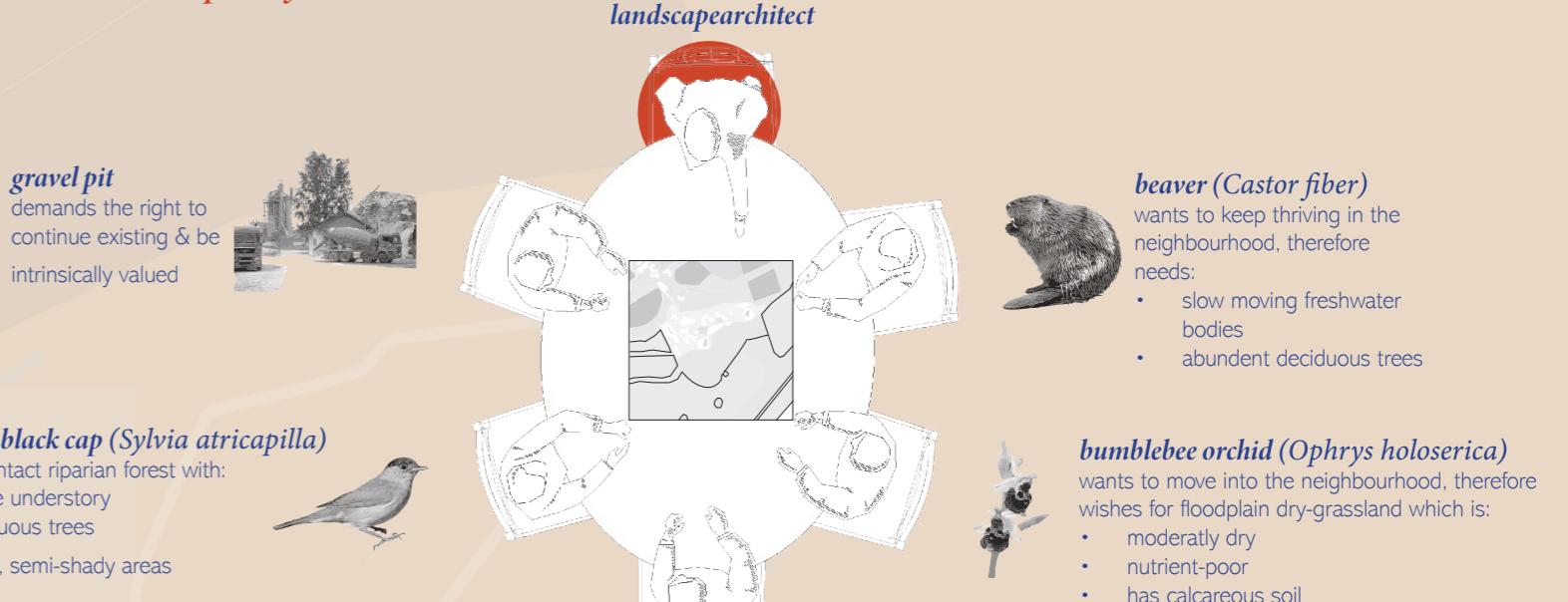


seedbank
a buildingstructure of the gravelpit with solar planelling is repurposed & converted into a seedbank for rare native species of the floodplain dry-grassland



floodplain dry-grassland, 2036

who is part of the discussion?



gravel pit
demands the right to continue existing & be intrinsically valued

eurasion black cap (Sylvia atricapilla)
wants an intact riparian forest with:

- dense understory
- deciduous trees
- damp, semi-shady areas

human

- seeks a space for realization & recreation
- wants the option of area-access

beaver (Castor fiber)
wants to keep thriving in the neighbourhood, therefore needs:

- slow moving freshwater bodies
- abundant deciduous trees

bumblebee orchid (Ophrys holoserica)
wants to move into the neighbourhood, therefore wishes for floodplain dry-grassland which is:

- moderately dry
- nutrient-poor
- has calcareous soil

impulses of nature relapse



add tree
planting two species of singular native & pioneer trees, suitable to the riparian environment to encourage soil regeneration and kick-start natural succession.

shift material

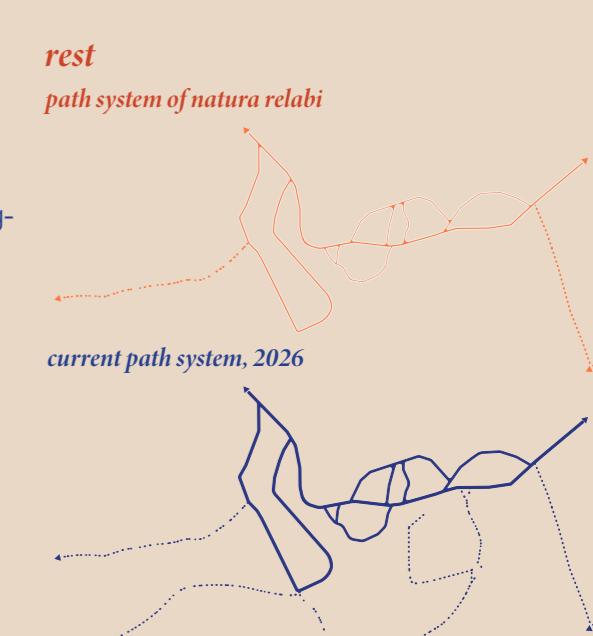
taking material from the base of the gravel mound & piling it back on top. a wider, less steep top surface emerges & a wadi (bioswale) is created at the foot of the mound, where rainwater can pool. this is where nature will start to relapse.

add substrate

soil substrate is added with the planting of a tree & sporadically in wells on the ground of the gravel pit

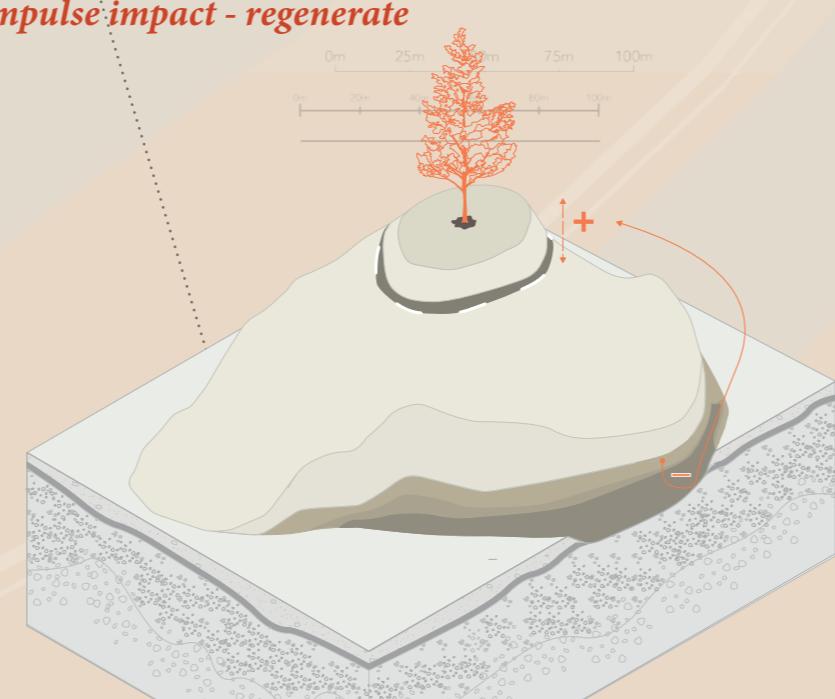
Alnus glutinosa
nitrogen-binding
deep root system
vertically stabilizing
sand & loam
short-time flooding

Populus nigra
pioneer
adaptable root system
sand & gravel
full sun
stoloniferous
flooding

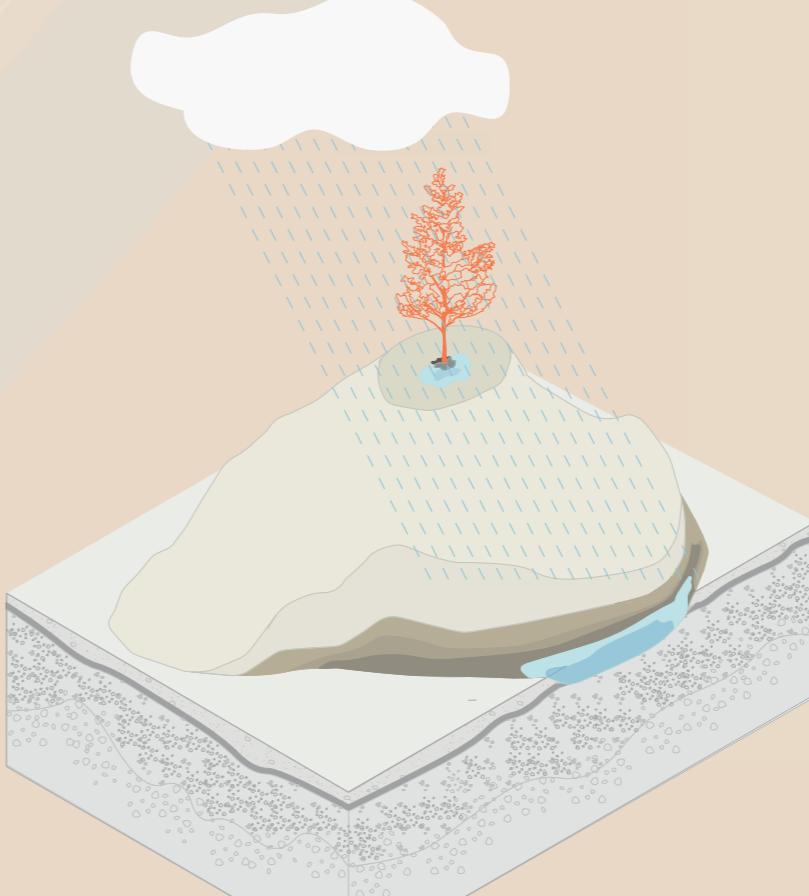


the impulses act as design principles, changing accessibility through strategic placements, intending to give the landscape more space & capacity for rest. natura relabi's path system within the gravelpit remnants is a gentle starting point. desire paths will shape it's future.

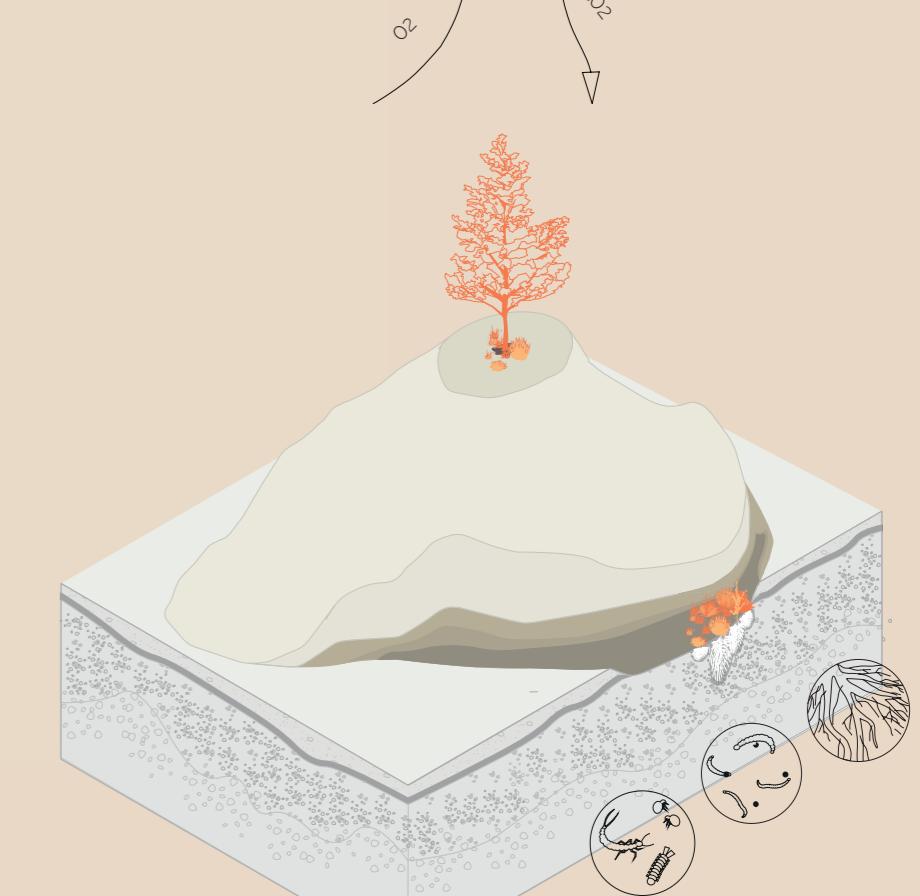
impulse impact - regenerate



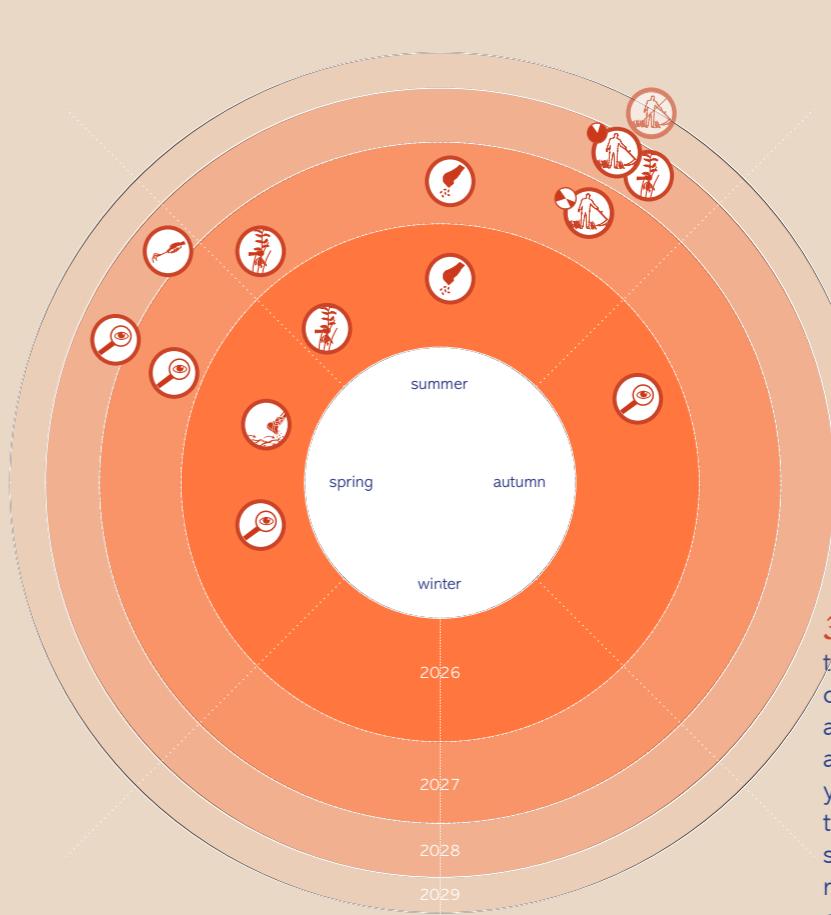
01
impulses for nature relapse are set



02
rainwater pools in the wadi & around the tree



03
nature starts relapsing into the gravel pit, setting the soil life cycle into motion



3 year extensive care-regimen
the regimen aims for as little intervention as possible while creating the ideal habitat conditions by avoiding fertilisation and heavy machinery. Yearly inspections determine the applied care-actions. The care- intensity fades with each year. A micro relief is created in the first year. The forage transfer is only repeated if necessary. Woody saplings and shrubs will be removed yearly to prevent shrub encroachment. Partial moving only starts in year two and will continue yearly, except for dry years. Every 3-5 years light surface scraping will mimic natural disturbance.

- yearly site inspection
- irregular micro relief
- remove woody saplings / shrubs
- forage transfer (seeds)
- (very) partial moving
- light surface scraping (occasional every 3-5 y.)

a floodplain dry-grassland
is established through forage transfer from a nearby existing one, harnessing the potential of the man-made peninsula. the bumblebee orchid & other rare species of this habitat will settle successfully, if the right conditions are provided through an extensive care regimen.