Hyper Habitats for Four Endangered Species

Ecological Connectivity

Our proposal increases ecological connectivity by preserving four endangered species in Mannheim: The Long-eared Bat, Crested Lark, Wall Lizard, and Mauerbiene. The site becomes a learning opportunity for the public to observe the growing cycles that weave together new habitats. The plan elaborates on the site transformation to a living ecosystem according to artistic/ecological and sustainable development principles.

Planting Strategy

The ecosystems planting strategies are a visual delight and display. Wildflowers, in blue and violet colours, are attractive to the Mauerbiene, as they are nectar-rich and serve as food not only to the Mauerbiene but also butterflies, flies, and insects. Trees planted, in addition to habitat creation, sequesters carbon in the surrounding environment. The surrounding soil systems also benefit from the nutrient cycle of the increasing diversity in planting.

Water Strategy

Ponds of water are present on-site, which provides the co-benefits of slowing rainfall run-off and increasing biodiversity to combat climate change. As a social project, the ponds can be a source of discovery and inspiration for local neighbours and the city to add future ponds to parks in a large-scale effort to rebalance ecosystems with pollination and wildlife.

Social Benefits

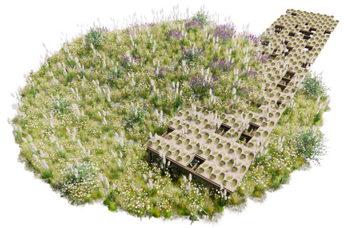
The site becomes an area of reflection and relaxation. The proven social benefits of spending time in nature and connecting with nature decrease cortisol levels and increases our quality of life. Benefits include providing joy and clarity experienced alone or in groups. It is a place where people can go daily for a moment with nature. It can also be a place of events, education, or celebration.

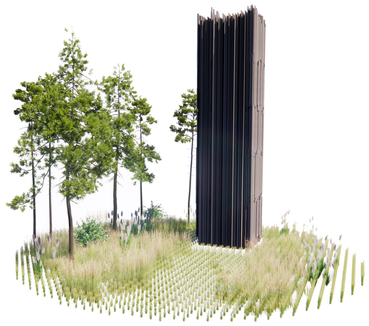
Environmental Research

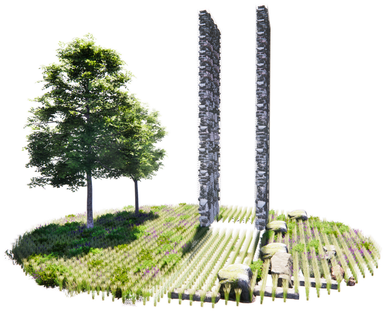
The site becomes a place of environmental research, experimentation, and innovation. In addition to offering a wide variety of uses and activities, the sites remain as a habitat and pollination corridor, with a focus on utilizing creativity, innovation, and environmental technology.

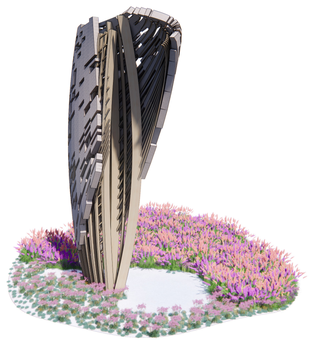
Energy Produced

The Solar Balloons can collect energy powered by the sun to feed back into the surrounding neighbourhood context. Keeping in mind their envelope material, one that absorbs solar radiation, the balloons float as the air inside is heated. The balloons produce 2082 MWh.









Crested Lark

As a vegetarian species, Lark's surrounding habitat includes grains, seeds, insects, beetles, and other food found on the surface of the earth's floor. The habitat structure hovers as a plane off the ground, inside small openings composed of mycelium blocks for the Lark to nest comfortably.

Gray long-eared Bat

This particular species of Bat live in environments that are small yet open and resemble woodlands, gardens, grasslands, and green edges. They can be found in small urban contexts too. Our habitat includes a tower that is an open volume for the bats to rest. They eat moths, flies, and small beetles, which reside in their corresponding grassland habitat.

Wall Lizard

The omnivorous Lizard feeds on insects, spiders, crickets, grasshoppers, caterpillars, and fruits. Its environment contains plants that house the various invertebrates, including lush greenery and rocks. The gabion wall structure, housing rocks, becomes a nest for the Lizards to rest, jump, and climb through.

Mauerbiene

Consuming both nectar and pollen from the surrounding planting and bee-line corridor, the Mauerbiene can retain enough energy to make honey and re-populate. Proximity to the ponds of water allows the bee to gain extra energy and fuel for their required intakes. The structure is composed of timber blocks with small perforations for the Mauerbiene to go into rest and create honey.