

METAMORPHOSIS

Be The Change

By David Camacho Romero

Bees are some of the most important creatures on the planet.
As pollinators, they play a crucial role in reproducing many of the crops we rely on for food.
Bees are responsible for pollinating one-third of our food.
Many of our favourite foods would only exist with bees, including apples, strawberries, almonds, and avocados.

WELCOME
TO A WORLD
WITHOUT
BEEES



Introduction

“Metamorphosis” is an immersive exhibition that aims to address climate change, energy use, resource depletion, biodiversity, and living within the Earth’s natural limits by focusing on the vital role of bees in our ecosystem. Specifically designed for individuals aged 5 to 30, including families with children, school groups, and young adults, the exhibition offers an engaging and educational experience through sculptures.

By creating a captivating sensory journey, the exhibition sheds light on the alarming decline of bee populations and emphasizes the need for action. The exhibition encourages visitors of all ages to learn about bees, adapt their behaviours, and create suitable environments for bees in their homes and gardens. Its immersive and interactive elements capture the attention of many visitors and foster meaningful engagement with the subject matter. Moreover, “Metamorphosis” promotes the significance of conservation efforts and sustainability, serving as a tranquil space where visitors can appreciate the profound impact of societal change.

Location

Located in the heart of Leicester city centre, the Corn Exchange, a 2* listed building, provides an ideal venue for an exhibition to educate people about pollinators and bees. This historic building has fulfilled various roles throughout history, including serving as a commercial grain space where goods were traded. Later, it transformed into a Lloyds bank with a dance hall on its first floor. Most recently, it evolved into a popular JD Wetherspoons pub, becoming a bustling social hub in Leicester.

By repurposing the Corn Exchange for this exhibition, the project incorporates a sustainable element by demonstrating how existing structures can be integrated and enhanced rather than constructing entirely new buildings. This approach aligns with the principles of adaptive reuse in architectural philosophy, breathing new life into a historical landmark. Furthermore, this transformation provides a distinctive identity to the Corn Exchange. Instead of the meeting point near the clock tower, which is five minutes away, locals can now refer to the meeting point as “See you by the bees” when they visit this remarkable venue.



Central Installation

The Final Plans

The design concept begins on the Ground floor, where the main objective is to create a space that embodies comfort and tranquility. As visitors step inside, they are greeted by an immersive environment that fosters a profound sense of calmness and serenity. This floor is a gentle reminder of the significance of seeking solace within nature, urging individuals to reconnect with the Earth and truly appreciate its inherent beauty.

A central structure is incorporated into the design to tie together the different floors and experiences. This central installation uses ETFE (Ethylene Tetrafluoroethylene), a sustainable alternative to traditional glass materials. ETFE is renowned for its remarkable transparency, durability, and environmental benefits, making it an ideal choice for this project. Using ETFE promotes sustainability and resource efficiency, aligning with the overall focus on living within the Earth's natural limits.

Moving up to the Mezzanine floor, the design intends to evoke a sense of concern regarding the potential loss of bees and the consequences of their extinction. This floor is a stark reminder of the dangers posed by the decline in pollinators. It aims to raise awareness about the interdependence between bees and our food systems, highlighting their critical role in ensuring biodiversity and sustainable agriculture.

On the First floor, the design focuses on providing educational resources and information to visitors. This floor is an interactive learning space where individuals can explore and gain knowledge about beekeeping, garden management, and bee-friendly practices. It emphasizes the importance of responsible and sustainable actions to protect and nurture bee populations in our gardens and local environments.

Finally, the Roof floor represents the promise stage of the design. Here, visitors are exposed to the awe-inspiring beauty of pollinators and their intricate relationship with the world around us. The floor showcases how humans can coexist harmoniously with bees and live within the Earth's natural limits. It inspires individuals to take action to protect and enhance the habitats that support pollinators, promoting a sense of responsibility and stewardship for our gardens and the broader ecosystem.

Overall, this design concept aims to create an immersive and educational experience that addresses pressing environmental issues such as climate change, energy use, resource depletion, and biodiversity. Focusing on bees and their sustainability encourages individuals to live in harmony with nature, promoting a more sustainable and resilient future for our planet.



Ground Floor



First Floor



Mezzanine Floor



Roof Floor

The open area allows for ventilation and temperature to be warm ensuring safety for bees

The layered glass ensures environmental protection to the interior

The bees roost in the center of this void, protecting the history of the building's past

Stairs that resemble an organic form which is made of sustainable living materials

Height to allow people to see the bees (about 1.2m to 1.5m)

Make and formal changing rooms to start maintain the work area provided with a bench

External benches to allow rest and watching the exhibition experience

The whole floor rises slightly to make people feel they are in a natural wild area with a green garden, lighting if the space becomes too dark

The open area allows for ventilation and temperature to be warm ensuring safety for bees

The pathway provides an organic honey-themed shape. The space allows people to move freely and plant natural and wildflowers creating environmental growth in an urban space

The area that is not a visitor journey / path is reserved for the general public for educational areas such as workshops

Millflowers and red tags in the area allow for natural beekeeping area a design which ensures protection and environmental growth for bee population

The railing is wrapped around the entire building to ensure environmental and social protection (ensuring the safety of visitors)

The design of the bees from follows the same premise as traditional bees hives, but uses the same technology used to remember the history of the Cam Exchange

The back extension of the building isn't present due to the height of the building towards the first floor

Storage of the purple glass and bee hives which will be given following the path of the exhibition

The design of the stairs is required to allow the visibility of the area to be remembered as the site is not connected to the existing extension

The stairs going down allow people to watch the exhibition which provides a bee very minor for others to watch

The attached bee sculpture allow for the protection of the historic building exterior

Small tables aren't for wheelchair access

Touch paths that play "THE HISTORY OF THE HIVE" Created by Alexandra Evans (writing) allow people to create a suitable environment for bees

Technology used to allow people without hearing to interact with the exhibition through the floor

Visibility to the ground allows for an added experience that allows for the view scale of the size of the main installation

Design to demonstrate the beginning of the first floor exhibition starts on the edge

Once entering the first floor there is a natural space with no exhibition. The material will be sustainable material to demonstrate a natural ground in the exhibition. This will match the stairs on each floor which resembles a natural design

Staff members to help direct people who visit the exhibition

Broken glass to demonstrate a fracture between floors

The lighting in the first floor is a cool white lighting and the mezzanine is a warm white lighting to create a different atmosphere on the floor

The windows are not sealed at the end it allows some light to come in to create a more natural theme

Stairs with flowers placed within each other to allow natural wind

The design of this area is a winding area with long green plants and overgrown stone which produces an effect of nature taking over

Control structure which is surrounded by sustainable fabric

See Long Storage of people who visit the exhibition

Once entering the mezzanine floor there is a natural space with no exhibition. The material will be sustainable material to demonstrate a natural ground in the exhibition. This will match the stairs on each floor which resembles a natural design

The long designed by light element for visitors who visit the space is to create a more natural theme

Staff members to help direct people who visit the exhibition

Broken glass to demonstrate a fracture between floors

Empty supermarket installation when demonstrates the loss of bees and other food we lose if they get extinct

Arced lighting which shows routes for exhibition space but also for accessibility but the lighting is a strong orange that resembles honey

Television which plays video of bees life cycles and other pollinators to highlight the importance of pollination to food

Sections & Statistics

Bees in the UK face several issues that have been affecting their populations. Here are some of the critical problems and potential solutions:

Habitat Loss: Bees require diverse and abundant sources of nectar and pollen. However, the loss of wildflower-rich habitats due to urbanization, intensive agriculture, and land-use changes has reduced suitable forage areas for bees.

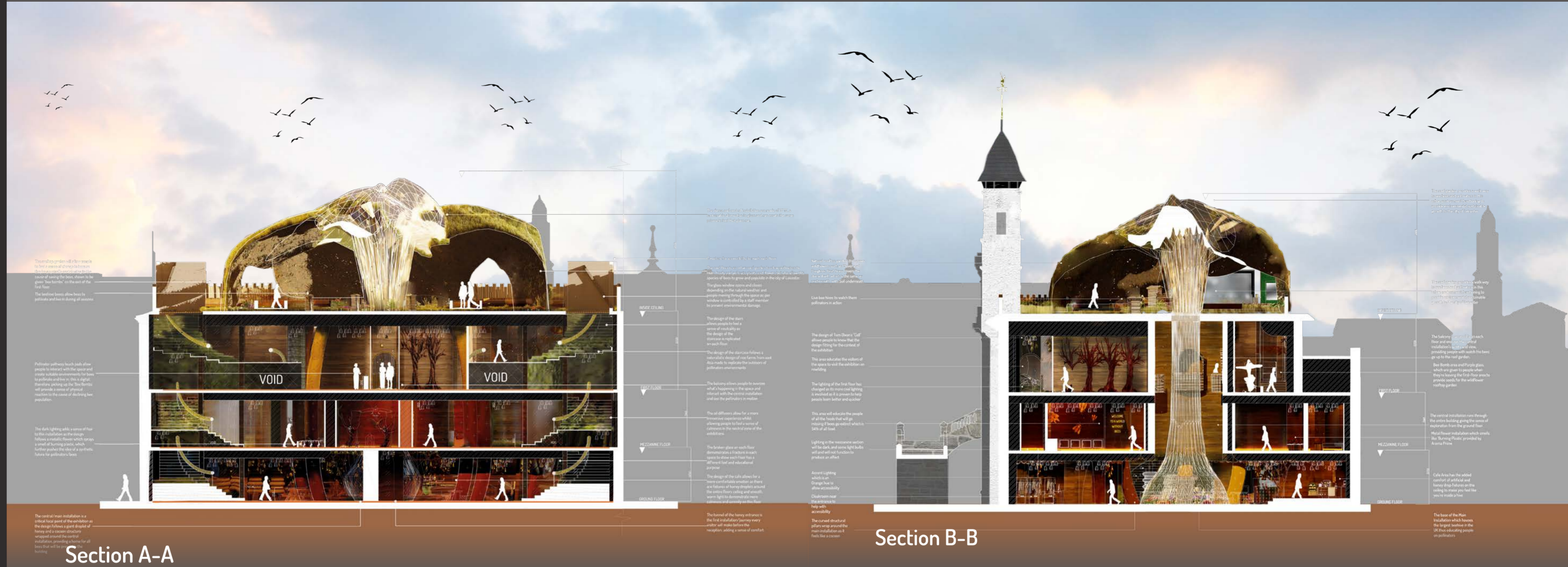
Solution: Conservation efforts should focus on creating and maintaining pollinator-friendly habitats. This can be achieved by planting wildflowers, creating green spaces in urban areas, and implementing agri-environment schemes that promote the preservation of floral resources.

Pesticide Use: Pesticides, including neonicotinoids, can harm bees. They can impair their navigation abilities, foraging behaviour, reproduction, and overall colony health.

Solution: Restricting harmful pesticides, especially those known to be toxic to bees, can help protect their populations. The EU has banned certain neonicotinoid pesticides, and the UK has adopted similar restrictions. Promoting integrated pest management practices that reduce reliance on pesticides is also crucial.

Climate Change: Changes in weather patterns and shifts in flowering seasons can disrupt the synchronization between bees and their food sources. Extreme weather events like droughts and floods can also negatively impact bee populations.

Solution: Mitigating climate change by reducing greenhouse gas emissions is crucial for the long-term survival of bees. Additionally, creating climate-resilient habitats and conserving water resources can help bees cope with the effects of climate change.



1. Tunnel of Honey



2. Comfort Forrest

Variety of food we could potentially lose if bees go extinct



Cherries



Avocados



Watermelons



Onions



Peaches



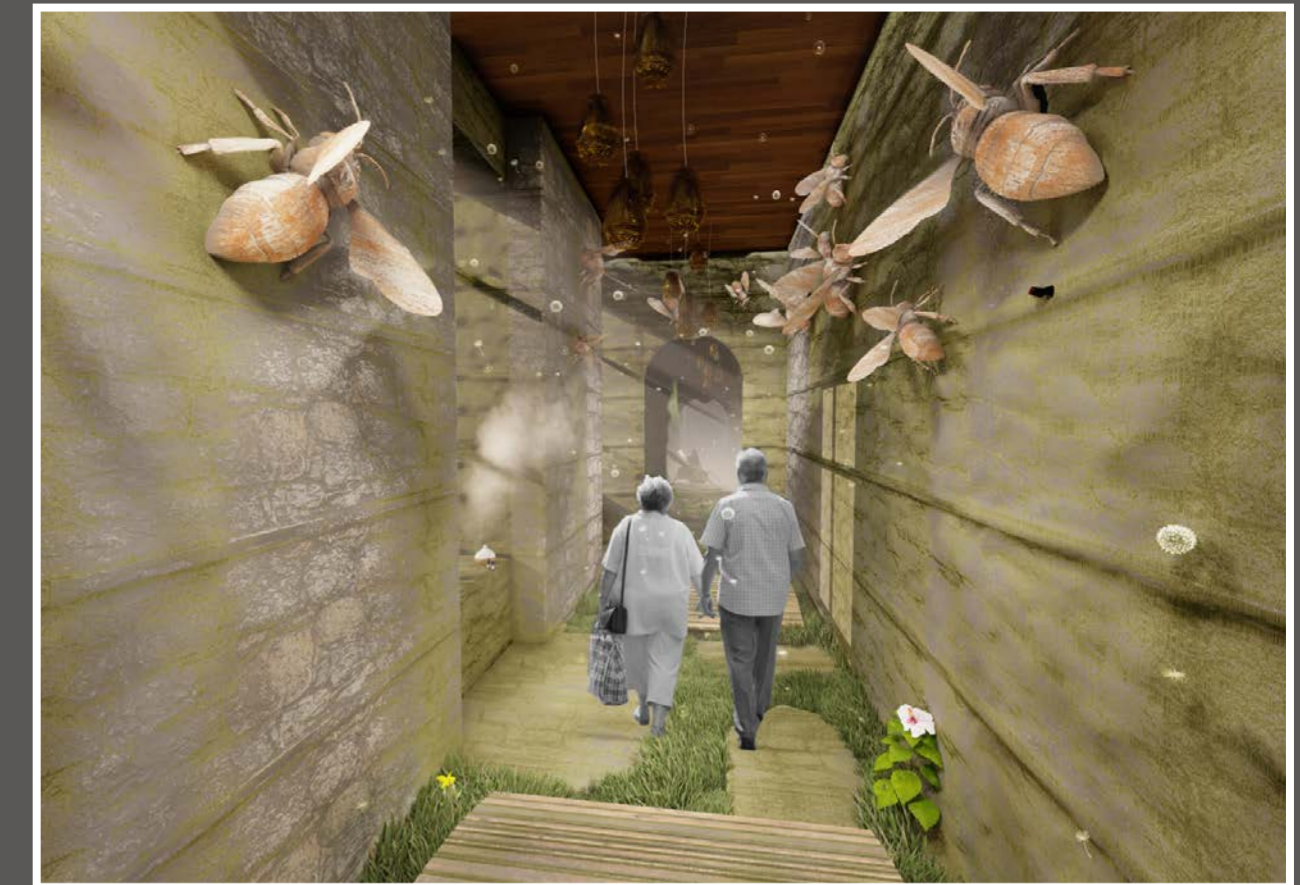
Oranges



3. Survival of Bee's Installation



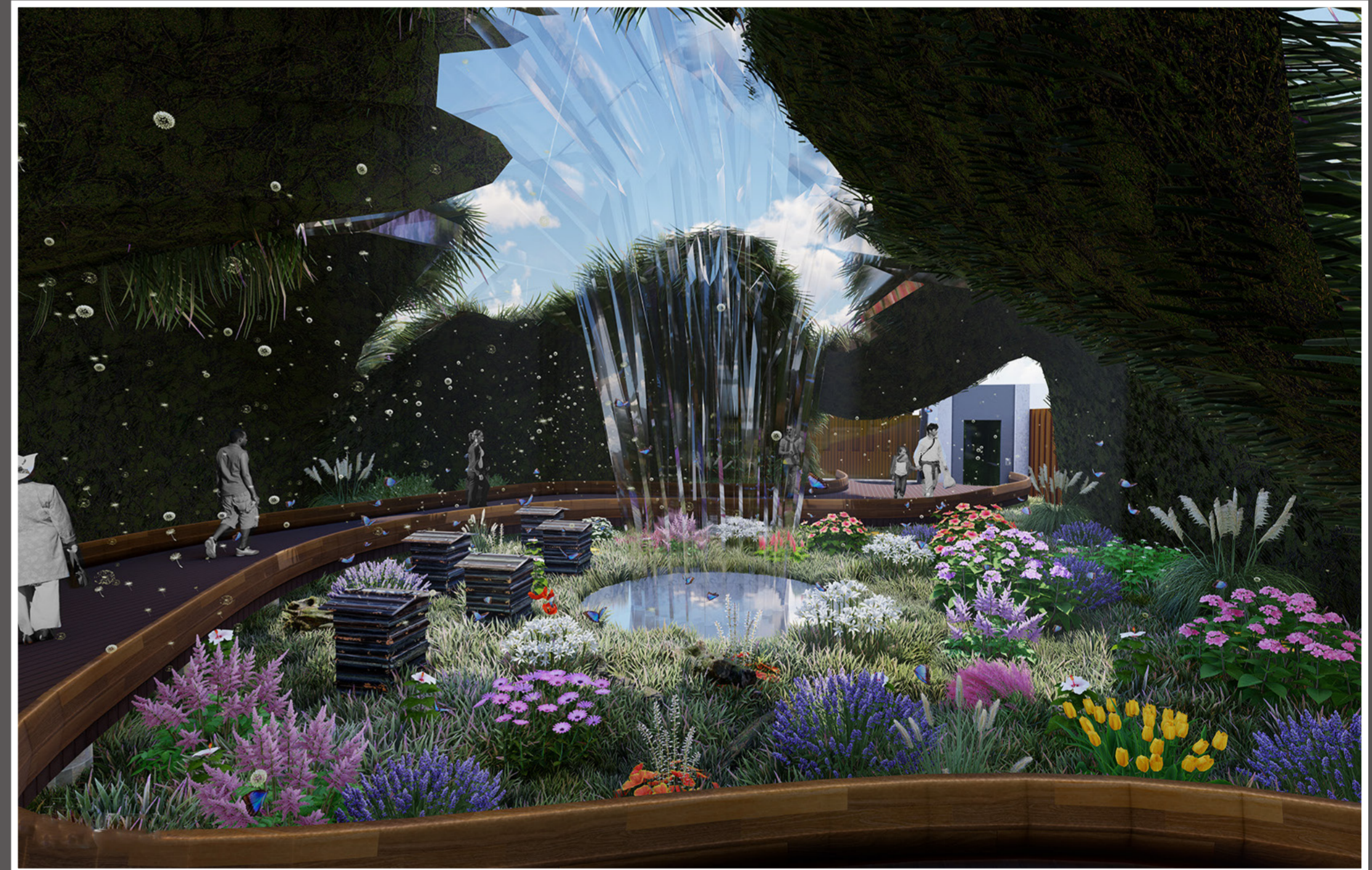
4. Sythentic Flower Room Installation



5. Pollinator Pathway Installation



6. Rewilding Area Installation



7. Roof Garden / Centrallation Installation

All Sustainability goals achieved following the United Nations Sustainability Action



Common Materials Used Within the Spaces

