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Expecto patronum

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ABSTRACT

Our natural world is currently undergoing a drastic and radical transformation! Human agency has led to the erosion of the very foundations of our livelihoods, economies, food security, health and quality of life. Ecosystems, which form our life support systems and our safety nets are shrinking and collapsing. At the heart of this collapse are pollinators, such as butterflies and bees, key species responsible for maintaining these vital ecosystems, whose very existence is being threatened by human activity.

This thesis depicts a series of explorations, re-defining the environment and surface needed for pollinators in this new age of man vs nature, before manifesting and putting forth the creation of a version of an artificial environment. This version of an artificial environment is presented as a solution to sustain and revive endangered pollinators and the degrading context of the proposed site.

This thesis looks at how architecture, in its physicality, can not only assist ecosystems and pollinators in their fight for survival but also act as a catalyst for a process of awakening and awareness. The intervention proposed in this thesis aims to create a space that negotiates between the two worlds of pollinators and humans, at the intersection of the built form and the natural environment. In doing so, this will ensure a space that benefits both people and pollinators, at their respective scales. The design of this new surface / artificial environment aims to aid pollinators year-round both naturally and through artificial means, while also showcasing their contribution to human life and research to aid their survival.

This thesis demonstrates the demise of nature, illustrating the impact humanity, as a species, has had and continues to have on the natural world, primarily on the lives of pollinators. A focus on the demise of pollinators is addressed, as their brink of extinction stresses a fundamental link between the two causes of collapse and how by saving pollinators, nature in turn can be revived. By doing the above, this thesis will advocate for the creation of an artificial environment as an effective solution to sustain and revive South Africa's endangered pollinators.

Key Words:
Artificial Environment . Pollinators . Ecosystems .
Nature . Ecology . Conservation . Biodiversity