

Helsinki (FI)

Regenerating ribbon

Context

The presence of an archipelago next to a capital city is a rarity, even at the international level. The Eastern Archipelago of Helsinki is a unique maritime environment with historically and culturally significant natural sites and diverse landscapes, ranging from sheltered inner archipelago to open and arid outer archipelago. Currently, only a privileged portion of the population can visit the islands of the archipelago, as they are not adequately served by ferry boats, and other landing modes lack clearly identified and secure spaces to stop. This archipelago contributes to the richness of the landscape of the Helsinki region, and it is therefore crucial for both residents and tourists to have access to it. Our aim is to make these beautiful coasts and shores accessible through well-designed facilities that enable recreational activities while protecting the sites from overexploitation, which would worsen the ecological issues these vulnerable areas are already facing, particularly due to rising water levels.

The Concept

Our project's approach is based on minimizing impact, with the intention of restoring damaged and worn natural areas, particularly by enhancing biodiversity. This approach is rooted in the idea of healing nature, relying on the regenerative capacity of nature to combat biodiversity loss by activating the resilience potential of wild environments. Since recreational use inevitably leads to new degradation, it is essential to protect nature and the vulnerable landscape through low-impact designs, not only in terms of their footprint but also in terms of materials, modularity and adaptability. This involves the creation of marked trails to guide visitors and enable them to act sustainably on the islands. These trails will also establish clear boundaries between private and public areas, as well as protect threatened habitats. All the planned facilities will be constructed using wood from the Finnish timber industry, which is based on sustainable and responsible production. The design of these facilities/modules aims to raise visitors' awareness and allow them to appreciate the importance of preservation. The goal is to minimize impacts on terrestrial, marine, and underwater fauna and flora. The initiative seeks to foster respectful relationships and closeness with nature within urban settings. It also aims to make visitors accountable for waste management, requiring them to take back all the waste they generate during their stay on the islands. Recreational activities proposed will be waste-free.

The Ribbon

During our research, we observed a variety of places and of different scales, with some sites being heavily used and others not at all. We eventually came up with the idea of a ribbon, a continuous feature that would extend across the various islands. This ribbon would accompany visitors at all times, serving as a demarcation between areas where their presence is allowed and areas that require preservation efforts. The goal is to raise the awareness among visitors that every step on land has an impact, and the beautiful landscape before their eyes is at risk of disappearing if we do not pay more attention to what nature has to offer. Various points along the trails will include corresponding adaptations of the ribbon so as to protect and inform visitors about specific zones, facilitating educational walks that encourage locals and tourists to act responsibly and increase their environmental consciousness. This educational approach aims to prevent vegetation loss and stress on the sensitive nature, restore and revitalize nature, and protect its natural values, including the terrestrial, marine, and underwater ecosystems. The didactic ribbon deployment targets conservation and thorough control of the impact that recreational use can generate. It also helps create an identity not only for individual islands but also for the entire archipelago. Furthermore, Regenerating Ribbon aligns perfectly with the LUMO program. This project contributes to Helsinki's objective of halting biodiversity loss. Our focus on raising awareness and responsibility among residents and tourists toward nature aims to provide them with sustainable recreational opportunities. According to surveys, the majority of Helsinki's inhabitants are interested in nature and willing to participate in biodiversity preservation. The project aims to develop new ways to inspire and engage people in activities that promote biodiversity. This dynamic will drive citizens and professionals to take an interest in biodiversity, understand its significance, be aware of the risks associated with its decline, and develop practical methods to increase biodiversity. The ribbon deployment and forest management will prevent the loss of species, secure natural habitats and enhance key features that positively impact forest diversity, such as semi-natural tree structures, old forests, individual trees, decomposing wood, and natural forest disturbances. In the case of meadows, mowing procedures will be developed to ensure seed production and insect proliferation. The concept of the ribbon deployment allows for modulation as per requirement for each island, creating a set of structures for various services and facilities such as relaxation, restoration, or observation areas.

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Modular Design System

Identifying the needs of each site has led us to compile a list of different facilities/modules required to meet these expectations. Besides mandatory services such as cooking shelters, firewood storage, toilets, benches, and resting areas, each island features unique spaces that we must value and protect. The idea is to propose identical facilities when they serve the same function, while also devising a range of modules to highlight each island's singularities observed in our analysis. These modules function like LEGO pieces, adaptable to any type of ground and expandable by adding another module to further the trail or to enlarge communal spaces. A wooden structure of bent wood is envisioned for all the trails we will establish. This local technique ensures adaptability to the location while providing a strong project identity to guide visitors effectively and prevent island degradation. The organic nature of this system allows for modifications and adaptations, especially concerning the trails, should they be displaced due to wear and erosion of the environment. Its flexibility and simplicity allow easy adaptability, expansion, and relocation to different sites and situations, increasing the feasibility of deploying it to other islands in the archipelago.

Activities

The modules will facilitate sustainable recreational activities such as walks, ecological awareness activities, visits to preserved historical relics (villas, manors, gardens), offering artists and researchers the opportunity to observe and conduct productions or research related to the landscape, biodiversity, and historical richness of the archipelago. Preserving and respecting the islands' ecosystems will be the focal point of these residencies, which could lead to awareness workshops or outdoor exhibitions. In the spirit of awareness and accountability, we believe it's essential to offer sustainable maritime leisure activities on some islands, such as light sailing (dinghy and catamaran), paddle-boarding, and pedal boating. These activities avoid disturbing fauna and flora, as they are non-motorized and will be located away from protected species' zones, thereby protecting fragile habitats. Information panels will sensitize visitors on appropriate behavior towards fauna and flora so as to minimize potential impacts. Swimming areas will also be provided, and a study will be conducted to address the issue of toxic blue algae in the water surrounding the islands affected by this problem during the summer.

Accessibility

Indicating appropriate landing places (docks, jetties, and pontoons) helps keep boaters and canoeists away from the most sensitive shores and prevent coastal vegetation erosion. While designing landing sites is crucial, they must be anchored to their respective sites of reflection and interconnected with each other to promote the discovery and preservation of the archipelago's richness at the heart of our project. These various scales intertwine to create tangible conceptual cohesion. Additionally, to enhance accessibility, we need to consider sustainable transportation. A solar-powered ferry already serves Vartiosaari, which demonstrates the residents' investment and willingness to adopt sustainable transportation methods. Expanding this approach to regularly serve other islands in the archipelago seems the best option. In the event that this option proves challenging due to weather conditions, another idea could be to use boats powered by liquefied natural gas. To further accentuate the overall unity of our architectural language, the landing areas on each island have been strategically placed for easy island-to-island movement. When choosing landing sites, we also took into consideration the fact that underwater and surface habitats off the coast and on the islands protect against coastal erosion and filter nutrient loads from the land. They also serve as crucial breeding grounds for numerous species.

Signage system

A kiosk will be present on the islands to not only guide visitors but also have an educational impact regarding appropriate behavior. Other practical information, such as schedules and routes of the boat-bus, a list of various activities available on the island, and the different trails that can be taken, will be accessible. This information will be directly laser-engraved onto the wooden planks of the module. The recessed letters will be painted following a colorimetric system – each zone/activity will have a distinct color. – and making way-finding easier. These colors will be regularly found on the ribbon, indicating the direction to follow.

Adaptability

The architectural language, proposed is not exhaustive. Only the basic vocabulary for solving the challenges put forward in this competition have been presented, leaving room for the people of Helsinki to embrace, adapt and expand it. This adaptability will be essential over time to account for evolutions in use and demand.

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It also allows for implementing the concept on other islands in the archipelago, continuing the deployment of the ribbon that makes this lesser-known heritage accessible while ensuring its sustainable preservation. Whether the visitors' profiles vary (families, young professionals, teenagers, elderly, sports enthusiasts, scientists, artists, nature lovers), each individual will find a suitable module that allows them to perceive the world around them from a different perspective, thereby encouraging them to reconsider their behavior towards the biosphere.