



The Art of Coexistence

Idea Concept SAAR

Estonian Museum of Natural History / Number 277655

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Idea Concept SAAR

A view to the main exhibition area from the entrance. Ramp gives accessibility to all and organises exhibition into theme islands.

01. An explanatory statement

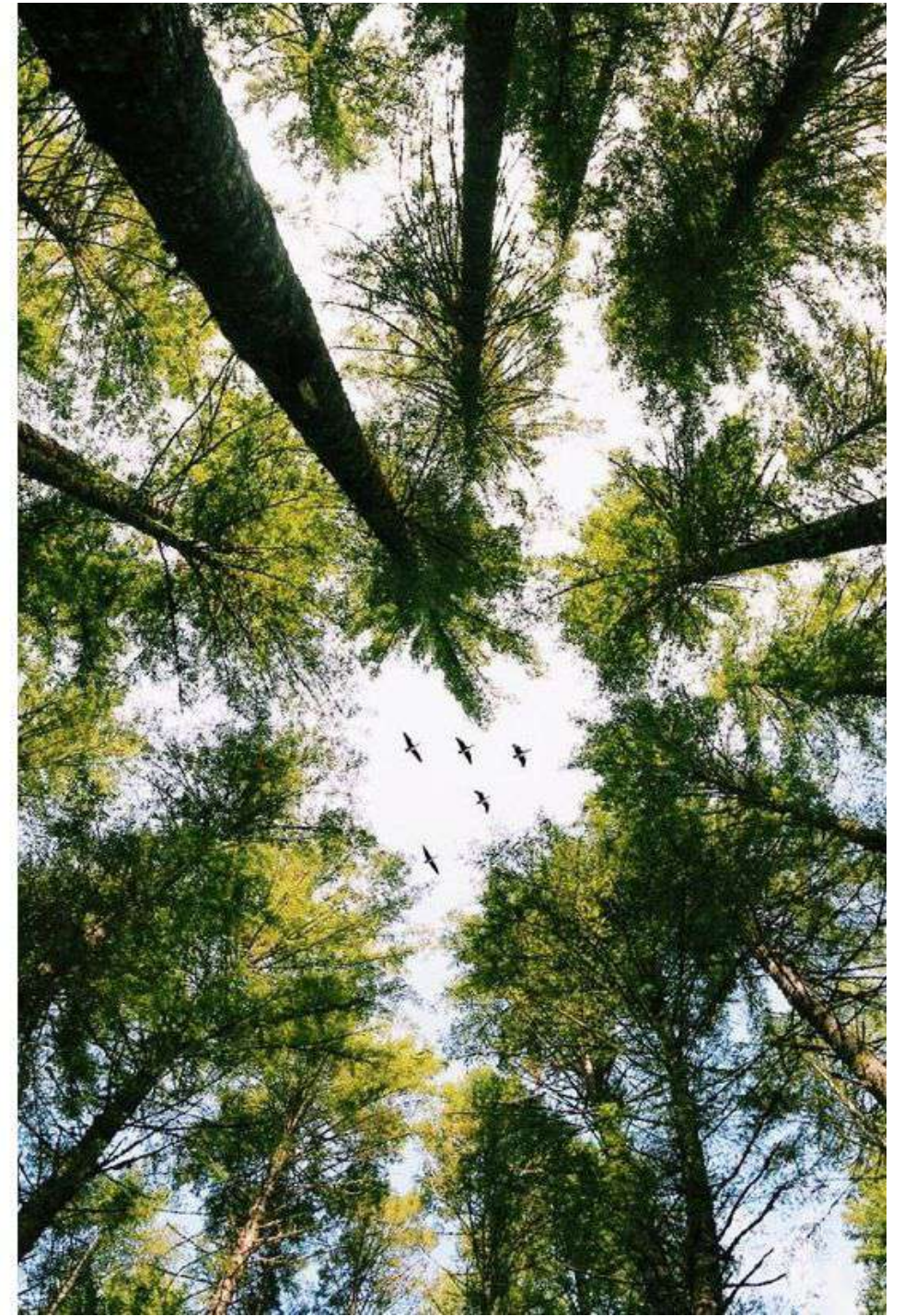
The Art of Coexistence: An Approach to Natural History and Future Coexistence

Our vision for the Estonian Natural History Museum reshapes the traditional boundaries of nature exhibits, transforming them into spaces that reveal our **interconnectedness with the natural world**. The *Art of Coexistence* aims to immerse visitors in the intricate web of life, emphasizing that nature is not an entity, but an ever-present part of our daily lives. Through interactive and multisensory experiences, we hope to inspire a **sense of belonging within a shared biosphere**.

This exhibition **bridges the gap** between humans and the rest of the living world, encouraging visitors to see the world from a **fresh perspective**. By stepping beyond the human scale, they can perceive the symphony of small creatures and vast natural forces that sustain life. From marshes and forests to urban landscapes, each exhibit highlights the delicate **balance of ecosystems** and the **consequences of ecological imbalance**.

By engaging with these environments in this exhibition, visitors can explore the connections between species, understand the impact of human actions on **planetary health**, and appreciate the **shared responsibility** we all share. Our concept supports reflection and taking responsibility. The exhibition shows that protecting nature is not just an altruistic act. It is a **call to action** that shows that caring for nature is essential for our own survival on the planet.

From marshes and forests to urban realms, each exhibition space underscores the interconnected essence of life and the imperative of ecological harmony – not as something distant or displayed behind glass, but intrinsically bound to our very being.



02. Introduction

Welcome to the Estonian Museum of Natural History exhibition *The Art of Coexistence*, an immersive journey through time, space, and scale. As you ascend the winding ramp, you'll be guided through the special aspects and information about the Estonian nature, where the trail leads you through a series of interconnected islands, each revealing the intricate tapestry of life on our planet.

Introduction

This exhibition marks a **bold shift from traditional museum experiences**. Rather than passively observing nature, you are invited to engage with it on a deeper level – to see the world from new perspectives inspired by the intricate connections within ecosystems and the unique way other species perceive their surroundings.

The journey through the exhibition goes along a ramp surrounded **by thematic islands** depicting different **natural landscapes of Estonia**. **Each island represents a distinct ecosystem**, from the vast, interconnected seas to the vibrant, intelligent forests. As you ascend, you'll encounter thought-provoking themes and immersive sensory experiences that challenge your understanding of humanity's relationship with the natural world.

At the core of this expedition lies the **concept of coexistence** – the recognition that we are not the sole architects of our shared environments but part of a grand symphony of life. Through interactive displays, augmented reality, and hands-on experiences, you will be invited to see beyond a human-centered perspective. By embracing the concept of the art of coexistence, the exhibition encourages not just understanding, but action – empowering the visitor to take steps towards a more harmonious relationship with the nature.



Exhibition Concept

03. Core Exhibition Concept



Movie "The Wind Sculpted Land", Joosep Matjuse

Theme and purpose

The Estonian Natural History Museum's new permanent exhibition, *The Art of Coexistence*, invites visitors on a transformative journey of discovery and reflection, exploring our relationship with nature. Housed in a state-of-the-art, energy-efficient wooden complex, the museum serves both an **environmental awareness hub** and a guardian of Estonia's natural and cultural heritage.

Through the core exhibition, the museum welcomes everyone – locals and international guests, young and old alike – to ask questions, share insights, deepen their understanding of Estonia's rich natural landscapes and the urgent ecological challenges we face today.



Core Exhibition Concept

Estonia, often described as a **nature nation**, offers unparalleled access to the wilderness, with both common and rare species, diverse post-glacial landscapes, and habitats rich in biodiversity and natural heritage. However, in daily life, many people's actions often reflect a growing disconnection from this heritage.

The Exhibition *The Art of Coexistence* seeks to bridge this gap by inviting visitors to reconsider their role in nature and, ultimately, to cultivate a deeper, more **caring attitude** toward the environment. At its core, the exhibition aims to inspire visitors not just to reflect on coexistence but to actively engage with it – transforming knowledge to action.

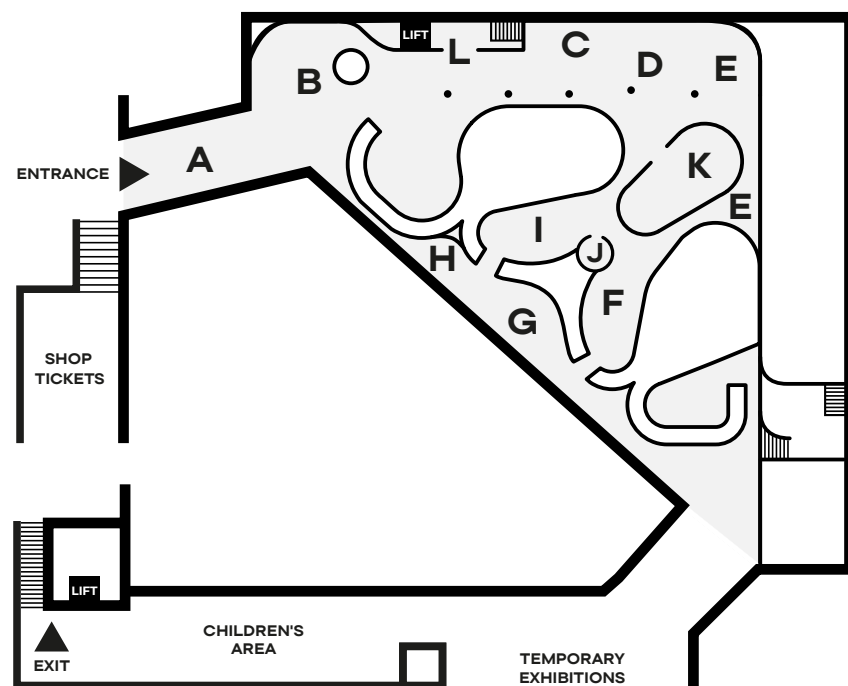
In the main hall we want to give accessibility to all so the design has resulted in a journey on a pathway (ramp) swirling through the room and dividing space into theme islands like Meadow of Memory, Forest Web and so on. The ramp is design according to Estonian standards. While pathway is descending and connecting floor with balcony additional spaces for visitors will be under it thus resulting in interesting special experience visitors can explore.

Core Exhibition Concept

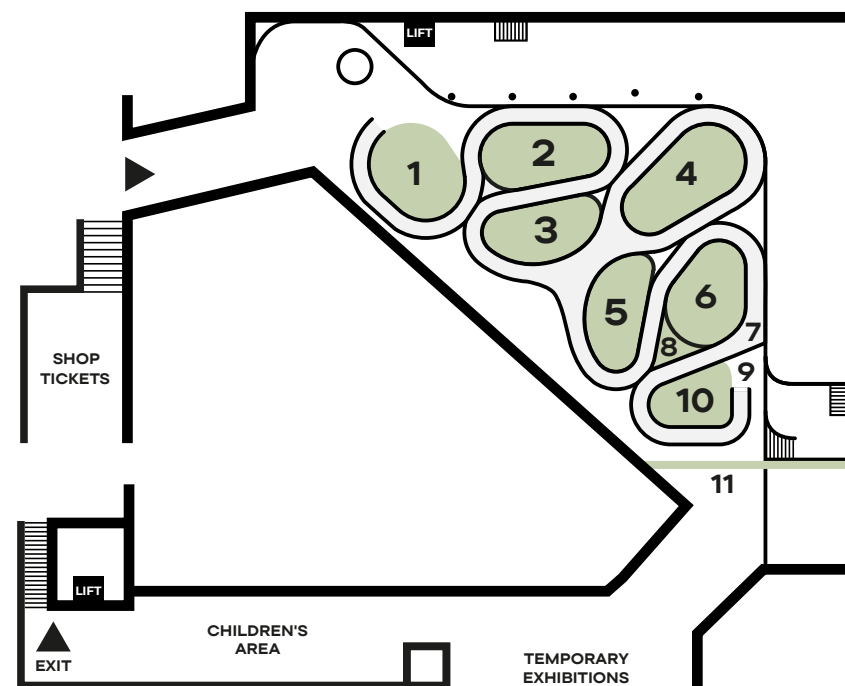
The exhibition concept and physical layout in the museum's main hall are organized into three distinct sections: the ground floor (A), the "islands" along the ramp (B), and the balcony (C).

On the ground floor (A), visitors will find enclosed thematic spaces nestled beneath the ramp and balcony. As visitors ascend to the "islands" (B) along the ramp, they encounter open exhibition spaces. In addition to specific topics covered on the "islands", these areas also offer broader and safe view of the exhibition hall and allow visitors to gradually take in exhibition from an elevated perspective.

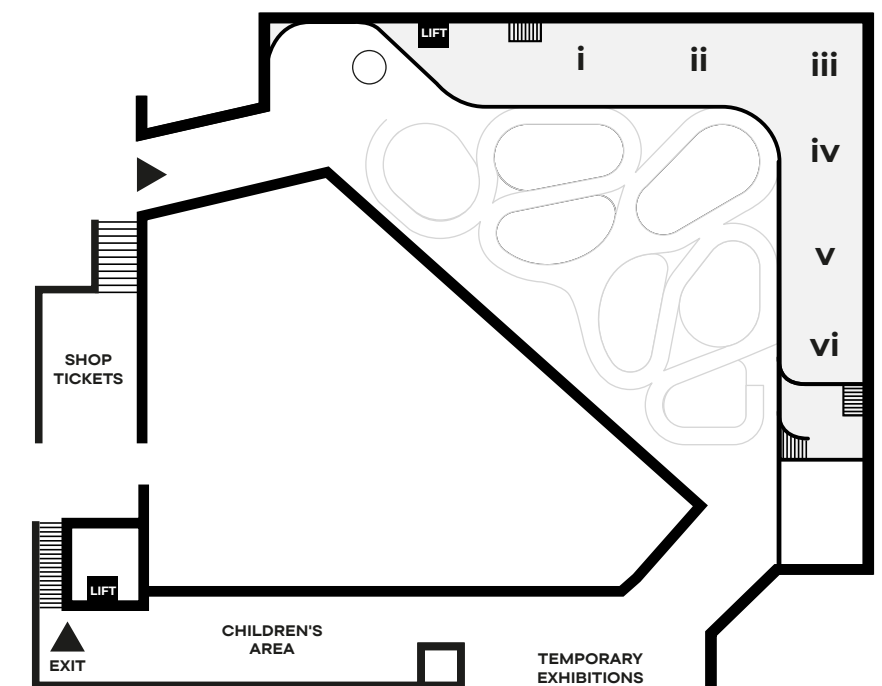
The balcony (C), the layout includes variety of settings, from open display spaces to more confined spaces, such as a built-in little cottage, offering multiple ways for visitors to interact with the exhibition..



A. Ground floor



B. Exhibition areas on the "islands"



C. Museum balcony

Core Exhibition Concept



The ramp area and its thematic "islands" feature open exhibition spaces, bordered by **transparent railings**. This layout encourages movement, interaction, and exploration, with each island offering a **unique perspective** on the exhibition. As visitors ascend the ramp toward the balcony, they move from intimate, detailed views in the thematic spaces to a broader, **interconnected understanding of the exhibition**. This progression mirrors the conceptual relationship between individual elements and their place within the exhibition hall, allowing visitors to reflect on the themes and their connections to one another.

Core Exhibition Concept

The exhibition is designed to be **accessible to all**, blending scientific knowledge with creative presentation techniques to engage visitors of all ages and backgrounds. It offers both physical and digital accessibility, ensuring that everyone can connect with the content in meaningful ways.

Interactivity is at the heart of the experience. Visitors can engage with **digital installations, augmented reality, interactive bioramas and hands-on activities** that allow them to explore nature from different perspectives. These interactive features encourage empathy and a deeper understanding of the **interconnectedness of species and ecosystems**. Each exhibit highlights the idea that **humans are part of the larger natural web**, emphasizing the interdependence of all life forms.

The exhibition is designed for a wide range of public and offers **a multi-layered experience**. Children can enjoy specially designed activities, such as caves to climb through. Modern digital solutions like touchscreens, holographic displays, and augmented reality offer engaging content for visitors of all ages. Traditional exhibits with detailed text offer additional depth for those who wish to explore further.

The layout alternates between dynamic, **interactive zones and tranquil spaces** for reflection. This creates harmony between active exploration and allows moments of serenity for meditation and reflection.

Personal connections to the content is encouraged through input stations where visitors can share their stories, thoughts, and environmental commitments. These reflections contribute to Estonia's environmental narrative, weaving individual experiences into a collective story about care for the planet.

Core Exhibition Concept

The exhibition's core message is one of **unity and responsibility**, focusing on both Estonian nature and global environmental challenges. It offers a broad view of ecosystems and the urgent issues facing the world, highlighting themes such as the **relationship between humans and nature**, the benefits of nature, and human impact in the **Anthropocene**. These themes are explored through sections on nature's antifragility, the effects of human actions (both negative, like greenwashing, and positive, like nature protection), and more.

For example, while the **benefits of nature** are featured in one section, they are also woven into other areas, such as forests, where the cultural and practical value of woodlands is explored. The exhibition encourages **a shift in individual mindsets**, promoting environmental advocacy, eco-friendly behaviors, and an understanding of the evolution of Estonian nature from the Ice Age to today.

The unique character of Estonia's landscapes – from forests to heritage meadows – is woven into thematic areas on global energy flows, lakes, rivers, mires, and more. The exhibition emphasizes the **interconnectedness of species and habitats**, reflecting the principle that nature's communities function as cohesive systems, not isolated entities. This approach is evident in the displays and educational materials throughout the exhibition.

The goal is to foster a **lasting connection with nature**, highlighting the beauty and resilience of Estonia's landscapes while stressing the urgency of protecting them in a changing world. Through exploration and discovery, visitors are reminded of their power to shape the future, promoting a culture of awareness, respect, and coexistence with the natural world.



The Story

04. The Story

Narrative Structure

The exhibition is designed as a cohesive, immersive journey, blending **scientific knowledge** with engaging **sensory experiences**. Focusing on themes of interconnection, the narrative deepens visitors' understanding of how humans and nature are intricately linked in a delicate balance while encouraging **self-reflection** of **environmental responsibility**.

The narrative follows an aristotelian narrative structure via a "hero's journey", with the main character acting as a storyteller. This character observes and describes the life and activities of unique topic openers at each thematic "island," and shares their stories. This concept offers visitors a deeper connection to the ecosystems or topics they encounter. As visitors journey through the exhibition, they follow this guide, gaining insights into how each element of nature, no matter how small, contributes to the larger web of life.

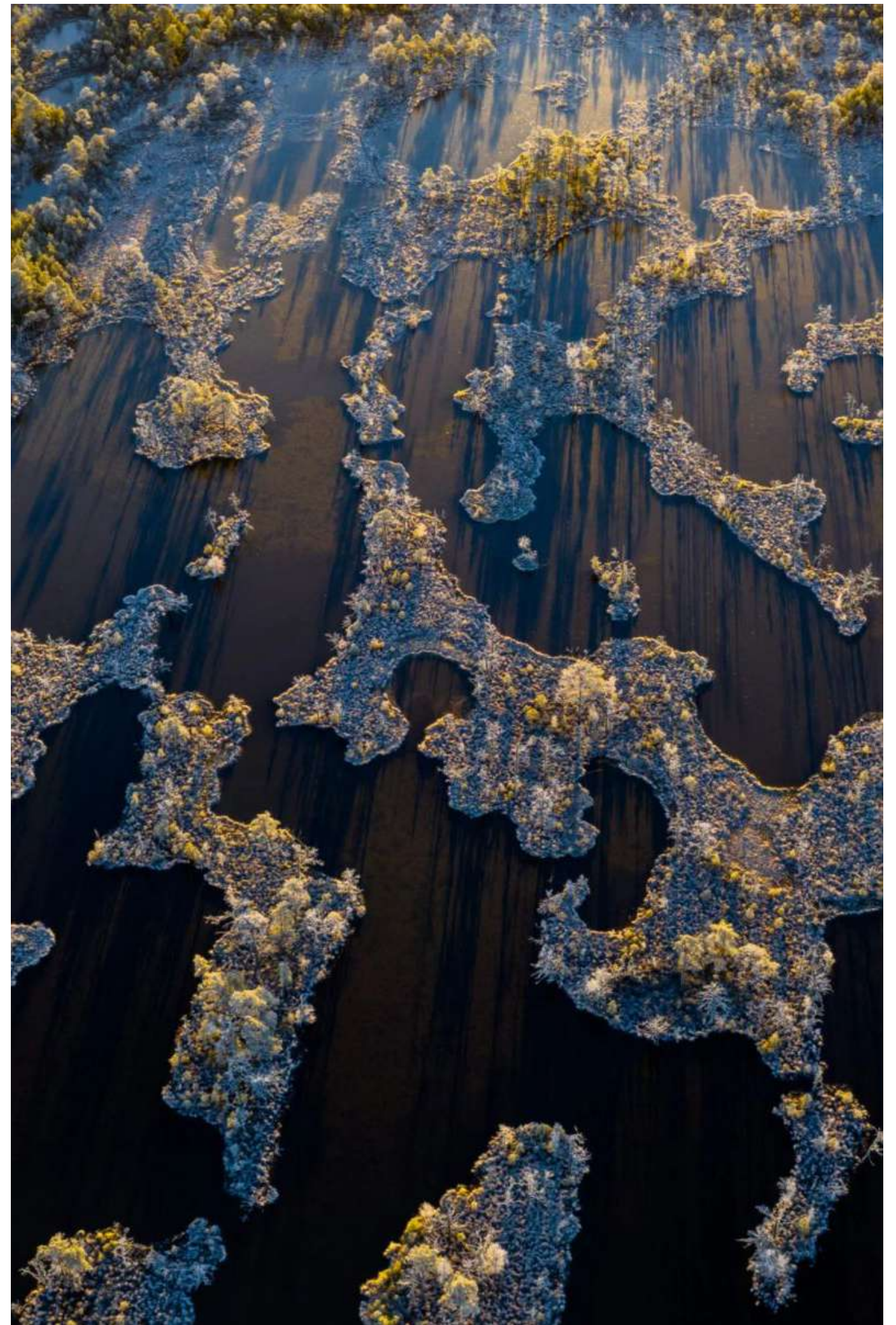


Photo: Jarek Jõepera

The Story

The Main Storyteller and Theme Openers

The exhibition's central storyteller and symbolic guide is the **Wind**. Wind is **timeless, omnipresent**. She sees and hears everything – a figure who **knows all the secrets of nature**. She rustles in the bush in the garden, caresses the bees on the meadows, blows over the snowfields and roars like a storm on the seas. She knows the stories of every creature and ecosystem.

As visitors move through the exhibition, the Wind introduces them to each thematic “island”, where different species like **brown algae in the “Life of the Baltic Sea”** area, **a wild hare in “In the Heart of Estonian Mire,”** and a **housefly in “City Life: Nature in Our Homes”** are met. The Wind observes and describes the lives, behaviours and habitats of various species, and translates the stories of objects from museum’s collection into human “language”.

Along each story, the Wind rises **thought-provoking questions** about the relationships between these creatures/objects and their environments or about human/cultural impact on them. These questions linger in the visitors’ minds as they explore the exhibition, inviting reflection on the deeper connections between themselves and nature and enhanced learning.

As the Wind speaks of nature’s mysteries, it invites visitors to truly listen and immerse themselves in these worlds. The wind, a silent force, weaves a tapestry of connection. Carrying fleeting spores, it helps new life spread across the land. An invisible agent of change, the wind shapes our world.

The Story

Visitor Experience and Engagement

At the entrance to each thematic space, an inviting screen gently invites visitors from one area to the next. These **screens** subtly highlight the key elements **what to notice and explore**, enhancing the journey with each step.

The screens introduce visitors to the **theme opener** of each section through sight and sound. **Interaction is entirely up to the visitor**. For a more laid-back experience, visitors can simply watch a calming video of the opener in its natural habitat, like a peaceful documentary.

For a deeper experience, visitors activate the storyline by pressing a start-button or using other digital means to activate the screen, triggering an interactive short storyline. This choice brings the theme on the screen to life, guiding visitors through an intimate, sensory journey with nature, revealing the sights, sounds, and secrets of life and ecosystems of each theme opener..

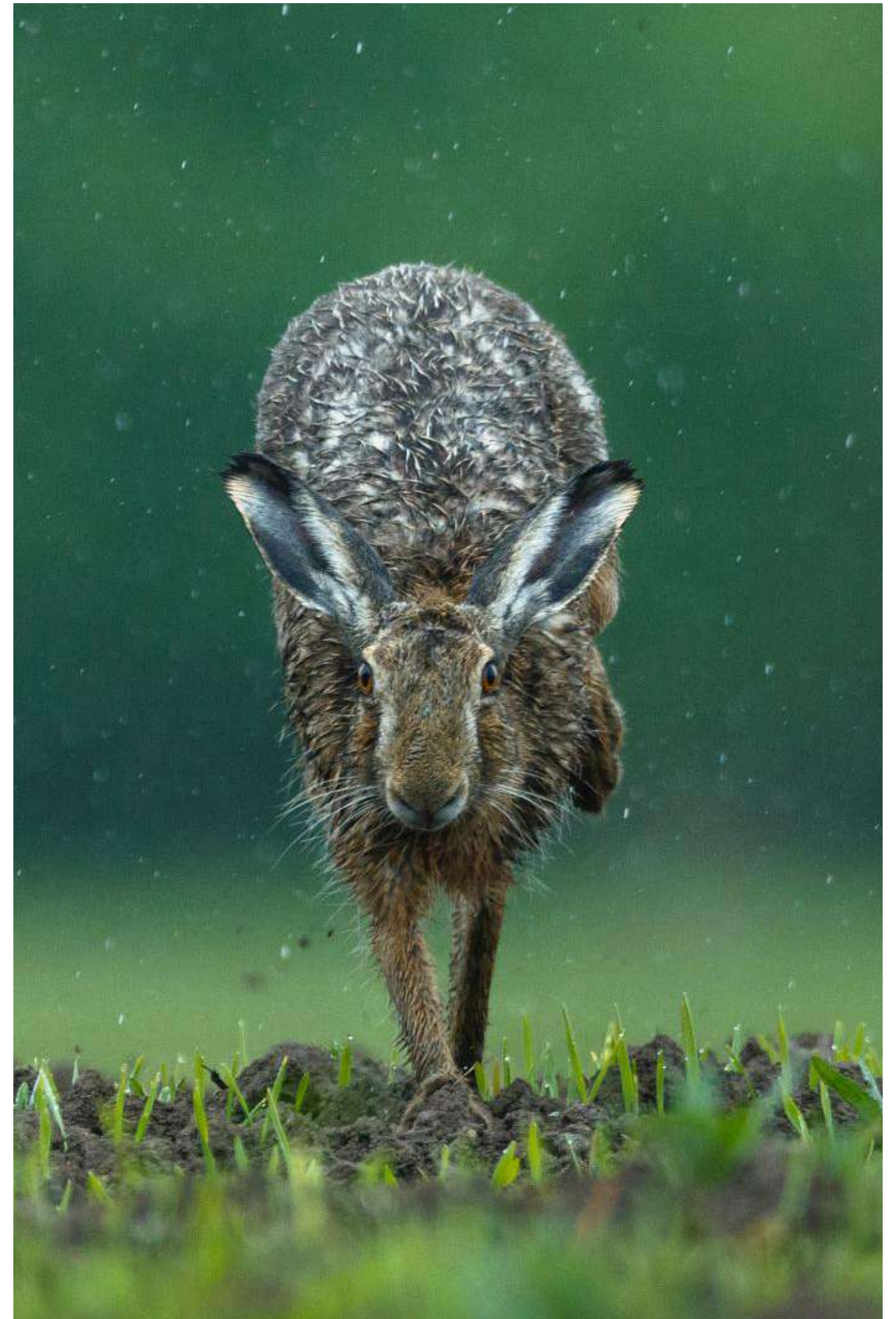


Photo: Jarek Jõepera

The Story

Deepening the Story

As visitors enter each thematic area, the story introduced at the entrance continues through display texts and interactive elements. The Wind's narrative weaves through the exhibitions, connecting the visitor's journey back to the storytelling and theme openers.

Thought-provoking questions from the Wind enhance the exhibits, for example, near the seal display in the "Life of the Baltic Sea" section, the usual details about its habitat and behaviour might be followed by the Winds personalised insightful questions i.e.: *"Did you know that seals can hold their breath for nearly half an hour? Imagine the hidden worlds they can see beneath the waves."*

This mix of facts and questions deepens learning, inspiring curiosity, wonder, and concern for nature's future. The storyteller Wind enriches visitors' understanding and connection with nature and themselves.

Narrative Arc

To maintain a seamless flow, the **narrative arc** has been designed to echo the **visitor path** itself, with each thematic area serving as a chapter in the overarching story. As visitors move along the **meandering wooden ramp**, the story gradually builds from the ground floor's introduction to Estonia's natural history and ecosystems to the balconies exploration of global environmental challenges and potential solutions. **This gradual ascent is not only a physical journey but also a metaphorical one** – reflecting a progression from understanding and appreciation to concern and action.

The **storyline is multi-layered** to cater to diverse audiences, with distinct levels of engagement that allow for various depths of interaction. For younger visitors, we integrate playful, engaging interactions that allow for tactile and visual discovery at their eye height, while more detailed, contemplative elements serve older visitors who seek a deeper dive into the science and ethical questions behind each topic. For those looking to engage personally, visitor **input points** allow individuals to contribute reflections and commitments using their ticket, creating a shared narrative experience that enriches the exhibition and enables the museum to build a **collective environmental archive**.

The Story

Emotional Variation

Emotional variation plays a crucial role in the narrative, guiding visitors through a range of feelings – from wonder and joy to urgency and introspection. Each thematic area is carefully designed with **lighting, soundscapes, and sensory elements** that align with the emotional tone of the content. For example, the **heritage meadows** and **forests** sections evoke tranquility and admiration, while topics like **global challenges** and **the Anthropocene** will present more intense, contemplative atmospheres. By alternating moments of calm reflection with more urgent themes, the exhibition encourages visitors to pause, process, and engage meaningfully with each space.

Throughout the the journey, reflective spaces allow visitors to contemplate their role in nature, take a moment to rest, or think more deeply about their impact.

The Topic Openers

Each exhibition space begins with a unique "theme opener" character, such as brown pine algae in "Life of the Baltic Sea," a wild hare in "In the Heart of Estonian Mire," and a housefly in "City Life: Nature in Our Homes." These characters and their habitats are observed by the Wind, who adjusts her tone, energy, and perspective to match the topic.

Through these shifting perspectives, the Wind reveals a series of sub-stories, each with its own exposition, climax, and resolution. These mini-narratives explore ecosystems, human impacts, and related problems or solutions, creating engaging and emotionally resonant plots. The suggested theme openers are primarily drawn from the Estonian National Museum of History's "Idea Competition" documents, with minor adjustments detailed later in the "Core Exhibition" section.

The Story

Narrative Examples

Here are three examples of possible narratives of the storybots, the interactions between the main character – the storyteller Wind and the topic opener. We have selected 3 topics to be portrayed – the "Life of the Baltic Sea" on the ground floor of the exhibition, "In the Heart of Estonian Mire" on the "island" on the ramp area, and the topic of "City Life: Nature in Our Homes" located on the balcony area of the planned exhibition.

Photo: Wikipedia



1. Exhibition area: "Life of the Baltic Sea"

Topic opener: Brown algae, *Phaeophyceae*

Storyteller: Wind (beautiful, soft, and gentle female voice)

Story: The wind whispers softly across the Baltic Sea, feeling the rhythm of the water beneath him. She dips below the surface, hovering above the swaying algae.

"These algae," the wind speaks quietly, "are the silent guardians of the sea. For centuries, they've felt the balance of life here. But now, the water is clouded. Invisible pollution – plastics, chemicals, metals – poisons everything, though you can't see it."

She moves gently among the algae. "Once, fish danced in clear waters. Now, there's only noise. Underwater hums and echoes from ships and machines, disturbing the sea's peace. What will it do to the creatures here?"

Rising above, the wind adds, "Everything is connected – clean water, calm currents, healthy life. But now, the balance is off. Can you feel it?"

She grows quieter, her tone thoughtful. "The sea calls for help, but who will listen? What will happen to these waters if pollution grows? And what can you do to protect them?"

The Story

Photo: Jarek Jõepera



2. Exhibition area: "In the Heart of Estonian Mire"

Topic opener: Wild hare, *Lepus timidus*

Storyteller: Wind (beautiful, soft, and gentle female voice)

Story: The wind blows gently and somewhat mysteriously across the swamp landscape. Ruffles the lingonberry here and moves the marsh leaves there. Finds a small rabbit hiding in the vegetation. The rabbit's ears are listening, its eyes are vigilantly exploring the surroundings, its whole body is alert and a little scared – just like a secret hidden in the depths of the swamps. The wind moves closer to him and ruffles his hair.

The wind whispers, "Look at him, that little white rabbit. There is something timid about him, like the foot of a person walking on a marsh."

The wind moves around the rabbit: "Do you know why he lives here? He loves marshes because it offers him a safe hiding place from large predators."

The wind rises higher and "looks" over the marsh landscape: "But marshes are much more than a refuge for small animals – they are sources of life. They store and purify water, store carbon and mitigate the vagaries of the Earth's climate."

She rises even higher above Estonia. "Yet, in the human world, these Earth's cleaning filters are often overlooked, neglected, or drained without thought. Today, there are three times fewer bogs in Estonia than there used to be..."

The wind pauses, but then speaks softly, with a sense of hope: "But it's not too late. If we remember how precious these places are and protect them, the rabbit's home – and many others – can continue to thrive. So, where will the bunny hide now? Maybe, in the places we still have time to protect."

The Story

Photo: Wikipedia



3. Exhibition area: "City Life: Nature in Our Homes"

Topic opener: House fly, *Musca domestica*

Storyteller: Wind (beautiful, soft, and gentle female voice)

Story: The wind blows in the streets, spins a single candy wrapper, rustles in the crowns of the park trees, pulls a 5 euro bill from an unsuspecting person on the street, with which he wants to buy a hot dog from a stand. He spins this money on the star town and quietly lands it on the kitchen windowsill through the open window of one of the apartment buildings. On the windowsill a fly buzzes around quietly.

She rustles the wings of a fly once: *"Do you see him? A small, insignificant fly, isn't it!?"*
The wind laughs and continues: *"He's closer to you than you think. He has accompanied people for thousands of years, traveling with them over seas and mountains. He is here because you are here. Your home is his home."*

The fly indifferently begins to wash its eyes: *"This little insect may seem annoying, but it's your companion. It follows you, cleaning up what is left behind from your meals."*

The fly takes off and lands on the edge of the trash can. The wind follows him and says, *"He doesn't mean you harm, but because he feeds on waste, he can carry bacteria and viruses. It's a reminder to be mindful of our waste."*

The fly flutters away, and the wind rises, leaving the window and soaring above the city: *"The fly may seem small and even bothersome in this big city, but it also shows us something important – the delicate balance between nature and civilization. Can the city coexist with nature? Can you learn from this little insect, listening to its quiet lessons on how we can live more harmoniously with the world around us?"*



Interior Architecture & Lighting

05. Interior architecture



Interior architecture and exhibition design work in tandem, creating a harmonious and effective exhibition experience.

While the exhibition itself is colorful and detailed, the interior should serve as a calming shell that brings cohesion to the space.

Material choices create a balanced backdrop that supports and complements but does not compete with the exhibition.

The path floating in the main exhibition hall gives accessibility to all. Ramp is designed according to Estonian standards; it has 5% incline and has resting platforms. The resting platforms have been placed accordingly with the exhibition content. Handrails will be also added according to the standards and can be used to place information.

Interior architecture

The interior architecture of the museum creates a serene, enveloping space, that enhances the visitor experience by focusing attention on the exhibits while maintaining a peaceful atmosphere.

Exposed CLT beams add subtle natural aesthetic that aligns with minimalist and nature-inspired theme. Between the wooden beams natural white acoustic plaster provides visually soft and clean appearance.

The walls will have soft, matte finish using white lime paint. White helps to create an airy, open environment and serve as a neutral background.

A smooth homogeneous floor is continuous and without patterns. Uniform flooring choice provides bland base, contributing to the minimalist design, while being durable and easy to maintain.

The ramp is covered with warm toned wooden deck flooring that enhances the organic, inviting feel of the space. The wooden surface complements the surrounding landscape, creating a visual flow between the islands. Additionally, wood is more forgiving underfoot, which can be more comfortable for walking up and down the ramp.

Proposed design approach prioritizes simplicity and functionality.

In suggested materials, lime paint and ramp's wooden deck can be locally sourced. Acoustic plaster can be made from natural materials (cork, clay, diatomaceous earth, lime). Materials are environmentally friendly.

All relevant regulatory acts, incl. those listed in procurement documents, have been considered and the solutions offered and planned respond fully to these requirements.

06. Ideas for lighting solutions

Lighting solution should be a mix of functional and aesthetic lighting. First, to help visitors navigate and see the exhibits clearly. Second, to create mood and highlight important objects in a subtle, refined way.

General lighting in the exhibition area will be settled with white spotlights on tracks. The tracks would be fixed to the sides of the CLT ceiling beams, to not clutter the visual experience. Areas under the islands will have white spotlights and linear lights on recessed tracks. Track lighting offers flexibility, allowing the lights to be repositioned easily to focus on specific objects or areas.

The ramp sides will have linear ambient lighting, that draws out the pathway between the islands and guides the visitors along their journey through the exhibition. The ambient light creates a soft, welcoming environment.

On the islands we suggest to use adjustable spotlights integrated into the landscape, hidden from sight so that space remains visually clean. Hidden lighting results in a more organic, immersive experience for the visitor.

Small exhibits will have additional mini spotlights inside the glass showcase. These lights need to be non heat emitting to not damage the exhibits over time. This kind of solution also minimizes the risk of glare or reflections from other light sources.





Exhibition Solutions

07. Exhibition solutions incl multimedia and special solutions

As visitors ascend the island odyssey, they are enveloped in a sensory symphony – forest whispers, salty mists, and earthy scents dissolve boundaries between observer and environment. State-of-the-art technology enhances this intimate experience, with augmented reality and interactive displays revealing micro-worlds and sweeping ecosystems. The journey alternates between lingering moments of awe and dynamic glimpses of nature’s intricate rhythms.

Surprise and wonder evolve into connection and understanding as visitors become active participants, not just spectators. By creating, manipulating, and influencing their surroundings, they unlock new perspectives and a profound sense of belonging within the natural world.



Exhibition solutions incl multimedia and special solutions

Approach to interactive exhibits

Our interactive exhibits forge tangible, immersive connections, opening new horizons. From microscopic marvels to sweeping vistas, visitors befriend non-human companions, yet grasp the context of entire ecosystems. This multiscale experience cultivates profound empathy, challenging anthropocentric perspectives and inviting a deeper understanding of our interconnected world. By merging the intimate and the systemic, we empower visitors to reimagine their place within nature's grand tapestry.



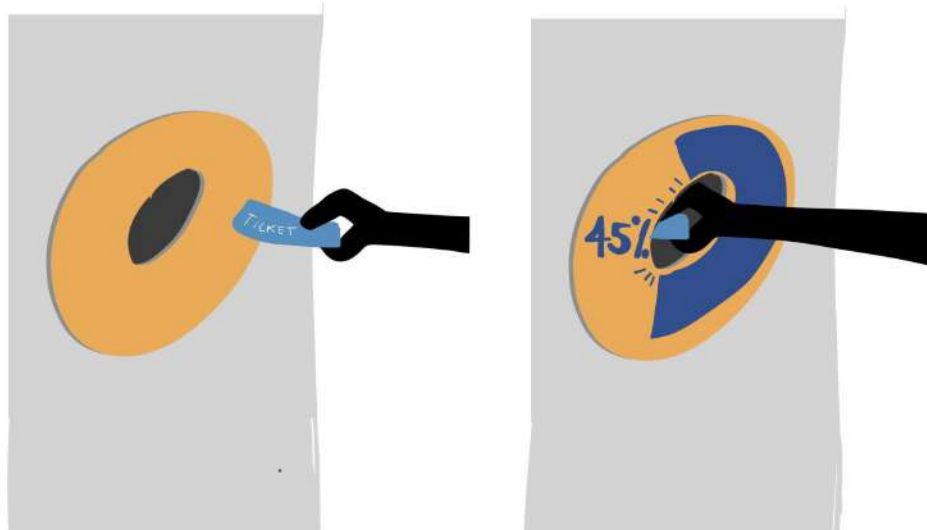
Exhibition solutions incl multimedia and special solutions

Ticket solution

To enhance visitor engagement and foster a sense of both personal and communal commitment, we will implement a self-service ticketing, similar to fast food service stands, solution featuring intuitive touch screen machines. The issued tickets will serve a dual purpose, functioning not only as entry passes but also as interactive tools via QR codes throughout the exhibition, imbuing them with meaning and transforming them into cherished mementos post-visit.

Pledge

Stick hand with
ticket into circular
screen - get %



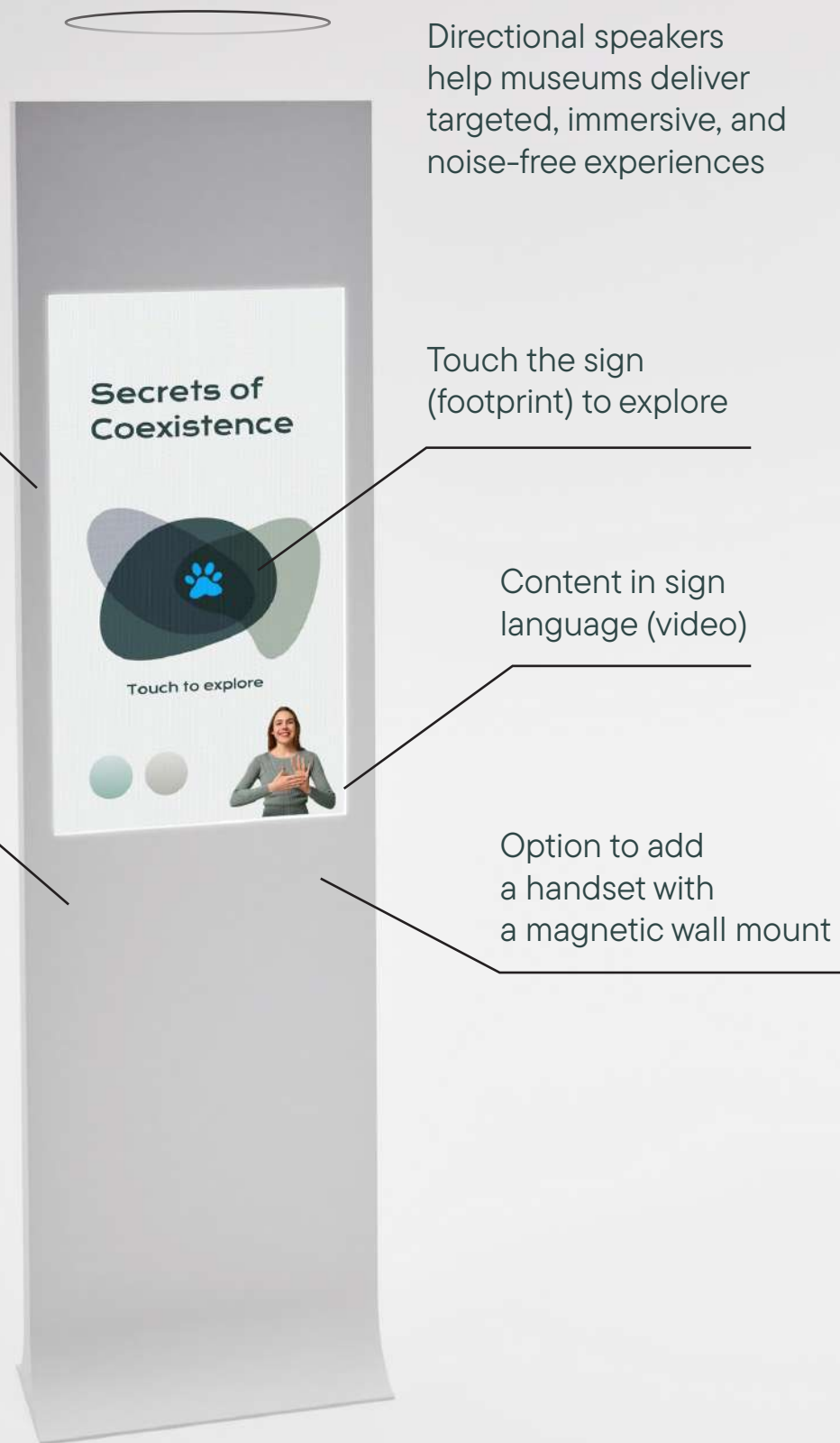
At key points in the museum, visitors will encounter circular screens inviting them to insert their ticket and place their hand. This triggers a thought-provoking question, encouraging reflection on our shared responsibility for nature. By responding, visitors make a symbolic pledge, turning their ticket into a tangible reminder of their commitment.

As they exit, visitors will scan their tickets one final time – not at a turnstile, but at the base of a striking statue of an iconic animal. This meaningful gesture, resembling a respectful bow, honors the majesty of these creatures and their vital role in our ecosystems. This final interaction emphasizes the interconnectedness of all life and reinforces the urgency of collective action to protect our natural heritage.

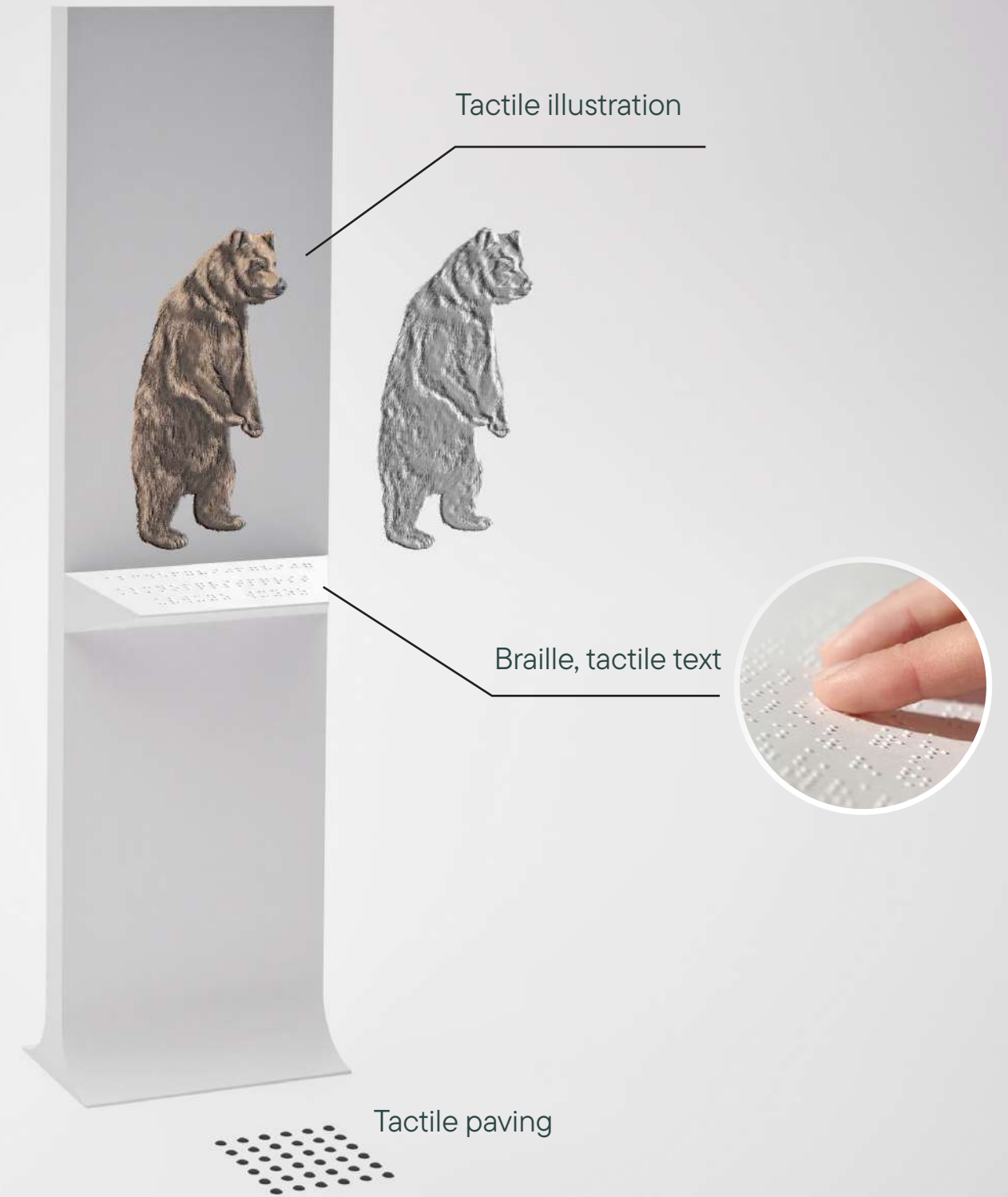
Touchscreen 43"

Personalized content by ticket or video with the theme opener

Ticket registration



Tactile illustration



Introductory Display - Theme Opener

Upon entering each area, visitors are greeted by vertical installation serving as a topic opener that serves as a multisensory gateway into the space. This interactive installation features a touch screen and tactile surfaces, inviting exploration through sight, sound, and touch. As visitors engage with the screen, they are enveloped in a symphony of nature sounds, subtle scents, and dynamic visuals that introduce the exhibition's themes. One-handed earphone speakers provide an intimate audio experience, while Braille texts ensure accessibility for all. This sensory-rich entry point sets the stage for a deeper dive into the exhibition's content, sparking curiosity and engagement from the very beginning.

Exhibition solutions incl multimedia and special solutions

Entrance to the exhibition

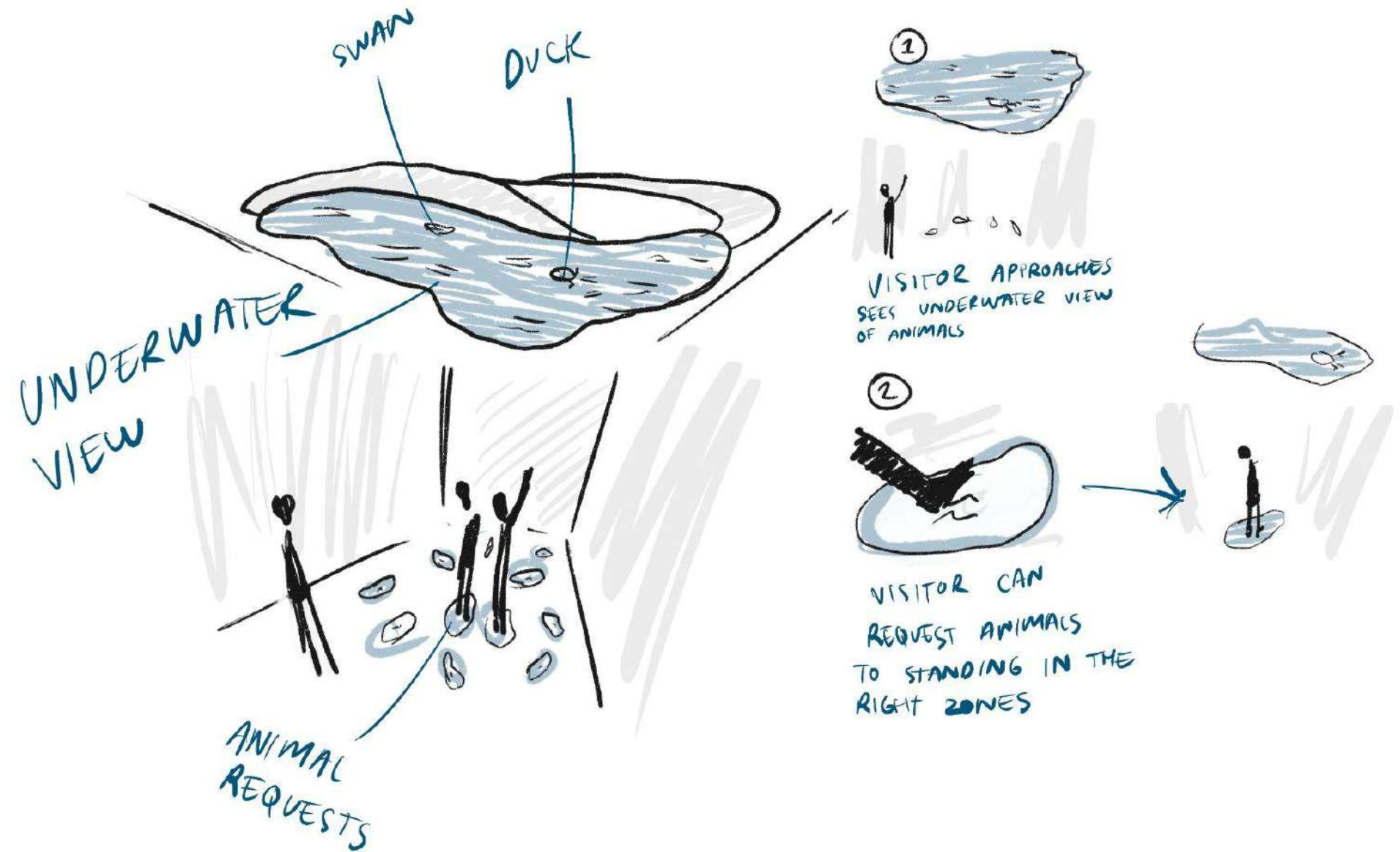
Visitors enter the exhibition through a misty tunnel reminiscent of Estonia's "5th season" fogs. Sunlight filters through the haze, revealing hidden colors and patterns that symbolize nature's unseen layers. This dreamlike experience blurs the lines between human and non-human realms, creating a sensory shift that encourages visitors to connect with the intertwined worlds showcased in the exhibition.



Exhibition solutions incl multimedia and special solutions

Beneath the Surface: A Curious Coastal Perspective

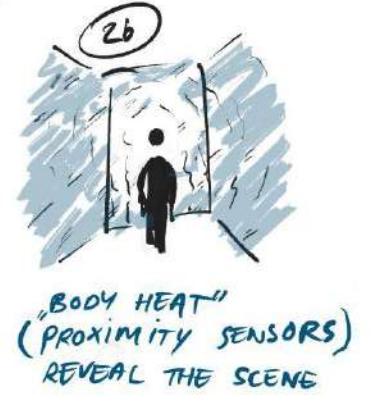
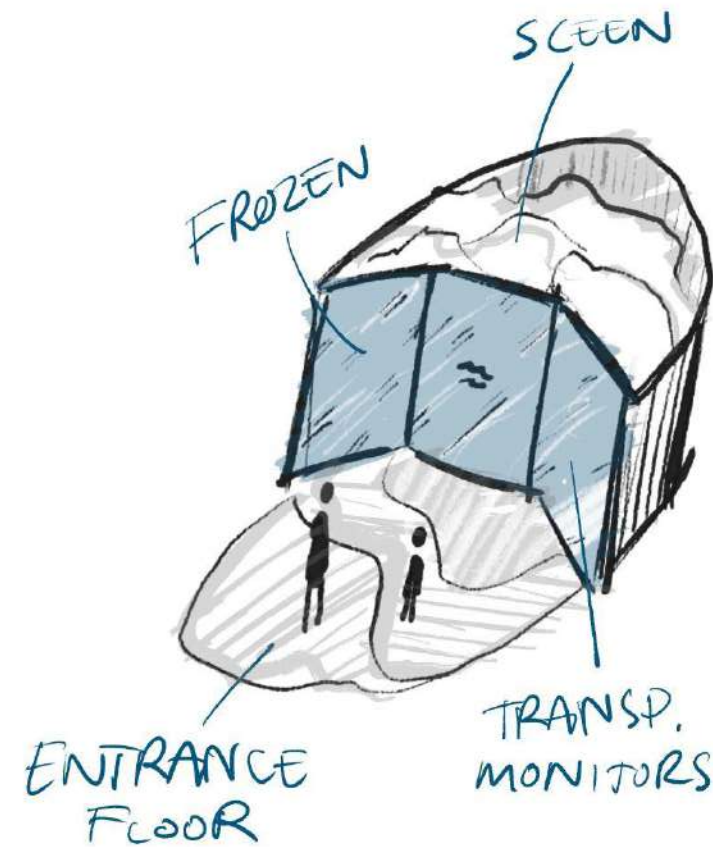
A biorama that upends expectations, offering an extraordinary glimpse of the coast from just beneath the sea's surface. Here, visitors encounter the underbelly of ducks, water birds diving through the water, and the occasional seal, its curiosity drawing it closer to investigate the visiting human observers themselves.



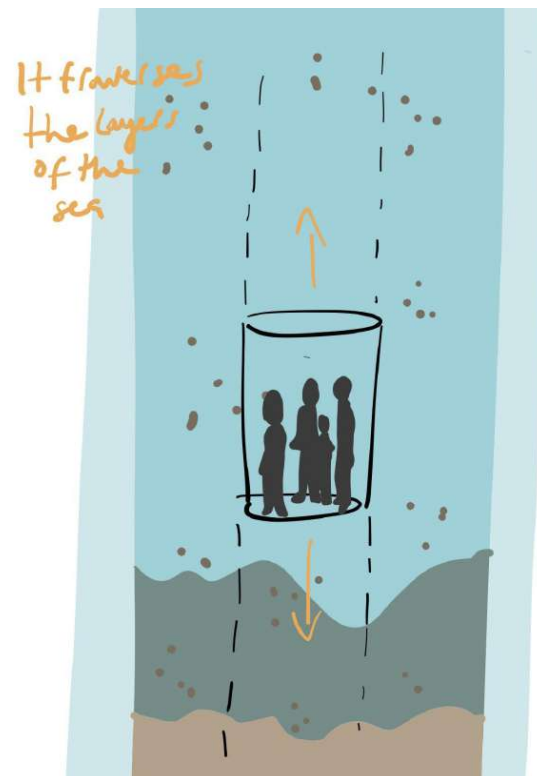
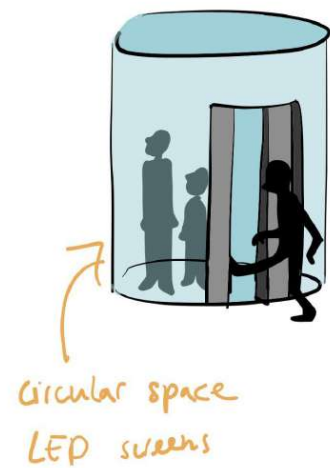
Exhibition solutions incl multimedia and special solutions

Baltic Sea Dive

As visitors enter an elevator, a storm above makes way for underwater calmness as it descends into the Baltic Sea. A view teeming with life, it moves into darker waters where the effects of human activity become clear – hypoxic zones & signs of seabed mining. But on the ascends, a calm Baltic archipelago appears, offering a vision of coexistence and a deeper understanding of the sea's fragile state.



Sea & Coast
'elevator' to
step into.



Ice Age Unveiled

The Ice Age installation begins with transparent screens, frosted to resemble frozen landscapes. As visitors approach, the "ice" melts away, revealing a vibrant biorama of an ancient world beneath the ice. Mammoths roam, glaciers glisten, and life unfolds in startling detail. This dynamic interaction bridges past and present, inviting visitors to reflect on cycles of change and the enduring traces of Earth's frozen history.

Exhibition solutions incl multimedia and special solutions

Wetland & Marshes

interactive table
with "lens"
rings with
which they
can
explore
↳ zoom
into the
marshes
& wetlands

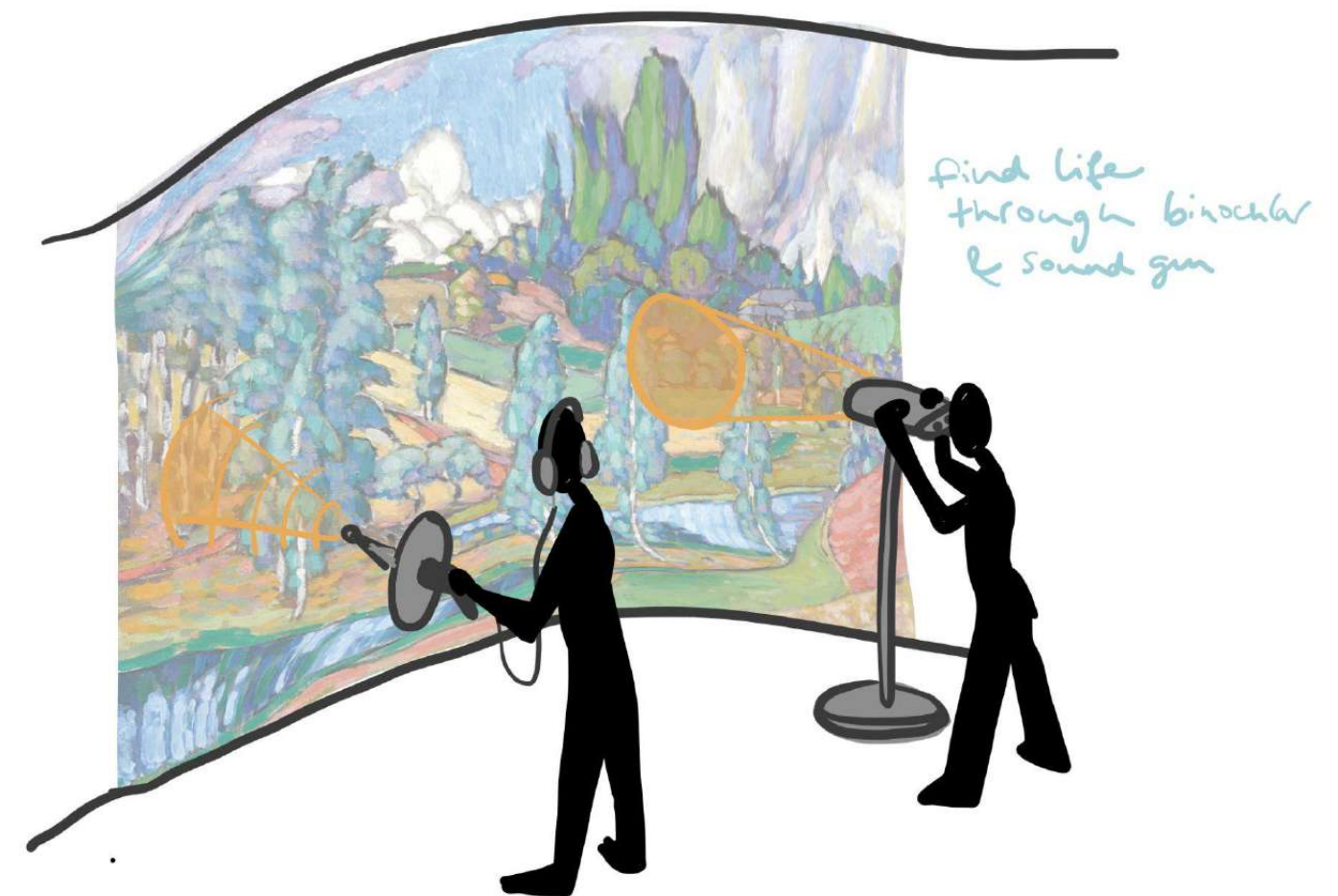


Lenses of Life

By turning tangible rings that function as lenses, users intuitively zoom in to reveal ever-smaller creatures. With each turn, new layers of the ecosystem are exposed, from the surface biotopes teeming with visible life, down to the hidden depths of the marsh. Here, in the mid-depth and deep water biotopes, anaerobic microorganisms and specialized invertebrates thrive in the low-oxygen environments. The interactive experience delves into the sediment biotopes, unveiling the rich biodiversity and complex dynamics of these natural environments.

Nature's Palette

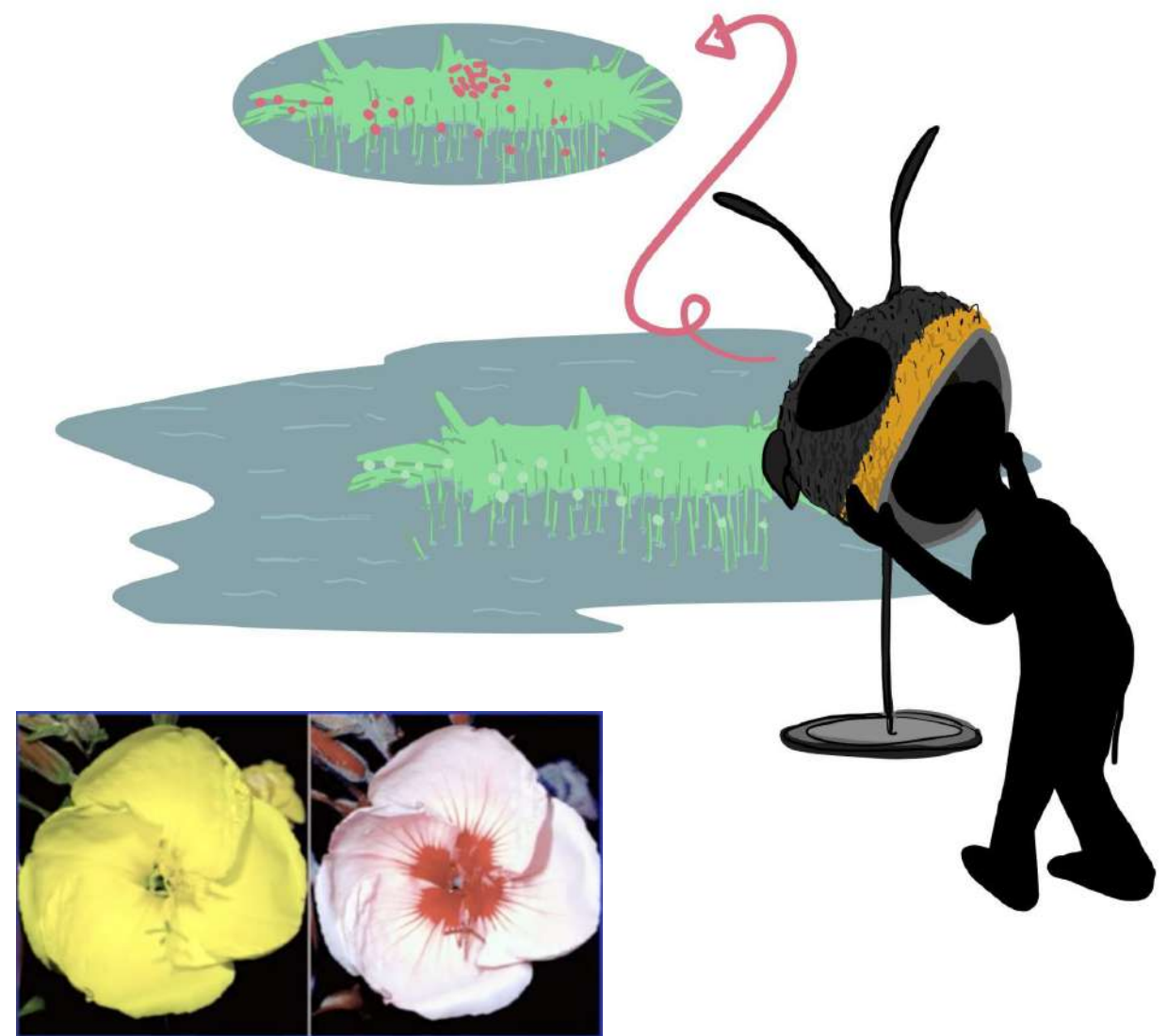
Visitors are immersed in Konrad Mägi's lake painting in an unprecedented way. Through directional microphones and augmented binoculars, hidden beings lurking within the artwork are unveiled. With each shift in focus, new secrets are revealed, transforming the static image into an interactive, multi-sensory exploration. Art and technology are blended to create a dynamic, mystical experience, inviting visitors to discover the unseen.



Exhibition solutions incl multimedia and special solutions

Sound search

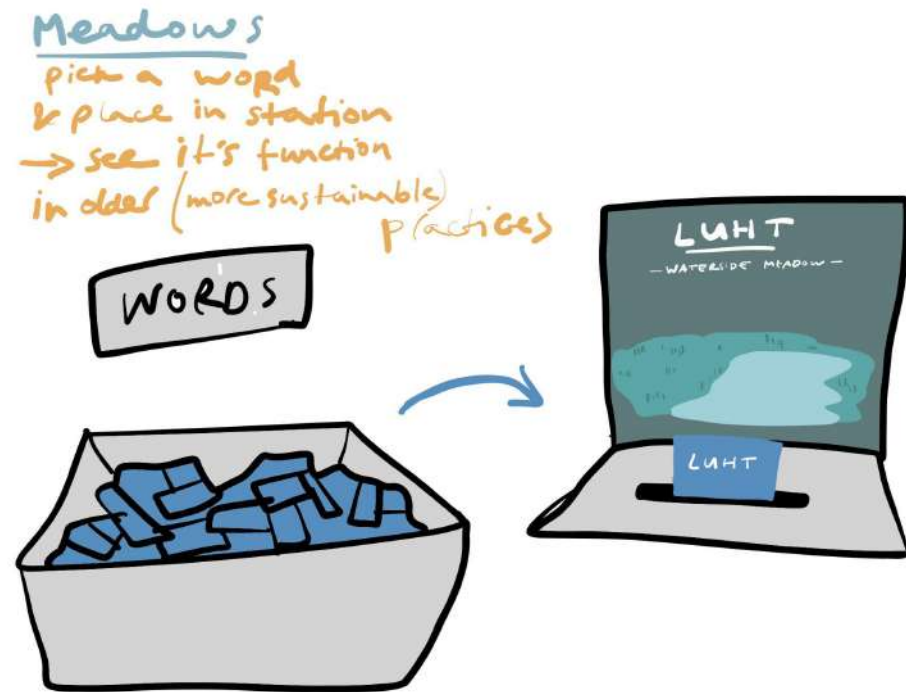
In an installation set within a meadow, visitors are equipped with a unique metal detector-like device to explore the sonic landscape hidden beneath their feet. As they sweep the ground, users hear the amplified sounds of insects, worms, and tinier non-human beings through headphones. Each discovery unveils the symphony of life typically unnoticed, offering an immersive and auditory journey into the microcosm of the meadow. This interactive experience invites visitors to connect with the unseen and unheard inhabitants of the natural world.



Be the Bee

In an installation situated within a meadow, visitors are invited to perceive the world through the eyes of a bee. By placing their head inside a large bee head sculpture, users are immersed in an infrared view of a meadow. This unique perspective reveals the hidden landing strips on flowers, known as nectar guides, which are typically invisible to the human eye. Allowing visitors to walk a mile in the bee umwelt.

Exhibition solutions incl multimedia and special solutions

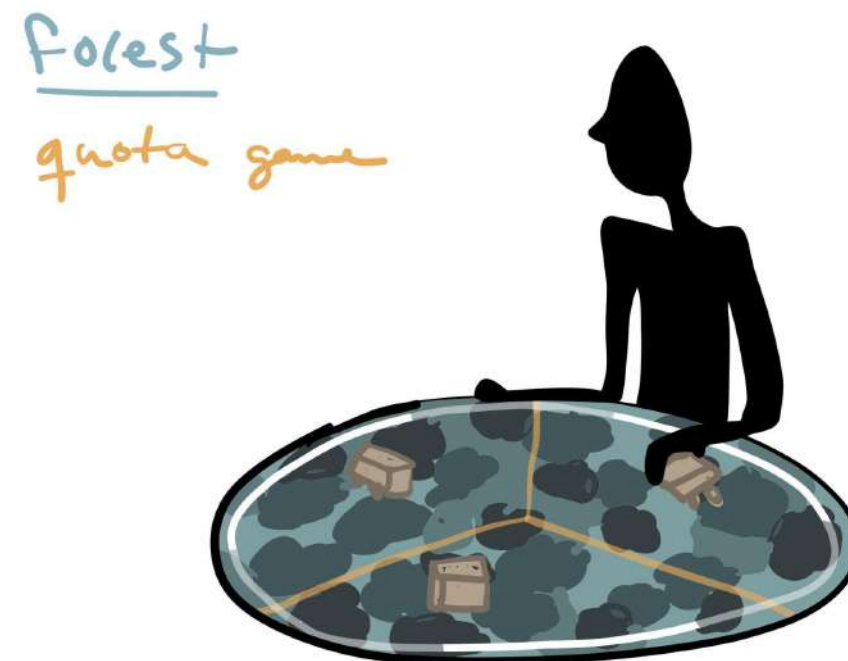


Lexicon of the Life

In an installation that reverses the nature experience; visitors are invited to explore how nature has profoundly shaped the Estonian language and culture. The experience begins with a serene walkthrough of a stylized Estonian landscape, where interactive elements trigger auditory and visual representations of nature's influence on language. Visitors discover the multitude of onomatopoeic words in Estonian, illustrating the diverse sounds of nature, and how these have enriched the language's expressiveness teaching Estonians and foreigners alike the intrinsic interrelation of culture and nature.

Deforestation Dilemma

In group experiences visitors are invited to role-play as foresters, competing against each other to harvest a virtual forest in a set amount of time. Equipped with realistic tools, participants initially strive to clear-cut as many trees as possible, fueled by competition. However, as the forest disappears, the ecosystem's decline becomes evident, with the once-rich tapestry of life diminished. Over time, players realize the long-term impact of their actions, understanding that sustainable forest management is key to maintaining a healthy ecosystem and producing quality wood. The experience encourages reflection on responsible resource use and the importance of environmental stewardship.



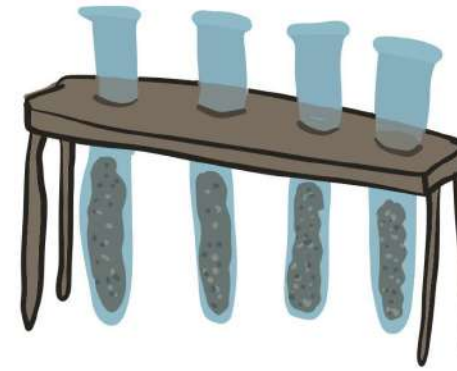
Exhibition solutions incl multimedia and special solutions

Urban animals

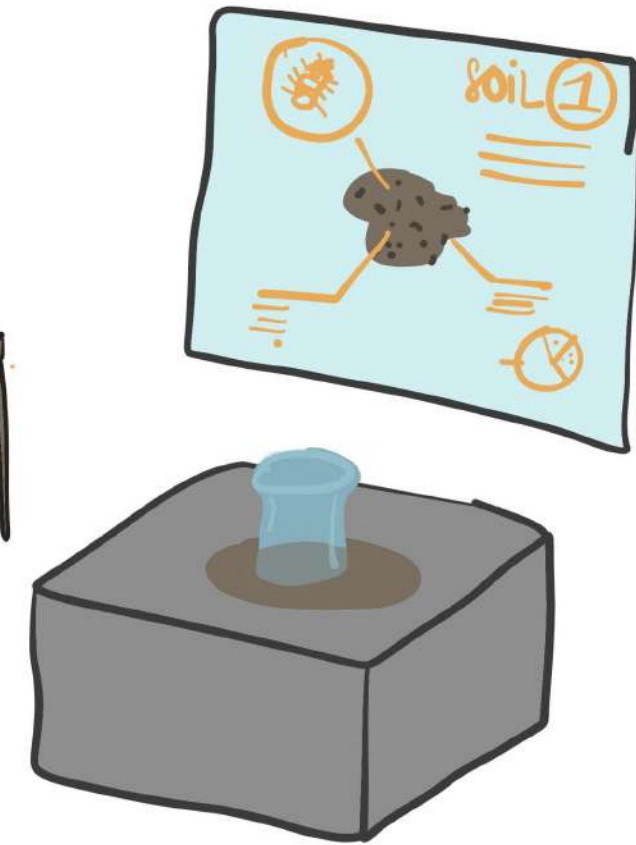
In an interactive installation exploring synurbanization, visitors are challenged to envision and design future cities that genuinely coexist with nature. Through an engaging city-building game, participants learn that incorporating nature is not merely symbolic, but essential for a healthy ecology. The goal is to create urban spaces that accommodate everything from beavers to diverse biota, and other wildlife, understanding that their presence indicates a thriving ecosystem. Players must balance development with environmental stewardship, designing cities with integrated wetlands, green corridors, and nesting sites. The experience encourages visitors to rethink urban planning and embrace a future where cities and nature coexist harmoniously in a future “sponge city”.



AGRICULTURE
LANDSCAPE



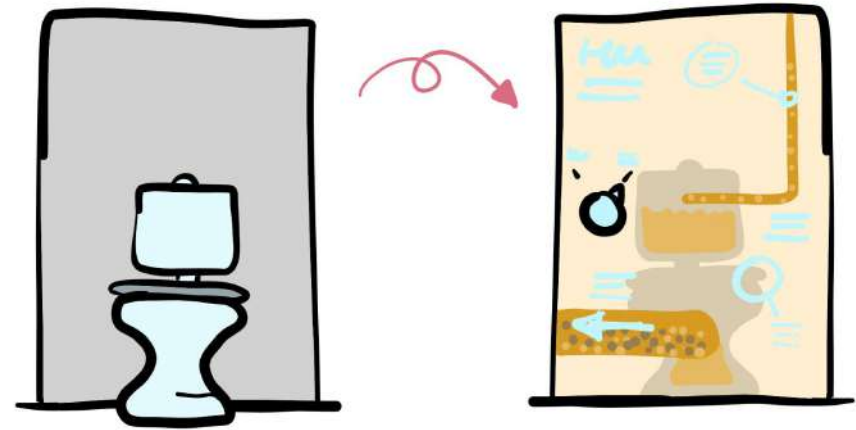
take a sample
and put in
scanner



Roots of Renewal

In the city hands on urban farming is is engendered visitors delve into the fundamentals of soil health and sustainable cultivation. Equipped with test tubes, participants collect soil samples from an urban garden and analyze them using a specialized scanner. On-screen displays reveal insights into the soil's composition and nutrient levels, highlighting the importance of wise crop rotation and strategic planting. Visitors learn how certain plants naturally enrich the soil with nitrates, eliminating the need for artificial fertilizers. Through hands-on exploration, the installation fosters a deeper understanding of sustainable urban agriculture, encouraging visitors to adopt eco-friendly practices in their own communities.

Exhibition solutions incl multimedia and special solutions

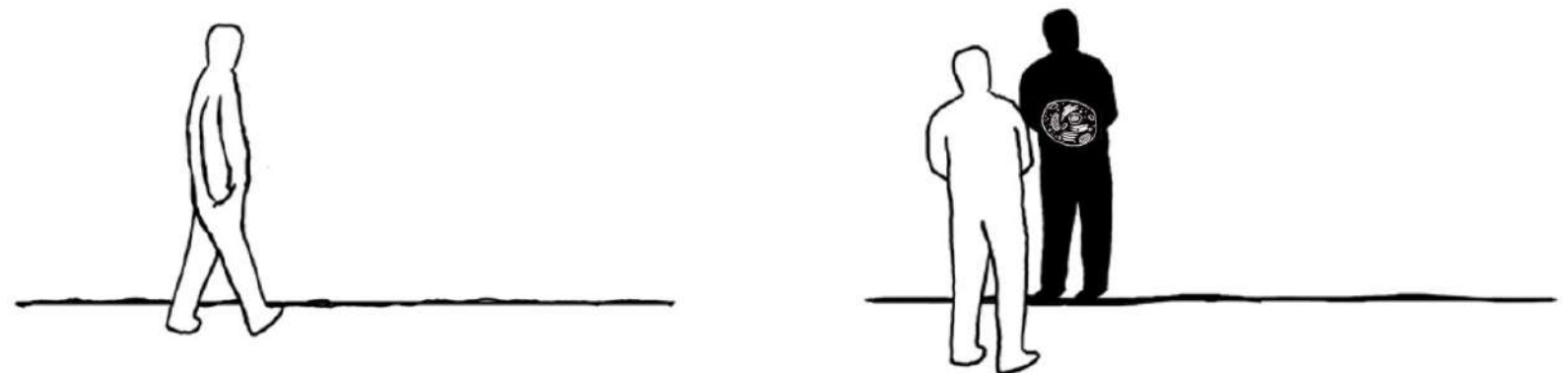


Sustainable Domesticity

In a thought-provoking installation, visitors are offered a glimpse into the future of domesticity, where the infrastructural functions we take for granted are reimagined for a sustainable world. The exhibition explores how our stance towards natural resources will necessitate a recalibration of urban infrastructure, with everyday objects like radiators and toilets evolving to integrate seamlessly with eco-friendly technologies. Visitors can examine the backsides of familiar items, revealing innovative adaptations such as radiators designed for efficient heat exchange using renewable energy sources, and toilets equipped with advanced water recycling and composting systems. Encouraging reflection on the future of our cities and the critical role of sustainable design in preserving natural resources.

The life in You

In an apartment setting a mirror installation invites visitors to explore the ecosystem that thrives within them. As visitors approach, the mirror comes to life, revealing a digital overlay of the myriad biota and other tiny non-humans sharing our bodies. These microscopic organisms swirl and multiply, illustrating the complex web of life that comprises our inner ecosystem. The installation responds to the viewer's movements, dynamically adjusting the representation to mirror their gestures and poses. This captivating experience challenges the notion of the self as a singular entity, instead presenting us as a symbiotic community of interdependent organisms. It invites visitors to embrace the idea that life and the environment are not merely external phenomena but integral parts of our being. By highlighting the unseen world within us, the mirror installation fosters a deeper understanding of coexistence and interconnectedness, anchoring us in the profound realisation that we are, quite literally, an ecosystem unto ourselves.



Exhibition solutions incl multimedia and special solutions

Cycles of Life

In a sprawling, immersive group installation, visitors are enveloped in a visualization of the interconnected cycles that govern life on Earth at every scale. From the cosmic dance of galaxies to the subtle shifts of the Milankovitch cycles, the installation weaves together the intricate tapestry of time and existence. Guests journey through the vast carbon cycles, both grand and minute, and encounter the enduring lifespans of ancient lichens and centuries-old forests. The experience culminates at the human scale, highlighting the daily rhythms of day and night. Through captivating visuals and interactive elements, visitors gain a profound understanding of the interconnectedness that sustains life, fostering a sense of awe and responsibility for our shared planetary home.



Display solutions

Diorama design solutions

A clear example of our approach to interconnectedness is brought to bear in our diorama designs aimed at showing how the environment is not just over there but intrinsically integrated in our being come to show in our approach to, and how we aim to rethink the diorama concept. Traditional dioramas separate humans from nature with a literal sheet of glass, whereas our immersive bioramas instead invite visitors to step into and coexist within natural environments by blurring those borders. By immersing themselves in these spaces, visitors understand their role as a part of nature, fostering a sense of unity and shared responsibility.





The static classic presentation of exhibits is further enhanced by a dynamic video projection on the background wall and a rock that appears to "extend" partially through the glass, creating a three-dimensional and realistic effect. The projection allows for the display of unique nature footages as well as infographics.

Display solutions

Diorama design solutions

The main goal of the museum is to present its existing collections in the most attractive and engaging way possible. Our demonstration diorama belongs to the thematic area "Coast and Sea", from which we have developed the section "Coast" for this display.

The diorama is located beneath an overhead walkway. Its total dimensions are 4 meters in length, 1.5 meters in depth, and 2.1 meters in height.

The "foundation" of the diorama is formed by a base covered with authentic, natural materials. To enhance the visibility of the animals and birds, they are elevated above the floor level, but this is done in a way that maintains a natural aesthetic – using natural terrain forms and their replicas.

The "heroes" of our diorama include a seal resting on a rock by the shore, as well as birds flying overhead and those active on the beach. In addition to animals and birds, the diorama also features bird nests with eggs, coastal plant species, and even elements like seaweed banks, adding an authentic touch to the scene.

To bring the static taxidermy specimens and plants to life and make the diorama more contemporary, we use a video projection on the background wall. This projection allows for the depiction of various weather conditions and seasons – from stormy seas in the background to groups of seals swimming in the water or a distant pier. This dynamic element helps create a diverse and engaging experience for visitors.

Unlike land-themed dioramas, this diorama's front is covered with glass, which provides better protection and preservation of the exhibits. The static presentation is further enhanced by a dynamic video projection on the background wall and a rock that appears to "extend" partially through the glass, creating a three-dimensional and realistic effect. The projection allows for the display of unique nature footage as well as infographics.

Access to the interior of the diorama has been solved in a practical and discreet manner – a subtle door is located in the side wall of the diorama. This door does not interfere with the viewer's direct line of sight, as it is positioned on the left side and harmonizes with the overall aesthetic of the space.

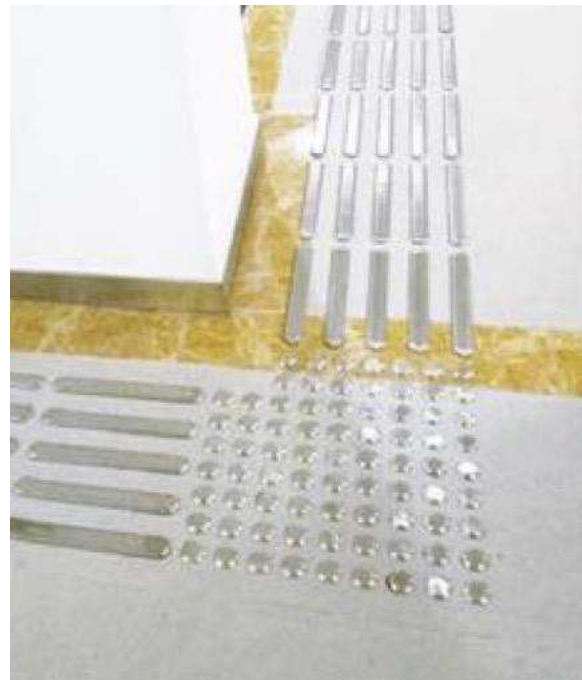
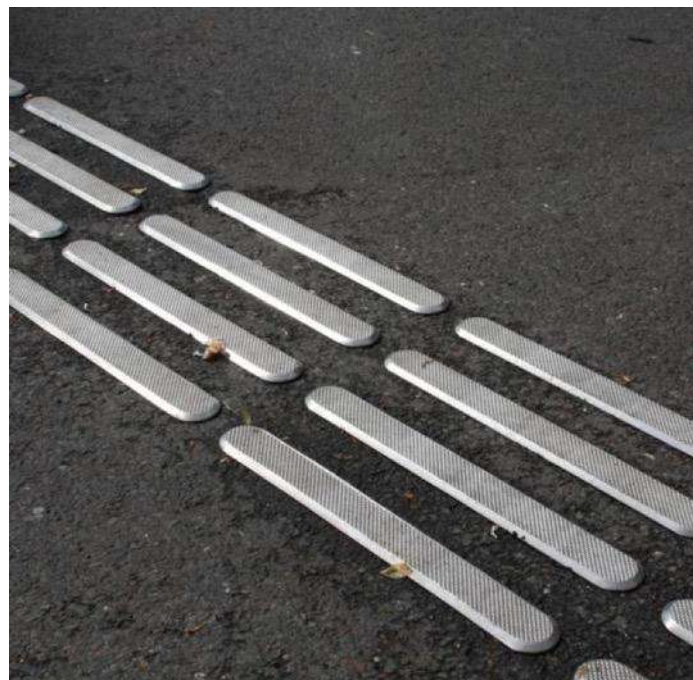
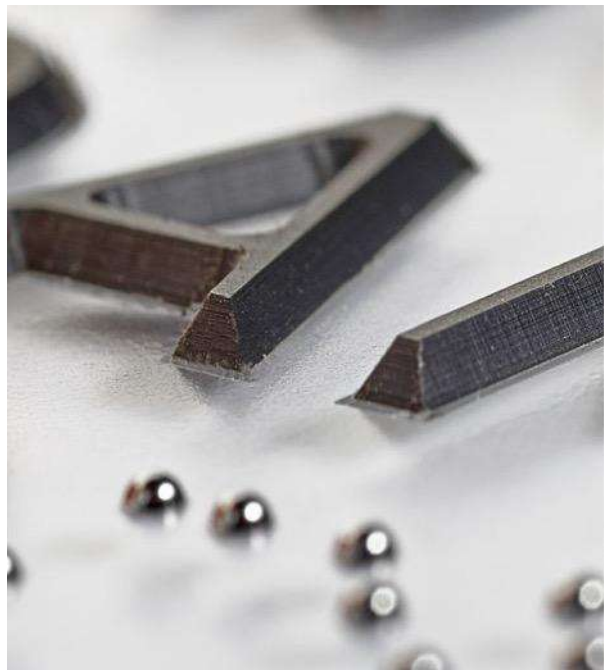


Accessibility



08. Accessibility

Information communicating an inclusive topic such as coexistence needs to be **accessible to everyone**, no matter the age or disability. Everyone has the right, possibility, and freedom to have a say, discuss, ask questions and find answers on nature-related topics. Because of this, the design of the museum has a great emphasis on accessibility. In addition, the exhibition can be experienced through all senses so that everyone could have their own experience and understanding within the museum.



Accessibility

Exhibition for all

We aim to meet the highest accessibility standards, adhering to the Smithsonian Guide for Universal Access in both physical and digital design. Our goal is to make the exhibition welcoming and engaging for as many people as possible, ensuring clarity and usability for a diverse audience.

We prioritize usability and will conduct rigorous testing to ensure our designs meet the latest standards in human-computer interaction and accessibility, following ISO 9241-11. Our approach goes beyond current standards, as we are developing new interaction methods and technologies. Our team is equipped with the expertise to design these innovations in a natural, intuitive, and immersive way, striving for fully engaging experiences that encourage visitor interaction.

Usability

Physical usability

The exhibition will adopt an inclusive design approach, ensuring that all areas are safely accessible to all visitors, including wheelchair users and parents with strollers, without physical barriers, height differences, or obstacles. For that (among others), the ramp is designed as a trail running through different landscapes on the “islands”, enabling a large number of visitors (incl. wheelchair users) to experience the exhibition and look at the exhibition at different levels.

Emotional usability

We will emphasize clarity and usability in order to make as many people as possible feel welcome and attracted to interact with our exhibits. Among others, there are places designed e.g. for guided tours, for resting, for hands-on activities. For children there is separate area with mother-and-child room as well as activity corner inside the main exhibition area. The areas with more calm and relaxing activities alternate with areas with more active activities. The topics are presented in a way that more cheerful topics alternate with more serious, thought provoking topics, creating different emotions.

Accessibility

Usability

Communicative usability

Special attention will be given to the visibility of themed areas, titles, and key objects to help visitors navigate and understand the exhibition. Elements such as contrast, scale, height, viewing angle, and legibility of text and images will follow best practices for accessibility.

This includes offering content in multiple languages and providing instructions in easily readable text or through visual communication and using also tactile communication means. For persons with visual disabilities, sounds, audio guides, landmarks on the floor, tactile communication etc. will be used. Some exhibits could be also touchable (e.g. 3D printed or clay figures of some exhibits).

Mental usability

The texts will be in easily understandable language which is comprehensible even to an audience without special knowledge.

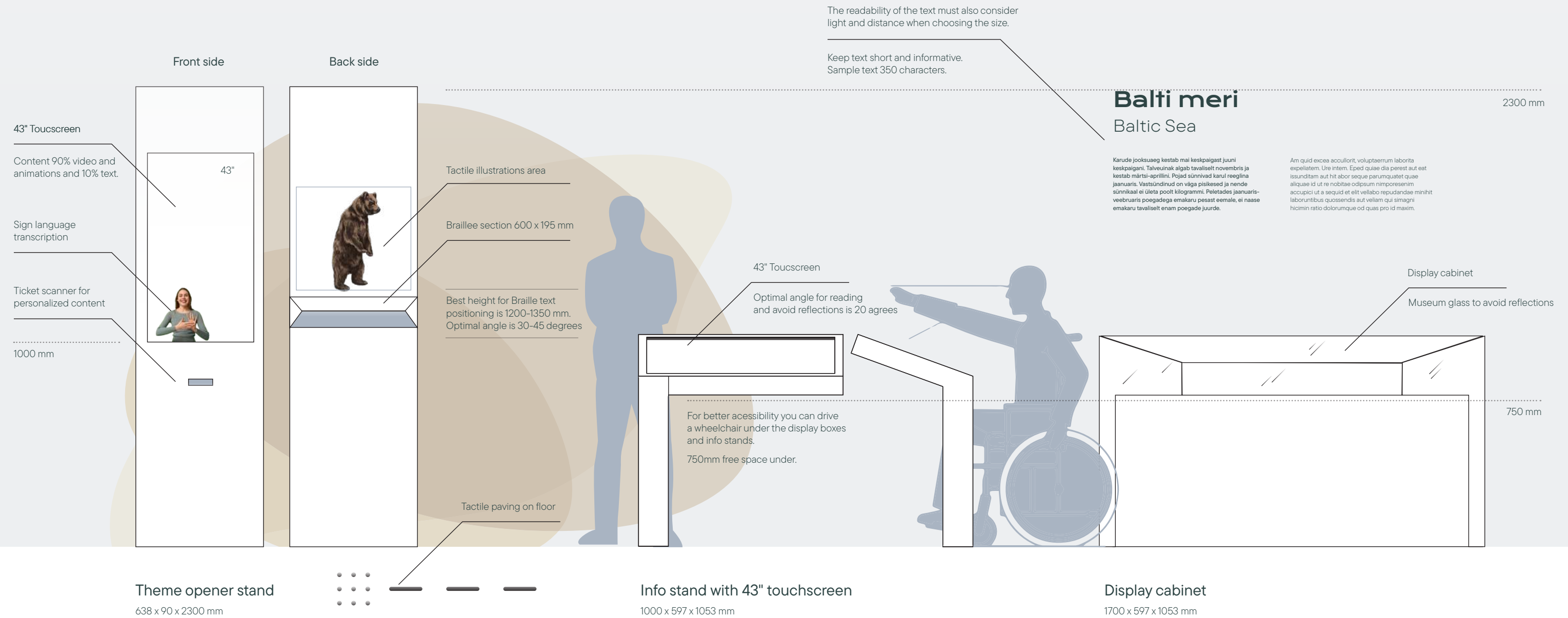
For persons with intellectual disabilities, methodologies based on feelings and senses, clear and simple language, clear signs will be used.

Social usability

Our tangible as well as digital interfaces should have affordance that speaks to people of different age groups, cultures and educational level.

Accessibility

Display and screen solutions that also accommodate people with special needs





Sustainability

09. Sustainability

Durability

The design prioritizes durability by selecting high-quality materials that can withstand heavy visitor traffic and meet the demands of public spaces. By choosing materials that last, we reduce the need for frequent replacements, which helps conserve resources and minimize environmental impact. Long-lasting materials contribute to a sustainable environment by reducing waste and ensuring resilient space.

Energy use

The lighting and multimedia systems are designed to conserve energy by operating only when needed. Multimedia devices automatically power down at night and activate in the morning, ensuring they are not in use during non-operational hours. Additionally, we incorporate motion sensors in appropriate areas to control lighting, minimizing energy use when spaces are unoccupied.

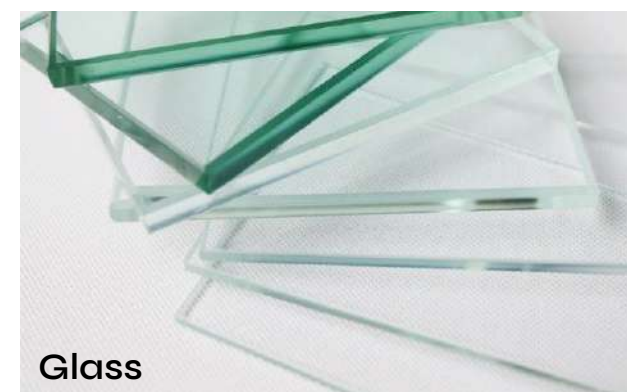
Material selection

In alignment with circular economy principles, we select materials that can be recycled or repurposed at the end of their lifespan. For this exhibition, we focus on recyclable materials like metal and glass, which not only provide durability and aesthetic appeal but also support environmental sustainability by facilitating recycling and reducing landfill waste.

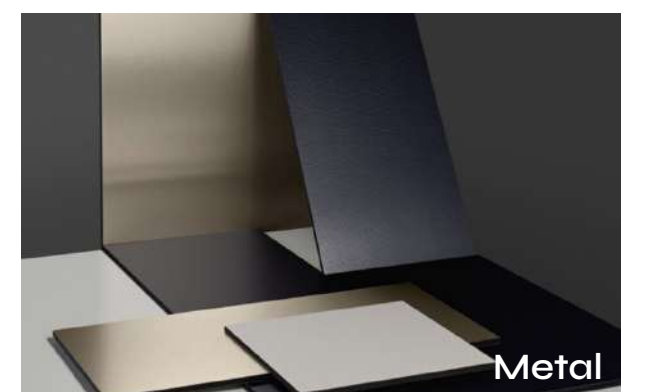
We prefer local and eco-friendly materials that need less transport. For example, local wood for the floor of the pathway. We also take CO₂ footprint into consideration.



Montenegro, Nina. *Against Forgetting*. 2015.
Wax rubbing of tree, fingerprint. 20 in x 20 in.



Glass



Metal



3D Views

11. 3D views

3D views on following pages will give an overview of the conceptual solution proposed.

A more detailed description of the content and exhibits planned to be presented in the various sections of the exhibition, is given in next chapters.





A view from the balcony to the floating pathway and islands

The ramp runs between thematic islands, enabling like a walk in Estonian nature where different landscapes alternate with each other. It also allows viewing the thematic islands from different angles and levels, creating a deep and multi-layered exhibition experience.



A view to thematic island “The Lakes and Rivers of Estonia”

In the beginning of the journey upwards the ramp that runs between thematic “islands”



A view from the ground floor.

Thematic island “In the Heart of Estonian Mire” on the right. While pathway is ascending and connecting floor with balcony additional spaces for visitors will be under it.



Science Theatre on ground floor

This is an example how we can use additional space created by floating ramp and islands.



A view to interactive exhibit based on Konrad Mägi painting, on ground floor, area H

Through directional microphones and augmented binoculars, hidden beings lurking within the artwork are unveiled. With each shift in focus, new secrets are revealed, transforming the static image into an interactive, multi-sensory exploration. Art and technology are blended to create a dynamic, mystical experience, inviting visitors to discover the unseen.



A view to thematic island “In the Heart of Estonian Mire” in the foreground, background the view to thematic island “The Meadows of Memory”



A view to thematic island “The Meadows of Memory”



A view to the balcony from the highest thematic island “Think-tank” by the ramp



A view to thematic islands by the ramp from the balcony



A view downwards to forest themes on thematic islands by the ramp



A view to thematic area “Primeval Forests and Nature Conservation” by the ramp

Protected animal and bird species are also exhibited in this area.



A view to thematic area “Forest Wall” along the ramp

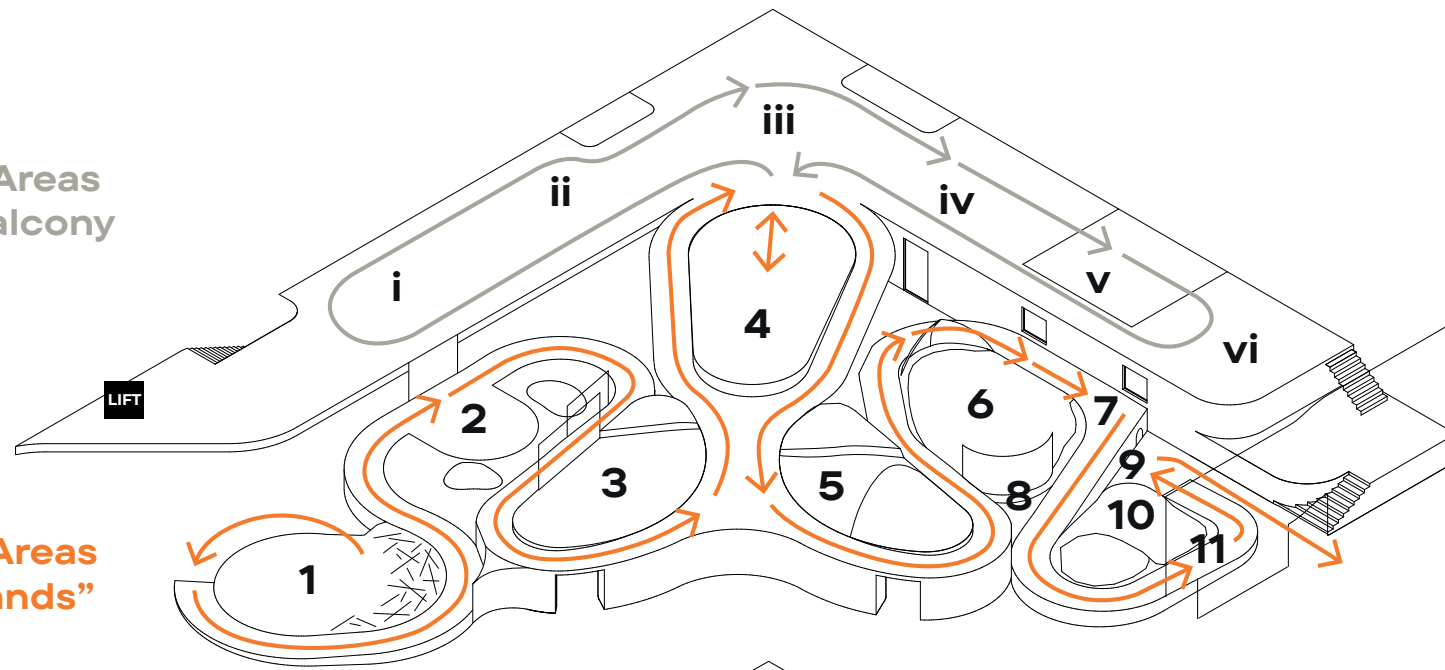
The wall is viewable with augmented reality binoculars to see the same forest in different seasons and discover animals and birds living in this forest.



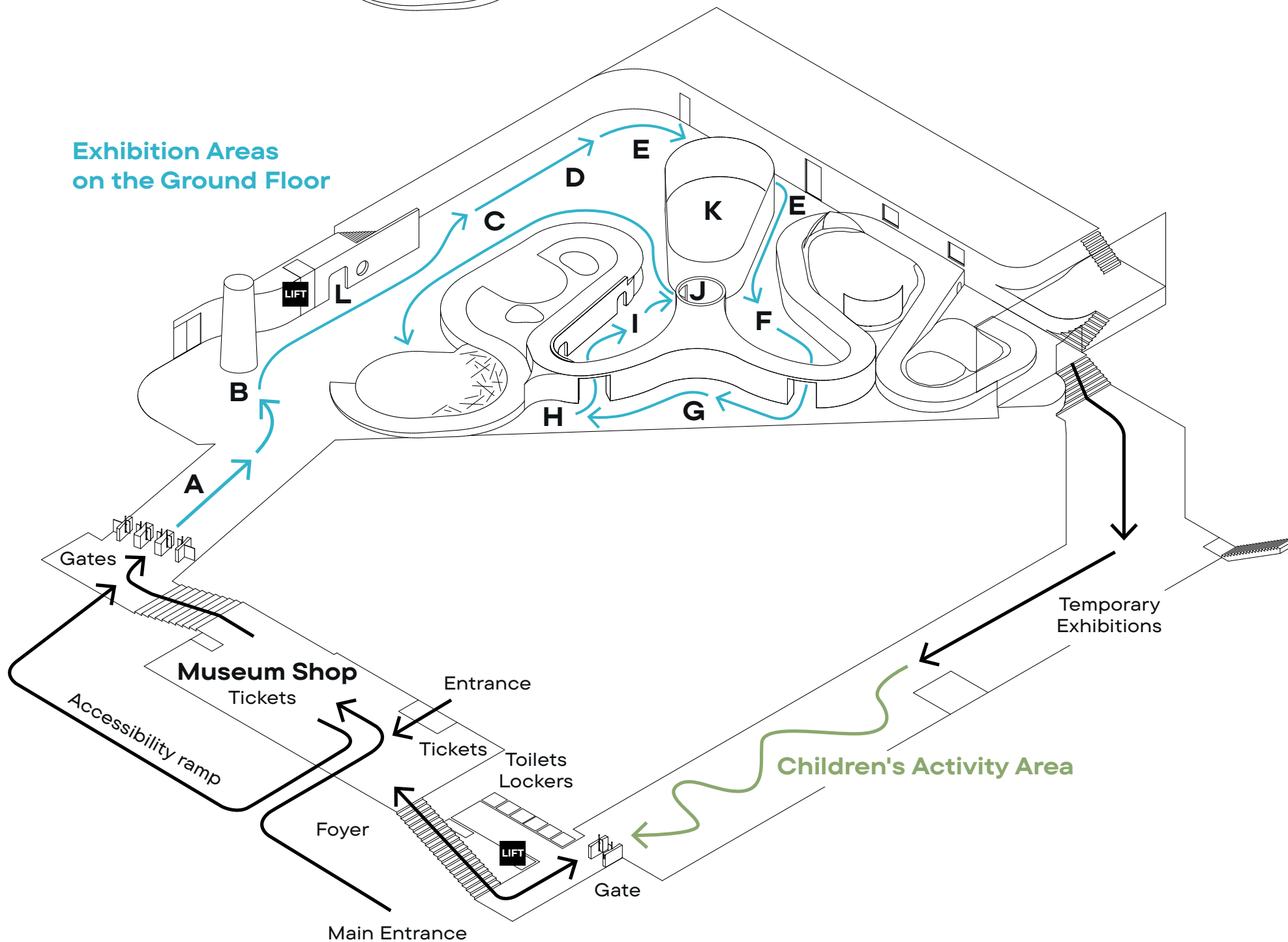
Visitor Journey

Exhibition Areas
Museum Balcony

Exhibition Areas
on the "Islands"



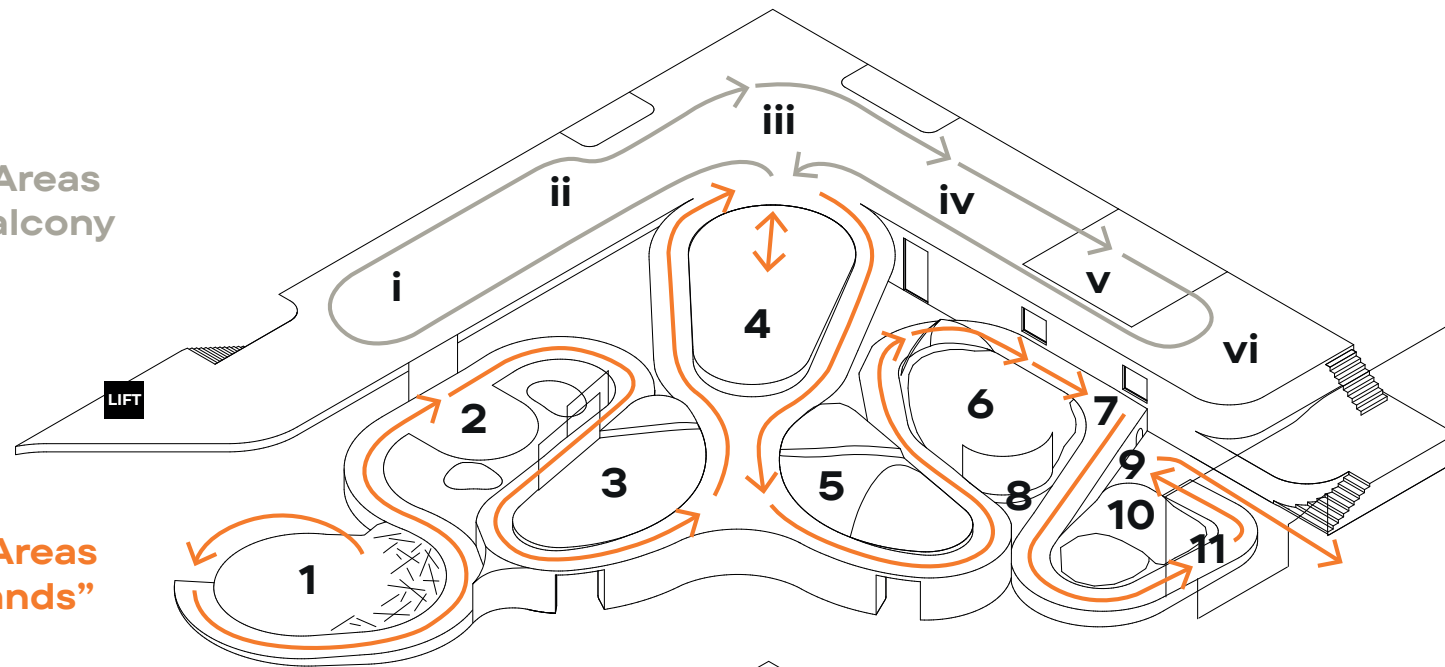
Exhibition Areas
on the Ground Floor



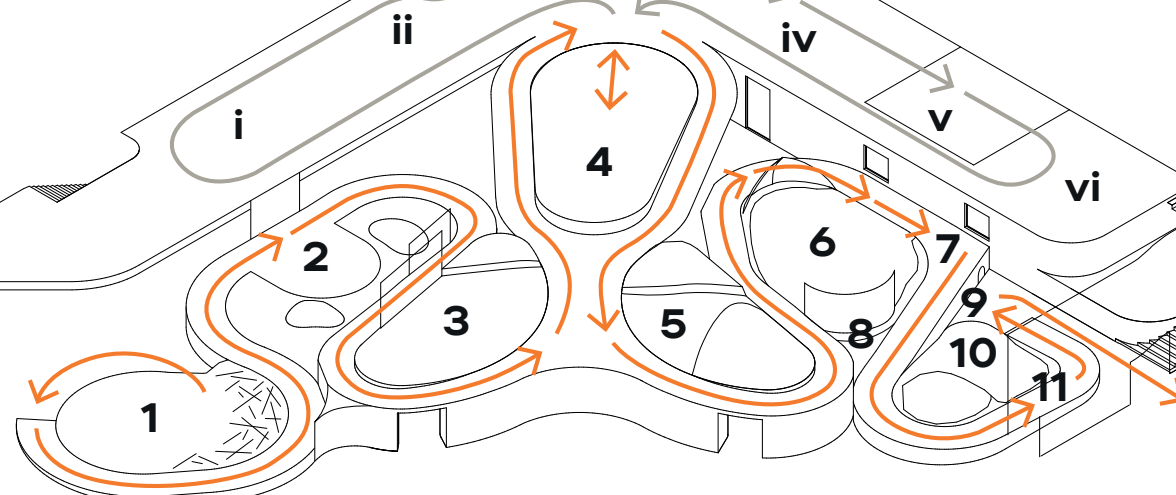
12. Visitor journey

Leaving aside the fascinating outdoor area of the museum, the in-door visitor journey begins as the guests enter the museum front door. The journey is visualized on the figures aside and on next page. The following sub-chapters will detail the journey through the museum main exhibition hall.

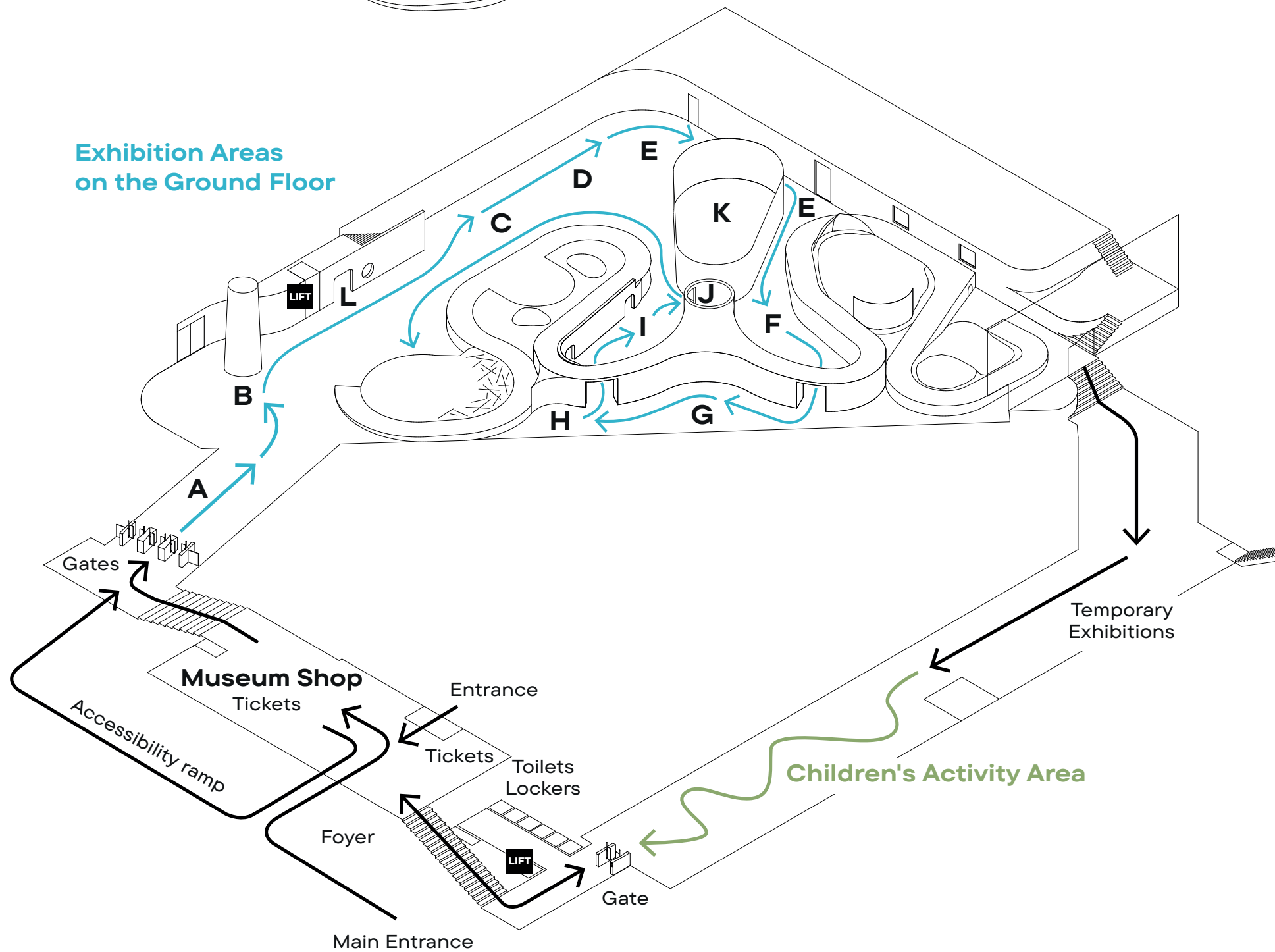
**Exhibition Areas
Museum Balcony**



**Exhibition Areas
on the "Islands"**



**Exhibition Areas
on the Ground Floor**



Topics covered on the balcony:

- Area i - Global Challenges
- Area ii - Urban Nature: A Moment of Peace
- Area iii - Futures in Green: Solutions for Tomorrow
- Area iv - From Earth to Table: Challenges and Solutions in Agriculture
- Area v - City Life: Nature in Our Homes
- Area vi - Benefits of Nature

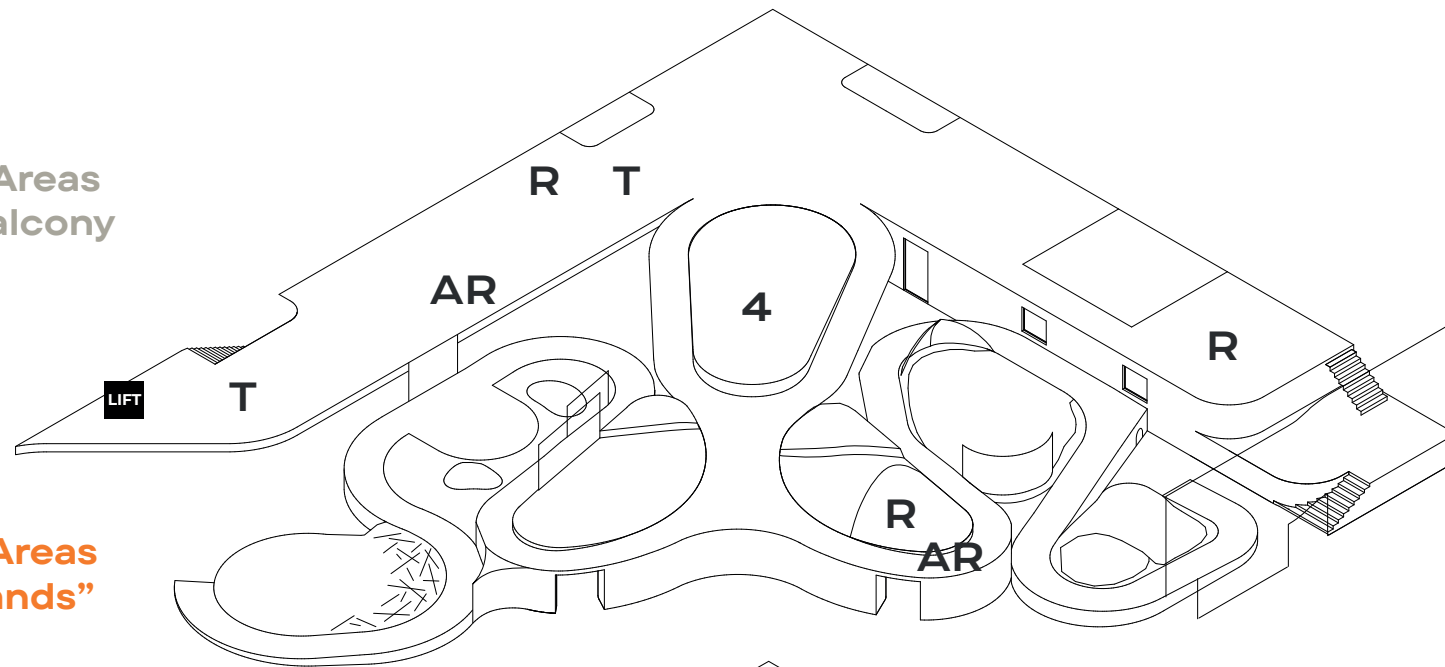
Topics covered along the ramp:

- Area 1 - The Lakes and Rivers of Estonia
- Area 2 - In the Heart of Estonian Mire
- Area 3 - Meadows of Memory
- Area 4 - Think-tank
- Area 5 - Estonian Wildlife and Skyscapes
- Area 6 - The Forest Web: Energy, Cycles, and Micro Life
- Area 7 - *Umwelt*: Jakob von Uexküll's Legacy
- Area 8 - Wild Boar Family
- Area 9 - Badgers' Cave
- Area 10 - Primeval Forests and Nature Conservation
- Area 11 - Forest Wall

Topics on Ground floor:

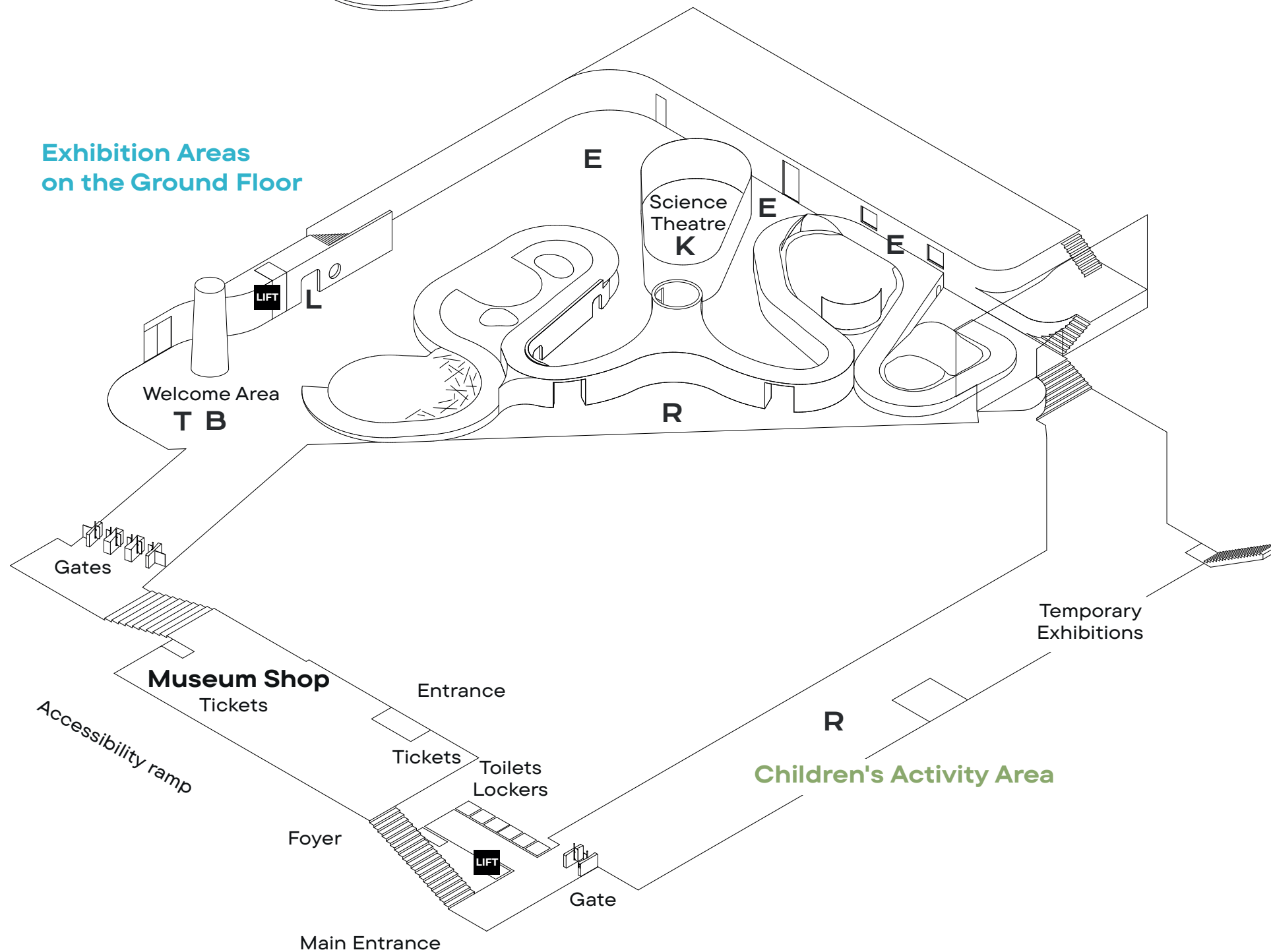
- Area A - The Entrance Tunnel
- Area B - Welcome Area
- Area C - Global Energy Flows and Nutrient Cycles
- Area D - Curiosity Corner
- Area E - Behind the Scenes: Museum Research in Action
- Area F - Ancient Waters: Estonia's Geological Past
- Area G - Formation of the Land
- Area H - Interactive landscape
- Area I - Life of the Baltic Sea
- Area J - Baltic Sea Dive
- Area K - Science Theatre
- Area L - Children's Mini-Exhibition with Aquarium

Exhibition Areas
Museum Balcony



Exhibition Areas
on the "Islands"

Exhibition Areas
on the Ground Floor



Layout by room functions

The exhibition area has areas with different functions shown in the figure aside:

- B** - Welcome area on ground floor
- K** - Science theatre, multifunctional activity area on ground floor
- L** - Small kids area under stairs
- E** - Areas showing museum research work in action
- T** - Gathering areas for guiding tours
- R** - Seating and relaxing areas
- 4** - Think-tank
- AR** - Augmented Reality Binoculars

Visitor journey

Visitor Journey through Core Exhibition Hall: the Ground Floor

Designed for a smooth and logical progression, the exhibition creates a cohesive narrative that unfolds from Estonia's natural and cultural heritage to global challenges and potential solutions.

Upon entering through the **Entrance Tunnel** (area A), the visitors are first greeted by the **Welcome Area** (area B), where they are introduced to the overarching story of the core exposition and given the necessary visitor journey guidance on the "Welcome to the Exhibition" screen. This initial section sets the stage for the entire museum experience, presenting the core focus: the interconnectedness of nature, human activity, and the challenges and solutions that will shape the future of our planet.

The journey then dives into exhibition area laying the scientific foundations, as visitors explore the topics on the ground floor such as the **"Global Energy Flows and Nutrient Cycles"** (Area C) and **"Behind the Scenes: Museum Research in Action"** (Area D). These topics will provide insight to the natural processes and energy flows that underpin all life on Earth and highlight the importance of scientific research that shapes the way we see and understand nature around us. In this section of the exhibition hall, visitors will also encounter a **flexible temporary exhibition space** (Area D), where topics and displays are changed over time. At the museum's opening, this area features a "Rare Exhibits" showcase, offering a glimpse into the fascinating treasures within the museum's collections.

Next, visitors step into deep time with Area F – **"Ancient Waters: The Secrets of Estonia's Geological Past"**. Here, they uncover the rich geological history of Estonia, connecting the distant past to the present. Following this, Area G – **"Formation of the Land"** delves into the dramatic shifts that have shaped the Estonian landscape, from the Ice Age to the Anthropocene. Adjacent to this, in Area H – **"Interactive Landscape"**, an engaging installation invites visitors to explore the ever-changing terrain of Estonia through interactive experiences. This progression through the exhibition encourages visitors to reflect on the dynamic changes over millennia.

From historical perspective, visitors transition into the present-day landscape with Area I – **"Life of the Baltic Sea"**. Adjacent to this, Area J – **"Baltic Sea Dive"** immerses visitors in the underwater world with an interactive "lift" that brings the vibrant ecosystems of the Baltic Sea to life.

There are two remaining areas on the ground floor. Area K – **"Science Theatre"** is a space designed for shows, museum classes, and lectures. Nearby, Area L – **"Children's Mini-Exhibition with Aquarium"** is a dedicated, playful space located below the stairs leading to the second floor. Here, children can explore, touch, play, and even climb on a mini obstacle path, immersing themselves in hands-on learning. The room features a live aquarium visible both from the exhibition hall and inside the children's space, offering a unique opportunity for young visitors to connect with the aquatic life of Estonia.

Visitor journey

Visitor Journey through Core Exhibition Hall: the Ramp and Balcony areas

As visitors ascend the ramp, the focus shifts to Estonia's local ecosystems, starting with Area 1 – **"The Lakes and Rivers of Estonia,"** followed by Area 2 – **"In the Heart of Estonian Mire"** and Area 3 – **"Meadows of Memory"**. These areas introduce visitors to the unique landscapes of freshwater systems, peat bogs, and meadows, highlighting the fragility and interconnectedness of Estonia's biodiversity, while showing both the positive and negative impact of human influence.

At the top of the ramp and heart of the museum hall, visitors encounter the **Think-tank** "island" (Area 4), which encourages reflection on global challenges and solutions for the future of nature and humanity. This pivotal moment invites deep, intellectual engagement, prompting visitors to consider their role in shaping the planet's future.

From here, visitors can continue along the balcony, where the narrative broadens to global concerns and future solutions. The journey moves through areas like **"Global Challenges"** (Area i), **"Urban Nature: A Moment of Peace"** (Area ii), **"Futures in Green: Solutions for Tomorrow"** (Area iii), and **"From Earth to Table: Challenges and Solutions in Agriculture"** (Area iv). These sections focus on human-centered environmental solutions, encouraging visitors to explore how societal, technological, and agricultural shifts can address pressing environmental issues.

As the balcony tour continues, visitors reflect on harmonious living with nature in **"City Life: Nature in Our Homes"** (Area v) and **"Benefits of Nature"** (Area vi), considering how sustainability, culture, and art can shape a more symbiotic relationship with the environment.

The journey culminates as visitors descend the ramp, reinforcing the theme of nature's circularity and interconnectedness. The descent begins with Area 5 – **"Estonian Wildlife and Skyscapes,"** and Area 6 – **"The Forest Web: Energy, Cycles, and Micro Life,"** reconnecting visitors with local biodiversity and ecological importance of photosynthesis, mycorrhizae and nutrient cycling. A glimpse into Area 7 – **"Umwelt: Jakob von Uexküll's Legacy"** adds depth, exploring the subjective experiences of animals and ecosystems, with a small special exhibit of the **"Wild Boar Family"** life tucked in Area 9.

The descent concludes in Area 10 – **"Forest: Living Heritage,"** reaffirming Estonia's natural heritage and leaving visitors with a hopeful call to action, encouraging them to think critically about their role in preserving and restoring the natural world. Meanwhile, children can engage with the interactive play area in Area 9 – **"Beavers' Cave,"** emphasizing the importance of nature education and playful exploration.

Area 11 – **"Forest Wall"** is a striking mural at the back of the museum hall offering a visual connection to the forest's vastness and beauty, visible from nearly every corner of the space.

This thoughtfully designed journey allows visitors to connect with Estonia's natural history, confront contemporary challenges, and envision a sustainable future, creating a dynamic, emotionally resonant experience that evolves from reflection to engagement.

Visitor journey

Visitor Journey through the Core Exhibition: Foundation, Ascent, Climax, and Descent

Visitor journey through the core exhibition is designed to mirror both physical, thematic, and intellectual progression. As visitors begin their path on the ground floor the topics that cover nutrient and energy cycles of the world and research of nature along with introduction to the formation of the Estonian land area we are setting the stage for deeper engagement and learning.

As the visitors begin to ascend the ramp, the exhibition gradually draws them more in, intensifying both in intellectual and emotional engagement. The more visitors focus on the exhibition topics along the route, the more they are prepared to confront the pressing global challenges highlighted in the balcony. This progression not only builds awareness but also prepares them for the heart of the exhibition – the Think-tank area, where we invite them to make personal and communal environmental commitments.

From this point on, the journey transitions into descent, allowing visitors to calm their minds in the forest-related “islands” along the downward route on the ramp where the focus shifts back to more calm topics such as protection of biodiversity, importance of photosynthesis and conservation of natural heritage. The descent provides space for quieter reflection, reinforcing the message of hope and urgency of protecting nature.

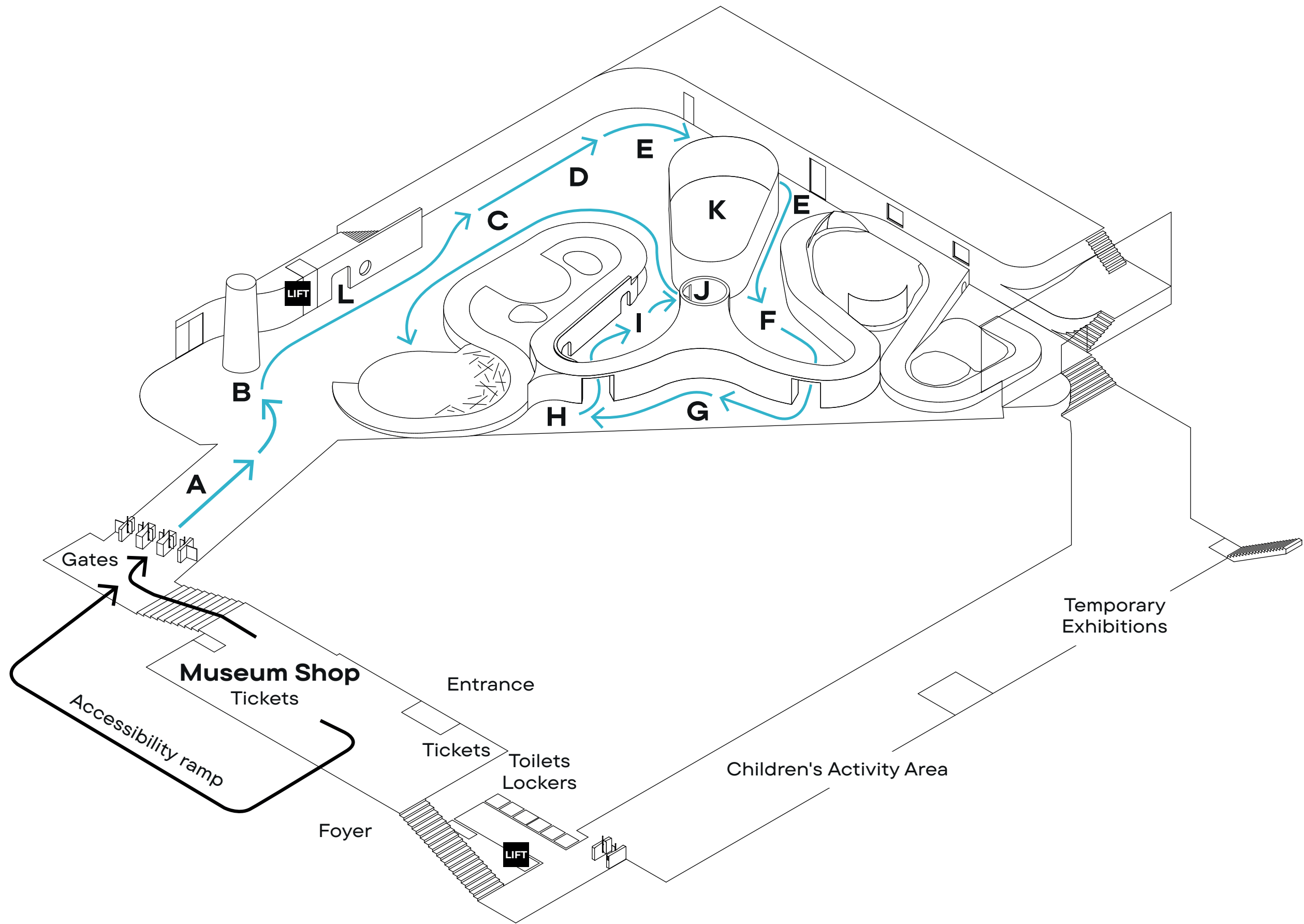
Visitor will conclude their journey with renewed sense of responsibility and commitment to preserving the natural heritage, and with a **message of optimism and hope**.



Exhibition Details



13. Details of the Core Exhibition

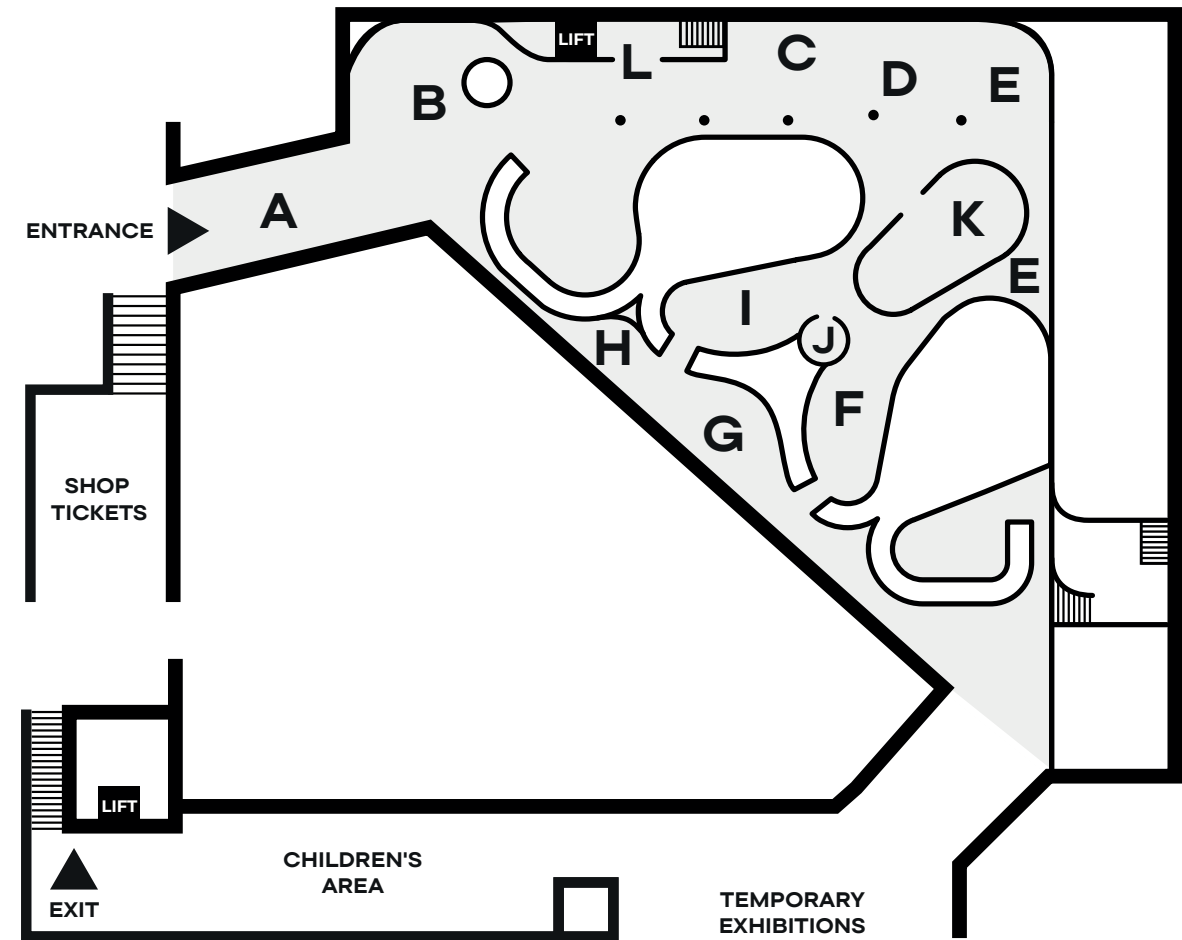


Ground Floor Exhibition areas

Distribution of Exhibition Areas on the Ground Floor

The ground floor sets the stage for an exciting journey through Estonia's natural and geological heritage, beginning with an entrance tunnel that symbolically transports visitors from everyday life into the realm of exploration. This section invites visitors to embark on a profound geological journey, exploring the formation of the Baltic Sea and Estonian landscapes – from deep geological eras through the Ice Age and into the present day.

In addition to this, visitors engage in a personal learning experience at the Science Theatre, where hands-on demonstrations and interactive exhibits highlight the museum's critical role in research and conservation. This immersive experience deepens our collective understanding of natural history and environmental responsibility.



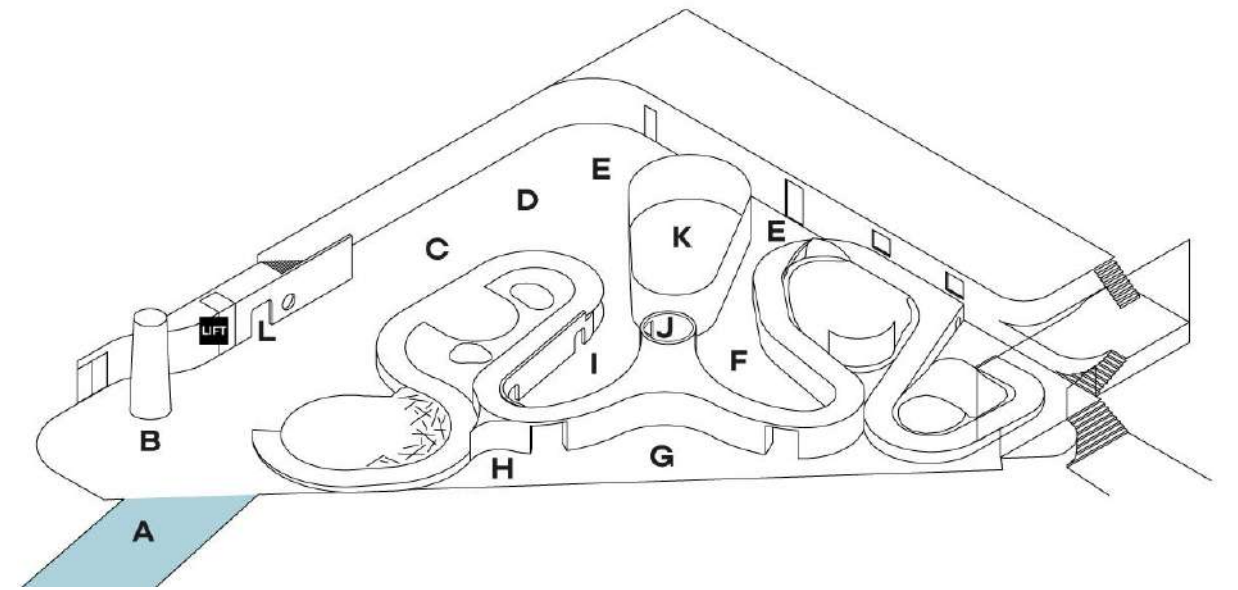
Topic covered on ground floor:

- Area A - The Entrance Tunnel
- Area B - Welcome Area
- Area C - Global Energy Flows and Nutrient Cycles
- Area D - Curiosity Corner
- Area E - Behind the Scenes: Museum Research in Action
- Area F - Ancient Waters: The Secrets of Estonia's Geological Past
- Area G - Formation of the Land
- Area H - Interactive landscape
- Area I - Life of the Baltic Sea
- Area J - Baltic Sea Dive
- Area K - Science Theatre
- Area L - Children's Mini-Exhibition with Aquarium

Ground floor. Area A

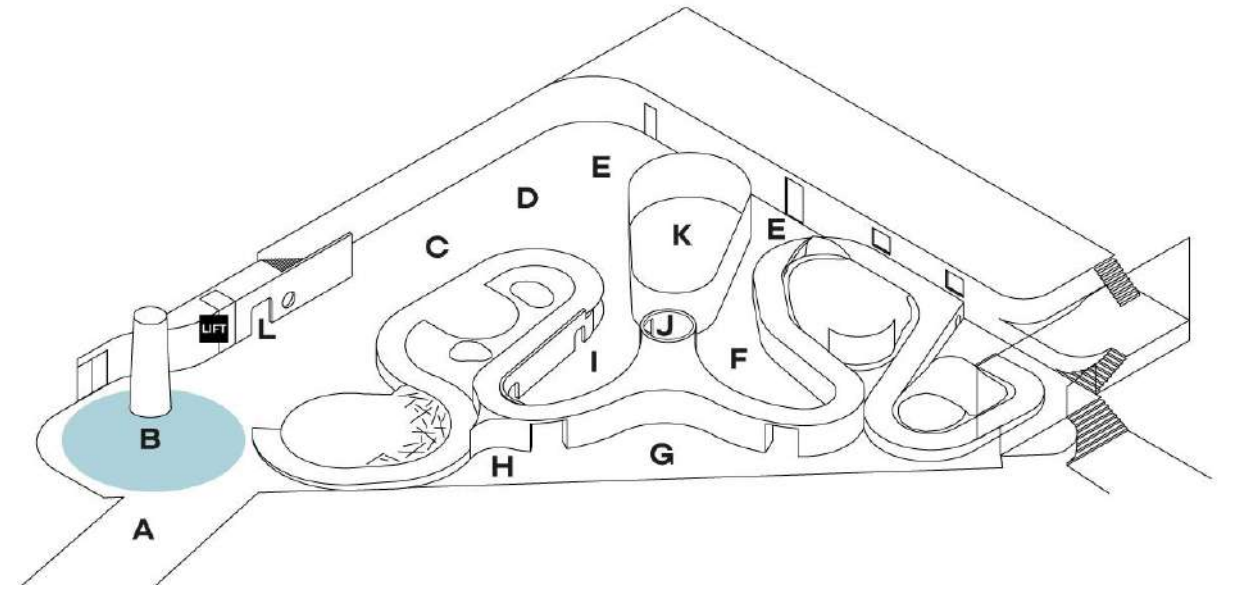
The entrance tunnel

Before entering the main exhibition hall of Museum of Natural History of Estonia, visitors shall pass through the 'Mist Tunnel', a deliberately designed liminal space that disrupts the ordinary and primes the senses for discovery. This experiential passage, dense with a dynamic mist, is not merely a transitional zone but a profound sensory realignment. Inspired thematically by Jakob von Uexküll's concept of *umwelt*, the tunnel abstractly evokes the subjective perceptual worlds of diverse species, encouraging visitors to contemplate the manifold realities of life on Earth. The tangible encounter with the elements – the moisture on skin, the temperature shift, the muted sounds – serves as a vivid reminder of nature's constant presence and its power to transform. By crossing this threshold, visitors are invited to shed their anthropocentric perspective, open their minds, and embrace the multifaceted, interconnected, and wondrous web of life that constitutes our natural world.



Ground floor. Area B

Welcome Area



The **Welcome Area** serves as the gateway to the Estonian Natural History Museum's core exhibition, setting the tone for the journey ahead. Featuring an artistic installation of the **Tamme-Lauri Oak** – an iconic symbol in Estonian heritage – this area connects visitors to nature. The impressive oak installation appears to stretch out of the museum's roof, immediately catching the eye upon entering the hall.

Nearby, a digital interactive stand offers detailed information about the Tamme-Lauri Oak and its cultural significance. The entrance area also doubles as a comfortable gathering space, ideal for groups awaiting tour guides.

A dynamic, curved wall greets visitors with a welcoming message and introduces the museum's permanent exhibition route. This exhibit serves as a shared experience for many visitors at once, guiding them through the space and introducing "The Wind" – the narrator who will accompany them throughout their journey.



Welcome area

Storyline and Theme Opener

Topic opener: Tamme-Lauri oak

Rationale: The ancient Tamme-Lauri oak greets visitors as a symbol of Estonia's deep connection to nature and culture, setting the tone for a journey through Estonia's natural and cultural landscapes.

Atmosphere and Aesthetics

The atmosphere of the Welcome Area is light, open, and inviting, with soft earthly lighting solution. The space is designed to immediately engage visitors, blending natural elements with modern aesthetics (the oak is solved as an artistic installation). The abstract Tamme-Lauri Oak installation, towering and impressive, provides a focal point, with its twisting, organic shape suggesting both nature's raw power and its delicate intricacies.

Emotional Resonance

Comfort, curiosity – a space for orientation and welcoming visitors into the exhibition should arise curiosity but also feel welcoming and emotionally comfortable.

Content and Engagement

In this area, content is both informative and inclusive. The digital stand next to the oak tree installation provides visitors with an engaging introduction to the natural history of the Tamme-Lauri Oak, as well as to Estonian flora and fauna related to this large tree as living environment for smaller species. Through touchscreens, visitors can learn about the tree's role in Estonian culture, its biology, and its place in the broader context of the country's natural heritage. Interactive features may include a virtual tour of Tamme-Lauri Oak's environment, stories from local folklore, and ecological facts about ancient trees. Additionally, the interactive "Welcome to the Museum" wall gives visitors a clear understanding of the museum's layout, the visitor route, and a preview of the experiences that await ahead.

Key Takeaway Messages

Connection to Nature:

The Tamme-Lauri Oak represents Estonia's deep bond with nature and the importance of preserving culture and biodiversity.

Exploration Begins Here:

The Welcome Area sets the tone for the visitor journey, offering direction and anticipation.

The Wind as Guide:

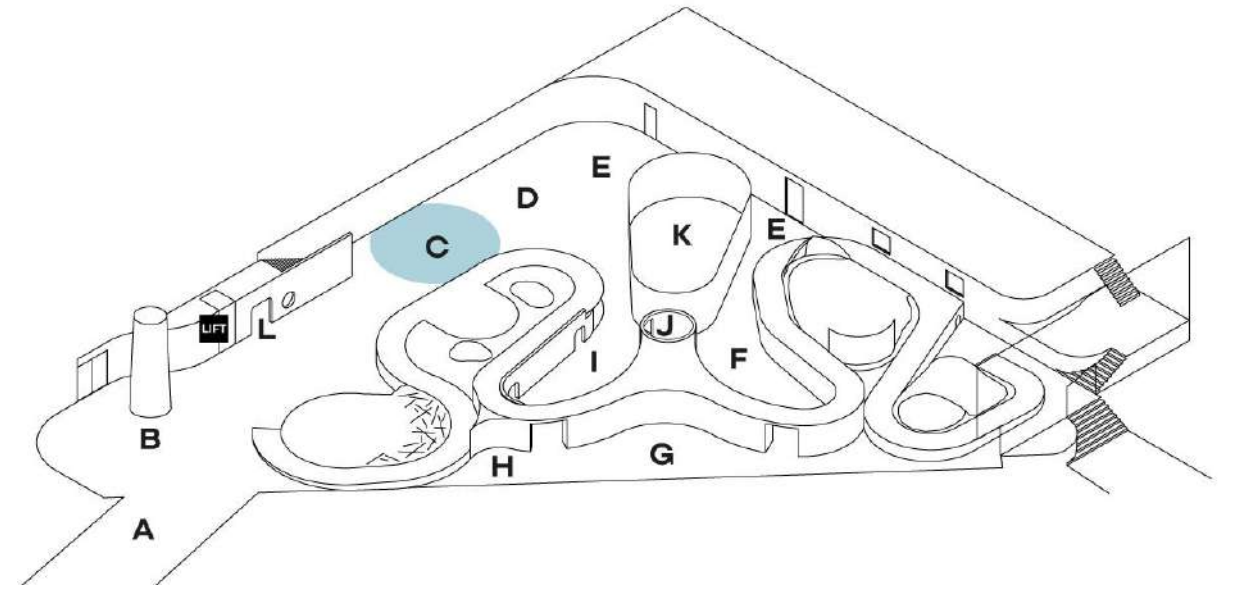
The Wind serves as the narrative thread, guiding visitors through the museum experience.

Ground floor. Area C

Global Energy Flows and Nutrient Cycles

Global Energy Flows and Nutrient Cycles section is showcasing global energy flows and nutrient cycles that is rooted in the recognition that **all life is part of an intricate, interconnected web**. Every organism, from the smallest microbe to the largest predator, plays a role in these terrestrial and even cosmic cycles. Understanding these processes reveals the underlying **harmony that sustains our planet**.

By exploring how energy and nutrients flow through Earth's systems, and how cosmic forces influence these cycles, we come to appreciate the **profound interconnectedness** of all things. This perspective fosters a sense of awe and responsibility, urging us to see ourselves not as separate from nature, but **humans as active participants in the ongoing balance of life**.



Global Energy Flows and Nutrient Cycles

Content and Engagement

The "Global Energy Flows and Nutrient Cycles" area features a stunning, never-before-seen installation that breaks out of the wall and ventures seamlessly into the exhibition space. Here visitors can get an understanding of the interconnected cycles that connects the circumstances for life on earth at all scales.

Larger rings beyond Earth's cycles represent cosmic influences, including Earth's rotation, the Moon's orbit, solar activity, Milankovitch cycles, and planetary movements within our solar system and the galaxy. These vast celestial cycles extend beyond the screen, symbolizing their far-reaching impact on Earth. The entire installation functions as a vast, interconnected mechanism – where a change in one cycle affects the entire system.

Earth cycles like carbon, nitrogen, phosphorus, water, rock, and oxygen can be investigated by the visitor yet understanding their connection to the grand scheme of our cosmic existence. Smaller circles between them illustrate finer cycles, such as migration patterns, predator-prey interactions, and seasonal changes. Simple, visually striking animations accompany each cycle, offering a quick, clear understanding of how they work.

This captivating installation invites visitors to reflect on the delicate balance of these cycles, highlighting the harmony that sustains life on Earth and connects us to the broader universe.



Global Energy Flows and Nutrient Cycles

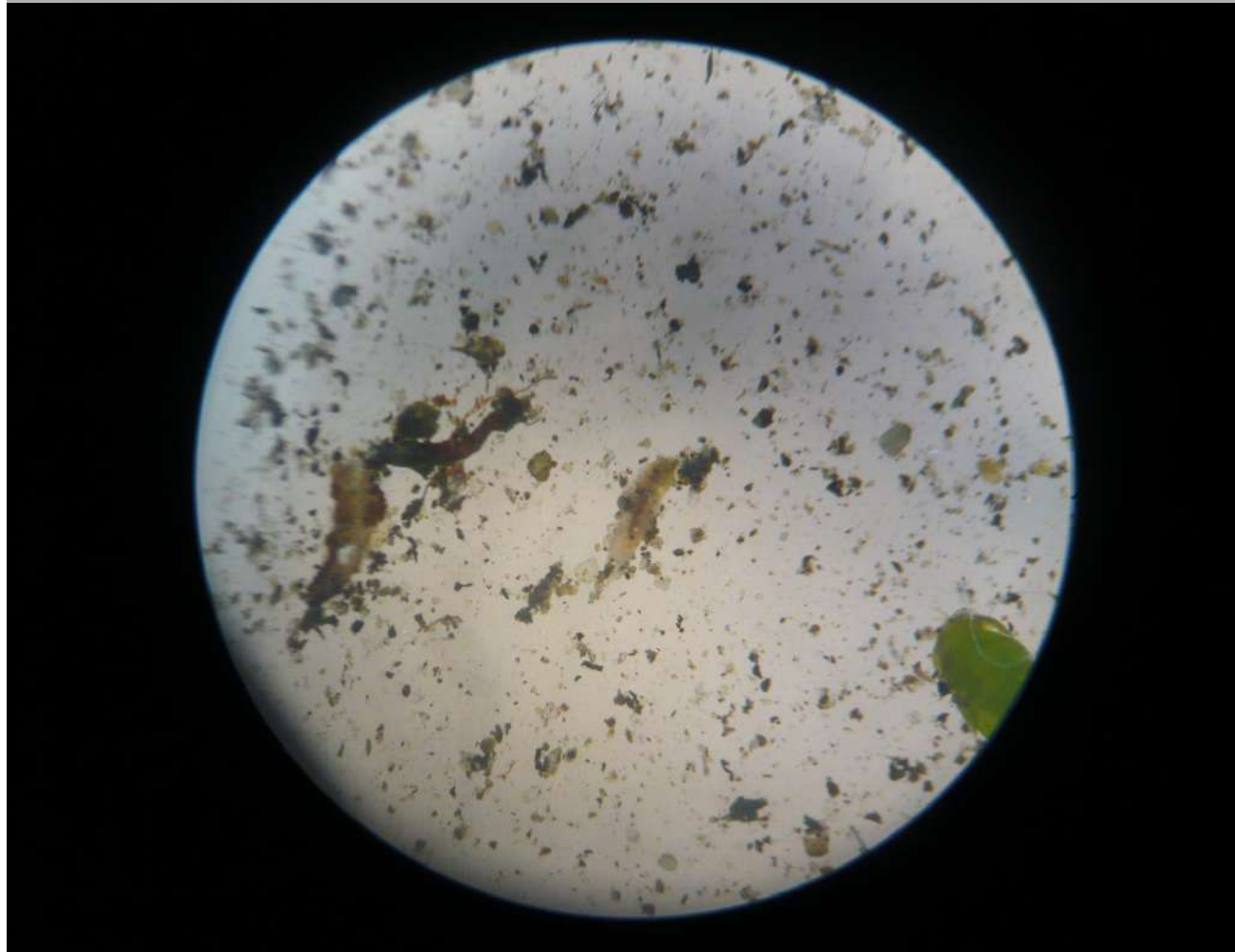


Foto: Wikimedia Commons

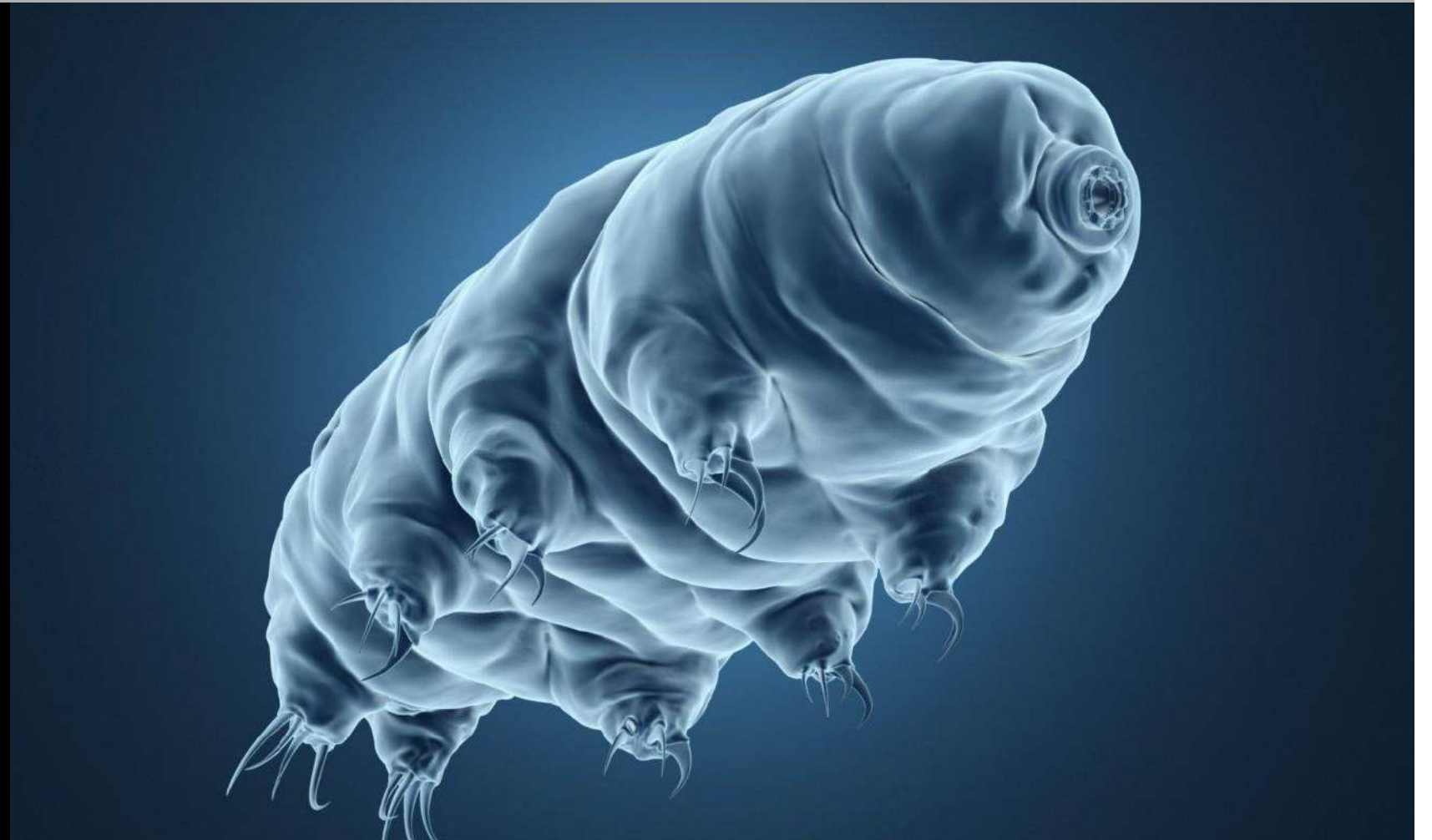


Foto: Getty Images

The second exhibit in this area is a smaller interactive exhibit "From Cosmos to Cell".

By permeating the layers of life this table installation offers a tangible journey through the scales of existence. A responsive surface, interactive via physical rings, invites visitors to explore the cosmos and the microcosm seamlessly. A turn of the ring presents the Earth as a blue marble amidst the stars. With each twist, visitors zoom out to the universe and back, honing in on Europe, Estonia, and a specific locale. Through interaction, the rings allow visitors to delve deeper, unveiling the intricate details of non-human beings that inhabit the chosen landscape. With each rotation visitors can zoom into the microscopic realm, revealing cells and their pulsating structures, and ultimately, the molecular dance that underpins all life. This interactive experience opens our eyes to the unseen layers of the natural world, offering a deeper understanding of life's interconnectedness. It invites us to look beyond the surface, to appreciate the beauty of the vast and minute, and to connect with the non-human beings that share our planet.

Global Energy Flows and Nutrient Cycles



Tardigrade moulage

Last but not least, the over-life size tardigrade moulage will be presented in this area as a captivating, tactile exhibit that allows visitors to engage with one of nature's most resilient creatures in a completely new way.

This massive, highly detailed model will be over life-size, scaled to human proportions or larger, offering visitors an experience where they can physically touch and explore the features of the tardigrade. With its rugged, armored exterior and unique features, the moulage will highlight the microscopic marvels that enable tardigrades to survive extreme conditions, such as extreme heat, cold, radiation, and dehydration.

Visitors can examine its segmented body, powerful claws, and intricate facial features, all magnified to allow for a deeper understanding of how this microscopic organism endures in environments that would be lethal to most other forms of life. It also serves to emphasize the importance of the tiny, often overlooked life forms that play vital roles in the ecosystems around us.

Global Energy Flows and Nutrient Cycles

Storyline and Theme Opener

Topic opener: Tardigrade

Rationale: Tardigrade is a life form that is highly resilient and capable of surviving in a wide range of environments, and would likely be among the first forms of life discovered elsewhere in the universe. Through the resilient tardigrade, visitors are introduced to life's adaptability, emphasizing the intricate cycles that sustain ecosystems.

Atmosphere and Aesthetics

This area is lit with soft, focused lighting that highlights the futuristic Earth's cycles exhibit. The ambiance is modern yet inviting.

Emotional Resonance

Wonder, awe, discovery – recognizing the interconnectedness and beauty of natural cycles. Getting new knowledge about the microscopic tardigrade on the background of the largest of cosmic and earthly systems.

Key Takeaway Messages

Interconnectedness of Life:

All life forms, from microbes to predators, are part of cycles that sustain life on Earth.

Cosmic and Earthly Cycles:

Earth's nutrient and energy flows are shaped by both planetary and cosmic forces, linking our planet and all life on it to a larger system.

Life's Resilience and Adaptability:

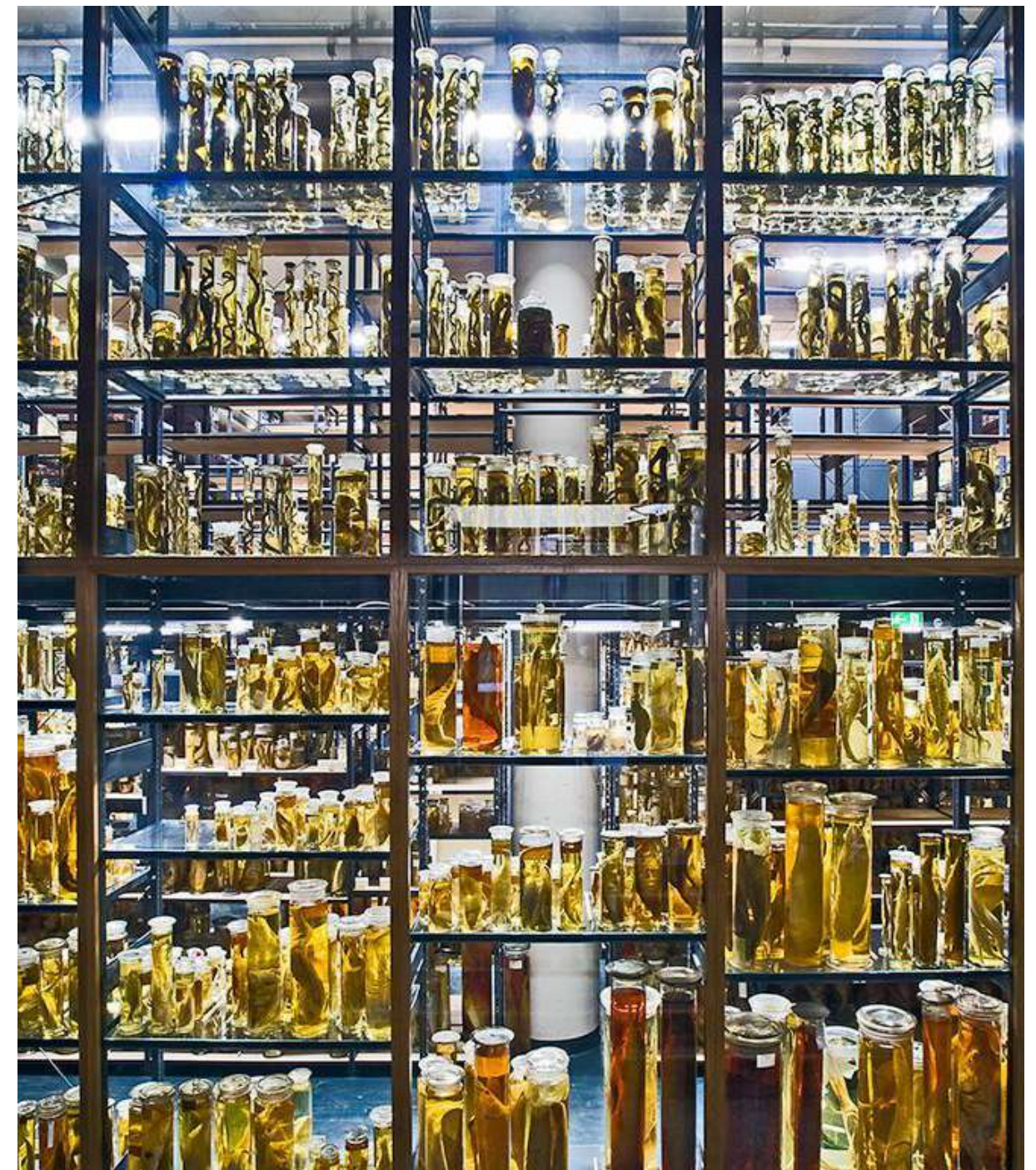
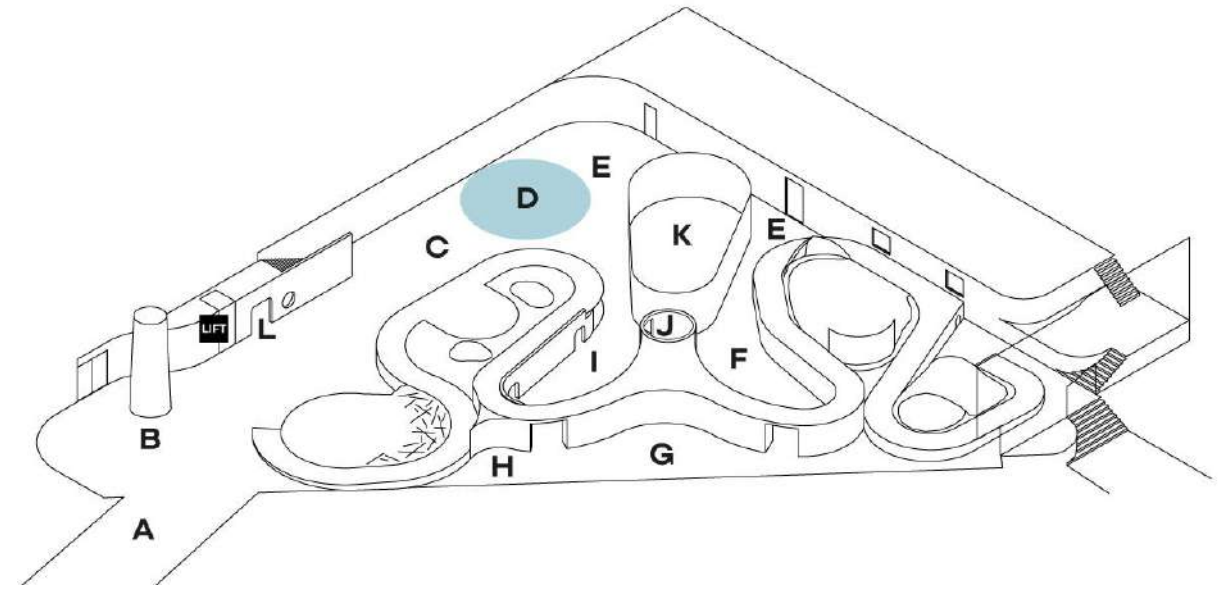
The tardigrade symbolizes life's resilience, showing how even small organisms can survive extreme conditions.

Ground floor. Area D

The Curiosity Corner

The **Curiosity Corner** is a dynamic and adaptable exhibition space designed for changing exhibits. This area is constantly evolving, offering a platform for displaying species and topics that don't fit into other exhibition themes but are too fascinating to overlook – such as penguins, flamingos, and other extraordinary animals.

What makes this space unique is its **flexibility**. Each display stand is mobile, built on wheels, and designed to be easily reconfigured, allowing for seamless changes. This ensures the Curiosity Corner can **quickly transform to accommodate new topics and temporary exhibits**, making room for fresh and engaging content whenever needed.



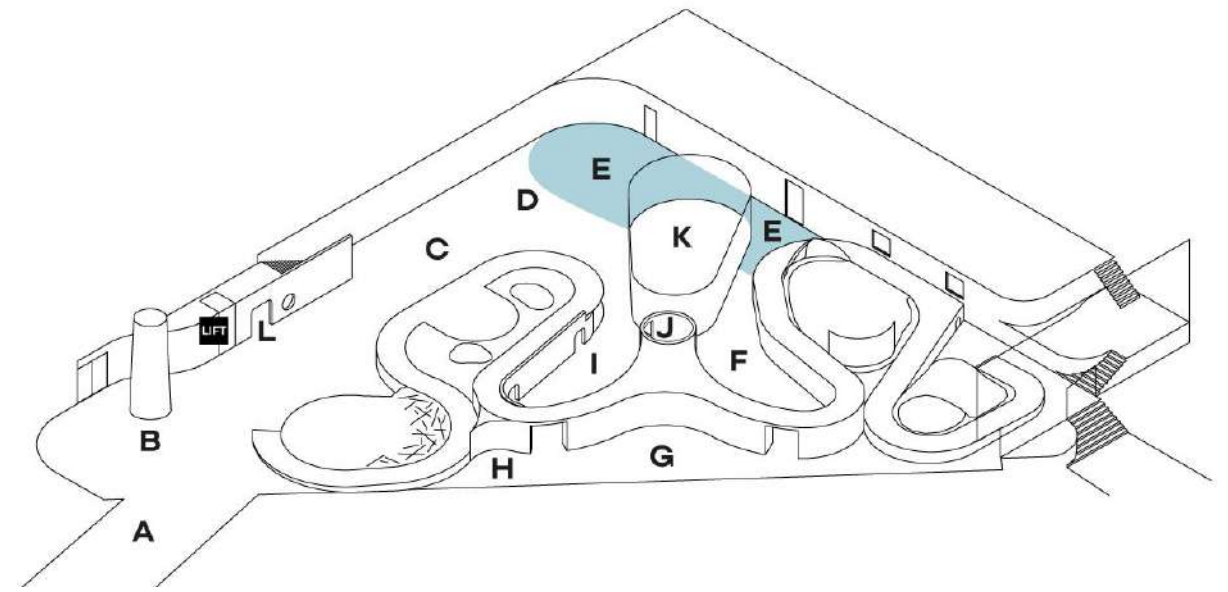
Ground floor. Area E

Behind the Scenes: Museum Research in Action

Behind the Scenes: Museum Research in Action exhibition section is literally built around and surrounds an in-door window that connects directly to the museum's collections and daily work area, offering visitors a unique, real-time view into the ongoing research and conservation efforts happening behind the scenes.

The area seamlessly integrates physical artifacts and digital displays that showcase the dedication of individuals advancing our understanding of Estonia's natural history. Visitors can explore personal stories, hunting trophies, and specimens such as the mounted European mink and garden dormouse, alongside historical photographs and field diaries from prominent researchers like T. Marnot and O. Šmeidt. These documents illustrate the passion and dedication of naturalists and biologists over time, from A. Üksip's 1964 phenological notes to K. Puust's 1946 sketches.

Surrounding the actual working window, this exhibit allows visitors to engage directly with the museum's live research environment, offering them an immersive understanding of the ongoing work that preserves and deepens our knowledge of Estonia's natural heritage.



Behind the Scenes: Museum Research in Action

Content and Engagement

This area features several engaging solutions. Firstly there is **an interactive map table** that invites visitors to engage with Estonian geography on old maps and historical vs novel digital mapping navigation solutions (i.e. compass vs GPS). Then, a simulated **scientist's workspace** features tools like binoculars, butterfly nets, and U. Ramst's 1990s dye samples. An indoor window into the museum's collections room emphasizes the museum's ongoing commitment to preserving Estonia's biodiversity.

There is a dedicated **storyboard wall** that can have sections or "panels" dedicated to different stories with a mix of photographs, short quotes, and objects. The wall has integrated listening posts, tablets and physical wall mounts for objects and stories gathered via the museum's story collection campaign.

An individual installation is created for the **Ehrenpreis' album** in a display case highlighting its historical significance in Estonian nature protection. Supported by touch screen information and photos of Ehrenpreis documented trees or springs. The ***Tetrax tetrax* physical showcase**, accompanied with looping video about the taxidermist working explain how taxidermology contributes to species study and conservation.

These and other similar exhibits illustrate the **crucial role of museums** in advancing scientific knowledge and fostering a deeper connection to our natural heritage.

Storyline and Theme Opener

Topic opener: Field Diary

Rationale: Historical field diary of T. Marnot as a symbol to show the everyday work of researchers, conservationists, and explorers. It could be represented visually as an open diary with handwritten notes, sketches, etc. This area brings visitors closer to the personal experiences and contributions of researchers and explorers.

Atmosphere and Aesthetics

This area features warm and cosy natural lighting that evokes the feeling of scientist's workplace. There can be de slight sound of writing on paper, distant bird sounds, or other natural sounds in the background. Use of spotted lights highlights various exhibits in this area.

Emotional Resonance

Inspiration, awe – fostering an understanding of the crucial work in conservation and research.

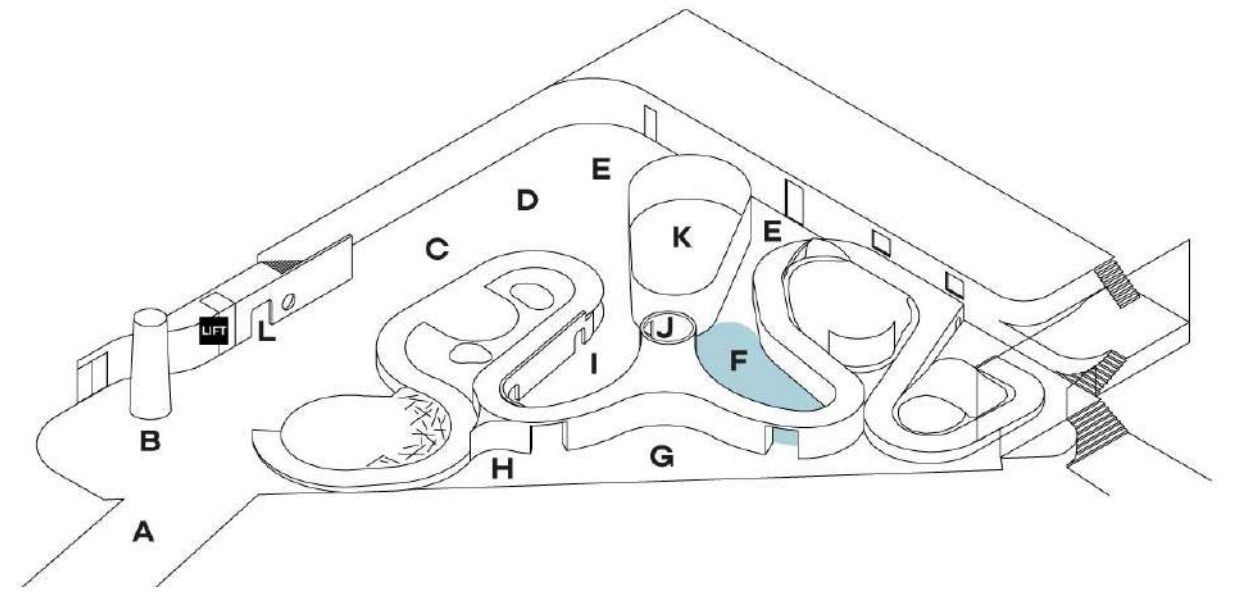
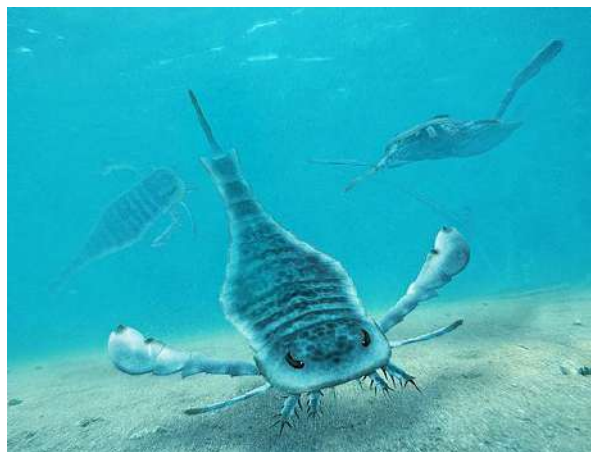
Ground floor. Area F

Ancient waters: The Secrets of Estonian Geological Past

Ancient Waters: The Secrets of Estonia's Geological Past invites visitors on a journey through **deep geological time**, immersing them in the fascinating history of Estonia's ancient seas and the area's drift from the Southern Hemisphere to where it situated today.

Spanning the Cambrian, Ordovician, Silurian, and Devonian periods, this exhibition unveils the remarkable underwater ecosystems that thrived millions of years ago. Through displays that highlight significant geological events and processes, visitors will explore how life evolved and how Estonia's key natural resources, such as oil shale, were formed.

This area offers a glimpse into the profound changes that shaped the Baltic region, bringing to life the distant past of the land and its ecosystems.



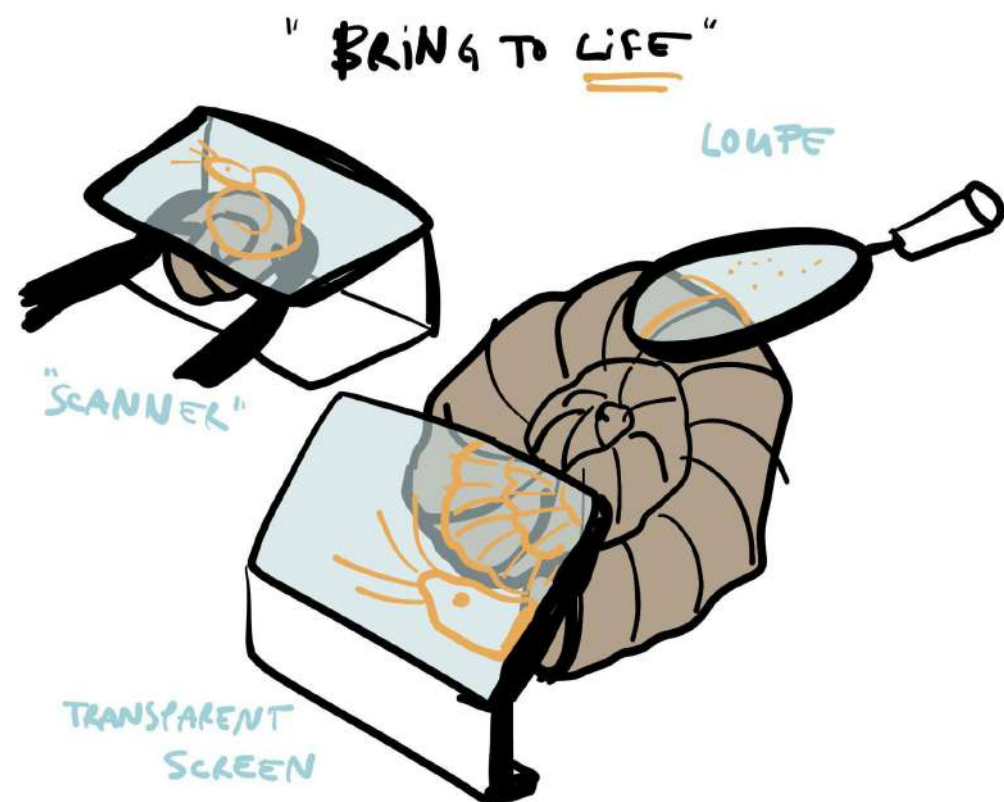
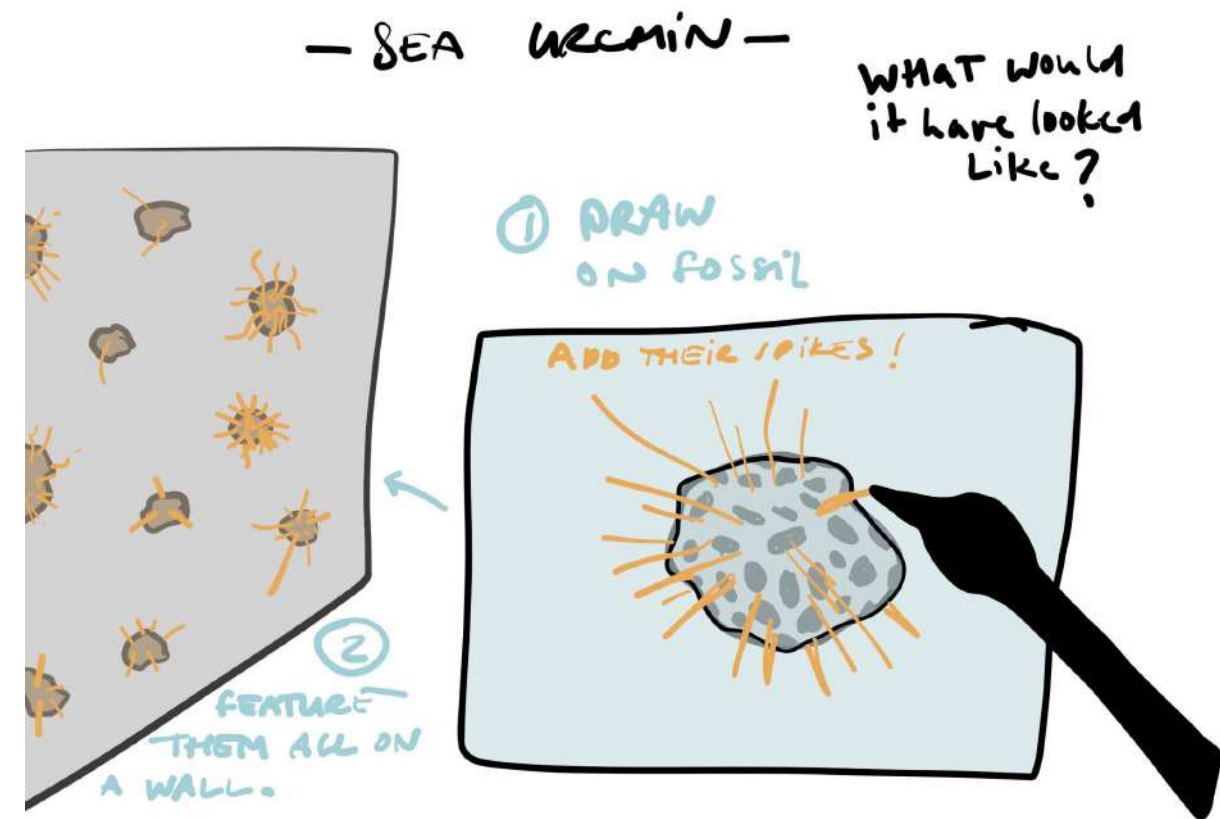
Content and Engagement

At the heart of the exhibit is a **central display island**, featuring a diverse collection of fossils, minerals, and rocks, showcasing key specimens from each geological period. **Augmented reality technology** will bring fossils to life, allowing visitors to see ancient creatures in their original environments.

Surrounding this central display, four immersive wall sections will highlight each geological period with interactive videos, animations and information depicting seabed life, while a life-size **moulage of an ancient sea scorpion** will serve as a striking focal point, bringing the prehistoric seas to life. Informative panels will provide additional context on how these periods shaped Estonia's geological legacy.

This room is designed to foster a deeper understanding of the connection between ancient ecosystems and the geological processes that continue to shape our world today.

Ancient waters



A series of interactions empowers visitors to bring artifacts to life, overlaying digital layers that reveal their enchanted interiors and contextual roles within the wider ecosystem. By scanning intricate objects with augmented reality devices, visitors unveil the hidden stories and functions of each object. Glowing animated visuals illustrate the artifacts' internal workings, while overlays demonstrate their interconnectedness with the natural world.?

Ancient waters

Storyline and Theme Opener

Topic opener: Ancient sea scorpion

Rationale: Representing the life forms that lived in Estonia's waters millions of years ago, this opener sets the tone for uncovering the hidden geological history of the region.

Atmosphere and Aesthetics

The room will be dimly lit to enhance the projection effects, creating a serene, underwater ambiance. The design will incorporate organic shapes and textures reminiscent of waves of the sea and seabeds.

Ambient soundscapes featuring sea sounds and gentle currents will complement the visuals, creating an engaging and multi-sensory experience.

Emotional Resonance

Mystery, awe, discovery – evoking the ancient and hidden history, of water and geological evolution and meeting the unusual ancient creatures.

Key Takeaway Messages

The Power of Geological Time:

Earth's history spans millions of years, shaping life and landscapes over vast timescales.

Evolution of Species:

Species evolved and adapted over time, from simple marine life to more complex organisms, driven by environmental changes.

Ancient Ecosystems and Biodiversity:

Ancient sea life was incredibly diverse, with ecosystems shaped by environmental factors.

Formation of the Baltic Region:

Key geological events shaped the Baltic region, forming the land and seas we see today.

Environmental Changes Over Time:

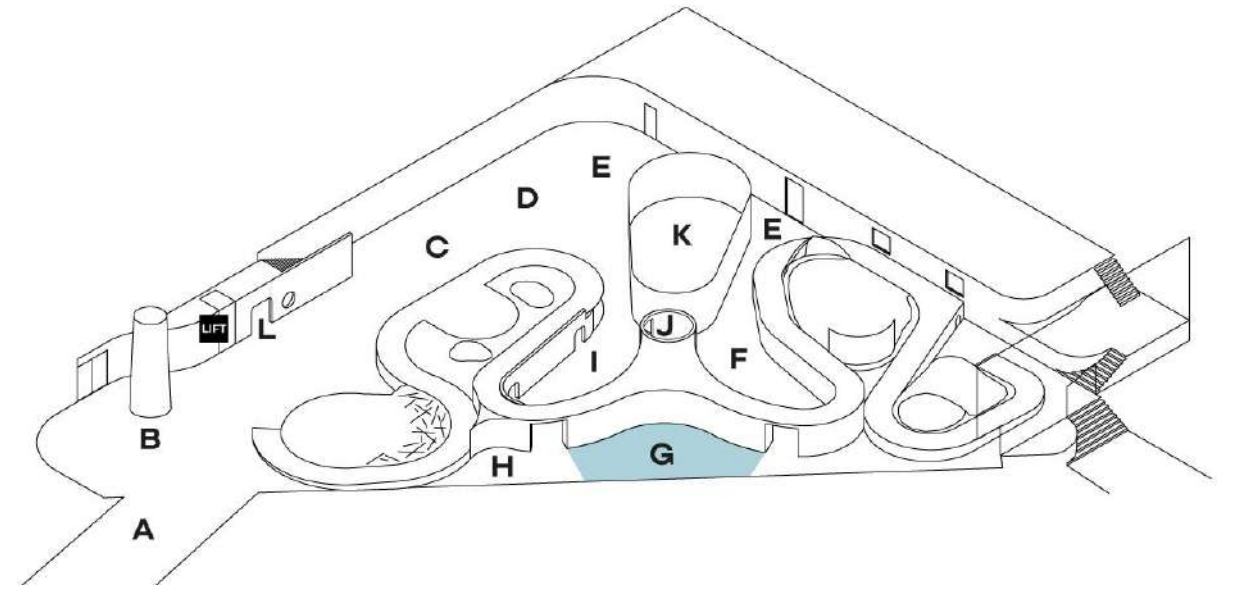
Ancient climates and environmental shifts influenced biodiversity, offering insights into today's environmental challenges.

Connection Between Past and Present:

Everything is interconnected through time and space; the changes in Earth's past continue to shape the world today.

Ground floor. Area G

Formation of the Land



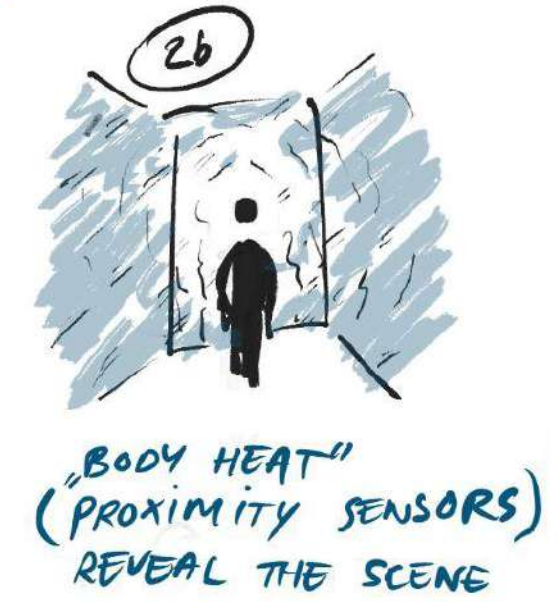
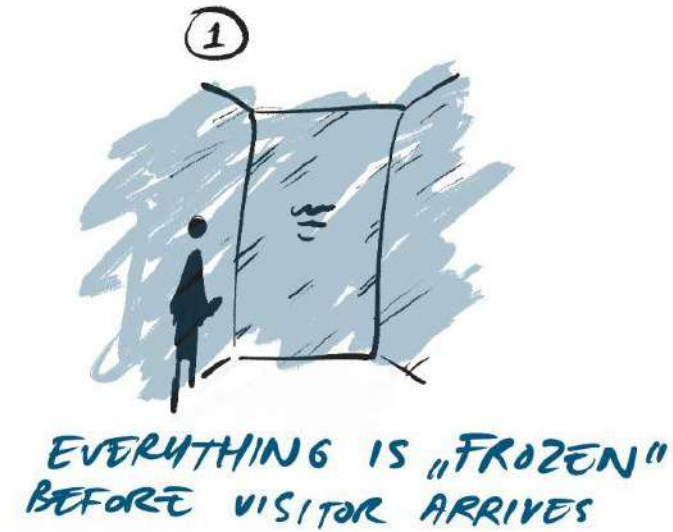
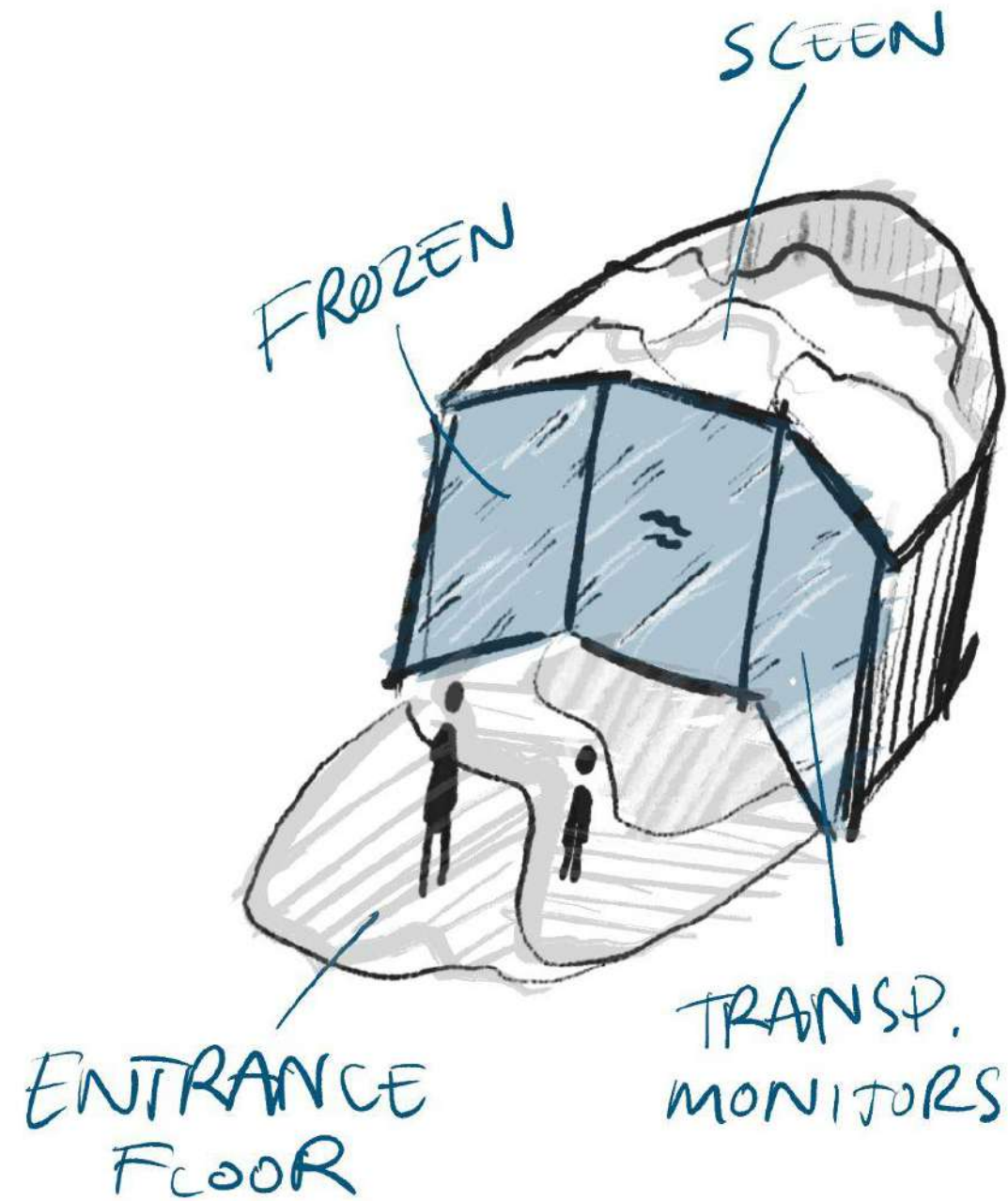
The **Formation of the Land** exhibition area examines the powerful natural forces and human actions that have shaped Estonia's (and surrounding areas) geological, biological, and cultural landscapes. It takes visitors on a journey through the region's deep history, from the **Ice Age**, when glaciers carved the land, to the present day, where human activity now plays a dominant role in shaping the environment.

The exhibition area highlights key events like glaciation, sea-level changes, and ecological succession, alongside the impacts of human settlement, agriculture, and industry. As human influence grew, so did the pace of transformation, ushering in the **Anthropocene** – an era marked by deforestation, industrialization, and land cultivation, all of which have left lasting marks on landforms and biodiversity.

Encouraging reflection on the future of Estonia's environment, the exhibit challenges visitors to consider their role in balancing conservation with development, prompting engagement with the critical environmental issues of today.



Formation of the Land



A biorama invites visitors to explore frozen landscapes that melt away upon approach, unveiling vibrant ancient worlds. This interaction serves as a metaphor for humanity's impact on the environment in the Anthropocene, offering a glimpse into Earth's past while provoking reflection on our present role in shaping its future?

Formation of the Land

Content and Engagement

The most striking feature of the "Formation of the Land" exhibition area is the **massive glacier design** that stretches from the floor to over 4 meters high along the walls. This dramatic visual serves as both a thematic centerpiece and a dynamic storytelling tool. Embedded within this glacier wall are a range of interactive exhibits and multimedia solutions that engage visitors in the geological and cultural history of Estonia.

The exhibition begins with the **Weichselian Glaciation** (can be solved as interactive map), when ice sheets covered Estonia and Northern Europe, shaping the landscape with **glacial erratics** (can be brought real samples to the room as exhibits), moraines, and glacial lakes (as information stands, screens). As glaciers retreated, post-glacial rebound raised the land, **forming the Baltic Sea** from the Baltic Ice Lake and creating coastal features like beaches and cliffs (can be solved as striking video solution).

Following the retreat, plants like birch and pine and animals (shown as physical exhibits in bioramas) migrated, forming boreal forests and wetlands, important for carbon storage (discussed by animations and interactive solutions). The exhibition covers **species adaptation**, the reintroduction of the European bison (if possible the introduced as a moulage), and the **role of microorganisms** (creative digital solution) in ecosystem development.

As the climate warmed, the Baltic Sea evolved (the **phases of the Baltic Sea** discussed as animations and information stands) into a brackish environment with species like spiny dogfish and Baltic herring (species shown as physical exhibits). Early marine and freshwater species such as bladderwrack colonized the area.

The final section explores **early human settlements**, highlighting their **environmental impact** – clearing forests for agriculture, introducing species like common carp, and the reintroduction of the European beaver. The role of humans in shaping Estonia's ecosystems and ongoing conservation efforts is emphasized (this could be solved as a video installation and a little sitting area).

Formation of the Land

Storyline and Theme Opener

Opener: Goldcrest, *Regulus regulus*

Rationale: A small but resilient bird that has witnessed the transformation of the Estonian landscape, symbolizing the endurance of life through significant changes like the Ice Age, guiding visitors into understanding the geological history that shaped Estonia's landscapes into the age of Anthropocene.

Atmosphere and Aesthetics

As the area presents an immersive centerpiece – large glacier moulage then the overall atmosphere combines natural glacier textures with modern design. Soft, blueish ambient lighting highlights key features of the glacial landforms, while soundscapes evoke the ice movement (ice cracking, water dripping etc).

Emotional Resonance

Wonder, intrigue – engaging visitors in the deep geological story of Estonia's past.

Key Takeaway Messages

The power of nature:

All of the Estonia's today's landscapes have been carved by ice.

Human Impact in the Anthropocene:

Humans have shifted from being part of nature to a dominant force, accelerating environmental changes.

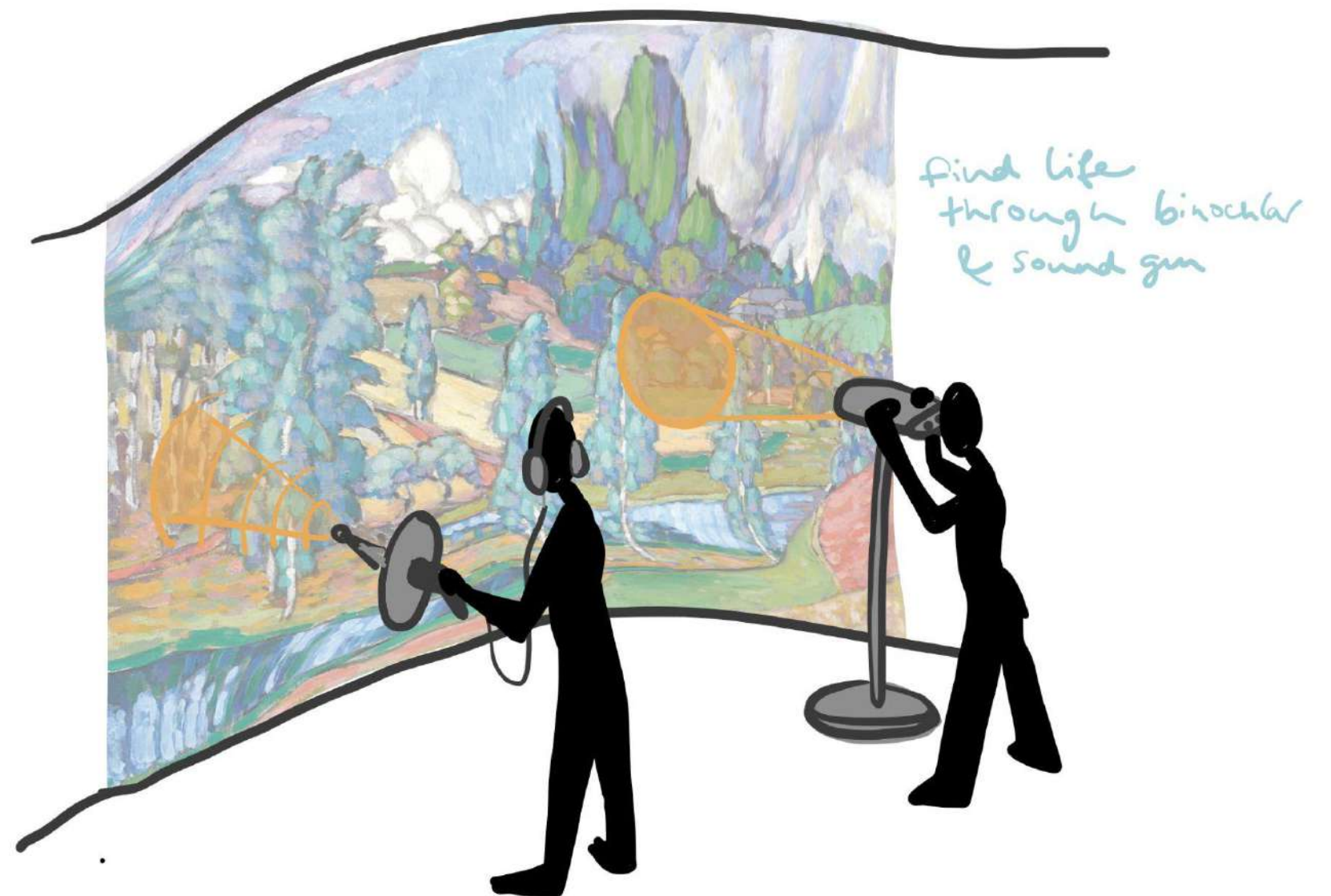
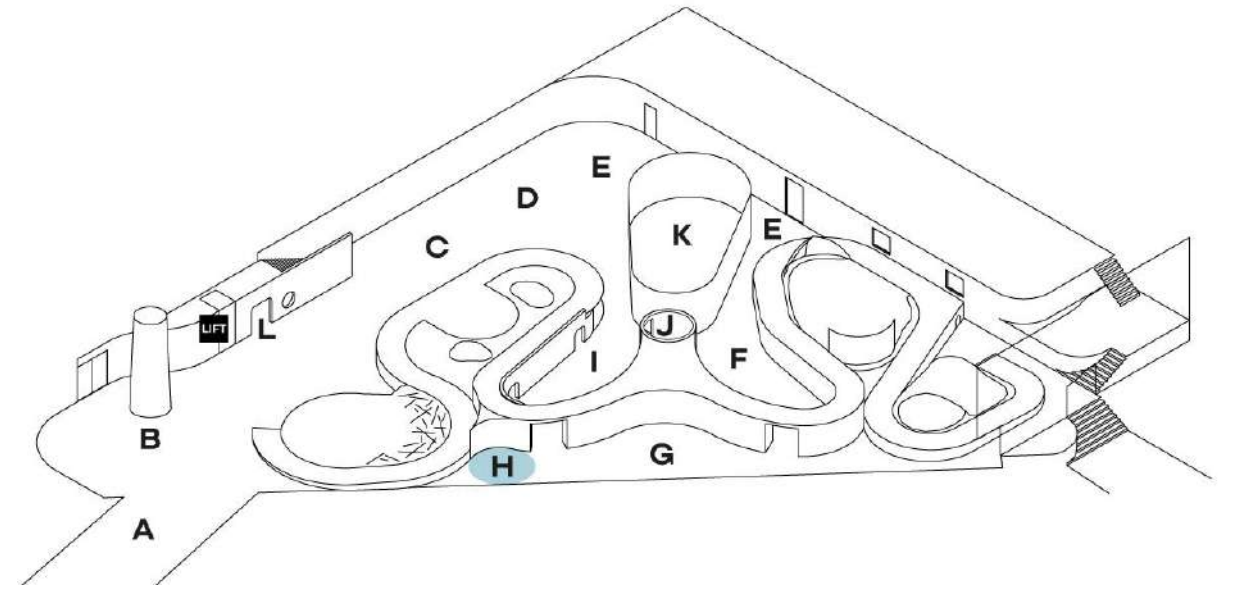
Responsibility for the Future:

As we live in the Anthropocene, we must address environmental issues and make choices that shape Estonia's future.

Ground floor. Area H

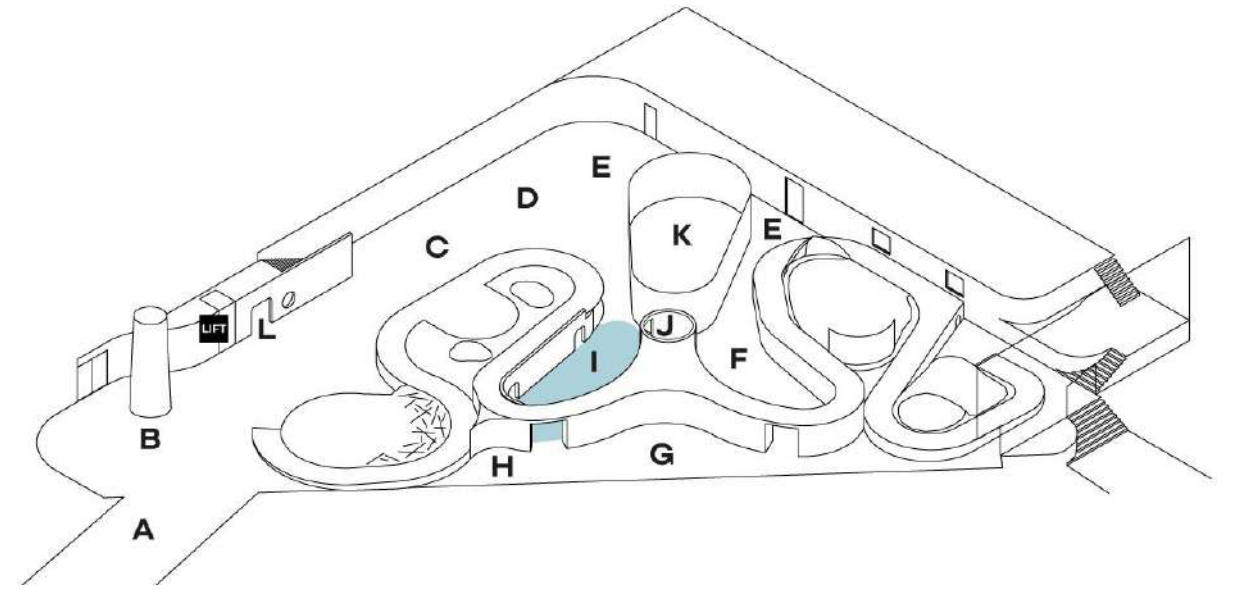
Interactive Landscape

In a delicate shift of our usual perception of nature, the lake section offers a mediated view through the lens of Konrad Mägi. A large representation of his painting *Lõuna-Eesti maastik* invites the visitor to first encounter the beauty of the landscape. Through interaction, visitors can uncover sounds and glimpses into the life forms hidden within the scene. Using a sound gun and binoculars, they can move across the painting, focusing their attention through the crosshairs, and reveal the non-human beings that bring the lake biotope to life. This immersive experience gently opens the eyes to the often unseen symphony of nature, offering a richer understanding of its interwoven essence – inviting us to see beyond the surface and embrace the small beings and earths that create it.



Ground floor. Area I

Life of the Baltic Sea



The **Life of the Baltic Sea** exhibit delves into the complex ecosystems of this unique and fragile marine environment, highlighting the interconnected web of life that thrives within its waters.

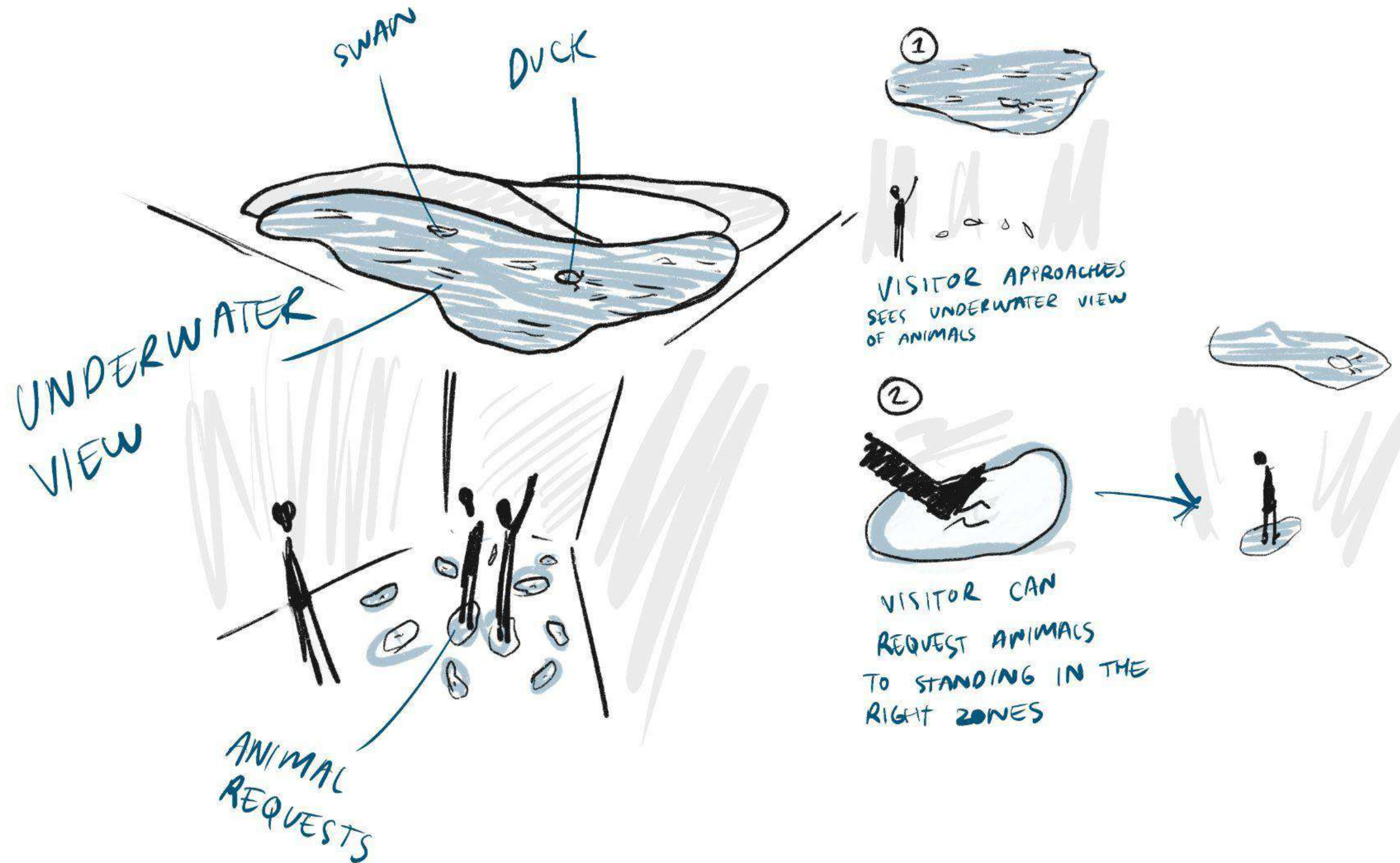
The exhibition showcases the diverse species – ranging from marine mammals and fish to birds, invertebrates, and microorganisms – that rely on the Baltic Sea brackish waters and coastal ecosystems. It also underscores the vital roles of plants, seaweeds, algae, and microorganisms in sustaining these ecosystems, while exploring the historical, scientific, and cultural ties between humans and the sea.

Through engaging displays, interactive technologies, and immersive experiences, the exhibit fosters a deeper understanding of the Baltic's ecological balance and the challenges it faces. Visitors will gain insight into the urgent need to preserve its health, with a call to action for protecting this delicate environment from pollution, climate change, and human impact.



Life of the Baltic Sea

An unusual biorama shows a perspective humans are seldom privy to. The ceiling portrays the sea surface and sees the ducks swimming, swans diving and seals foraging from a different view.



Life of the Baltic Sea

Content and Engagement

The journey in this area begins with two striking bioramas that bring the **Baltic Sea's underwater world** and **coastal life** to life. The first biorama illustrates the interconnectedness of marine mammals, fish, birds, and plants, highlighting species such as seals, porpoises, European eel, and Baltic herring, alongside vital underwater plants like eelgrass and bladderwrack. This exhibit demonstrates how each organism, from the tiniest invertebrate to the largest predator, plays a role in the overall health and **balance of the ecosystem**.

The second biorama showcases **coastal life**, focusing on the **behavior of bird species** like the common redshank and greater scaup as they interact with the shoreline. This exhibit connects the natural world with human history by incorporating cultural elements such as bird rings and rare artifacts, reinforcing the deep ties between Estonia's coastal ecology and local research.

Visitors can explore the diversity of coastal plants with a tactile wall exhibit that represents the **varying coastal zones**, such as dunes, tidal flats, and the shoreline, while plants like *Zostera marina* (eelgrass) and *Leymus arenarius* (dune grass) are displayed in their natural growth forms. This exhibit not only educates visitors about the importance of coastal vegetation but also fosters appreciation for the beauty and resilience of these ecosystems.

A highlight of the exhibit is the wall dedicated to **seaweeds and algae**, featuring specimens preserved in fluid preparations. This display demonstrates how these plants form the foundation of coastal ecosystems by providing shelter, food, and hiding places for marine creatures. The mural surrounding the seaweeds and algae transports visitors to an underwater world, enhancing their understanding of the **symbiotic relationships** within this ecosystem.

Life of the Baltic Sea

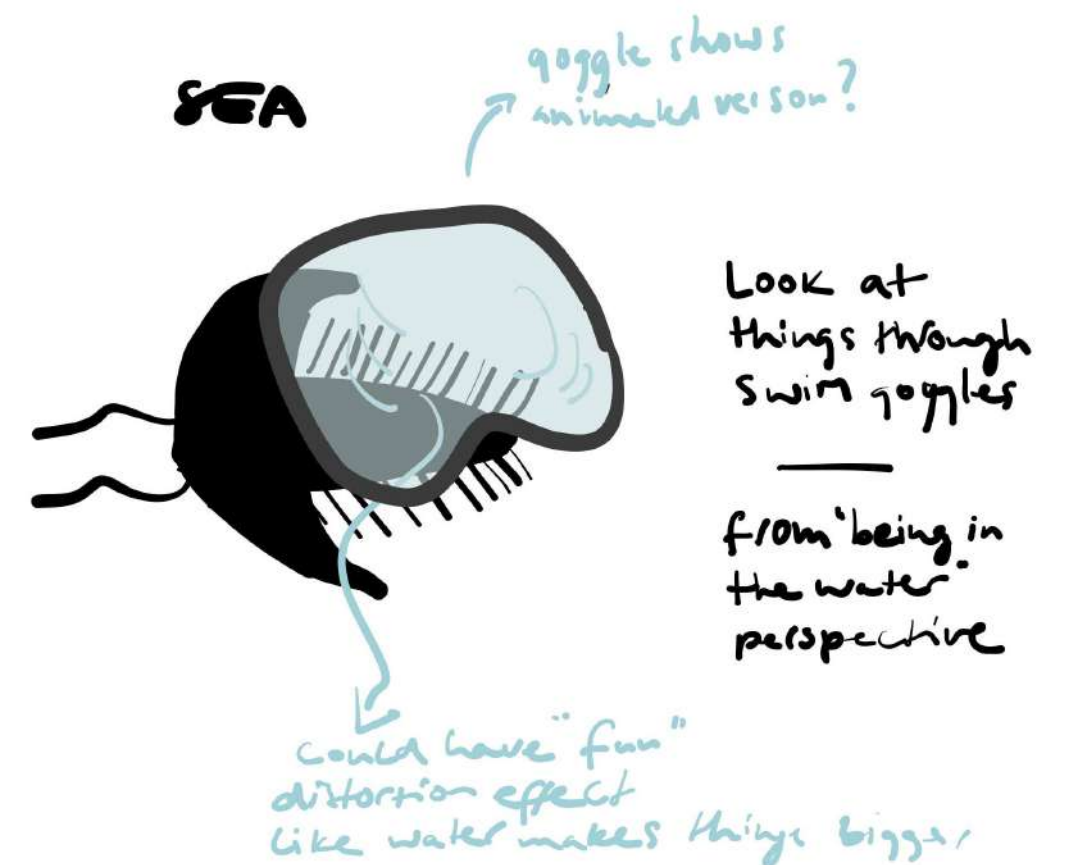
Content and Engagement

The **invertebrate wall** presents a fascinating glimpse into the small creatures that play crucial roles in the Baltic Sea, viewed through magnifying glass circles. Species like the Harris mud crab and the rare jumping spider offer insight into the region's rich biodiversity. Historical and scientific contexts, such as C.E. von Baer's 19th-century mollusc collection, enhance the educational value and illustrate the evolution of scientific exploration in the region.

An interactive centerpiece, the "**Microorganisms of the Baltic Sea**" exhibit, highlights the often-overlooked plankton and other tiny organisms essential to the ecosystem. With **live plankton growth** at the top and magnified views available through microscopes, this exhibit engages visitors in discovering the intricate and vital life forms that sustain the sea's food web.

Additionally, visitors can engage with the interactive touchscreen stand, providing data on the **health of the Baltic Sea**, including key issues such as pollution, conservation efforts, and sustainable fishing practices. The "**Noise Pollution**" installation allows visitors to listen to underwater recordings, demonstrating the impacts of human-generated noise on marine life.

Throughout the exhibit, visitors are encouraged to reflect on the **ongoing challenges faced by the Baltic Sea**, including pollution and climate change, and are inspired to consider the **importance of protecting this unique marine environment** for future generations. The combination of historical, scientific, and contemporary perspectives fosters a deeper understanding of the Baltic Sea's ecological importance and the critical need for conservation.



Visitors can dive into the sea with VR swim goggles, exploring vibrant marine life and coral reefs in an immersive experience.

The Invisible Puppeteers of Coexistence - Microbes in the core exhibition

The overarching theme, “The Invisible Puppeteers of Coexistence – Microbes,” **weaves through the exhibition**, uncovering microbes' foundational roles across diverse ecosystems and daily life. From the shores of the Baltic Sea to the depths of Estonian forests, and even within urban spaces and agriculture, microbes invisibly influence nearly every aspect of nature. They drive life, maintain balance, and enhance resilience. **We’ve integrated this theme into most exhibition sections, presenting microbes through engaging displays and interactions.**

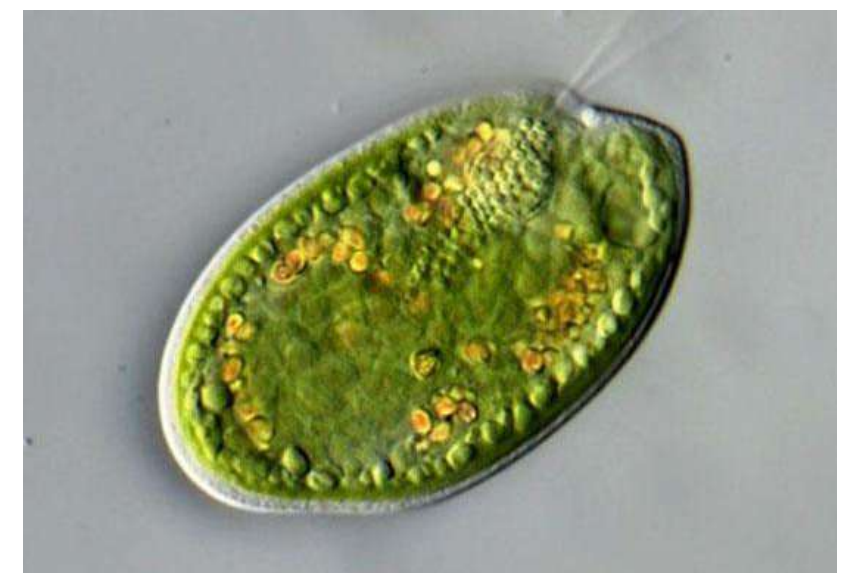
As just one example, in the “Life of the Baltic Sea” area, a specially designed floor-to-ceiling column brings the micro-world into view:

Upper Section: The Plankton & Algae Growth Farm

The upper portion of the column hosts a live plankton and algae culture, creating a miniature “growth farm.” This living exhibit illustrates how plankton and algae produce oxygen, form the base of the marine food web, and play a key role in environmental regulation. It also introduces visitors to potential future applications of algae, like sustainable energy and food production, sparking discussions about marine microorganism-inspired innovation.

Lower Section: Interactive Digital Microscope Station

The lower section of the column becomes an interactive digital table where visitors can explore marine microbes up close using binoculars. Videos, high-resolution images, and descriptions give a glimpse into the activities of bacteria, plankton, and microalgae, demonstrating their essential roles in the marine ecosystem and food chain.





This micro-life column is one of many interactive displays across the exhibition.

Each display highlights the significance of microbes in various habitats and interactions, including Estonian land formation, lakes and rivers, wetlands, forests, agricultural fields, urban environments, and even speculative future scenarios. Together, these exhibits reveal microbes – often unseen and underappreciated – as essential partners in nature’s balance and humanity’s coexistence with the environment.

Life of the Baltic Sea

Storyline and Theme Opener

Topic opener: Brown algae, *Phaeophyceae*

Rationale: An important species in marine ecosystems, highlighting the ecological richness and vulnerability of the Baltic Sea.

Atmosphere and Aesthetics

This area is lit with soft, focused lighting.
The ambiance is modern yet inviting.

Emotional Resonance

Reverence, concern – a reflection on the sea's importance and vulnerability.

Key Takeaway Messages

Interconnected Ecosystems:

The Baltic Sea's species, from mammals to plankton, are interconnected, each playing a vital role in maintaining ecosystem health.

Coastal Life and Human History:

The exhibit links coastal species to human history, highlighting bird research and Estonia's marine heritage.

Importance of Seaweeds and Algae:

Seaweeds and algae provide essential habitats and sustenance, supporting the marine food web.

Biodiversity of Invertebrates:

Invertebrates are crucial to the Baltic's biodiversity, with historical context highlighting their ecological role.

Human Impact and Conservation:

Exhibits address pollution, climate change, and conservation efforts, encouraging awareness of human impacts on the Baltic Sea.

Ground floor. Area J

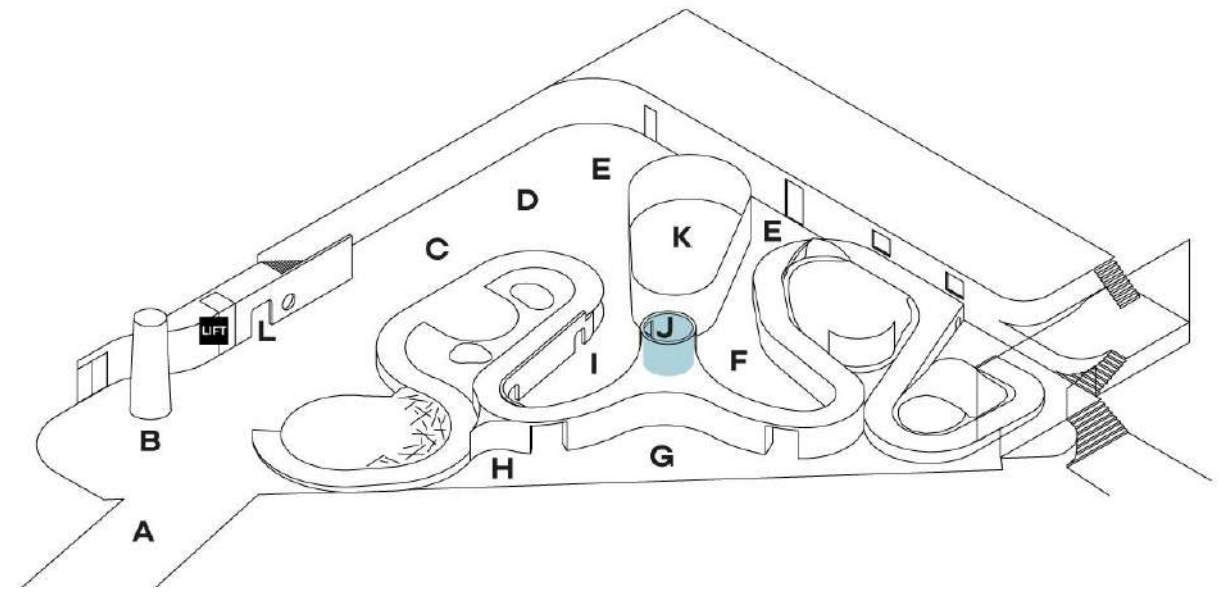
Baltic Sea Dive

As visitors approach the circular installation, the wind whips the waves into a frenzy, an autumn storm churning the Baltic Sea. Yet, as the elevator begins its descent, the tumult above is replaced by a calm, tangible silence, punctuated only by the distinct sounds of the underwater world.

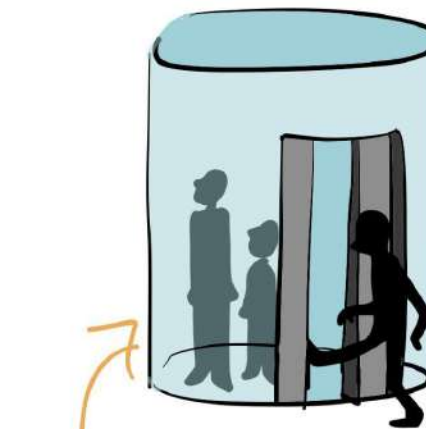
The journey starts at surface waters of the epipelagic zone, teeming with life. As the elevator descends, it transitions into the mesopelagic realm, where the gloom is interrupted only by the faint outlines of creatures adapted to the low light. Deeper still, on the way towards the sea floor, the water column reveals even more peculiar life forms thriving in the darker waters.

Finally, the elevator reaches seafloor, the visitors learn about the human impact to these waters – such as abandoned fishnets, human caused marine debris, algal mats and other eutrophication signs, as well as sediment discoloration due to toxic chemicals – all these often creating dead zones. The explorers in this submarine lift also encounter iron-manganese concretions on the seabed, considered potential future ore deposits. Additionally, they learn about ongoing research and conservation efforts in the Baltic Sea.

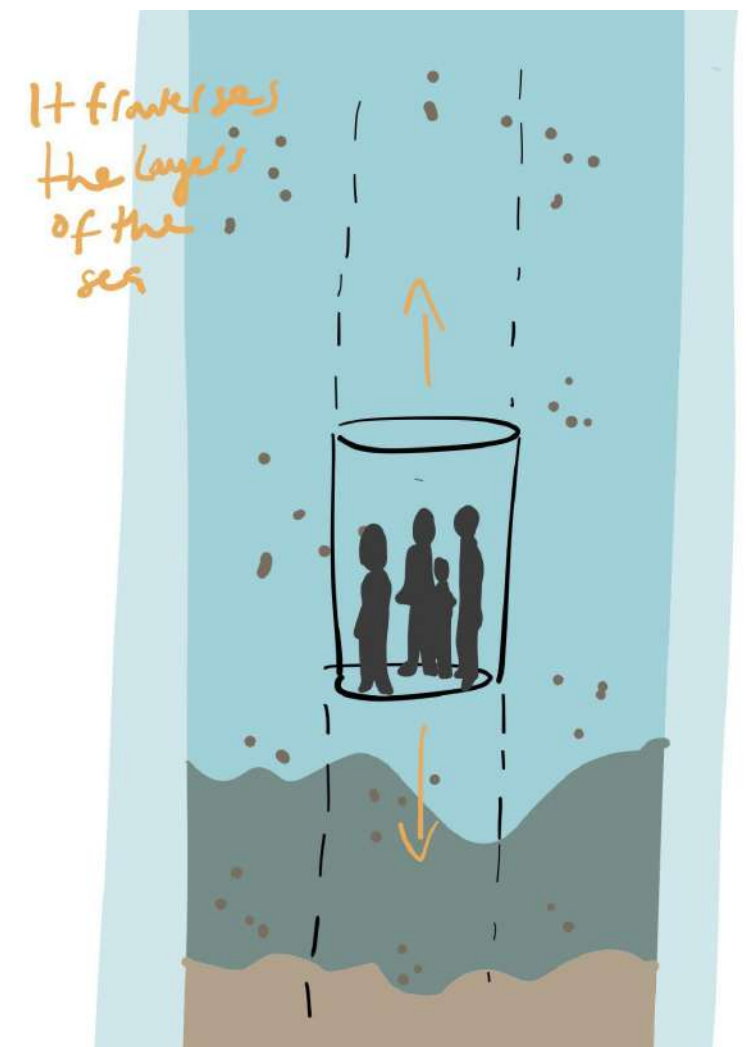
As visitors ascend back to the now calmed waters a beautiful archipelagic vista of the Baltic Sea meets them with sea birds serenading their return, they carry a newfound understanding of the sea's layered complexity and a profound respect for its fragile essence.



Sea & Coast
"elevator" to
step into.



Circular space
LED screens



Life of the Baltic Sea

Storyline and Theme Opener

Topic opener: Sea Urchin

Rationale: Sea urchins are iconic to the Baltic Sea ecosystem, and their presence could symbolize the life and biodiversity of the sea bed. Sea urchin could serve as an engaging character that introduces visitors to the importance of the sea floor, its inhabitants, and the hidden world beneath the water's surface.

Atmosphere and Aesthetics

The lift, designed to resemble an exploration pod, offers a sense of adventure as it "dives" beneath the Baltic Sea water's surface. Soft lighting reflects the undulating movements of the sea, while ambient sounds like bubbling water and gentle waves create a feeling of immersion. As the lift descends, projections of underwater life, like schools of fish and coral beds, provide an awe-inspiring, cinematic experience, blurring the line between reality and exploration.

Emotional Resonance

Wonder, excitement, joy – Visitors will feel a mix of wonder and excitement as they embark on an underwater journey.

Key Takeaway Messages

The lift is an awesome visual journey accompanied by a learning experience that is provided by the story told (everybody can hear that in lift) and some interactive (AI or AR supported solutions) engagement in some special spots or "stops" on the journey along the sea bed, where people can scroll, zoom, kick, or collect specific items or object highlighted by the program.

Key Takeaway Messages

The Baltic Sea's Fragility:

The ecosystem beneath the water is delicate and vulnerable, with pollution, microplastics, and noise threatening its health and biodiversity.

The Importance of Marine Life:

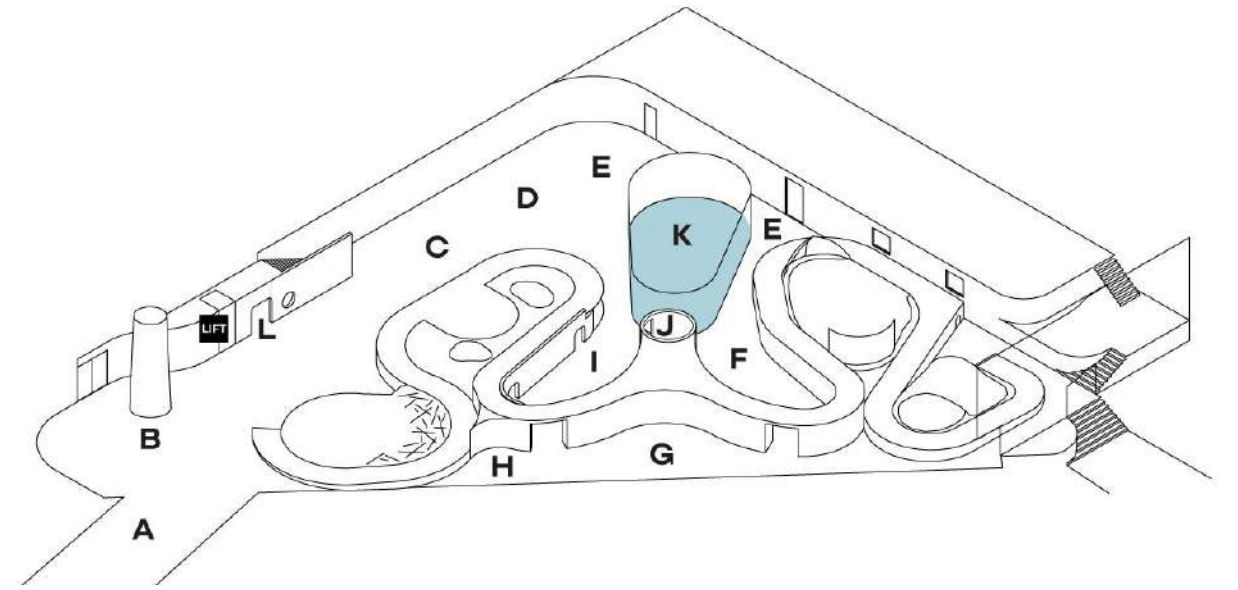
The Baltic Sea's inhabitants, from algae to fish, play a crucial role in maintaining the balance of the ecosystem and the broader environmental health of the region.

Our Role in Conservation:

Every action counts – individuals, communities, and industries must work together to reduce pollution, protect marine habitats, and ensure the long-term health of the Baltic Sea.

Ground floor. Area K

Science Theatre



This area is dedicated to live or interactive demonstrations, educational performances, and exhibits focused on scientific methods and exploration, linking the natural world to human discovery. The room is supplied with stackable chairs and movable modular units, that can be used for different types of events. Modular units are designed height adjustable.

Atmosphere and Aesthetics

The science theatre creates a space for learning and listening. The smart glass walls can be made opaque in order to put the focus on the activities within the room. Freeform shape of the rooms puts you in personal contact with the performer and allows for mutual understanding.

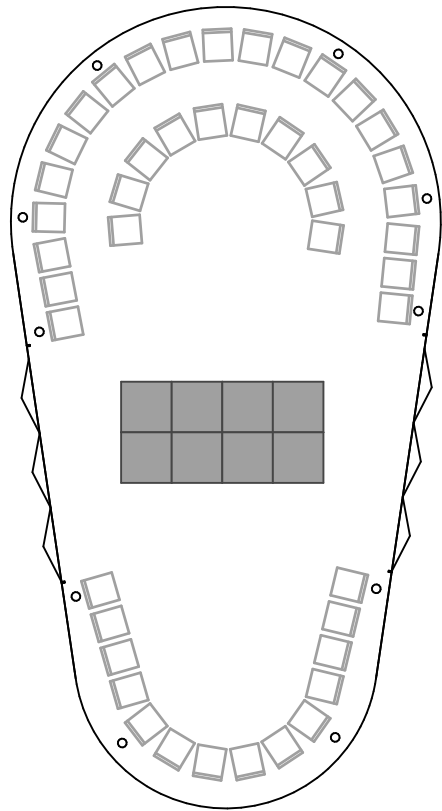
Emotional Resonance

Engagement, excitement – hands-on learning that sparks fascination with scientific discovery.



The Science Theatre

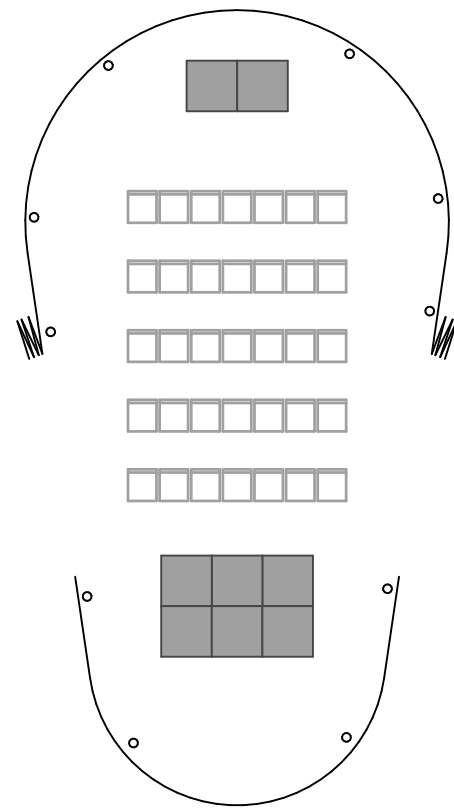
A Multifunctional Space



Performance

Central stage

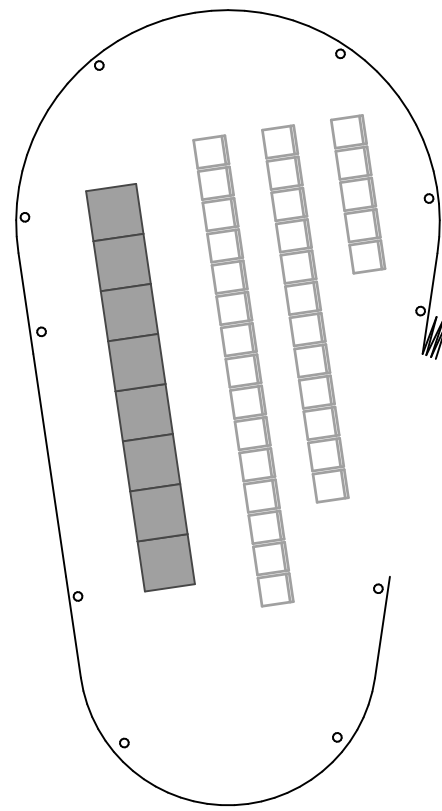
45 seats



Performance

Stage and control table

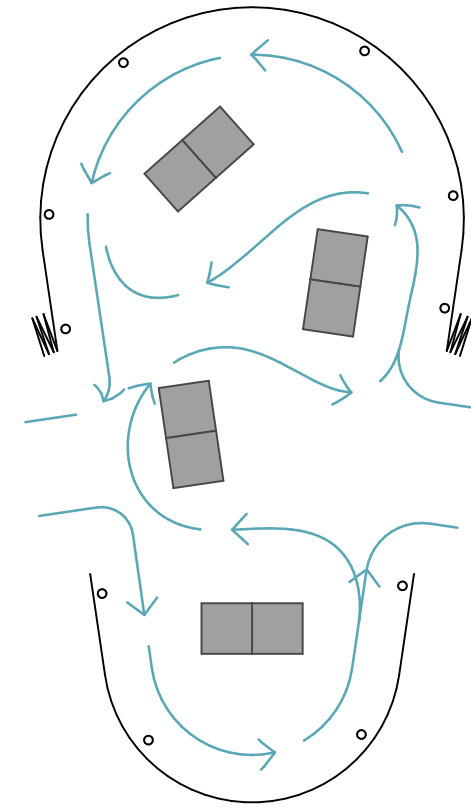
35 seats



Science theatre

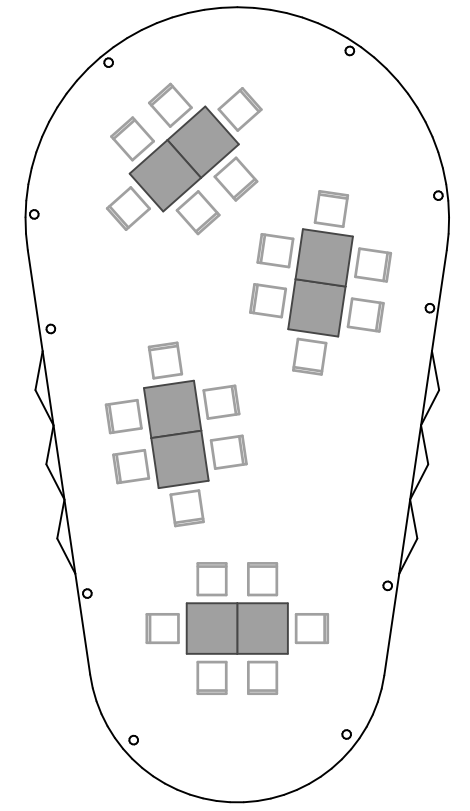
Linear stage

32 seats



Showcase

Small temporary exhibition



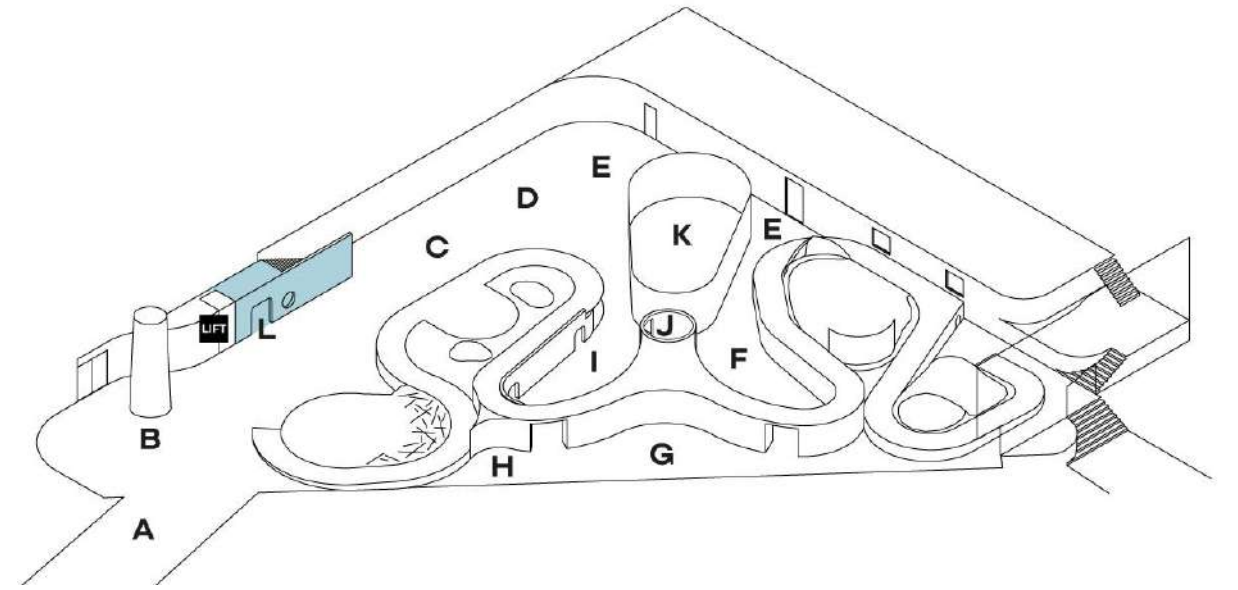
Workshop

Group tables

24 seats

Ground floor. Area L

Children's Mini-Exhibition with Aquarium



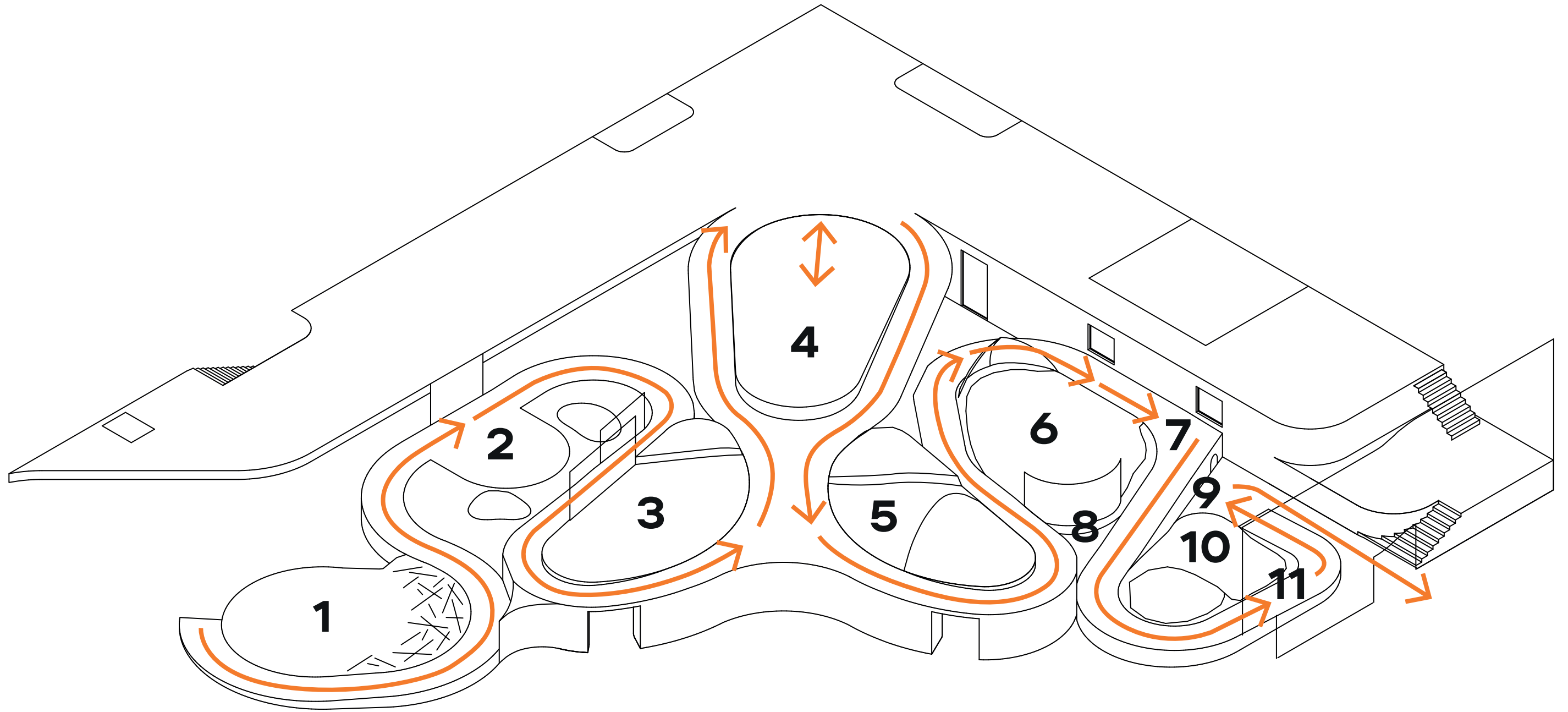
Children's mini-exhibition area with free-to-touch exhibits.
The aquarium is visible from both sides.



Birdsong Symphony

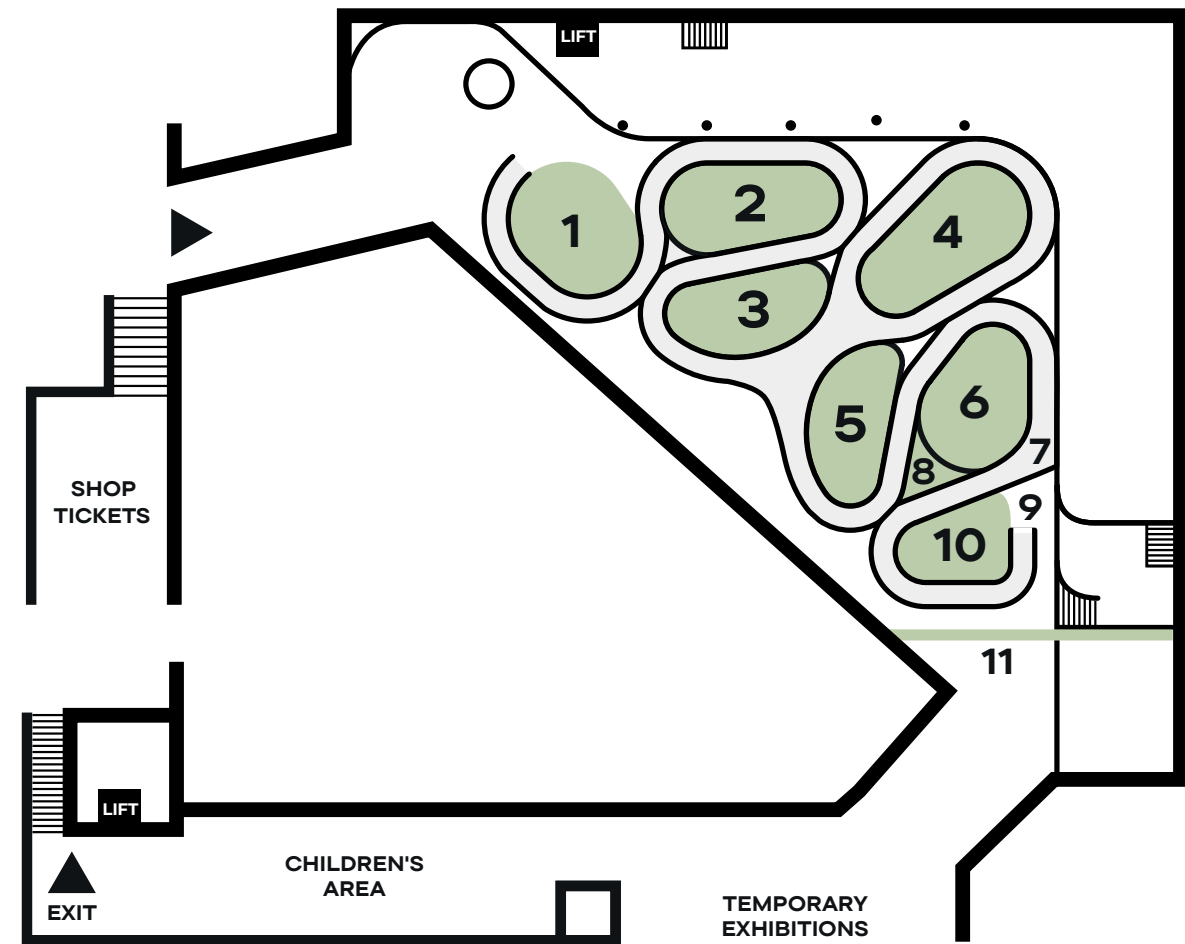
As a way to open up the youngest guests' senses to nature, they have the opportunity to create a "Symphony of Nature". A sky/forest relief features slots shaped like various bird species found in Estonia. When a bird is placed in its corresponding slot, it begins to sing. As more birds are added, a symphony of nature's sounds fills the room, creating a harmonious chorus.





Exhibition Areas on the "Islands"

Distribution of Exhibition Areas on the "Islands"



The exhibition areas along the ramp engage visitors in Estonia's diverse landscapes, showcasing the richness of lakes, rivers, mires, meadows, and forests through a blend of natural history and cultural narratives. Each section emphasizes ecological cycles, interdependence, and the unique species and habitats that represent Estonia's natural heritage, offering both interactive exploration and moments of reflection that deepen visitors' connection to the natural world.

Topics covered along the ramp:

- Area 1 - The Lakes and Rivers of Estonia
- Area 2 - In the Heart of Estonian Mire
- Area 3 - Meadows of Memory
- Area 4 - Think-tank
- Area 5 - Estonian Wildlife and Skyscapes
- Area 6 - The Forest Web: Energy, Cycles, and Micro Life
- Area 7 - *Umwelt*: Jakob von Uexküll's Legacy
- Area 8 - Wild Boar Family
- Area 9 - Badgers' Cave
- Area 10 - Primeval Forests and Nature Conservation
- Area 11 - Forest Wall

Exhibition areas on the "islands". Area I

The Lakes and Rivers of Estonia

Lakes and Rivers of Estonia showcases the intricate web of life within Estonia's **freshwater ecosystems**, revealing the interconnectedness of species that thrive in and around these waters. Visitors journey through displays featuring mammals, birds, fish, amphibians, invertebrates, plants, and microorganisms, each contributing to the balance and vitality of lakes and rivers.

The exhibition emphasizes the delicate co-existence in these habitats, exploring how species interact to sustain the ecosystem and adapt to environmental changes. Additionally, it highlights the cultural and historical significance of freshwater bodies in Estonia, underscoring their importance for biodiversity and human connection alike.

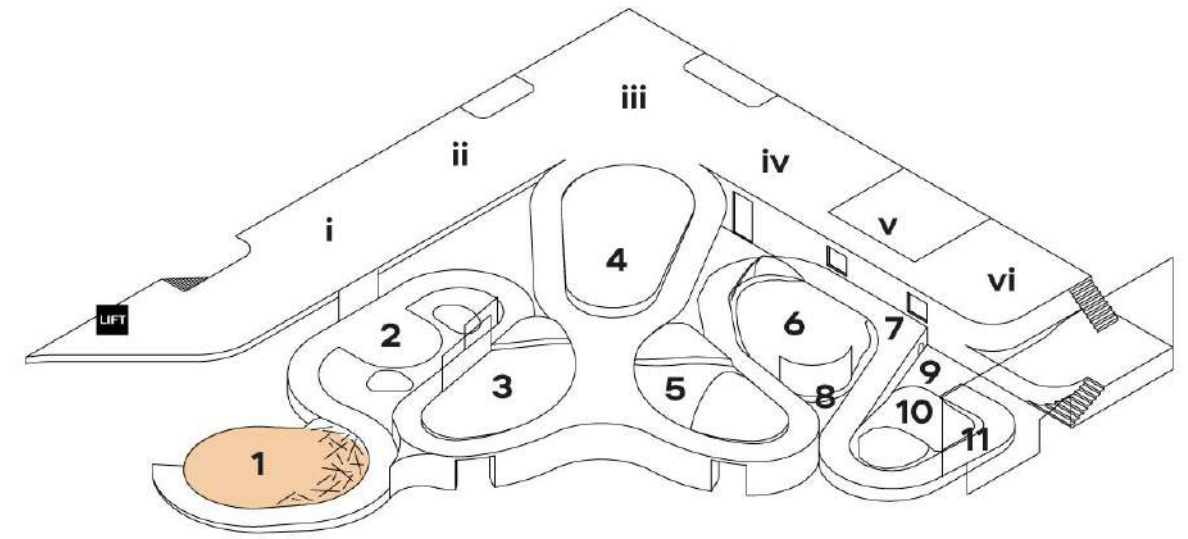


Photo: Jarek Jõepera

The Lakes and Rivers of Estonia

Content and Engagement

The largest element in this area is a physical moulage of a **beaver's dam**, which serves both as an introduction to beavers and as a display stand for larger animals and birds related to freshwater ecosystems. Designed to be interactive, the dam features a small "hut" underneath, where children can crawl in for a fun learning experience, engaging them with the world of beavers and their impact on the environment in an immersive, hands-on way.

Another large single standing floor exhibit would be (i.e. the **"Life below the water level"**), that resembles the gross section of water column in a lake or a river. This can be either a simple column or flowing risen design element that follows the lines of projected river. This see-through display will feature fish, sub-aquatic plants, invertebrates and plants in their closest natural habitats in the water column.

Another single standing floor mound resembling a table (e.g. **"Life above the water level"**) or a dome is presenting the plants and insects that live just above the water level.

A dedicated floor stand/table (e.g. **"The microworld under the surface"**) will be built to feature various microscopic life forms in rivers and lakes. This exhibit will feature a magnified virtual seabed with projection or augmented reality. Species like stoneworts, algae and organisms such as paramecium interacting with each other. Projections or augmented reality can also show interactions and feeding behaviours of single celled organisms (ciliates, amoebas), etc.

Photo: Jarek Jõepera



Photo: Wikipedia

The Lakes and Rivers of Estonia

Storyline and Theme Opener

Opener: Common Bladderwort, *Utricularia vulgaris*

Rationale: The common bladderwort is a carnivorous aquatic plant found in Estonian lakes and rivers, representing the delicate balance of water ecosystems and their rich biodiversity.

Atmosphere and Aesthetics

The open-space exhibition area should feel like a serene waterscape, with soft lighting mimicking sunlight peeking through the branches of trees and reflecting on water. Gentle sounds of flowing streams and birds will give the area a calm and natural vibe. Natural materials like wood, stone, and glass create a harmonious, organic feel.

Emotional Resonance

Awe, joy, concern – join and awe at the rich diversity of life in Estonia's freshwater ecosystems, joy for seeing how protective and conservative efforts have improved the conditions of many ecosystems and species, concern for the fragility of these systems, leaving with a sense of responsibility to protect these environments for the future.

Key Takeaway Messages

The Interconnectedness of Freshwater Ecosystems:

All life forms in freshwater ecosystems depend on each other, maintaining a delicate balance that supports biodiversity.

The Importance of Conservation:

Successful conservation efforts, like protecting beaver populations and aquatic species, must continue to ensure the future of freshwater habitats.

The Fragility of Water Ecosystems:

Freshwater ecosystems are fragile and vulnerable, requiring protection to maintain species survival and environmental health.

The Wonders of the Microworld:

Microscopic life forms play an essential role in freshwater ecosystems, maintaining balance through complex interactions.

Human Impact and Responsibility:

Visitors should leave with a sense of responsibility to protect freshwater ecosystems, ensuring biodiversity and ecosystem health for future generations.

Exhibition areas on the "islands". Area 2

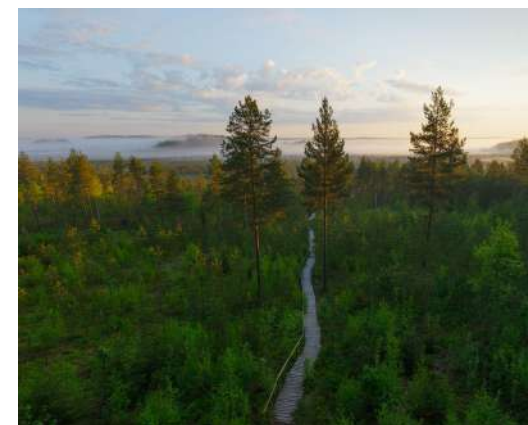
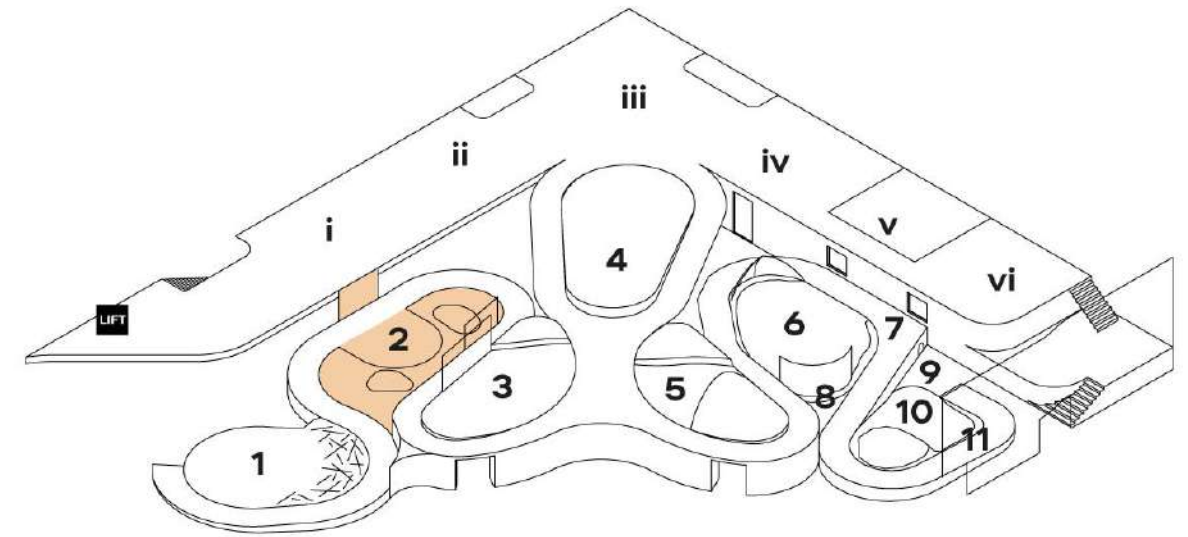
In the Heart of Estonian Mire

In the Heart of Estonian Mire invites visitors into the unique ecosystems of Estonia's bogs, marshes, and swamps, showcasing their vital role in biodiversity, climate regulation, and cultural heritage. Through interactive displays, this area highlights the diversity of wetland species – from insects and plants to mammals, birds, reptiles, fungi, and microorganisms – that thrive in these rich, mysterious landscapes.

The exhibit emphasizes mires' ecological importance, exploring how they support diverse life forms, act as carbon sinks, and hold a significant place in Estonia's natural and cultural history, inspiring a deeper appreciation for their preservation.

Content and Engagement

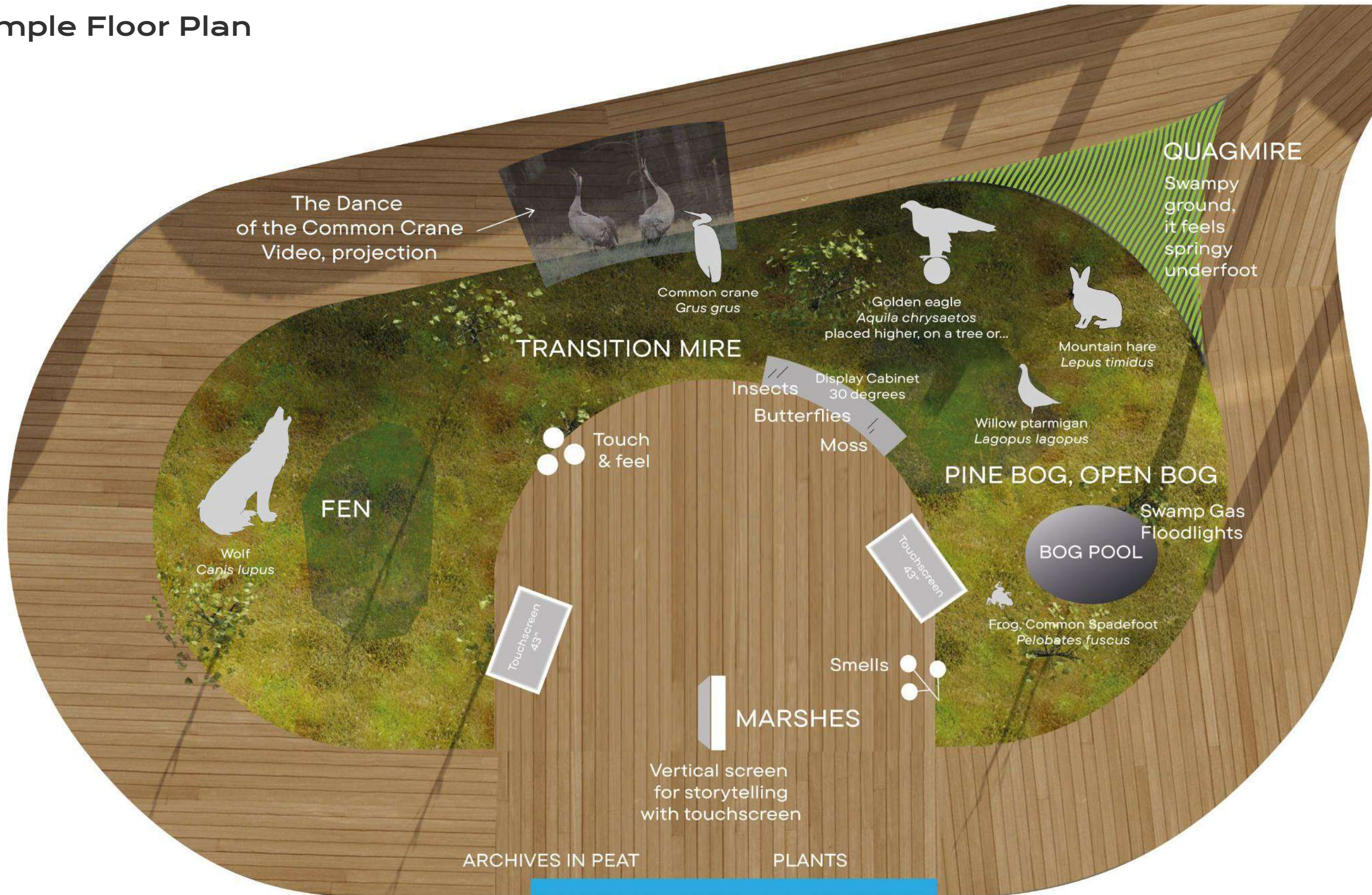
The area features open-air walk in *bioramas* representing typical Estonian mires, allowing visitors to observe large species in their habitats from a distance. A dedicated platform allows for an **up-close experience**, complete with **sensory elements** like swamp smells and interactive displays. One notable feature is a screen that shows the graceful **dance of swamp cranes**, with real-life crane specimens displayed nearby. The exhibition not only showcases the biological diversity of the mire ecosystems but also emphasizes their importance in climate change mitigation and their vulnerability to environmental threats.



Photos: Jarek Jõepera

In the Heart of Estonian Mire

Sample Floor Plan



In the Heart of Estonian Mire

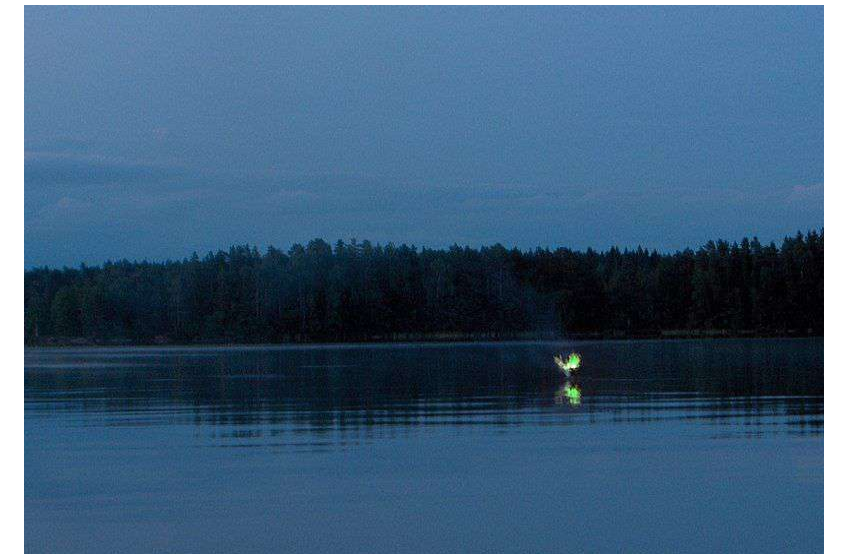
Content and Engagement

Visitors will encounter bioramas that showcase large animals and birds in their **natural swamp habitats**, including wolves, elk, and golden eagles, as well as smaller organisms like marsh mosquitoes, and green algae. Special attention is given to the preservation of bogs, with displays of ancient items found in peat bogs, demonstrating the preservative power of these oxygen-poor, acidic environments. The exhibit also highlights the role of sphagnum moss, a key species in bog ecosystems.

Special interactive area invites visitors, particularly children, to step onto a specially designed **"bouncy" ground** that mimics the unique, soft, and treacherous surface of swamp terrain. This **hands-on experience** simulates the feeling of walking on the fragile, waterlogged ground that shifts beneath your feet, allowing a deeper connection to the swamp ecosystem's **delicate balance**.

Additionally, a captivating holographic display brings to life the mystical **phenomenon of "essütäjä,"** the eerie "will-o'-the-wisp" or swamp lights that have long been part of Estonian folklore. These lights, which occur when natural gas produced in swamps ignites, are showcased in a mesmerizing, interactive projection, symbolizing the deep connection between Estonian culture and the mysterious beauty of the swamp. Through these immersive features, visitors are invited to explore both the scientific and cultural significance of Estonian mires in an engaging, unforgettable way.

Through its carefully curated displays, the mires of Estonia exhibition fosters a deeper understanding of the fragile beauty of these wetlands, their ecological significance, and the ongoing efforts to protect them for future generations.



Photos: Wikipedia

In the Heart of Estonian Mire

Storyline and Theme Opener

Opener: Mountain Hare, *Lepus timidus*

Rationale: The mountain hare is a species tied to Estonian mires, where they live in a delicate balance with their environment, symbolizing the importance of wetland ecosystems.

Atmosphere and Aesthetics

The atmosphere of the area evokes a sense of mystery, with soft, natural lighting that mimics the eerie glow of a swamp at dusk. The little bit mystical or even scary sounds of owls howling in distance, and subtle swampy fragrances create tranquil environment, inviting visitors to connect with the ancient and magical world of Estonia's wetlands.

Emotional Resonance

Mystery, intrigue – The wetlands evoke a sense of mystery, where visitors reflect on the uniqueness of these ecosystems, which are both life-giving and fragile.

Key Takeaway Messages

Swamps are Vital Ecosystems:

Swamps support a diverse range of species and play an essential role in carbon sequestration and climate regulation, highlighting their importance in the ecosystem.

Delicate Balance and Fragility:

Swamps are both resilient and fragile; even small disturbances can have lasting impacts, underscoring the need for careful preservation of these unique habitats.

Cultural and Mythological Significance:

Swamps have a rich place in Estonian folklore, with mystical phenomena like the "essütäjä" (will-o'-the-wisp) symbolizing their cultural and mythical importance.

Conservation Efforts are Key:

Conservation and restoration efforts, particularly for species like sphagnum moss, are critical in preserving swamp ecosystems and their biodiversity.

Connection to Nature:

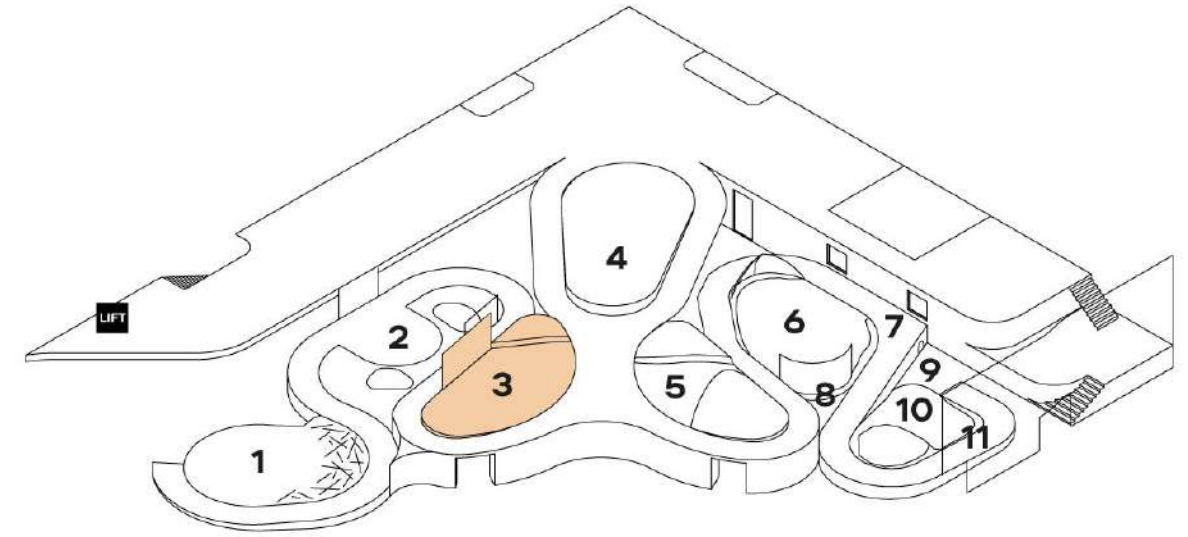
Engaging with swamp environments through interactive experiences encourages a personal connection, fostering respect and responsibility to protect these ecosystems for the future.

Exhibition areas on the "islands". Area 3

Meadows of Memory: Estonia's Living Heritage

Meadows of Memory: Estonia's Living Heritage area celebrates the vibrant biodiversity of Estonia's traditional meadows, showcasing them as true **hotspots of ecological richness**. This area highlights native meadow animals like sheep, alongside a diverse array of plants and insects that thrive in these unique habitats. A central exhibit – a North-Estonian karst rock moulage with a resting snake – illustrates the region's distinct geology and the karst phenomenon.

The display honors Estonia's efforts in conserving these landscapes, exploring themes of traditional land use, cultural heritage, conservation practices, and human-nature connections. By engaging visitors with these topics, this area emphasizes the enduring beauty and importance of Estonia's meadows for future generations.



Meadows of Memory: Estonia's Living Heritage

Content and Engagement

The Meadows of Memory area provides a multi-layered experience that captures the rich biodiversity and cultural significance of Estonia's meadows.

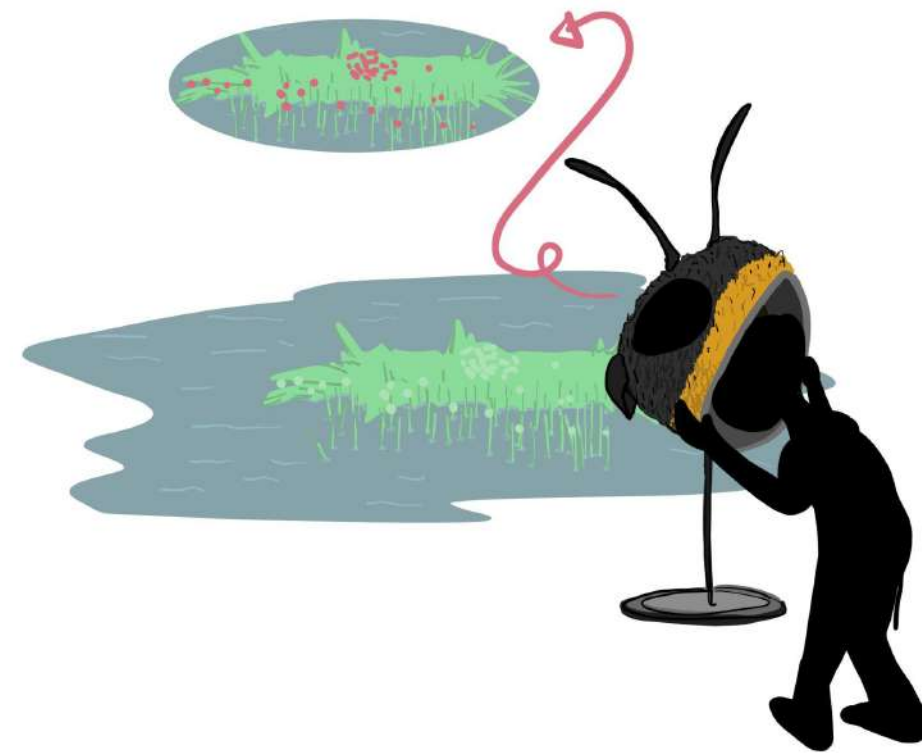
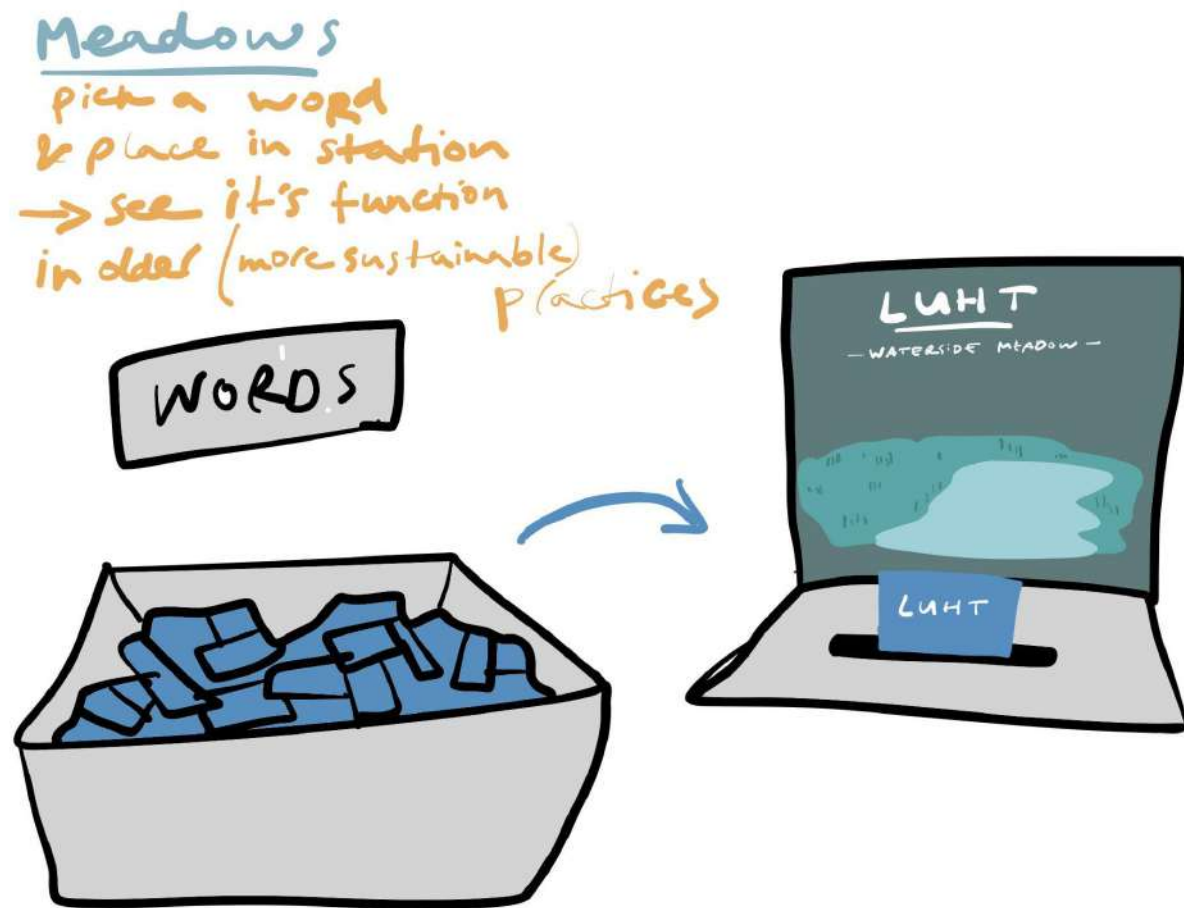
A large, life-sized screen plays a looping documentary that immerses visitors in meadow life, featuring scenes like Scottish Highland Cattle grazing, changing seasons, and Muhu islanders dressed in traditional clothes celebrating **Midsummer's Eve**. The screen also showcases a man **mowing with a scythe**, connecting visitors with traditional land stewardship practices.

Thoughtfully arranged displays of meadow plants, orchids, and insects highlight the intricate web of relationships between species, emphasizing the richness of these ecosystems.

Interactive tables offer games and learning activities, enabling visitors to explore the connections within the meadow's biodiversity and understand the importance of preserving these landscapes.



Meadows of Memory: Estonia's Living Heritage



In the meadow, visitors engage with installations that unveil hidden worlds, highlighting the interconnectedness of nature and culture. From exploring how the Estonian landscape has shaped language to uncovering the sonic microcosm beneath their feet and perceiving the environment through a bee's eyes, these experiences demonstrate the harmonious coexistence of humans and nature. This immersive journey reveals how our stretch into the natural world also stretches back, enriching and informing our culture.



Meadows of Memory: Estonia's Living Heritage

Storyline and Theme Opener

Opener: Parasol Mushroom, *Macrolepiota Procera*

Rationale: The parasol mushroom represents the biodiversity of Estonian meadows, which are often rich in plant and fungal life, symbolizing the deep connections to tradition and heritage.

Atmosphere and Aesthetics

As on open space on the ramp area spotted lights are used to highlight various exhibits on this area. The general light-theme is “sunny”. Sounds of meadow bugs buzzing in the background accompanied with sounds from the backdrop video installation.

Emotional Resonance

Fondness, nostalgia, happiness, tranquility – This area reflects a deep emotional connection to the past, evoking warmth and a sense of heritage, where visitors can reflect on cultural ties to nature.

Key Takeaway Messages

Biodiversity is Precious:

Estonia's heritage meadows are rich in unique plants, fungi, and insects, vital to ecosystem balance.

Cultural and Natural Heritage are Intertwined:

Practices like scythe mowing and Midsummer celebrations highlight the link between people and meadows.

Geology Shapes Ecology:

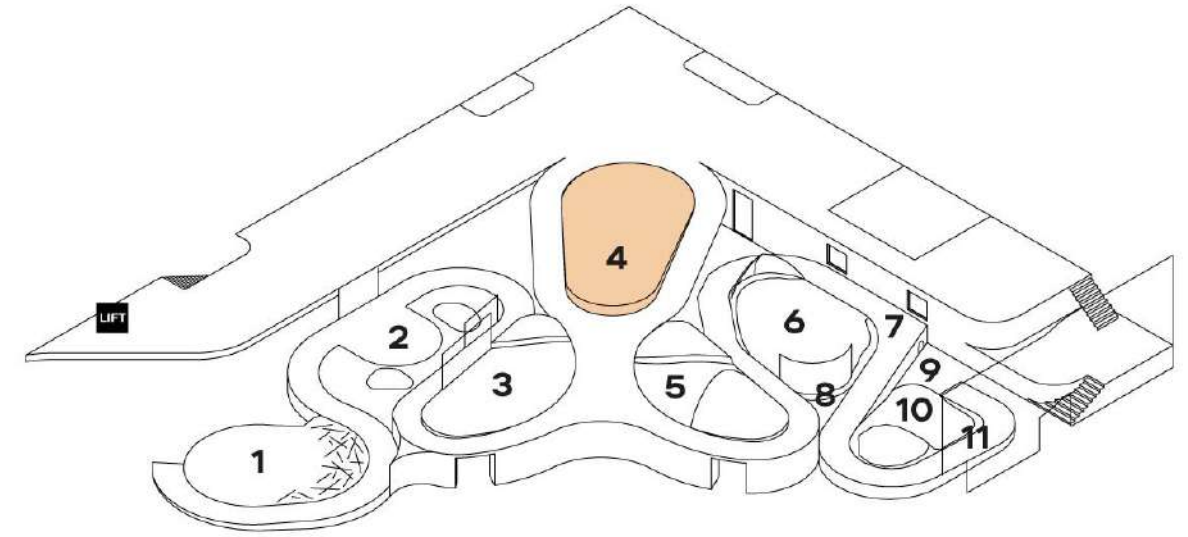
Karst rock formations influence meadow habitats, soil, and water flow, supporting diverse species.

Conservation Efforts Make a Difference:

Estonia's success in preserving meadows shows that conservation can protect ecosystems.

Exhibition areas on the "islands". Area 4

Think-tank



The **Think-tank** area serves as a transitional space, connecting the natural landscapes on the first floor with the human-centered and global themes on the balcony. Acting as a “bridge,” this area **encourages reflection** and sparks curiosity about the future of our planet. It invites visitors to ponder complex questions about sustainability, biodiversity, and the impact of human choices on nature.

Through interactive elements, thought-provoking questions, and digital displays, this area fosters engagement with urgent environmental and societal issues. The Think-tank encourages visitors to consider their own roles in shaping a sustainable future, bridging nature and modern life in a shared dialogue.

Content and Engagement

The exhibits of this area aim to engage visitors’ senses and stimulate deeper thinking about their role in environmental issues, making this Think-tank area an impactful transition between the themes of natural landscapes and global human concerns. There are a few specific solutions we describe here, however this area will eventually be designed more detailed.





The **central feature** of this area and of the whole exhibition is an interactive digital solution **"My Promise for The Future"**. In this reflective exhibit, visitors are encouraged to make a personal environmental commitment. Using an interactive touch-screen station, they answer

questions about their habits, values, and concerns. The system guides them through different themes, from daily choices to larger environmental issues, helping them identify specific actions they can pledge to improve sustainability in their lives.

Think-tank

Content and Engagement

A listening solution **"Perspectives of Life"** lets visitors hear stories told from contrasting perspectives, such as **city vs. nature** or **fish vs. fisherman**. Each story is an interaction between characters that embody opposing viewpoints on environmental issues. For example, a fish speaks about its life in a river and fishermen as his enemies, while a fisherman describes the same river as a resource of food. This sensory immersion highlights the interconnectedness and tensions between human actions and nature, prompting visitors to question how they perceive and interact with the environment.

After completing their reflection, visitors digitally "sign" their **environmental commitment**. These pledges appear on a projection wall in real time, creating a collective, visual display of visitor commitments. To reinforce accountability, visitors receive a QR code or link to their pledge, encouraging them to revisit and track their commitment over time.

The **"Living Mirror"** is an interactive exhibit that uses **AI** to reflect a potential future environment based on the visitor's current lifestyle choices. Visitors answer a short questionnaire about their daily habits – such as transportation, energy usage, diet, and recycling practices – and the **AI generates a visual projection of a future setting influenced by these choices**. The projection shows an environment that could range from a sustainable, thriving habitat to a more compromised setting, allowing visitors to see a possible "tomorrow" shaped by their "today." The exhibit includes a semi-reflective screen that overlays the visitor's image with a projected background environment. As they stand before the screen, they see themselves within a **dynamically changing environment generated by AI**. Visitors can modify their answers and immediately see how changes impact the projected environment, reinforcing the direct connection between personal actions and environmental outcomes. This dynamic feedback loop offers both a visual and emotional experience, emphasizing the power of individual choice.

Storyline and Theme Opener

Suggested Opener: The Future

(e.g., an abstract representation of life in a new form or environment)

Rationale: Since this area is dedicated to interaction, reflection, and exploring future possibilities, an opener that represents potential for change and evolution would be ideal. An abstract organism (like a 3D-printed "alien" organism or virtual life form) could spark curiosity and engage visitors in thinking about future scenarios. Alternatively, you might consider a concept like "a single drop of water" symbolizing potential for life and interconnectedness.

Atmosphere and Aesthetics

The area is intentionally scent-neutral, emphasizing sight and sound to create a thought-provoking environment that's free from distractions. Subdued lighting focuses attention on each exhibit, while gentle ambient sounds from nature (like wind or distant water) create a grounding atmosphere, encouraging reflection.

Emotional Resonance

Inspiration, contemplation – A reflective space encouraging deep thinking and the consideration of future choices. It evokes a hopeful yet somber feeling, prompting visitors to contemplate their role in shaping the future.

Key Takeaway Messages

Your Choices Shape Tomorrow's World:

Small, mindful changes in your daily habits can significantly impact the future environment.

Perspectives Matter in Solving Environmental Issues:

Understanding different viewpoints helps us find balanced solutions for both humans and ecosystems.

Commitment Starts with a Small Promise:

One simple sustainable action can spark a movement for positive environmental change.

You Are Part of Nature, Not Separate from It:

Our future is shaped by how we connect with and care for the natural world today.

A Sustainable Future Depends on Our Imagination and Action:

Innovative ideas and active choices are key to creating a healthier future.

Exhibition areas on the "islands". Area 5

Estonian Wildlife and Skyscapes

The **Estonian Wildlife and Skyscapes** exhibition area offers visitors a dual experience: a rich look at Estonia's native species and a serene space for contemplating the country's varied skylines and weather. This area is divided into a detailed wildlife biorama and a peaceful sky-viewing nook, blending education with reflection.

The wildlife biorama presents iconic Estonian species, from mammals like the European mink, brown bear, and elk to birds like the rare black stork, the small goldcrest, and the common chaffinch. It also highlights the unique slow worm, Estonia's only legless reptile, alongside a habitat display for forest animals.

The skylines area allows visitors to experience the 4 seasons, the flight above the beautiful and varied Estonian landscapes, and admiration of night skies and *aurora borealis* phenomenon.

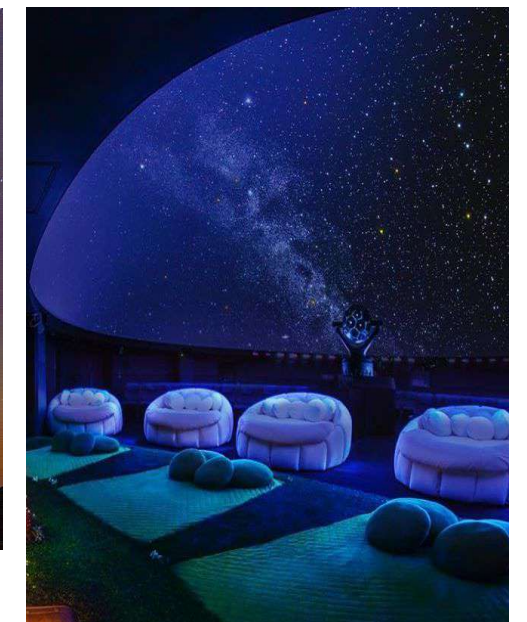
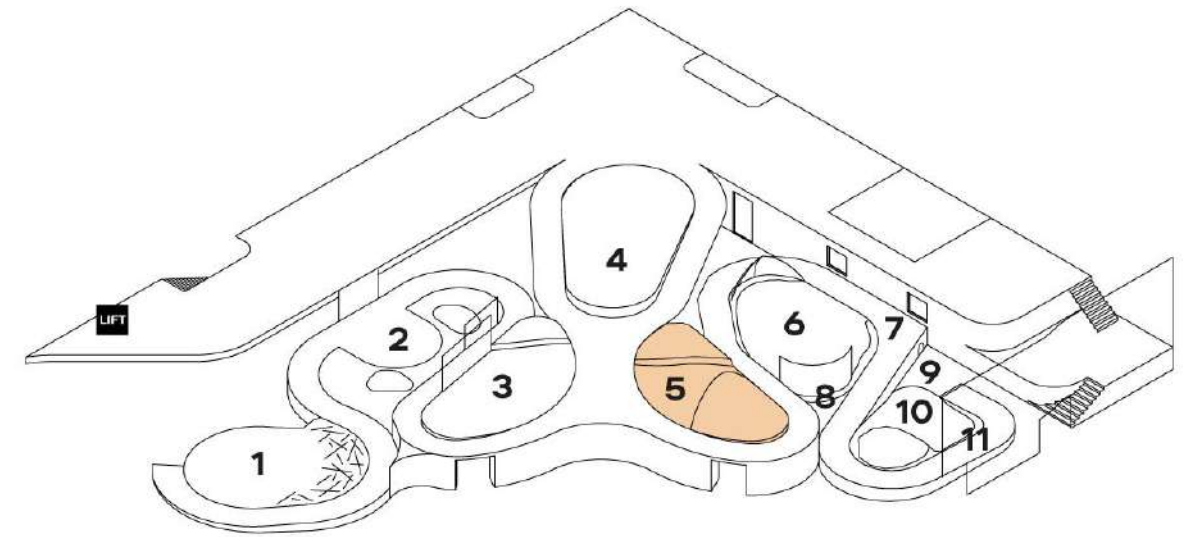


Photo by konicaminolta_planetarium

Estonian Wildlife and Skyscapes

Photo: Jarek Jõepera



On the opposite side, a dedicated leisure area invites visitors to relax and contemplate Estonia's spectacular skyscapes. A looping projection across the arcing ceiling creates a mesmerizing and deep display of changing skies, from bright, sunlit afternoons to rainy and stormy clouds, to the serene, starry night. There are serene nature sounds playing (rain falling, gentle wind blowing, birds singing etc) that will further deepen the contemplative experience. Visitors can sit or lay back on cosy sofas and gaze at the northern lights and other awe-inspiring phenomena, connecting deeply with the natural rhythms and moods of Estonia's skyscape.

This area captures the essence of Estonian nature in a single, immersive space where visitors can explore the richness of local biodiversity, then unwind in the peaceful ambiance of Estonia's ever-shifting skies. By presenting wildlife and skyscapes side by side, this exhibit inspires both a respect for local species and a sense of wonder for the natural world, making it a sanctuary for reflection and an homage to Estonia's environmental heritage.

Estonian Wildlife and Skyscapes

Content and Engagement

Immersive Visual and Audio Experience: The exhibition offers a dynamic and engaging environment with looping videos of Estonian skies, from sunny days to northern lights. This visual display is paired with the natural sounds of Estonian wildlife, creating an immersive experience that connects visitors to the beauty and rhythm of nature. The ceiling projections invite relaxation and contemplation, while the sounds and visuals shift to reflect different times of day and weather conditions, fostering a deep sense of connection with the natural world.

Rest and Reflection: The leisure area, designed for rest and relaxation, offers a space for visitors to lie down or sit comfortably while taking in the vast, changing sky projections. This quiet zone invites reflection on the beauty and fragility of nature, providing an opportunity for visitors to meditate on their personal connection to the environment and to understand the importance of conservation.

Educational and Emotional Connection: The exhibition fosters both an intellectual and emotional connection to the natural world. It encourages visitors to consider their own relationship with the environment and reflect on the delicate balance between wildlife and landscape.

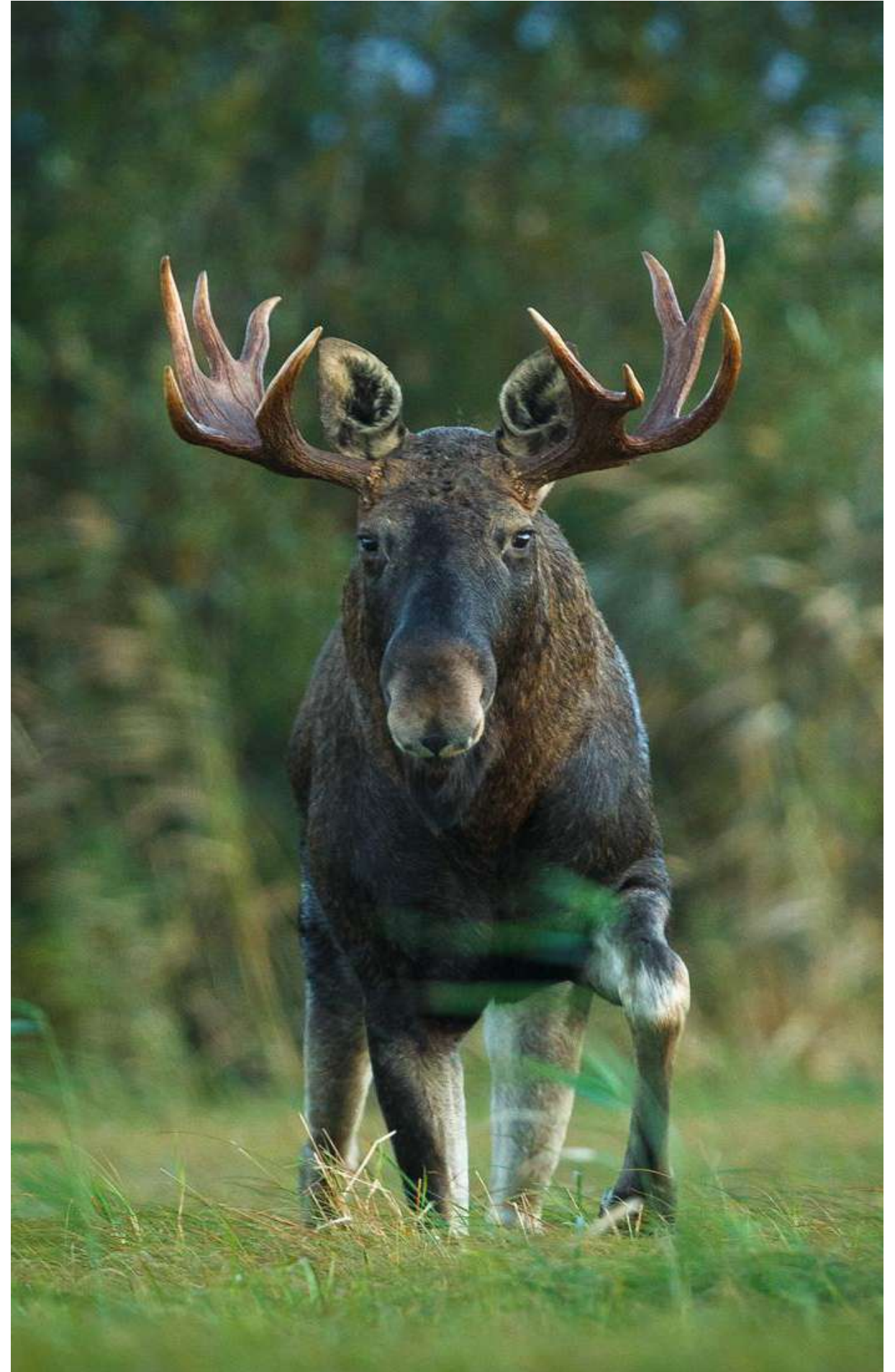


Photo: Jarek Jõepera

Estonian Wildlife and Skyscapes

Storyline and Theme Opener

Suggested Opener: Common Tern, *Sterna Hirundo*

Rationale: The common tern is a bird found throughout Estonia and is often associated with coastal and wetland areas. It could serve as a symbol of Estonian wildlife. For the tranquil sky section, this bird could be the "guide" for visitors as they experience the changing skies above, highlighting the peaceful relationship between the natural world and the environment.

Atmosphere and Aesthetics

This area features focused spotlighting on the animal displays, highlighting the details of species displayed. The seating/lying area for skyscape admiration is subtly lit, creating a peaceful, relaxed atmosphere, where the only light comes from the ceiling video installation, drawing visitors' attention upward to the shifting skies above while maintaining a tranquil, immersive experience. This area supported by natural sounds from the video installation (rain, storm, sunny day sounds on a meadow, etc.).

Emotional Resonance

Awe, freedom – A feeling of awe for the beauty of nature and a sense of freedom, connecting people to the expansive natural world and the sky above them.

Key Takeaway Messages

The Power of Nature's Rhythms:

The changing Estonian skies show us nature's beauty and its impact on weather and ecosystems.

The Importance of Rest and Reflection:

Taking time to enjoy nature's beauty fosters a deeper connection and appreciation for the environment.

Human Connection to the Land:

The exhibit highlights how Estonian wildlife and geology shape human lives and the need for sustainable coexistence.

Exhibition areas on the "islands". Area 6

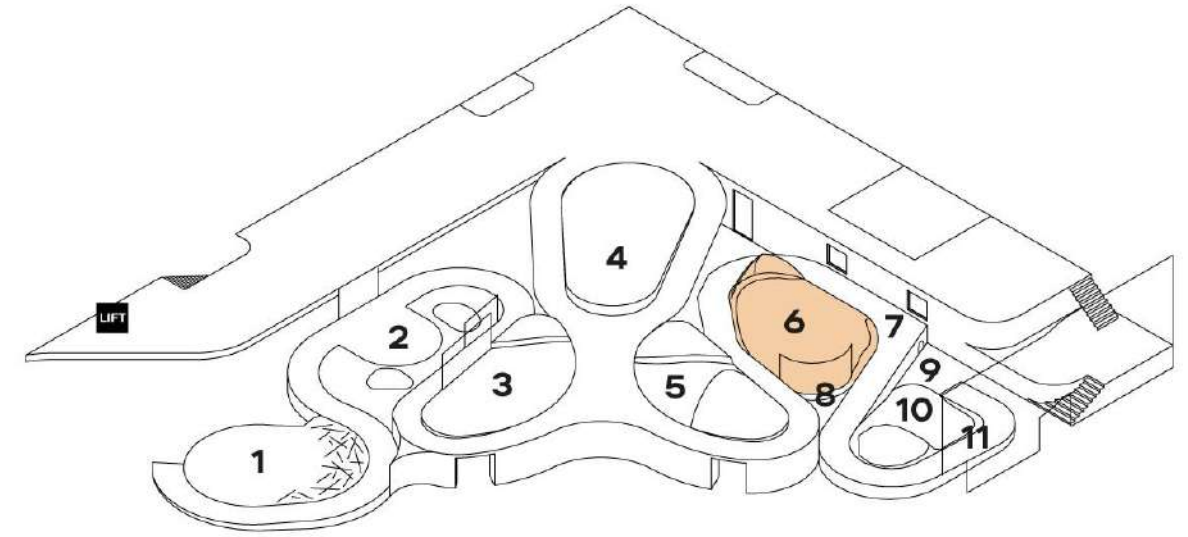
The Forest Web: Energy Cycles and Micro Life

The Forest Web: Energy, Cycles, and Micro Life area delves into the complex relationships that sustain forest ecosystems, focusing on the critical roles of **mycorrhiza**, leaves, and microorganisms. At the center, an interactive digital animation illustrates the *Wood Wide Web* – the symbiotic network linking trees and fungi. Surrounding this display, backlit panels provide intriguing insights into these essential natural processes.

An oversized, curved leaf structure offers an immersive experience, allowing visitors to walk beneath it and explore the intricacies of **photosynthesis** and micro-life. Additional hands-on exhibits cater to younger visitors, while interactive displays spotlight forest species such as insects, fungi, lichens, and mosses, underscoring their ecological significance and interconnectedness.

Content and Engagement

There are several interactive learning experiences and solutions that are used in this area for enhanced learning and exploration into topics that can generally be considered as less engaging.



<https://www.waldwissen.net/en/forest-ecology/forest-plants/plant-ecology/fascinating-mycorrhiza>

The Forest Web: Energy Cycles and Micro Life

As the centerpiece we focus on introducing the importance of mycorrhizae and the concept of the Wood Wide Web. The solution **"Mycorrhizal Web Animation"** is presented on the large floor to "ceiling" central screen. It is designed as a bent digital projection (to ensure better visitor engagement) that spans along the left edge of the area. This screen can be designed to be interactive and responsive to movement. As visitors walk past, the (otherwise still) mycorrhizal web animation starts. The animation will depict mycorrhizal fungi formation and operation, showing their relationship with trees through the Wood Wide Web. This animation should show a dynamic and visual representation of how fungal networks connect plants, trees, and other organisms, transferring nutrients and information. The mycorrhiza network will be shown as a vast, intricate underground web that reacts to environmental stimuli.



The other, right edge, of the area is designed as a huge **Curved Leaf Wall** that focuses on photosynthesis topic making it attractive, interesting and engaging learning experience. The curved leaf wall represents the process of photosynthesis and highlights the role of leaves in the forest ecosystem. This oversized leaf acts as both an artistic sculpture and an interactive learning tool. Visitors will walk under the leaf structure, which will be designed with intricate details that represent the microscopic anatomy of a leaf (stomata, chloroplasts, and veins). Interactive screens embedded in the leaf's structure will show how photosynthesis works and explain how leaves produce the oxygen that sustains life on Earth. For younger visitors, there will be simple tactile games or touch-sensitive panels that allow them to simulate how plants absorb sunlight, water, and CO₂. For older audiences, there will be visual diagrams explaining the biochemical processes like the Calvin cycle, light reaction, and how plants store energy. The leaf's texture should be visible, with tactile features such as raised veins, droplets of "dewdrops," and glowing sections that represent photosynthesis. Use a gentle, warm lighting effect to simulate sunlight filtering through the canopy.

The Forest Web: Energy Cycles and Micro Life

Content and Engagement

Connected to the leaf are **Insect and Micro Life Mounts**. On the walls on and around the curved leaf, various forest insects and microscopic life forms are mounted (covered with magnifying semi-circle glass), emphasizing their role in sustaining plant and tree health. Insects like Purple emperor butterflies, Bumblebee robber flies, and beetles are displayed with informative plaques explaining their ecological roles, such as pollination, decomposing organic material, or maintaining the forest food web.

Microorganisms, such as bacteria and algae, will be presented as enlarged 3D printed models, showing the intricate, often invisible life forms that interact with trees, fungi, and soil. For added engagement, visitors can interact with touch screens next to each insect display to learn more about its lifecycle and behavior in the forest ecosystem.

The third encompassed exhibit in this area is an **Interactive Tree-Stump Stand (Mushrooms, Lichen, and Moss Focus)** that is presented in the center of the room. Visitors can gather around it. The stump will be surrounded by real specimens of moss, lichens, and mushrooms that grow on trees. Interactive touch screens placed around the stump will provide information about how different types of fungi, mosses, and lichens interact with trees. These displays could have detailed illustrations showing the symbiosis between fungi and trees (such as mycorrhiza), and how this relationship is essential for forest health. The tree stump will also showcase examples of species such as Chaga and Honey fungus, explaining their ecological importance and impact. The stump has a natural look, carved to appear as if it has been naturally worn by time, with a smooth surface for easy touch interaction. Visitors can press buttons to interact with the different fungi and learn about their effects on the tree, the forest, and the wider ecosystem.

The Forest Web: Energy Cycles and Micro Life

Storyline and Theme Opener

Opener: Lichen, *Pseudevernia furfuracea*

Rationale: Lichens are important bioindicators of forest health and represent the intricate, almost invisible relationships that sustain ecosystems. The lichen perfectly fits the theme of micro life, energy cycles, and interdependence within the forest.

Atmosphere and Aesthetics

This area is light mimicking natural sunlight filtering through a canopy, creating dynamic shifts in light as visitors walk through the space, evoking the changing forest environment throughout the day. Throughout the area, sounds of the forest like rustling leaves, bird calls, and the sound of a breeze moving through trees are introduced. These sounds will help immerse visitors in the forest environment.

Emotional Resonance

Wonder, reverence – A sense of wonder as visitors delve into the interconnectedness of life in the forest and its many hidden, unseen aspects. There is also reverence for the delicate balance of these systems.

Key Takeaway Messages

Interconnectedness of Forest Life:

Forests thrive through complex relationships, like the "Wood Wide Web," where fungi connect tree roots.

Importance of Photosynthesis:

Leaves are crucial for photosynthesis, turning sunlight into energy that sustains both plants and ecosystems.

Micro and Macro Life Connections:

Every organism, from insects to microorganisms, plays a key role in nutrient cycling and forest health.

Fungi's Vital Role:

Fungi help forests by aiding nutrient absorption, decomposition, and protecting against pathogens.

Biodiversity as a Pillar of Forest Stability:

Forest biodiversity maintains balance and helps ecosystems adapt to environmental changes.

Exhibition areas on the "islands". Area 7

Umwelt: Jakob von Uexküll's Legacy

The **Umwelt: Jakob von Uexküll's Legacy** section honors Uexküll's groundbreaking contributions to biology and philosophy, focusing on his influential concept of *Umwelt*. This area introduces visitors to the idea that each species experiences the world through its own unique sensory lens, highlighting how organisms perceive and interact with their environments in distinct ways.

Through visual displays and interactive elements, the exhibit illustrates Uexküll's insights into animal behavior, revealing the complex web of connections among living beings. This section not only celebrates Uexküll's legacy but also invites visitors to reflect on the diverse perspectives within the natural world, encouraging a deeper respect for all forms of life.

Content and Engagement

Visitors will discover Uexküll's biography, showcasing key moments that shaped his scientific inquiries. Excerpts from his correspondence with notable contemporaries will illustrate his collaborative spirit and the lasting influence of his ideas. Copies of Uexküll's seminal works will be displayed, providing insights into his writings that continue to resonate in ecology and conservation.

Visual representations will further illustrate the sensory experiences of various species, inviting visitors to appreciate the complexity of life from perspectives beyond human experience. This space honors Uexküll's legacy while inspiring reflection on the importance of understanding diverse life forms and their environments in fostering a holistic approach to ecology and conservation.

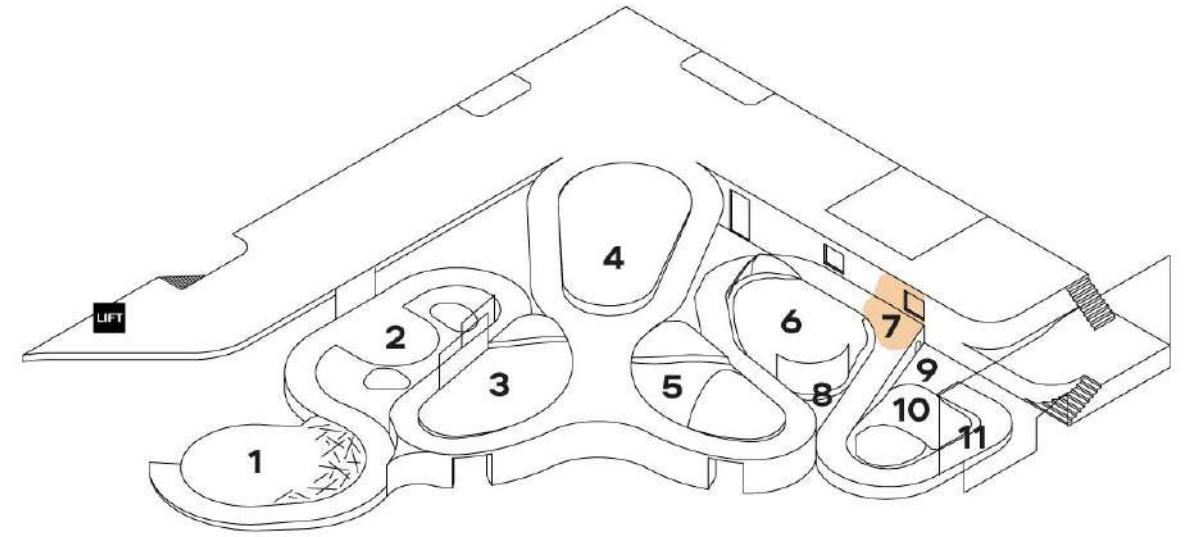
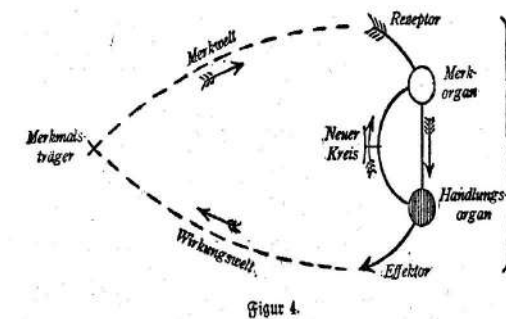


Photo: Wikipedia



Umwelt: Jakob von Uexküll's Legacy

Storyline and Theme Opener

Opener: *No opener needed.*

Rationale: This area could focus on the concept of Umwelt (the "self-centered world" in which organisms perceive and interact with their environment). Since it's a conceptual space inspired by Jakob von Uexküll's theories, it doesn't need a specific biological opener but should instead center around the idea of perception and environmental interaction.

Atmosphere and Aesthetics

For this section we suggest minimalistic spotlighting the wall around the window overlooking the museum's collections where the topic is presented. Using a subtle, concentrated light that emphasizes the text or visuals without overwhelming the space is preferred. The light gradually fades away from the area, highlighting this way both the window but also the Uexküll's exhibit area.

Emotional Resonance

Introspection, curiosity – The experience encourages visitors to reflect on their own perception of the world and to develop curiosity about how different species experience their environment.

Key Takeaway Messages

The Concept of "Umwelt":

Uexküll's "Umwelt" shows that each species experiences the world uniquely through its sensory perspective.

Holistic Approach to Ecology:

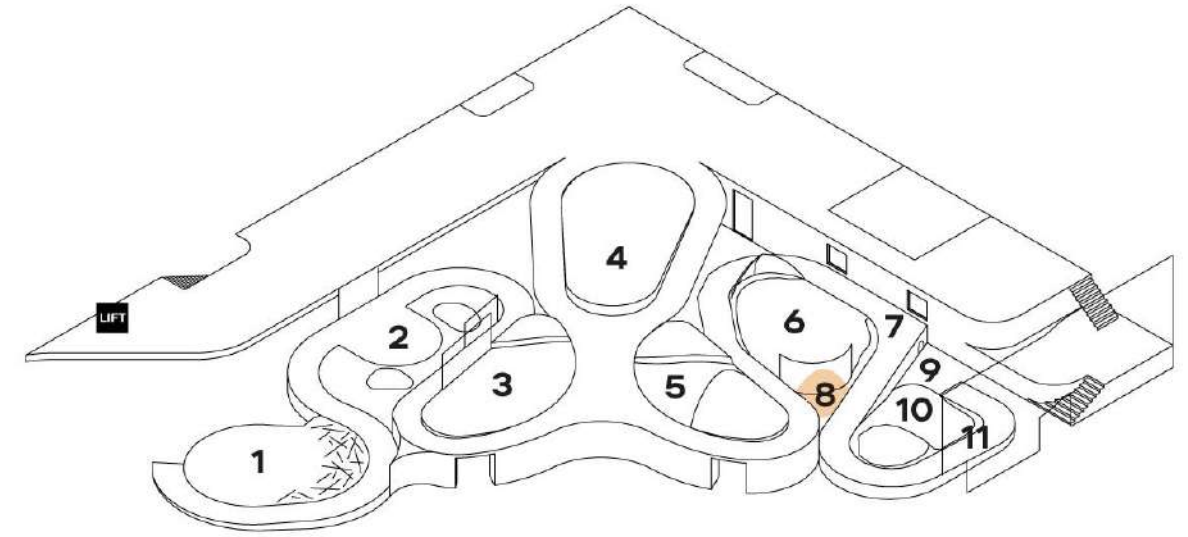
Umwelt promotes empathy for different species and a deeper understanding of biodiversity and ecological interactions.

Legacy of Scientific Inquiry:

Uexküll's works inspire critical thinking about perception, species diversity, and the complex relationships in ecology and conservation.

Exhibition areas on the "islands". Area 8

Wild Boar Family



The **Wild Boar Family** exhibit provides an intimate space where visitors can enter a lifelike diorama of a wild boar family, illustrating the species' role within Estonia's natural landscape and cultural heritage. This area highlights the behaviors and habitats of wild boars, as well as their ecological impact, inviting visitors to better understand these iconic animals and their place in the local ecosystem.

The exhibit also explores the cultural and historical significance of wild boars, touching on their role in traditional **hunting practices**.

Additionally, it addresses contemporary issues such as the spread of **African Swine Fever (ASF)** and its effects on **agriculture** and the environment, emphasizing the need for balanced management of wild boar populations.

Through this thoughtful display, the Wild Boar Family exhibit encourages a deeper appreciation for wildlife conservation and the ongoing challenges posed by human-wildlife interactions.



Wild boar family

Atmosphere and Aesthetics

The space will be dimly lit to simulate the shadowy, dense woods where boars are often found, and the background will feature lush underbrush and trees, reflecting the boars' forest habitat. To enhance the experience, sound design can include subtle forest noises accompanied by occasional wild boar bellowing sounds.

Key Takeaway Messages

Wild Boars as Ecosystem Engineers:

Wild boars help maintain healthy forests by controlling vegetation and promoting plant growth.

The Tradition and Responsibility of Hunting:

Hunting wild boars is both a cultural tradition and a necessary tool for wildlife management.

The Challenge of African Swine Fever:

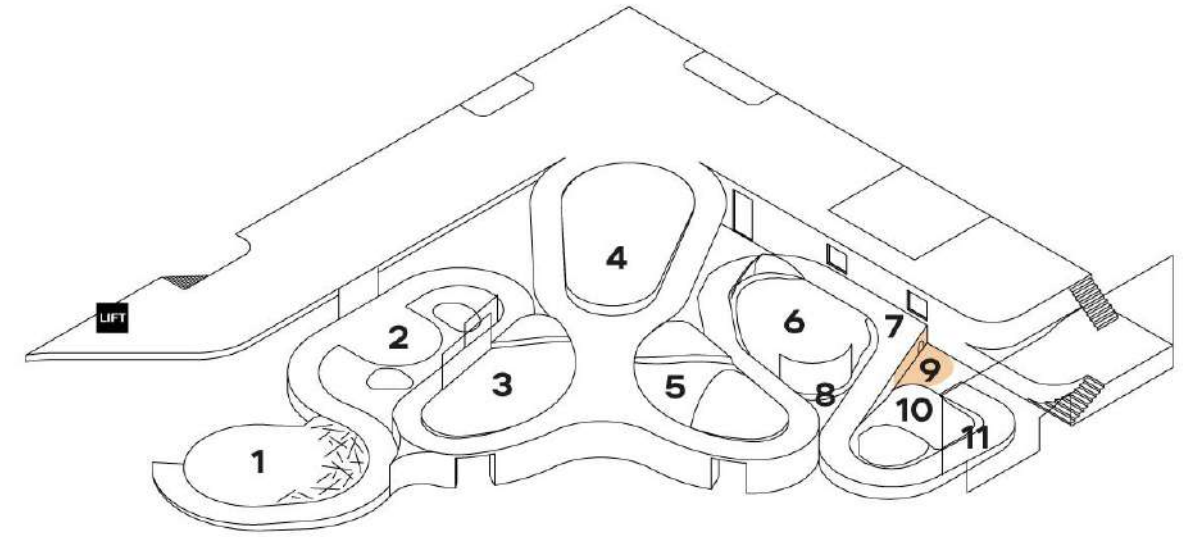
African Swine Fever threatens wildlife and agriculture, requiring proactive management for conservation and public health.

Exhibition areas on the "islands". Area 9

Badger's Cave

The **Badger's Cave** is a fun, interactive space designed for children, tucked beneath a ramp, where they can crawl in and experience the world from a badger's perspective. This cozy nook features winding paths that encourage young adventurers to explore, revealing hidden creatures and intriguing artifacts softly glowing under glass displays. The cave, designed to mimic a badger's natural habitat, promotes imaginative play and discovery.

The Badger's Cave offers a perfect retreat for children, a nook to retreat to while their parents explore the nearby "Living Heritage" exhibition. This thoughtful layout enhances the family experience by creating a welcoming, engaging environment where learning and play go hand in hand. The space is intended to ignite curiosity about nature and wildlife, fostering a sense of responsibility for the environment in young visitors.



Badger's Cave

Content and Engagement

In the "Badger's Cave", children will embark on an exciting journey of discovery, uncovering magical and hidden features of the badger's natural world. Glowing, bioluminescent mushrooms will be subtly integrated into the cave walls, tucked behind glass or hidden in small cubby spaces, offering a touch of magic while teaching children about the types of fungi badgers may encounter.

A miniature, cross-section model of a badger burrow, placed behind a glass panel, will provide a glimpse into the underground world, with backlighting highlighting the intricate tunnels and chambers where badgers live. Small sandboxes and textured panels, scattered throughout the cave, will reveal hidden badger paw prints, giving the impression that the animals have recently passed through. These prints will invite children to uncover them as they explore.

Glowing silhouettes of plants found in badger habitats – such as shrubs and grasses – will be strategically placed along the cave walls, subtly illuminating the space as children discover them. In addition, videos will display hidden insect life, such as earthworms, beetles, and ants, on screens placed along the cave. These backlit images will bring to life the smaller creatures that share the badger's environment, enhancing the sense of exploration and adding to the wonder of the cave. Next to this delightful cave, there's an engaging information stand that shares insights about beavers in Estonia. Children can learn about where they live, how they behave, and why they're so important to our ecosystems. This educational stand is packed with interactive and playful features, making it easy for children to absorb knowledge while they have fun.

Storyline and Theme Opener

Opener: *No opener needed.*

Rationale: This area could highlight the role of badgers in shaping Estonian landscapes through their natural behavior (creating dams, wetlands, etc.). The focus would be on the animals' environmental impact, making a specific opener less necessary.

Atmosphere and Aesthetics

This area features bright, warm lighting that creates a cheerful and inviting atmosphere, resembling the cozy, hidden world of a badger's den, making it a welcoming environment for children, while still capturing the charm of a natural badger's home in a lighthearted, non-threatening way.

Emotional Resonance

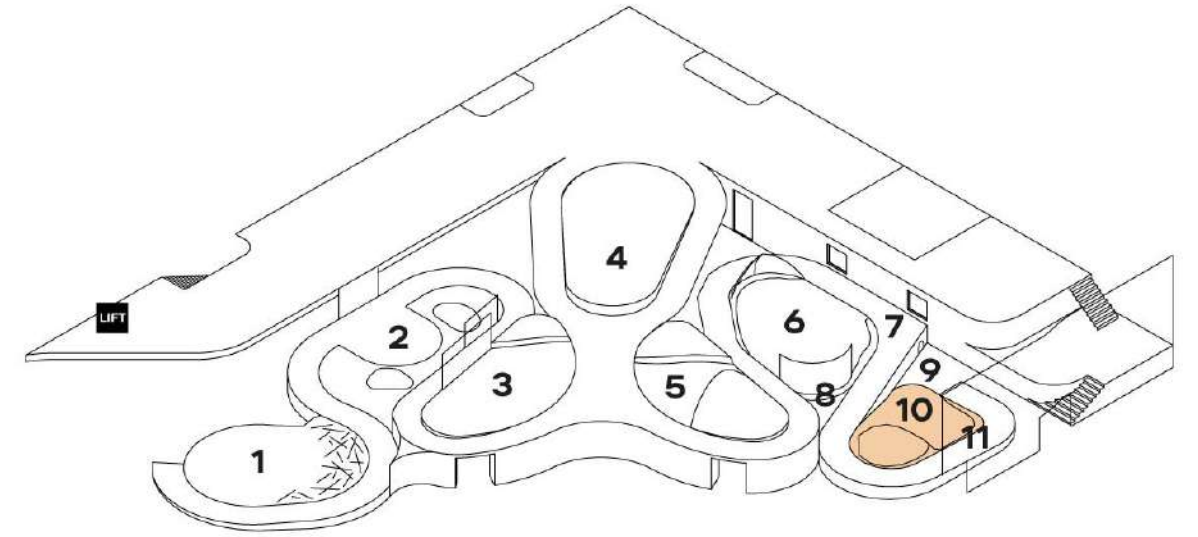
Playfulness, awe – An invitation to playfully engage with the natural world through the lens of badgers, feeling both awe and wonder at their role in the ecosystem.

Key Takeaway Messages

Badgers are cool! 😊

Exhibition areas on the "islands". Area 10

Primeval Forests and Nature Conservation



The **Primeval Forests and Nature Conservation** section immerses visitors in Estonia's untouched ancient woodlands, showcasing their ecological richness and critical role in biodiversity. The area highlights natural cycles of growth, decay, and renewal, with specimens like fallen trees and decomposing matter that transform into fertile soil, supporting plant life and providing habitats for various organisms.

This exhibit emphasizes the intricate web of life in these forests, where each species – from mammals and insects to fungi and moss – contributes to the ecosystem sustainability. In addition to their biological diversity, primeval forests offer vital ecological benefits such as carbon storage and water purification.

The section underscores the importance of conservation, portraying these forests as essential resources for future generations. It encourages visitors to understand the delicate balance of these ecosystems and our shared responsibility to protect them.



Photo: Jarek Jõepera

Primeval Forests and Nature Conservation

Content and Engagement

The *Primeval Forests and Nature Conservation* area features exhibits that highlight the ecological cycles and biodiversity of Estonia's ancient woodlands, focusing on the processes of growth, decay, and renewal. Key content illustrates how fallen trees, decomposing matter, and humus-rich soils support the entire ecosystem. Visual and tactile displays, including an actual fallen tree display, show how decaying wood and organic matter transform, fostering new life and sustaining forest balance.

A prominent open biorama presents species thriving in Estonia's primeval forests, with a focus on protected species like the Eurasian lynx (*Lynx lynx*), flying squirrel (*Pteromys volans*), and European badger (*Meles meles*), which depend on these forests for shelter, food, and breeding. Other protected birds, such as the black woodpecker (*Dryocopus martius*) and three-toed woodpecker (*Picoides tridactylus*), along with plants like Norway spruce (*Picea abies*), wood sorrel (*Oxalis acetosella*), and mosses, further enrich the exhibit's biodiversity.

To explore decomposition and nutrient cycling, displays feature cross-sections of decaying logs, soil samples at various stages of humus formation, and panels explaining the roles of fungi, insects, and decomposers in recycling organic matter. These elements emphasize how natural decay and regeneration processes are vital for maintaining ecosystem health.

An interactive “Forest Protection Simulator” allows visitors to step into the role of a forest manager, making decisions on a couch screen solution, that impact the health of a virtual forest ecosystem. They will address scenarios such as logging, invasive species management, and conservation measures for protected species like the flying squirrel or lynx.



Primeval Forests and Nature Conservation

Storyline and Theme Opener

Opener: Dead Man's Finger (*Xylaria polymorpha*)

Rationale: A protected wood-decaying fungus that primarily breaks down dead wood, contributing to the cycle of decay and renewal in forest ecosystems. Its role in decomposing woody material helps release nutrients back into the soil, supporting the overall health and regeneration of the forest ecosystem.

Atmosphere and Aesthetics

This area features deep, shadowy lighting that evokes the mysterious, untouched atmosphere of a primeval forest. The sounds of distant animal calls are heard in every now and then.

Emotional Resonance

Awe, reverence, and hope – exhibition evokes wonder at the interconnected life cycles within primeval forest, while emphasizing that their preservation holds a promise for future generations

Key Takeaway Messages

The Urgency of Conservation:

Protecting these forests is essential to preserving Estonia's natural heritage and ensuring a thriving ecosystem for future generations.

Forests as Ecological Safeguards:

Primeval forests are crucial for carbon storage, water purification, and soil health, benefiting both nature and humanity.

Biodiversity as Interconnected Life:

Each species, from fungi to mammals, depends on others, creating a delicate and vital ecosystem balance.

Power of Natural Cycles:

Primeval forests demonstrate the essential role of decay and renewal in sustaining diverse life.

Integration of core theme “Art of Coexistence”

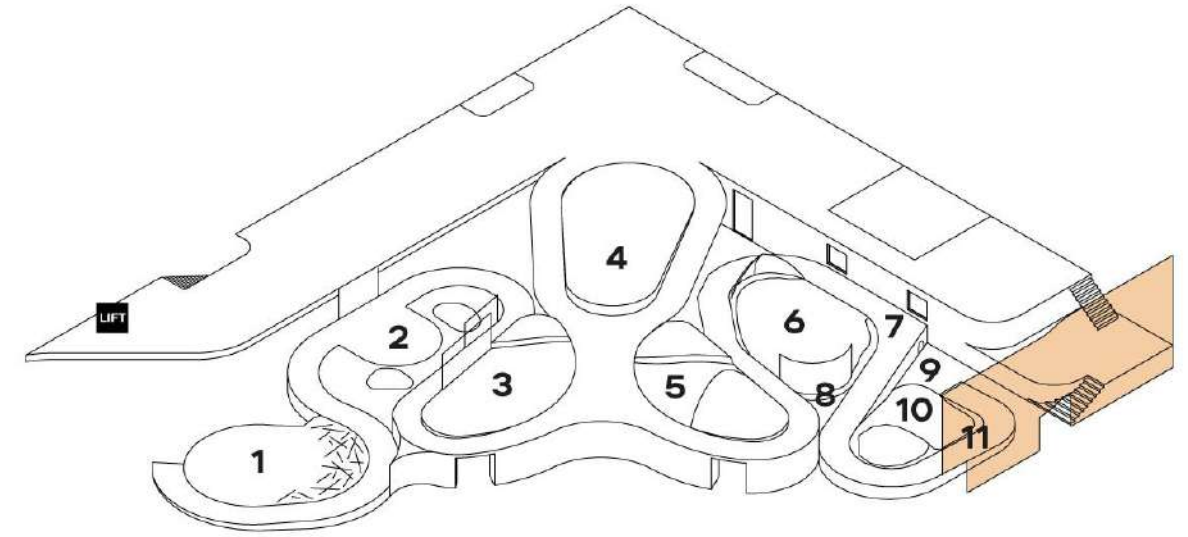
The core theme “*The Art of Coexistence*” is integrated throughout the exhibition, emphasizing interspecies relationships across various ecosystems. By presenting symbiotic, commensal, and other forms of interdependence, the exhibition highlights how species sustain each other and maintain ecological balance. Interrelated species are displayed together or in proximity, with supporting visuals, infographics, and animations illustrating their connections.

One example of such integration would be the key exhibit, “Life Below the Water Level,” in “*Lakes and Rivers of Estonia*” section. This exhibit demonstrates aquatic interconnections within a water column. Designed as a clear column or a flowing element following a projected river, this see-through display shows fish, sub-aquatic plants, and invertebrates in natural positions within the water column. The display highlights the ecological roles of each species, such as how fish depend on plants for shelter and food, while plants contribute oxygen and habitat for invertebrates.

This water column exhibit is one of several solutions designed to reflect “*The Art of Coexistence*” in different habitats, from forest floors to urban green spaces. Together, these displays reveal the critical, often unseen, interdependencies that sustain ecosystems and inspire a deeper understanding of nature’s complex web of life.

Exhibition areas on the "islands". Area 11

Forest Wall



Photos: Jarek Jõepera

The **Forest Wall** in this area features a massive image or projection of Estonia's ancient forests, covering the entire rear wall of the exhibition hall from floor to ceiling. Visible from the balcony and the various exhibition "islands" along the ramp, this stunning visual element serves as a captivating focal point in the museum's great hall. The image captures the tranquil beauty of Estonia's natural forest landscapes, helping to create a serene, nature-centered atmosphere throughout the space.

Forest wall

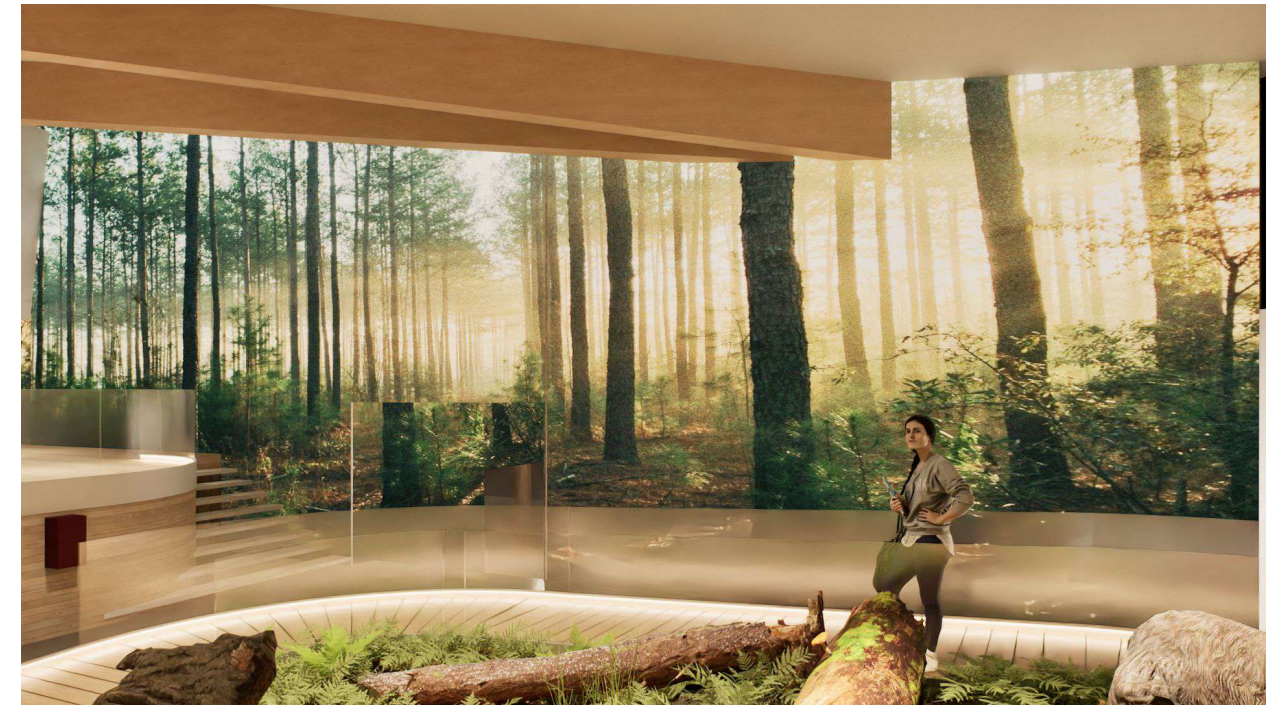
Content and Engagement

In this section, visitors are invited to **engage with the Forest Wall** in a new and immersive way through augmented reality (AR) binoculars placed along the ramp on a distance. As visitors peer through the binoculars, they will see the forest "come alive" in unique and captivating ways.

One set of binoculars reveals the **dynamic movement of animals**, trees, and the wind as if the forest is breathing. Another perspective binocular offers the **experience of a nature researcher**, quietly documenting and exploring the forest's secrets in a journal.

These interactive AR experiences allow visitors to feel both the vibrancy and the kind human interaction with the forest, deepening their connection to Estonia's ancient, protected landscapes.

Next to each binocular, information stands provide visitors with insights into the significance and protection of these ancient forests, further enriching the experience and encouraging reflection on their role in the natural world.



Forest wall

Storyline and Theme Opener

Opener: *No opener needed.*

Rationale: The Forest Wall can serve as a dramatic representation of Estonian forests through visual and sound elements. It could showcase the forest as a living, breathing entity, perhaps with interactive elements reflecting how forests evolve.

Atmosphere and Aesthetics

This area features soft, dappled lighting that mimics sunlight filtering through a forest canopy, with a towering "Forest Wall" showcasing various plant species and ecological interactions.

Emotional Resonance

Tranquility, awe, jearn for nature – this exhibit, as the monumental wall mural arching over the museum hall should convey the message of hope and jearn to go to the nature and immerse its beauty in.

Key Takeaway Messages

The Vital Role of Ancient Forests:

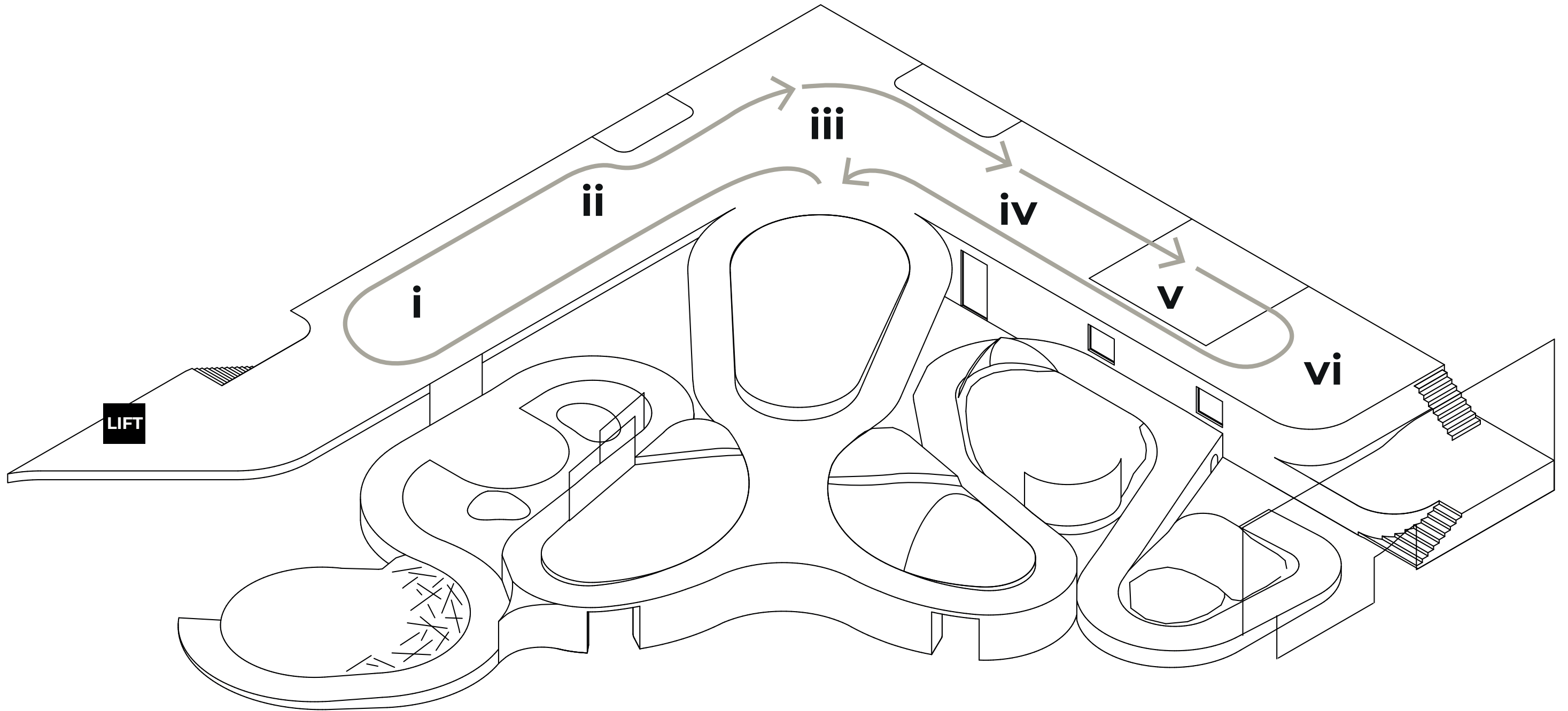
Estonia's ancient forests support diverse species and play a key role in biodiversity and climate regulation.

Conservation Efforts and Future Protection:

Ongoing care and protection are essential to preserve these forests for future generations.

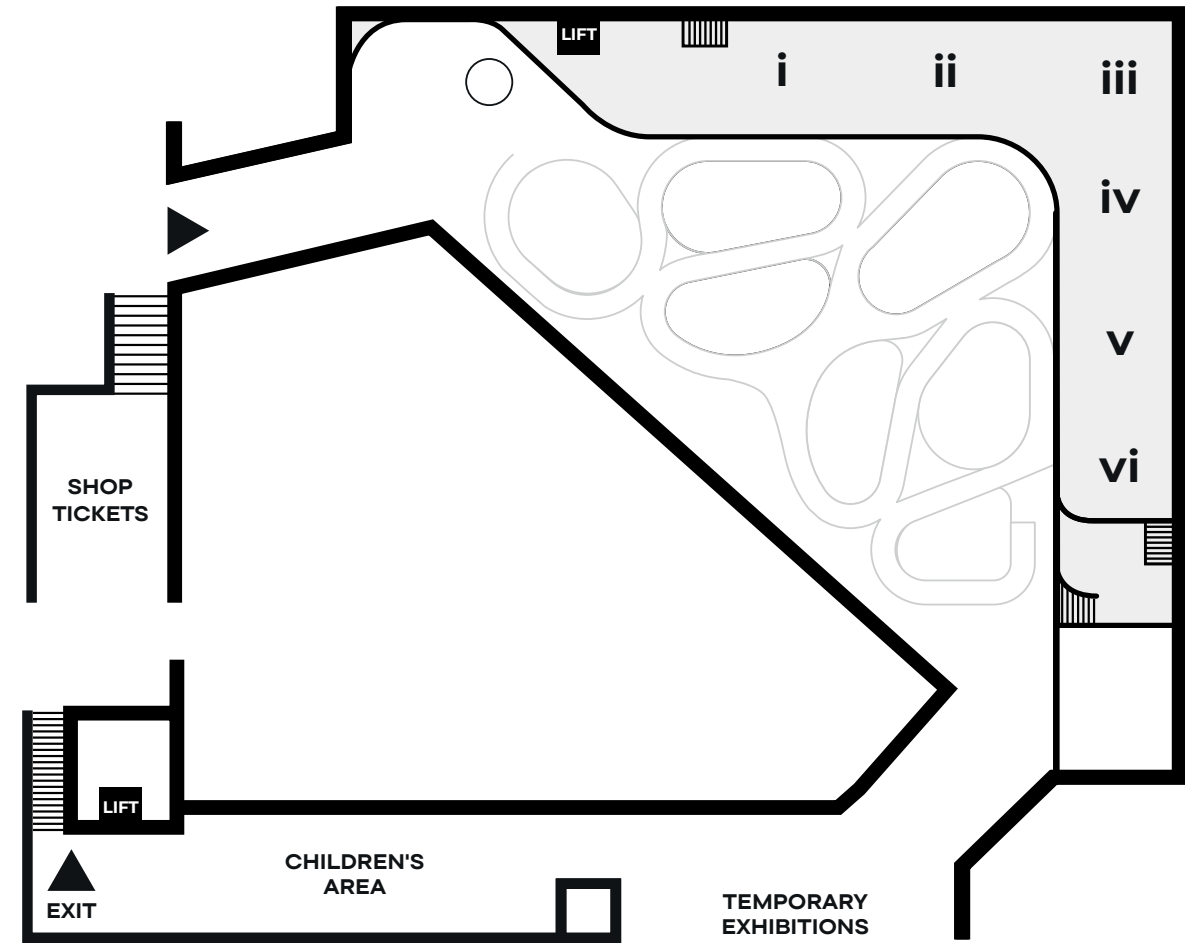


Museum Balcony



Museum Balcony

Distribution of Exhibition Areas on the Balcony



The balcony area highlights humanity's interconnected relationship with nature in contemporary contexts, addressing global ecological challenges, innovative green solutions, and the subtle presence of nature within urban spaces. Each exhibit provides insights into sustainable practices, the resilience of natural systems, and the beauty of landscapes as both resources and sources of inspiration for future coexistence.

Topics covered in the balcony:

Area i - Global Challenges

Area ii - Urban Nature: A Moment of Peace

Area iii - Futures in Green: Solutions for Tomorrow

Area iv - From Earth to Table: Challenges and Solutions in Agriculture

Area v - City Life: Nature in Our Homes

Area vi - Benefits of Nature

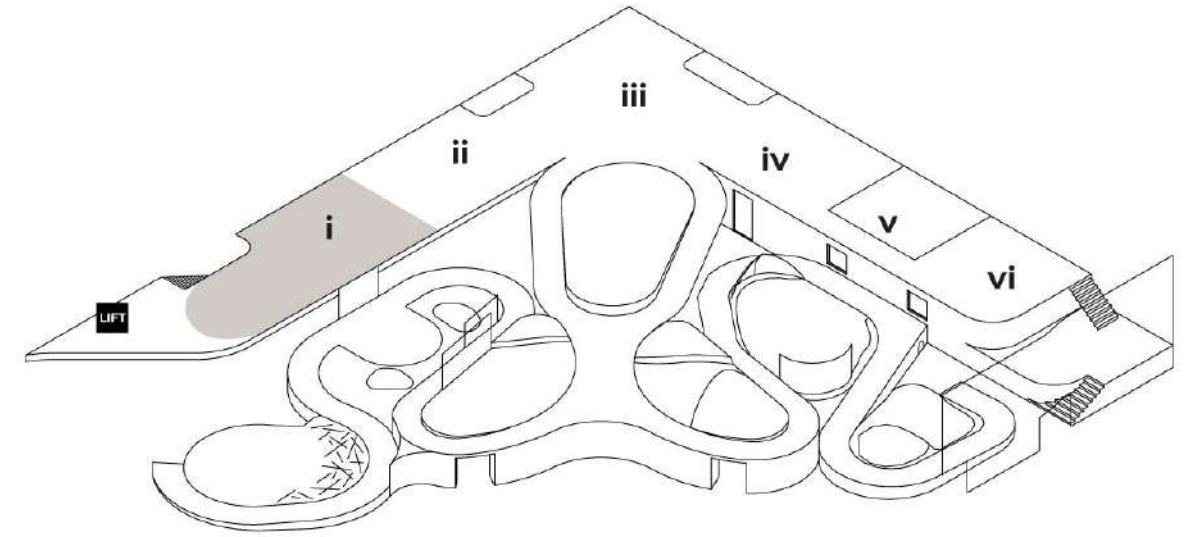
Museum balcony. Area i

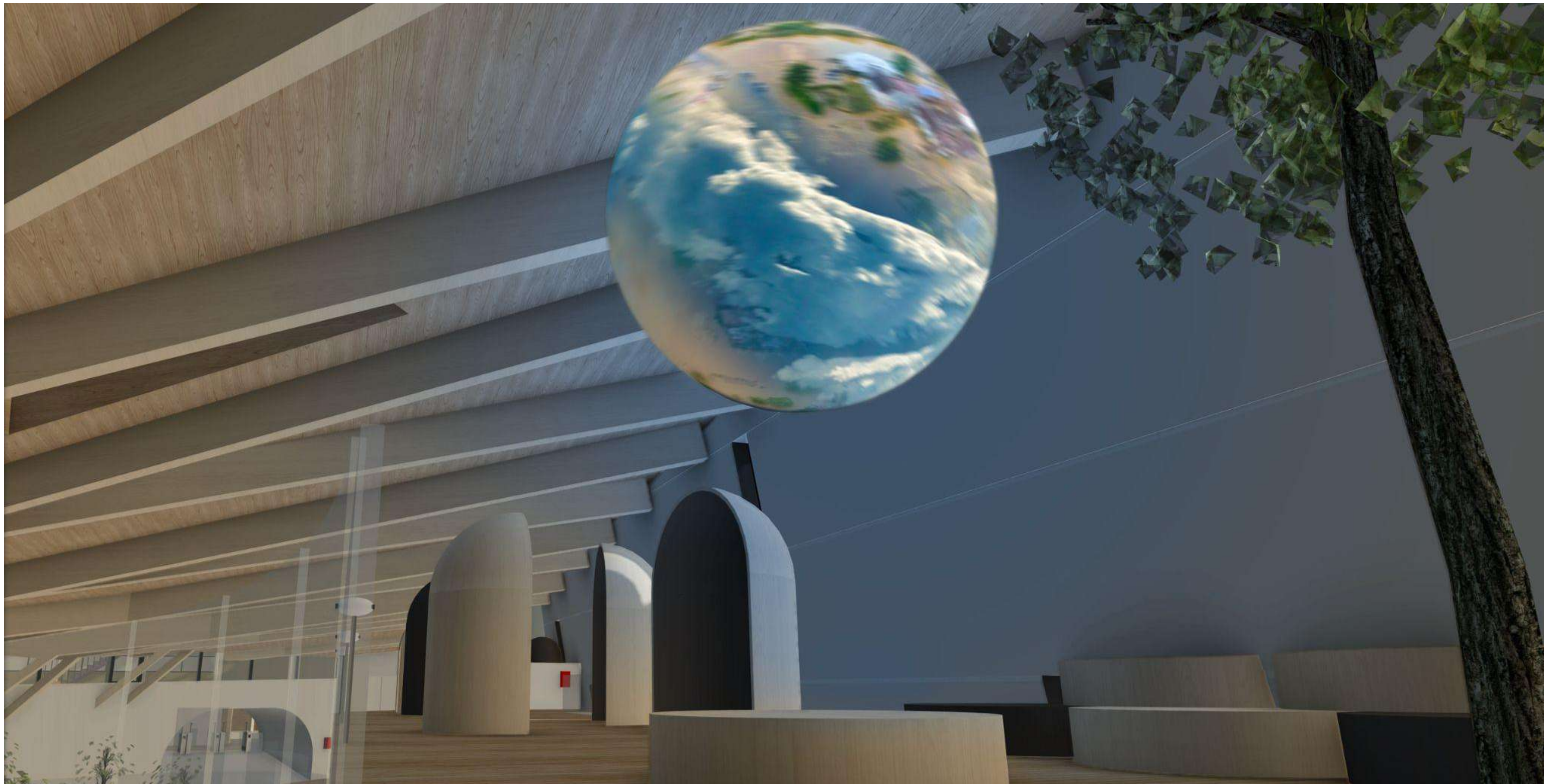
Global Challenges

The **Global Challenges** area explores the most urgent issues facing our planet, inviting visitors to engage with topics such as climate change, biodiversity loss, food security, pollution, and deforestation.

Through projections, interactive walls, and augmented reality (AR), the area highlights how these challenges intersect and impact ecosystems at both local and global levels.

The goal is not only to inform but to inspire action, emphasizing how today's choices shape the planet's future. By encouraging reflection and active participation, the area challenges visitors to consider their role in fostering a sustainable future and underscores the urgency of collective responsibility.





Content and Engagement

This area invites visitors to engage deeply with the critical environmental and societal issues that shape our future. At its center, a striking **sphere projection** presents a series of possible futures – some optimistic, others dystopian or even apocalyptic – playing in a continuous loop. This installation serves as a powerful reminder that “the future is not yet decided,” encouraging visitors to reflect on how our choices today can shape the world of tomorrow.

Global Challenges

Content and Engagement

Surrounding this immersive projection are several **curved walls**, each dedicated to a different global challenge. Visitors can explore topics such as climate change, biodiversity loss, sustainable cities, food security, water management, global health, deforestation, the ethics of technology, pollution, clean drinking water, and oceanic issues. Each wall combines informative text, interactive screens, and engaging activities, inviting hands-on exploration and fostering a deeper understanding of these complex problems. This interactive approach empowers visitors to think critically about their role in creating a sustainable future.

Three augmented reality (AR) binoculars positioned at the edge of the balcony offer a unique perspective on Estonian nature. Looking through these binoculars, visitors are confronted with alarming visuals of the exhibition hall below. For instance, instead of flourishing mires, they'll see barren landscapes ravaged by machinery, and once-thriving forests will be depicted with harvesters at work, highlighting the stark realities of deforestation. These striking images prompt reflection on the impact of human activities on our environment and emphasize the importance of conservation and sustainable practices.

We specifically include the museum suggested topics of **Weather Forecast** and **Seasons** to this section and incorporate these to the interactive walls. **Weather Forecast** topic would fit into the section focused on global health, climate change, and technology.

You could explore how modern technologies, including satellites, have enhanced our ability to predict weather, especially extreme weather events that are becoming more frequent due to climate change. This can link to the idea of preparedness and the role of technology in mitigating risks associated with natural disasters, which aligns with the larger themes of global challenges.

The **Seasons** topic would naturally connect with the **climate change** and **biodiversity** loss discussions. It could highlight how shifting seasons – such as warmer winters, longer springs, and hotter summers – are a direct consequence of climate warming. You could use this to explore how these shifts disrupt ecosystems, agriculture, and human societies. It's a great opportunity to tie the changing seasons to broader ecological and societal impacts, emphasizing the urgency of action.

Together, the projection, interactive walls, and AR binoculars create a dynamic, engaging experience that educates and inspires action. The emotional responses evoked – shock, sadness, and concern – challenge visitors to consider their role in shaping a more sustainable future. This area becomes a vital platform for reflection, encouraging visitors to contemplate the relationship between humanity and nature and recognize that we all have the power to influence the future of our planet.

Global Challenges

Storyline and Theme Opener

Opener: Sumatran orangutan, *Pongo abelii*

Rationale: The Sumatran orangutan is critically endangered, primarily due to deforestation and habitat destruction caused by logging and palm oil plantations in Southeast Asia. As an iconic species directly affected by deforestation, the Sumatran orangutan is an apt symbol of the destruction of forests, loss of biodiversity, and the impact of human actions on wildlife.

Atmosphere and Aesthetics

This area is lit with dynamic, contrasting lighting, with ambient natural sounds of distant storms, bustling cities, but not rising too much fear, rather just normal fierce nature sounds.

Emotional Resonance

Worry, urgency – highlighting the pressing environmental challenges we face.

Key Takeaway Messages

The Urgency of Action:

The environmental challenges we face are urgent and interconnected, and our choices today will shape the future.

The Power of Individual Choices:

Small, everyday decisions can make a big difference in creating a sustainable future.

The Role of Technology:

Technology, like satellite imagery, helps us understand and address environmental issues, aiding climate change mitigation.

Hopeful Possibilities:

The future is not predetermined, and collective action can create a more sustainable world.

Biodiversity Matters:

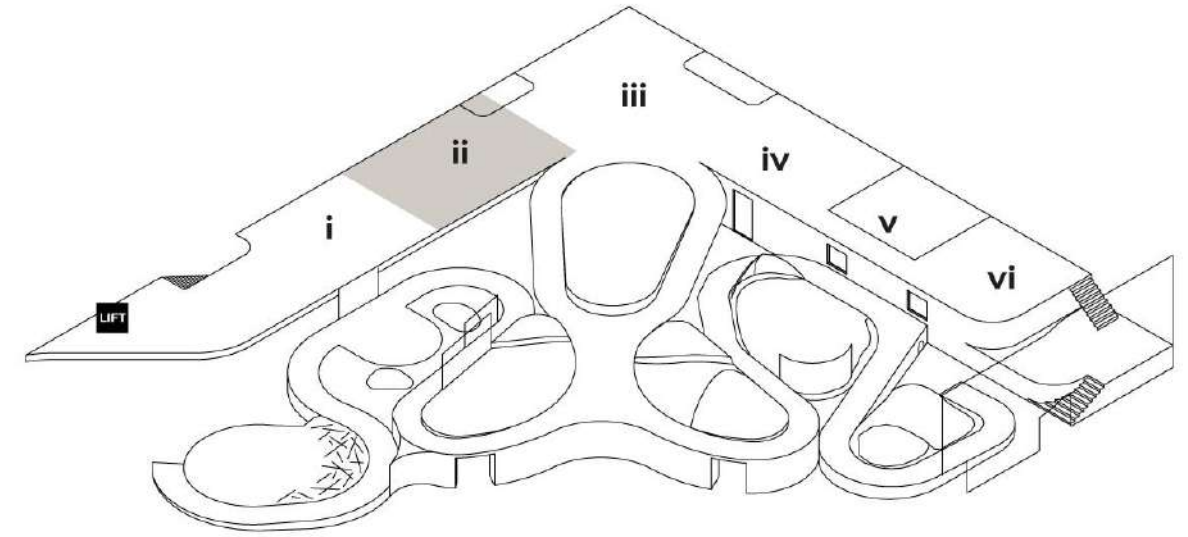
The Sumatran orangutan reminds us of the importance of preserving biodiversity in the face of human threats.

Museum balcony. Area ii

Urban Nature: A Moment of Peace

Urban Nature: A Moment of Peace offers visitors a serene, contemplative space inspired by city parks and urban green areas. This small seating area serves as a peaceful oasis within the exhibition, allowing visitors to relax, recharge, and reflect on the role of nature in urban environments. The space emphasizes the connection between nature and cities, highlighting how urban green spaces contribute to well-being, biodiversity, and overall quality of life.

Featuring natural elements like plants, trees, and flowing water, the area creates a mini park atmosphere. Comfortable seating, designed to mimic park benches, invites visitors to sit and immerse themselves in the calming environment.



Urban Nature: A Moment of Peace

Content and Engagement

Thoughtfully placed benches or lounge chairs, maybe even incorporating elements like recycled materials or local wood to reinforce sustainability. Seating could be shaped to resemble park benches or even outdoor cafe-style seating. Surrounding the seating with a combination of potted plants, flowers, and small trees to create a "pocket park" effect. Low-maintenance greenery like ferns, moss, and grasses could be used, mirroring the peaceful and restorative qualities of nature found in urban parks. A small water feature, like a fountain or a mini-stream, could provide a soothing sound and increase the calming atmosphere. This could be a symbolic representation of the importance of water in both natural ecosystems and urban life.

Strategically placed screens or tablets could feature short video loops or interactive graphics that show the positive impact of city parks on mental and physical health. These could include facts about green spaces' contribution to biodiversity, climate regulation, and human well-being. Integrating photos or artwork that showcases iconic parks or green spaces in urban settings, possibly including well-known examples like Kadrioru Park or Tallinna Toompark comparing with parks New York Central Park or others. These visuals could celebrate how cities around the world have embraced nature within their infrastructure.

A small educational exhibit showing examples of native versus non-native plants in urban spaces and their effects on local biodiversity.

There is a small children's area with a classical sandbox and a little swing. And an additional central attraction: a semi-digital table that brings children's creations to life in a fun and engaging way. The latter is a semi-digital table features a large interactive landscape (beach, sea, ponds, streets, green spaces) on a digital canvas. Children use physical LEGO-like blocks to build their own cities, placing houses, animals, cars, trees, and other features directly onto the blank landscape. The beauty of this concept is the table's digital interactivity. As children place items on the canvas, the table responds with playful, engaging messages. For example, if a child places a rabbit in the sea, the screen might say, "Interesting choice! But are you sure the rabbit can swim that far? Maybe it prefers a meadow instead!" This feedback helps children learn about the interactions between nature and urban environments in a fun, lighthearted way. The table will guide children in designing cities that integrate nature – suggesting placement of parks, trees, ponds, and wildlife. The system may prompt, "What animals live near ponds?" or "Where would you put a tree to provide shade?" These questions encourage children to think about how cities and nature can coexist in harmony.

Urban Nature: A Moment of Piece

Storyline and Theme Opener

Opener: Common wasp, *Vespula vulgaris*

Rationale: The common wasp could serve as a quirky yet important opener to this area, symbolizing the coexistence of urban spaces and nature. Wasps thrive in cities, building nests in places where humans live. This opener could highlight how nature persists in urban environments, reflecting how our cities can be integrated with nature in peaceful coexistence.

Atmosphere and Aesthetics

This area features natural, warm lighting that mimics the soft glow of sunlight filtering through trees in a city park. The gentle sounds of birds chirping, leaves rustling, and the very distant hum of city life – cars, outdoor cafés, and people talking – blending the tranquility of nature with the vibrancy of urban living.

Emotional Resonance

Calm, reflection – an invitation to appreciate nature in urban spaces.

Key Takeaway Messages

Nature Enhances Urban Life:

Green spaces and wildlife improve city life by offering relaxation, recreation, and environmental balance.

Balance is Key:

Successful cities integrate nature with infrastructure, creating healthier, more sustainable environments.

Nature's Role in Mental Health:

Access to nature reduces stress and improves happiness, even in urban areas.

Sustainability Starts Locally:

Our choices in designing urban spaces can profoundly impact the planet's future.

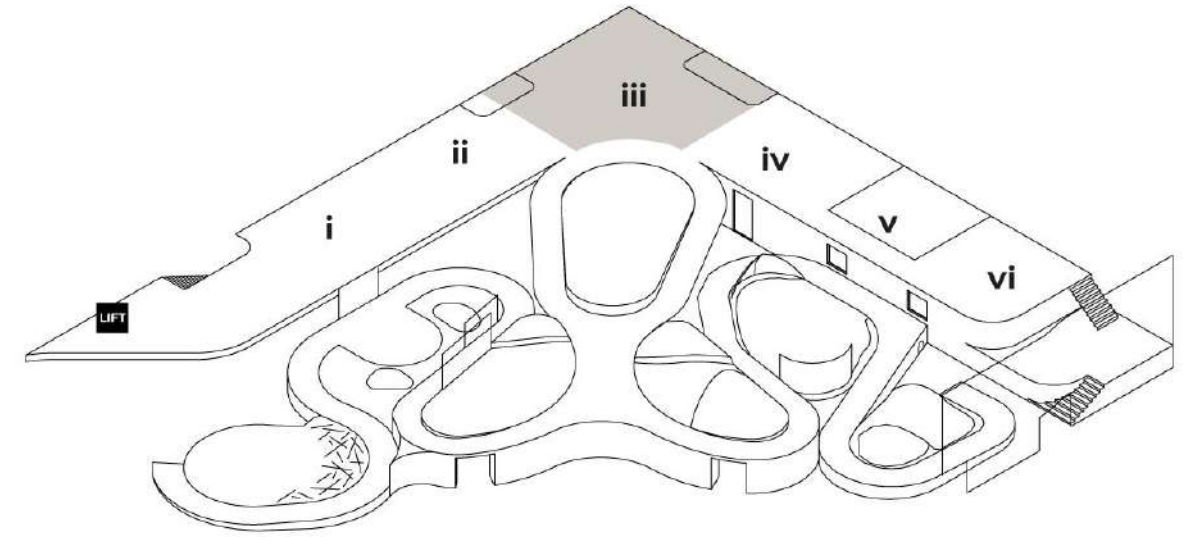
Museum balcony. Area iii

Futures in Green: Solutions for Tomorrow

Futures in Green: Solutions for Tomorrow area showcases innovative and sustainable solutions for a greener future, blending current practices with future possibilities.

Behind a striking **vertical living garden** wall, the space highlights urban farming, green design, and sustainable transportation options like electric vehicles, bicycles, and scooters. It also explores renewable energy through mini models, animations, and interactive screens, featuring solar panels, wind turbines, and geothermal energy.

The area introduces **eco-friendly building materials** like mycelium, bamboo, and recycled plastics, alongside waste-to-resource solutions such as recycling and upcycling. Visitors can participate in DIY activities to create new items from discarded materials, while learning about bioplastics, sustainable packaging, and zero-waste concepts. Digital screens throughout the space provide an engaging, informative experience.



Futures in Green: Solutions for Tomorrow

Content and Engagement

In our race to create a sustainable future, we often focus on minimizing harm. But true coexistence demands a radical rethinking of how we design the environments we inhabit. Rather than seeing nature as a decorative addition, this exhibition explores how we can invite ecological systems to become active architects of our shared spaces.

Drawing inspiration from innovative approaches like those championed by indigenous cultures worldwide we challenge the notion that cities must be separate from the natural world. Here, you'll discover built environments where plants, animals, and microbial communities are given agency to shape the spaces we share. These are not mere green spaces, but vibrant, living ecosystems that operate by their own rhythms and requirements.

Stepping into these reimagined urban landscapes, you'll be immersed in a sensory experience that goes beyond the visual. Hear the chatter of birds nesting in vertical forests. Feel the spongy give of soil beneath your feet. Catch the scent of flowering undergrowth woven into building facades. In this world, coexistence is not a static aesthetic, but a dynamic, multi-sensory reality.

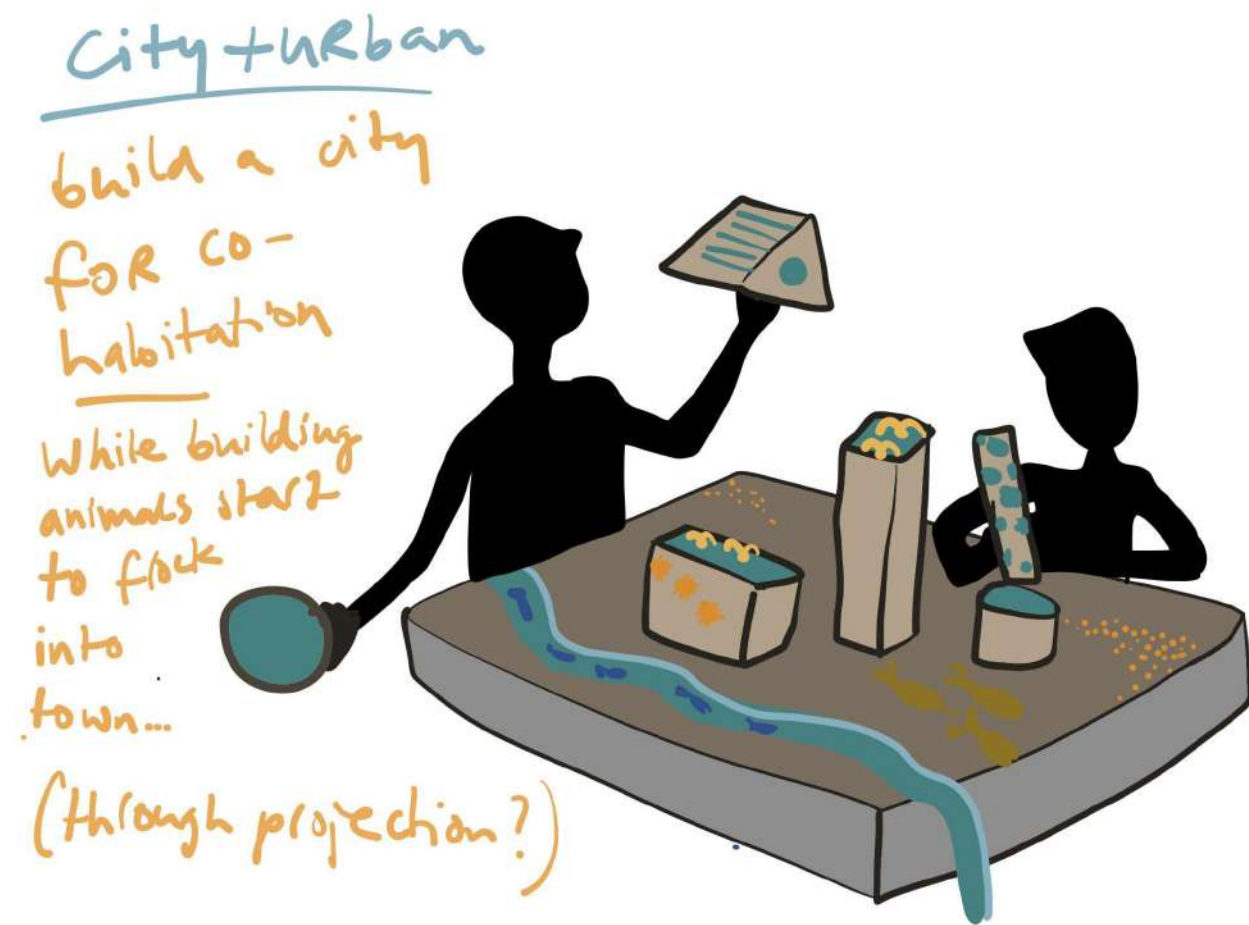


Jingkieng Dieng Jri Living Root Bridges are living ladders and walkways created by the Khasi tribe in India
@Julia Watson

Futures in Green: Solutions for Tomorrow

By championing the rights of other-than-human inhabitants, these solutions invite us to expand our conception of what a city can be. No longer merely human-centric, these spaces cultivate a delicate balance where diverse life-forms not only coexist, but actively collaborate to create thriving, resilient communities.

This is the future of green – not just in appearance, but in essence. It's a future where we learn to be humble guests in the ecosystems we inhabit, rather than masters of a world we seek to control. Join us in imagining cities that don't just minimize harm, but actively foster the flourishing of all life.



An interactive city-building game that challenges visitors to design future urban spaces that genuinely integrate and coexist with nature, promoting harmonious "sponge cities"

Futures in Green: Solutions for Tomorrow

Storyline and Theme Opener

Opener: Brown algae, *Phaeophyceae* or Sea Lettuce, *Ulva lactuca*

Rationale: Algae are powerful in environmental cleanup and sustainability. Seaweed, for example, is being studied for its potential in carbon sequestration, biofuels, and food security, making it a perfect opener for exploring green solutions. These algae also represent a natural solution to some of the environmental challenges discussed earlier in the "Global Challenges" area.

Atmosphere and Aesthetics

This area is lit with soft, focused lighting that highlights the futuristic nature of green solutions, with digital stands showcasing various innovative technologies. The ambiance is modern yet inviting.

Emotional Resonance

Hope, optimism – inspiring a positive outlook on sustainable solutions.

Key Takeaway Messages

Innovative Solutions for a Sustainable Future:

Technology and nature provide solutions like vertical gardens and renewable energy to tackle the climate crisis.

Green Urban Design is Possible:

Cities can be more sustainable by integrating green spaces, eco-friendly materials, and urban farming.

Sustainability is Multifaceted:

Sustainable practices can transform every aspect of urban life, from transport to waste management.

Waste Can Become a Resource:

Recycling, upcycling, and bioplastics contribute to a circular economy and reduce waste.

Small Changes Lead to Big Impacts:

Individual actions, like using electric bikes or sustainable packaging, can collectively make a big difference.

Museum balcony. Area iv

From Earth to Table: Challenges and Solutions in Agriculture

From Earth to Table: Challenges and Solutions in Agriculture takes visitors through the journey of farming, from its deep-rooted traditions to the modern challenges it faces today. The exhibition explores the delicate balance between agriculture, sustainability, and our food systems. It covers critical topics such as soil health, water conservation, the impact of climate change, and the innovative farming techniques helping us adapt. At the same time, it honors the heritage of traditional farming practices that have shaped our landscapes and cultures. Through this blend of old and new, the exhibition invites visitors to reflect on how we can nurture the land, protect biodiversity, and ensure a sustainable food future for generations to come.

Content and Engagement

In this exhibition area, visitors are immersed in the **rich history** and **modern challenges of agriculture** through a dynamic blend of physical and digital exhibits. A large, wall-to-ceiling backdrop screen continuously loops a documentary showing the evolution of farming, from tractors plowing fields to traditional hand-plowing techniques. The video seamlessly transitions into a physical floor display where potato wedges, seen in the footage, extend physically onto the museum floor, inviting visitors to walk among the crops and explore the tangible connection between past and present farming practices.

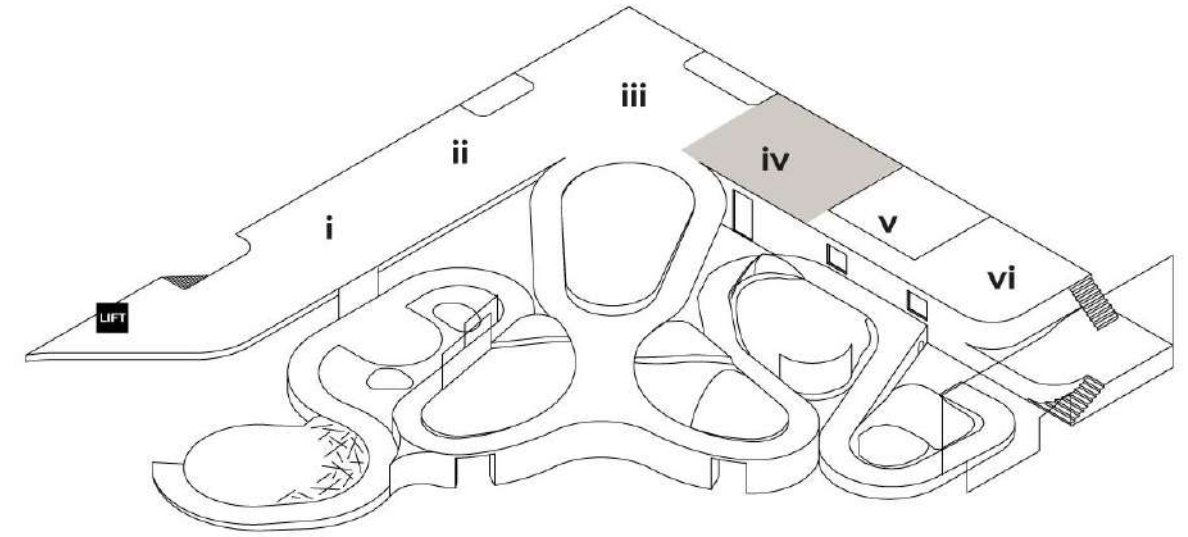


Photo: Jarek Jõepera



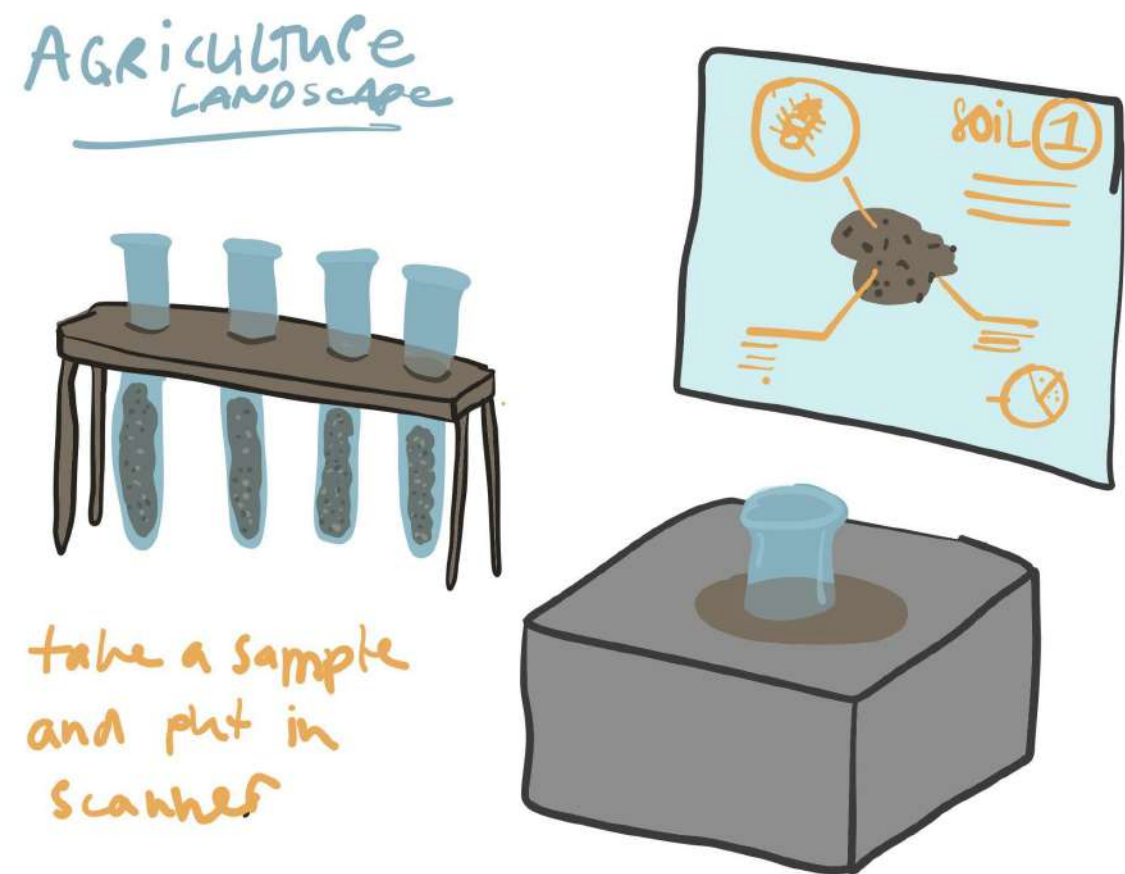
From Earth to Table: Challenges and Solutions in Agriculture

Content and Engagement

The central feature of the exhibit is an **interactive soil pod**, where visitors can engage hands-on by extracting soil samples from glass tubes and inserting them into an **"analyzing machine."** The digital system projects detailed information about each soil type, highlighting its **life forms**, **fertility**, and role in **sustainable farming**. To deepen understanding, informative stands and digital screens offer insights into the various aspects of **soil health**, **water conservation**, and **biodiversity** in agriculture.

To further engage visitors, a set of interactive touch screens could allow users to **"design" their own farm**, balancing crop choices, water use, and biodiversity, demonstrating the complexities of sustainable farming. Additionally, a small-scale model of an urban **vertical farm** could showcase cutting-edge agricultural technologies, such as hydroponics and precision farming tools, demonstrating their potential in urban settings. This solution could be placed in the vicinity of the **actual vertical garden** that is installed next to the **"From Earth to Table"** area bridging these two areas.

These exhibits work together to create an immersive experience that fosters reflection on the importance of sustainable practices in agriculture, offering both visual and interactive opportunities to engage with the pressing issues of today's food systems.



Visitors explore urban farming, collecting and scanning soil to reveal its secrets and promote sustainability

From Earth to Table: Challenges and Solutions in Agriculture

Storyline and Theme Opener

Opener: Soil

Rationale: Soil is at the heart of agricultural sustainability and challenges, making it a perfect symbol for this area. Soil health directly impacts food security, biodiversity, and the environment, encapsulating many of the issues that will be discussed here, such as overuse, erosion, and regenerative farming practices.

Atmosphere and Aesthetics

This area features earthy, natural lighting that reflects the openness of a working field, with a video of a tractor plowing the land. The sounds of the tractor engine and rustling crops add to the immersive experience, evoking the steady rhythm and challenges of modern farming.

Emotional Resonance

Reflection, concern – contemplating the balance between agricultural demands and sustainability.

Key Takeaway Messages

Healthy Soil is Key to Sustainable Farming:

Soil health supports growth, biodiversity, and carbon storage, maintained through practices like crop rotation and no-till farming.

Efficient Water Use is Crucial for the Future:

Smart irrigation and rainwater harvesting are essential to address water scarcity in farming.

Biodiversity Boosts Farm Resilience:

Diverse farming practices like agroforestry improve ecosystems and farm health.

Technology Can Revolutionize Agriculture:

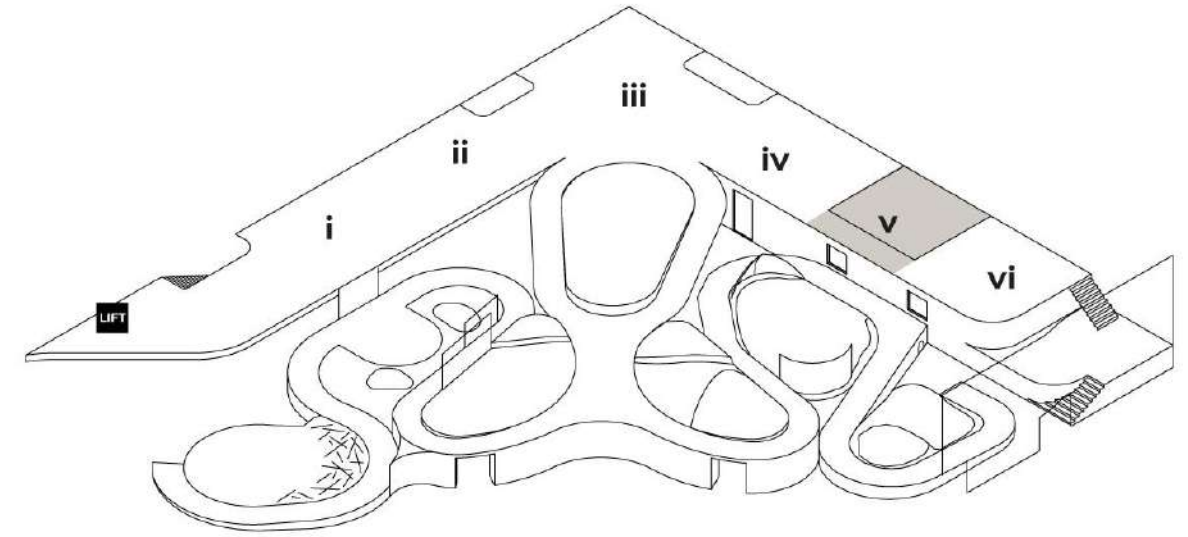
Innovations like precision farming and urban farming systems help make food production more sustainable.

Museum balcony. Area v

City Life: Nature in Our Homes

City Life: Nature in our Homes area explores the interconnectedness of humans and nature within the context of everyday life. Set in a model home with a kitchen, bedroom, and bathroom, this area highlights the diverse species – plants, insects, microorganisms – that thrive in our living spaces and communities.

From the microorganisms within our bodies to the plants and insects in our gardens, visitors will discover the crucial role nature plays in our health, well-being, and daily routines. Through interactive displays and engaging environments, this space encourages exploration of how conscious gardening, biodiversity, and the invisible world of microbes shape the world around us.



City Life: Nature in Our Homes

Content and Engagement

This area features several exciting solutions designed to engage visitors in interactive and educational ways. One of the highlights is a life-size, **AI-powered digital display** that invites visitors to explore the vast world of **microorganisms** in the human body. As they approach the screen, a digital representation of the human body appears. By selecting various interactive buttons, visitors can learn how specific microorganisms – **from beneficial gut bacteria to harmful viruses – impact our health**. They can discover how these invisible organisms aid digestion, support immune function, and even influence mood and behavior.

In the kitchen of the house, there will be an interactive **"Microbe Wall,"** a digital panel that showcases both "human-friendly" microbes (such as *Lactobacillus* for yogurt) and harmful ones (like *Salmonella* or SARS-CoV-2) in the kitchen environment. The panel will demonstrate how these microorganisms interact with food, surfaces, and even our health when ingested.

Another feature will highlight the **role of beneficial fungi**, like *Penicillium*, in food production (cheese, antibiotics) alongside harmful molds. A visual timeline or interactive panel will explain their life cycle and contrasting effects.

In the bathroom, **hygiene and health** will be explored through augmented reality solutions that glide through the room. A screen with animations will provide information about water purification systems that rely on microbes, such as *Lactobacillus fermentum*.

The bedroom will feature **over-life-size, touchable 3D models of insects**, like the Housefly (*Musca domestica*), Bed Bug (*Cimex lectularius*), and Human Flea (*Pulex irritans*), allowing visitors to explore their interactions with humans.

<https://www.pinterest.com/pin/1759287347664893/>



<https://www.pinterest.com/pin/3307399720859503/>

City Life: Nature in Our Homes

Storyline and Theme Opener

Opener: House fly

Rationale: The house fly is an everyday urban species that is often overlooked but plays a crucial role in ecosystems by breaking down organic matter. It is found in homes, symbolizing how nature exists even in human-dominated spaces. This opener can spark curiosity about the unseen ways nature interacts with urban life and encourage visitors to think about the relationship between people and nature within their living environments.

Atmosphere and Aesthetics

This area features warm, inviting lighting that reflects the charm of a traditional, "old" home, with interactive displays revealing hidden ecosystems within familiar spaces. The ambiance is enriched by the subtle sounds of wooden floors creaking, household noises, and the distant hum of a radio news broadcast, creating a cozy, lived-in atmosphere.

Emotional Resonance

Curiosity, intrigue, connection – Curiosity and awe are sparked through interactive displays of hidden ecosystems, and connection is nurtured by showcasing how these organisms directly influence our daily lives and well-being.

Key Takeaway Messages

We are interconnected with nature:

Microorganisms, plants, and insects play vital roles in our health, often unseen.

Biodiversity supports well-being:

The species in our homes and gardens enhance our physical and emotional health, emphasizing ecosystem importance.

Small things matter:

Even tiny organisms have powerful impacts on the environment and our health.

Cities are rich in nature:

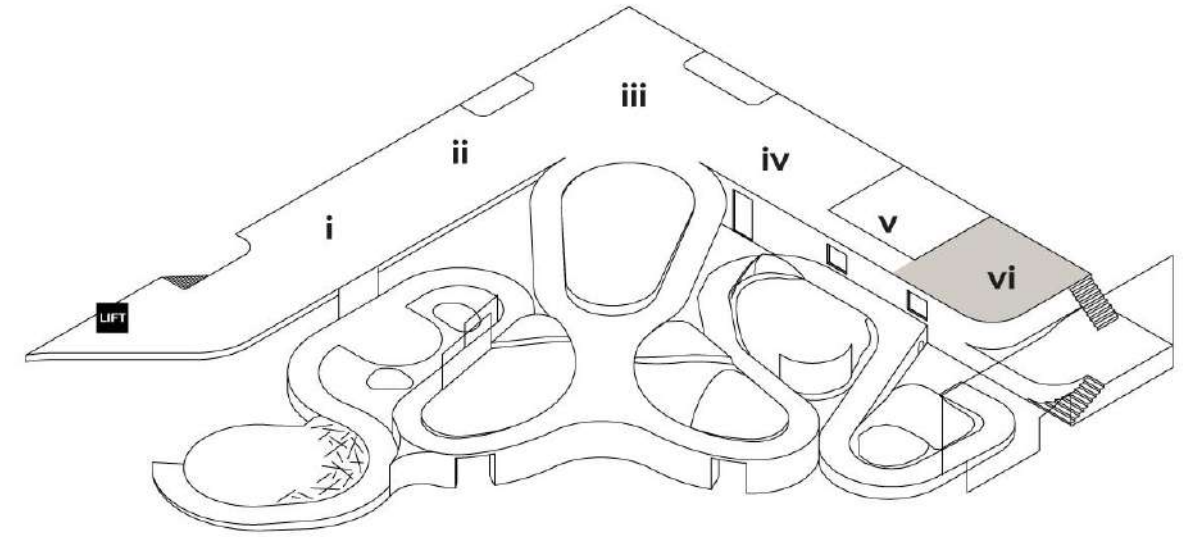
Cities and residential areas are often more biodiverse than we think.

Nature as a shared responsibility:

Our relationship with the environment is mutual; conscious actions support biodiversity.

Museum balcony. Area vi

Benefits of Nature



Benefits of Nature area invites visitors to discover how deeply Estonian nature has influenced the country's art, culture, and daily life. This area blends the **intangible benefits** – such as inspiration for music, poetry, and visual art – with the **tangible benefits**, like sustainable building materials and natural resources. Through interactive displays, visitors will explore how nature's influence permeates both creative expressions and practical, everyday applications.

Content and Engagement

This area showcases both the artistic and practical sides of Estonia's relationship with nature. A rotating digital display features famous **Estonian nature-inspired artworks**, allowing visitors to reflect on how **nature influences creative expression**. Alongside this, physical exhibits present tangible benefits such as sustainable building materials, peat, and other natural resources. These real-world materials invite visitors to touch and explore how nature supports human construction, energy, and daily life.



Photo: Jarek Jõepera

Benefits of Nature



Photo: Jarek Jõepera

In more intimate poetry, literature, and music alcoves, visitors can immerse themselves in works inspired by nature. Touchscreen panels allow individuals to select from a variety of **music, poetry, and literature**, including pieces by poets like **Juhan Liiv** and **Doris Kareva**, and composers such as **Arvo Pärt**, or even modern bands like **Metsatöll** and **Trad!Attack**. These pods foster a deeper emotional connection to art, drawing from nature's influence.

Interactive digital solutions further engage visitors through a **collaborative art installation**, where they can contribute with their own nature-inspired poetry, sketches, and wisdom. This collective experience connects visitors not only to the artworks but also to a shared appreciation of **nature's role in creativity**. A video installation offers a behind-the-scenes look at the art-making process, showing Estonian artists interacting with the natural world as they create.

The space also features physical exhibits that highlight nature's tangible benefits, including nature-inspired sculptures, folk medicine, and craftsmanship like willow flutes. Visitors can explore how materials such as mycelium, bamboo, and recycled glass are being used in eco-friendly construction and design, demonstrating nature's direct contribution to sustainability.

Benefits of Nature

Storyline and Theme Opener

Opener: Fred Jüssi, a prominent Estonian naturalist

Rationale: Fred Jüssi's life and work reveals deep philosophy towards Estonian nature. Nature is not just a backdrop but a source of inspiration, comfort, and identity. Through Jüssi's eyes, we can see that nature is woven into Estonians daily life, their minds, and historical roots. In this section, on contrary to most other theme openers in other areas, it is Jüssi who does the observing and thinking over nature. He can enter into dialogue with Wind.

Atmosphere and Aesthetics

The atmosphere is warm and inviting, with soft, earthly lighting that feels like sun filtering through leaves. There are gentle sounds of Estonian nature anticipated on the background. Walls and exhibits are designed with (Fred Jüssi's and others) photographs and video installations.

Emotional Resonance

Nostalgia, gratitude, connection – Jüssi's journey encourages visitors to reflect on their own ties to the nature. Through exhibits that blend art, sounds, personal stories, but also tangible natural resources like building stones, etc., visitors will find inspiration and perhaps develop the quiet pull to cherish and protect nature.

Key Takeaway Messages

Art and Nature Are Inseparable:

Estonia's landscapes inspire artistic expression, highlighting nature's connection to creativity.

Nature as a Source of Inspiration and Sustainability:

Nature fuels art, music, and sustainable living by providing both inspiration and resources.

Reflection and Connection:

The gallery invites visitors to reflect on nature's beauty, seen through the eyes of artists.

Celebrating Estonian Cultural Heritage:

Art, music, and literature celebrate Estonia's deep connection with its landscapes and identity.

Inspiration for Future Creativity:

The gallery encourages drawing creative inspiration from nature, reinforcing its bond with art.





Children's Activity Area

14. Children's activity area concept



The overall design of the Children's area takes its shapes from the soft contours of the Estonian landscape.

The furniture and decor take cues from natural elements, for example, the curves of rivers, the layered edges of mushroom caps in a woodlands and the islands that form in mires.

Area is divided into three main activity-centered themes – animism, knowledge, and Estonian folklore – they all invite parents to engage as co-explorers, fostering shared, value-driven experiences that simulate real-life processes and support age-appropriate learning.

Animism

Animism is the belief that objects, places, and creatures all possess a distinct spiritual essence.



Access gates

Knowledge

Tactile and interactive connection helps children sense the "life" within natural elements, fostering respect and empathy towards it.



Fast track through

Folklore

Using known Estonian folklore to convey teachings about nature or as subject matter for activities.



Relaxation

Secondary entry →



← Entry from the exhibition

A clear path for those who do not wish to engage with the area is also provided. The parent and child's room remains undisturbed for easy access to and from it.



Here wonders take root and stories bloom – a natural world with soft edges where the borders between **imagination and discovery** dissolve into a landscape of gentle encounters. Through **touchable textures** that invite curious fingers and huggable forms that welcome warm embraces, children find themselves in a space where every creature feels like a friend waiting to be discovered.

This is where enchantment meets understanding, where the simple joy of play weaves itself into deeper stories of belonging. It's a place where children can be their truest selves – natural philosophers who already know that every beetle has a tale to tell and every leaf holds a universe of wonder.

Kas teile tuleb meelde
mõni muinasjutt karudest?

Can you think of any
fairy tales about bears?



Skipping stones, relaxation

The space is designed to inspire play and relaxation, blending active with passive activities. Half-spheres dot the ground, their shapes reminiscent of skipping stones across a still pond or in the woods. The mounds are perfect for younger children to crawl upon, their bounce encouraging interactivity. The older children can softly bounce on and over them. Everybody visiting the area is invited to sit and relax on the mounds as well.

Complementing the half-spheres are rounded ball chairs, designed not just for sitting but for playful exploration. Emulating the bright red cranberries found in the Estonian woods, these seats offer a perfect balance of stillness and motion, where children can relax and swing gently. The design evokes a sense of freedom and fun at the same time functionality as they are scattered around the whole area for seating for everybody to use.



Folklore

In this spot, the walls feature small, round openings that invite curious explorers to peek inside, where digital screens reveal an interactive game inspired by Estonian folklore. Each screen brings to life tales of animals and forests, inviting children and their parents to engage with the story. Through simple, interactive choices, young players learn lessons about kindness to nature and respecting the wild. The intuitive interactions encourage making every choice an opportunity to participate in active decision-making.

As children interact with the screens, they guide characters through small adventure all while learning the impact of their choices. The stories are designed with clarity, allowing even the youngest children to grasp the storyline and teachings.

Inspired by the tale: *A bear and a fox are arguing over which of them can identify trees. The bear can name the trees by their actual names, while the fox gives them imaginary names based on their characteristics.*



Knowledge

Adjustable lenses invite all visitors to see the world through the eyes of animals. Each lens, made with color-shifting glass, mimics how different creatures perceive colors – muted tones for cats, vibrant hues for bees, or cool blues and greens for fish, for example. As children look through, they glimpse nature from new perspectives, sparking curiosity about the diverse ways animals experience their surroundings, creating a bodily empathy for their fellow non-human beings.

At the center, a table holds an object, like a leaf or flower, that children can view through multiple lenses. This simple setup encourages to discover how one object appears differently to each animal. Together with parents, they learn that every creature's view is unique, fostering both empathy and curiosity for the natural world.



Animism

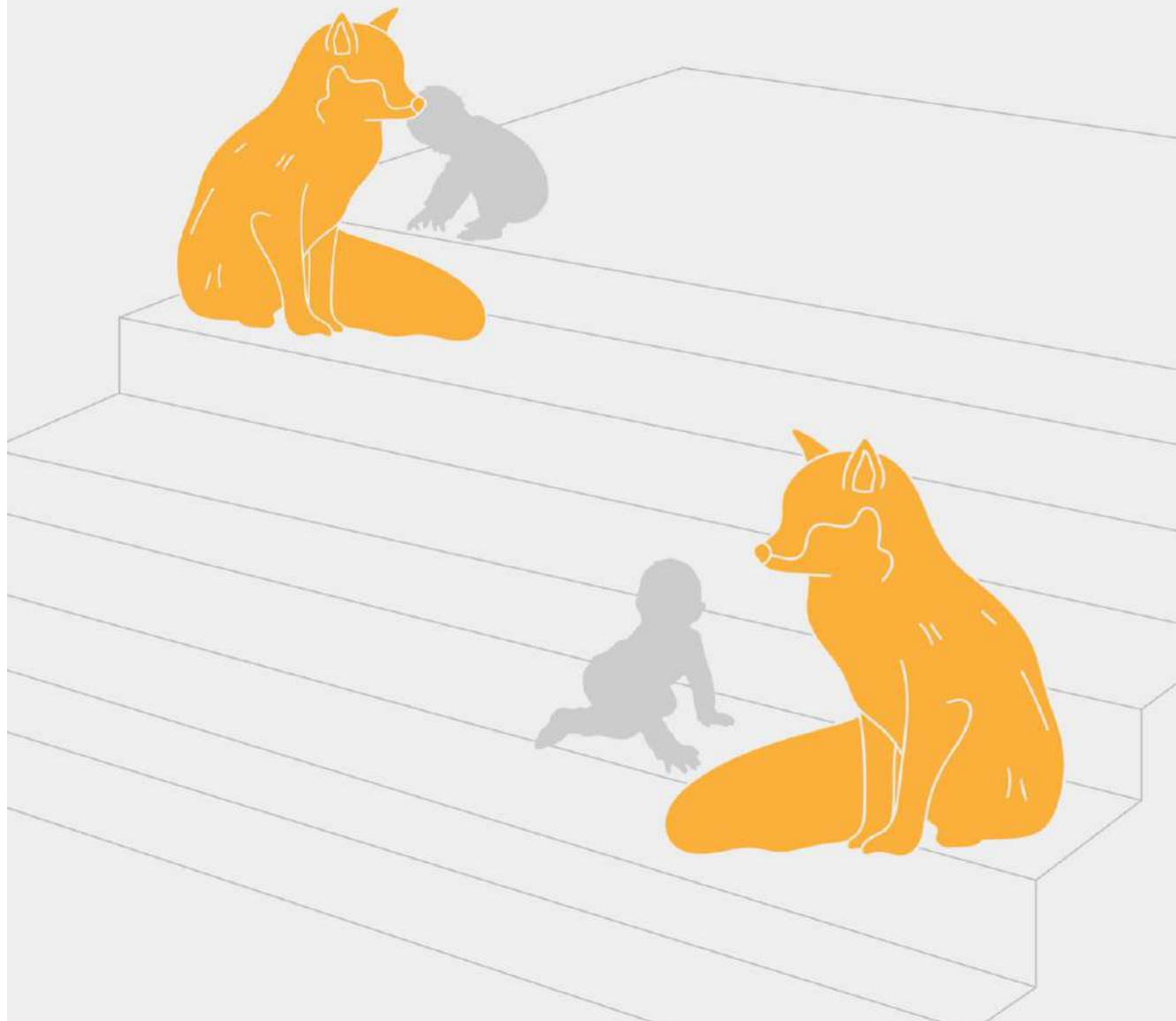
Here nature is close at hand, with stations featuring real textures like moss, smooth stones, bark, or leaves that invite visitors to feel and connect with nature 1-to-1. Inspired by the philosophy of animism, this space encourages children to interact with nature as if every element has its own spirit. They can whisper secrets to trees, touch the bark as a greeting or feel the coolness of stones, creating a gentle, respectful bond with the world around them.

These tactile experiences foster a sense of wonder and kinship, offering moments where children and parents can pause, explore, and share quiet reflections together. It's a nurturing environment that blends curiosity and respect, inviting kids to discover that nature is not only alive but also a listening presence, ready to receive their stories and dreams.



Museum Shop & Stairs Concept

Concept sketch



References



15. Stairs concept

The path from the ticket and shop area to the exhibition entrance is enhanced by 3D animal sculptures adorning the stairs. Visitors can interact with these sculptures, touching them or even sitting alongside them for a moment of connection.

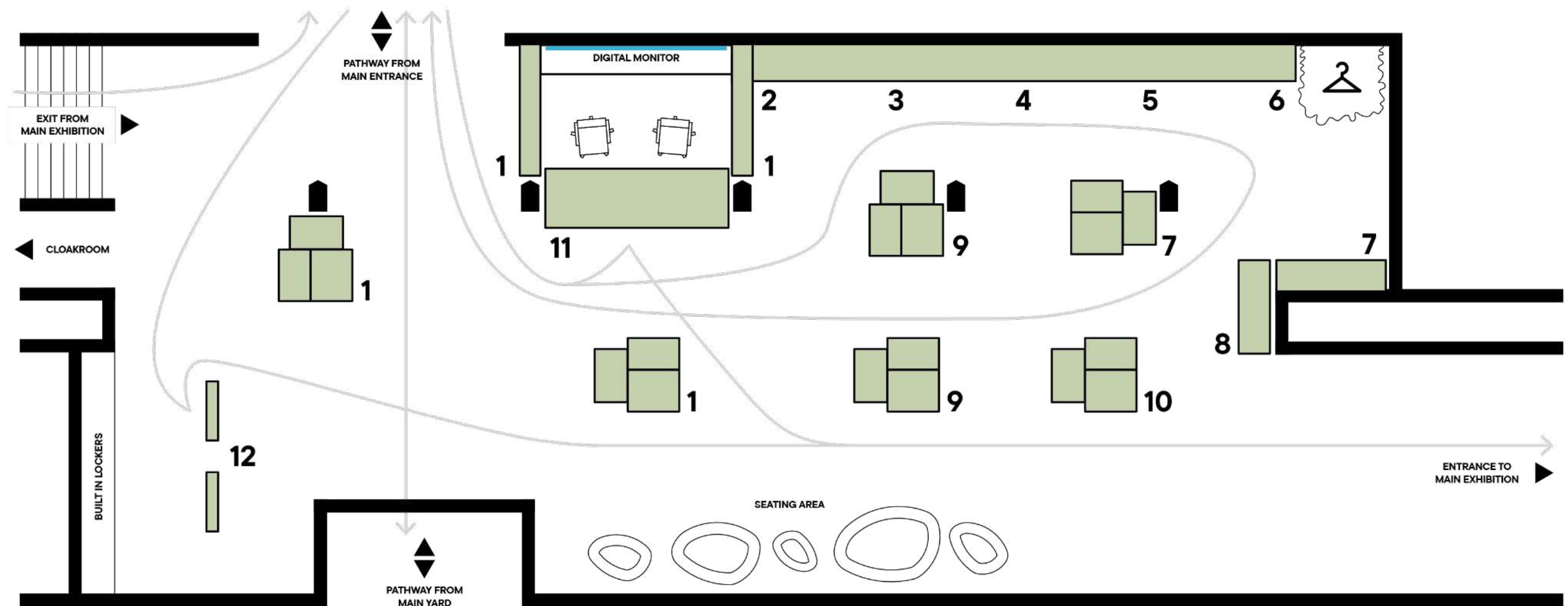


16. Museum shop concept

Museum shop envisions a **mobile, functional, and educational retail environment focused on sustainability**. The design emphasizes bright, lightweight materials that create an open, welcoming atmosphere, with all elements chosen for their recyclability.

Possible placement of product categories

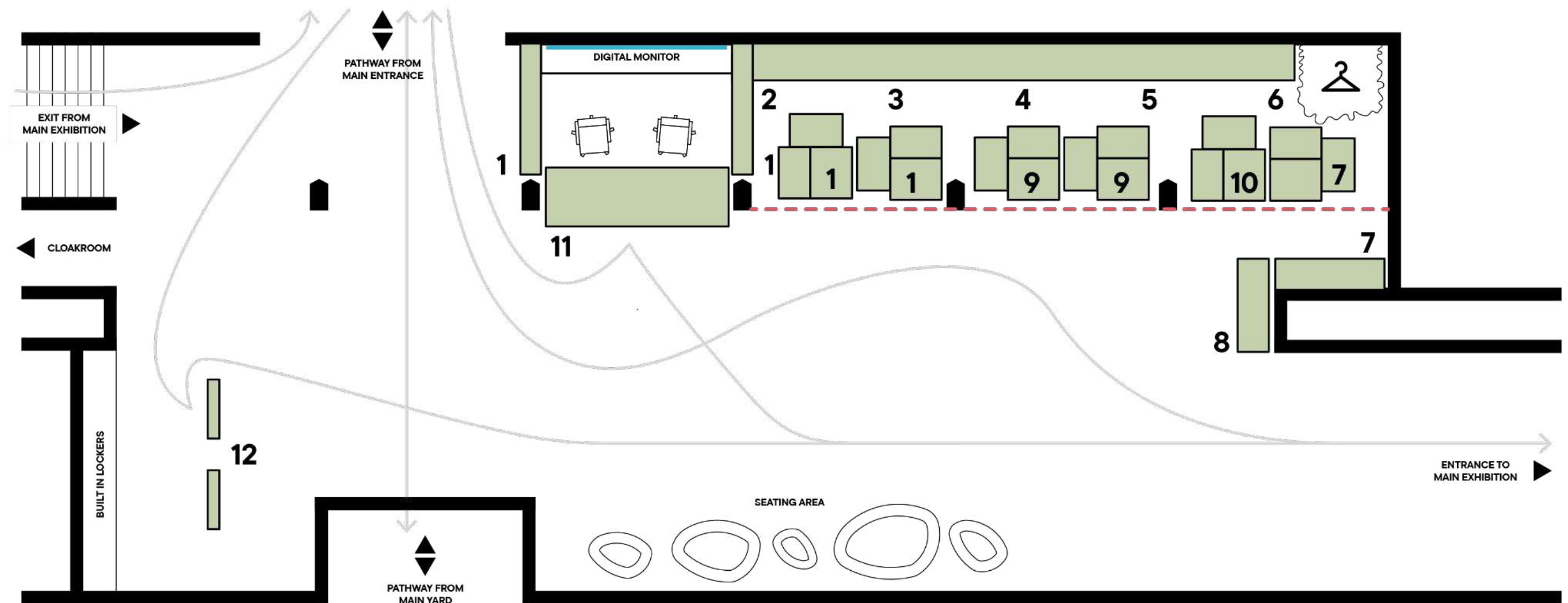
- Area 1 - Museum souvenirs and Postcards+Stamps
- Area 2 - Food/Drinks
- Area 3 - Home
- Area 4 - Books
- Area 5 - Kids/Family
- Area 6 - Bike and Camping/Hiking/Electronics
- Area 7 - Designer/recycled products
- Area 8 - Self-service checkouts
- Area 9 - Nature Cosmetics
- Area 10 - Seasonal
- Area 11 - Ticket/Shop desk (Services)
- Area 12 - Self-service ticket machine



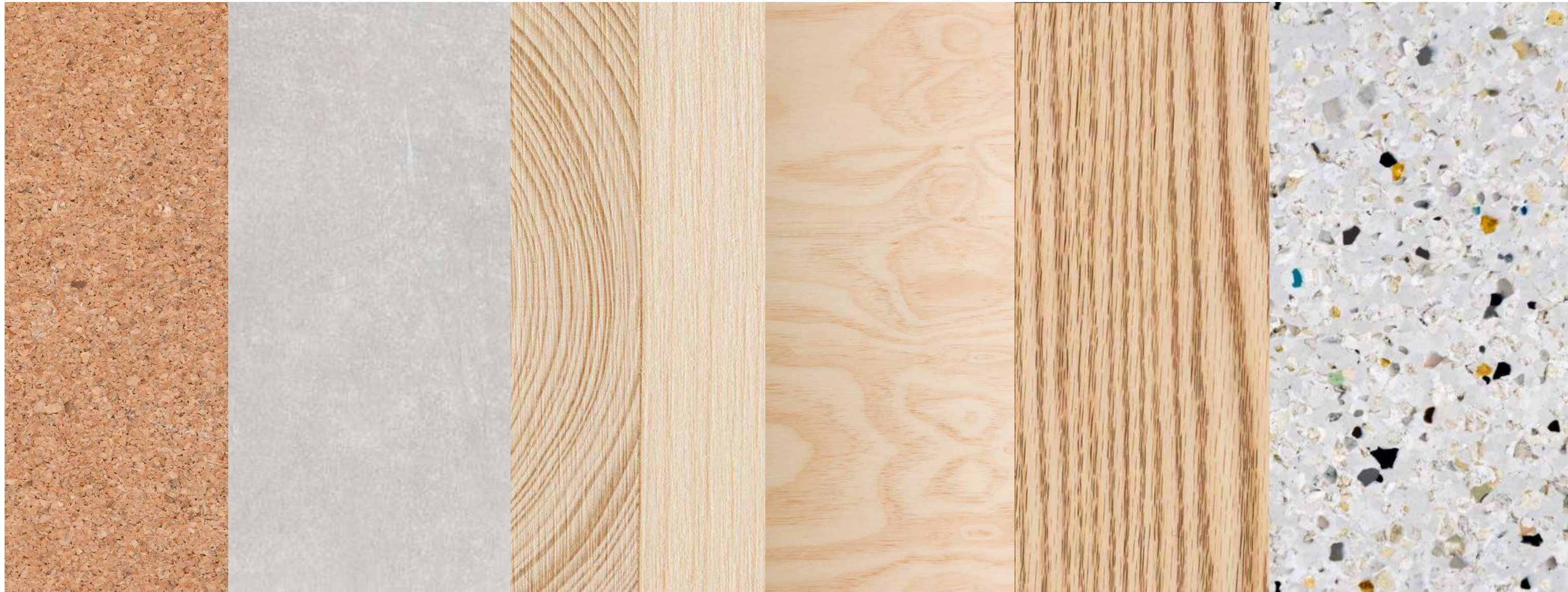
Closed shop area

In the museum shop, mobile furniture allows for easy rearrangement during open hours and can be swiftly rolled behind a secure roll-down screen when closed. This protects products and displays while still maximizing space in cases where shop needs to be closed but museum is still working.

- Area 1 - Museum souvenirs and Postcards+Stamps
- Area 2 - Food/Drinks
- Area 3 - Home
- Area 4 - Books
- Area 5 - Kids/Family
- Area 6 - Bike and Camping/Hiking/Electronics
- Area 7 - Designer/recycled products
- Area 8 - Self-service checkouts
- Area 9 - Nature Cosmetics
- Area 10 - Seasonal
- Area 11 - Ticket/Shop desk (Services)
- Area 12 - Self-service ticket machine
- - - - - Shop roll-down screen



Museum shop concept



Cork

Concrete (floor)

CLT

Plywood

Wood

100% Recycled plastic

Materials

A diverse mix of materials is incorporated to add visual interest and form a cohesive ensemble. To further lessen environmental impact, locally sourced Estonian materials are prioritized, reducing CO₂ emissions and supporting regional resources.

Museum shop concept

Infographics and labeling

Informative graphics are strategically placed throughout the space, both on interior materials and next to product groups. The graphics provide clear, concise insights into furniture and product material's origin and explain why it was chosen as a sustainable option.

This approach **educates customers on the environmental benefits** of the materials and products, reinforcing the shop's commitment to conscious, eco-friendly choices.

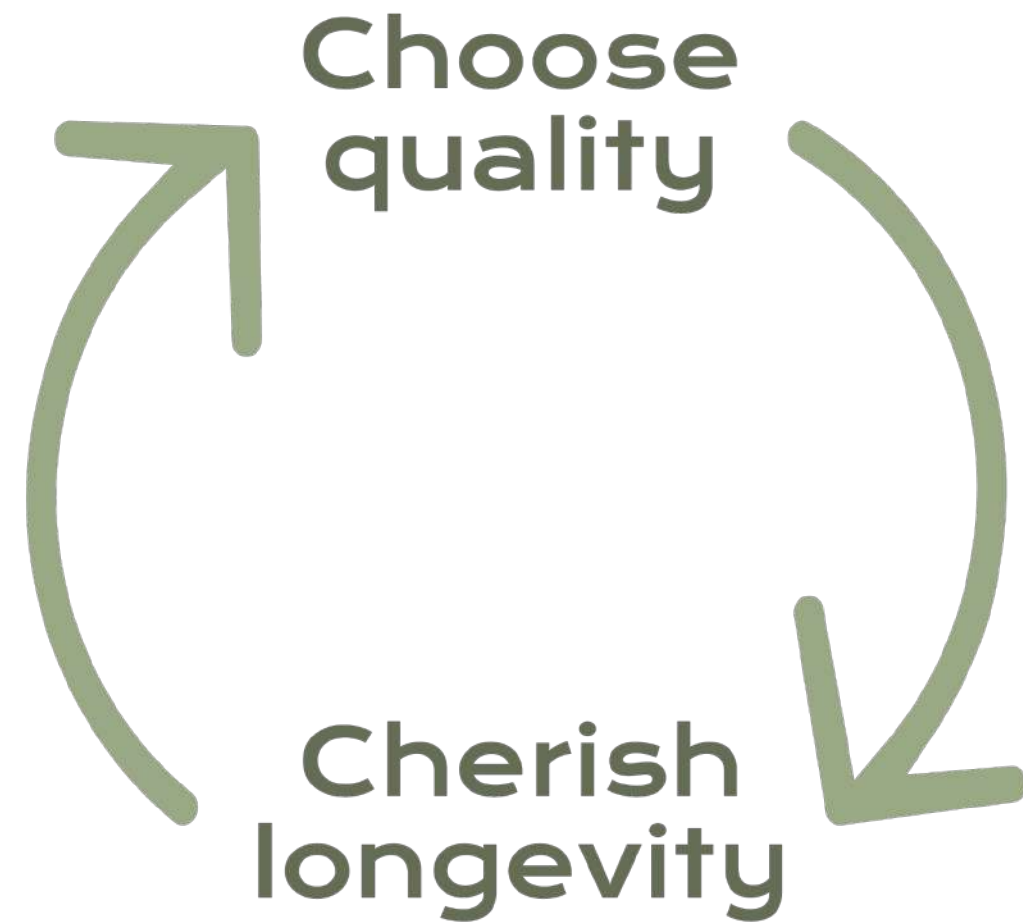
The price tags are eco-paper based. Hanging tags use paper with seeds embedded in it, in order to promote wildlife awareness while adding an interactive element to the process. If needed, simple self-cut tags can be placed on shelves if there is a change in price etc.

If necessary, water-dissolvable stickers ([see product example](#)) and labels can be used for simple price labels on mugs, bottles or food containers and other products that are easy to wash. This way cutting on excess packaging where possible.





Close up of the proposed tag



Proposed infographic visual language

Language

Light and simple language is used in order to make the information more approachable, so that all customer groups can understand the core message.

It is speaking to the consumer, encouraging them to take conscious actions and informing about the concept of the store – to provide sustainable products.



Graphic Design

The background features a series of overlapping, semi-transparent shapes in various shades of brown and tan. On the left, there are several overlapping circular and semi-circular shapes. On the right, there is a large, soft-edged, cloud-like shape that overlaps the circular shapes.

17.

Graphic Design

Krona One is nicely winding like river
and fits well with the ramp idea

AaBbCc1230



muuseum

Kooselu kunst

The softness and the angularity
are well balanced

Typo

Main identity font is Krona One.

Headlines: Krona One

Headline in english:
TT Commons Pro Expanded Light

Main text:
TT Commons Pro Medium

Main text in english:
TT Commons Pro Light

Subheadline:
TT Commons Pro Expanded Bold

Subheadline in english:
TT Commons Pro Expanded Medium

Kooselu kunst

The Art of Coexistence

Am quid excea accullorit, voluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vella.

Eped quiae dia perest aut eat micelle dolores

Unditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vellabo repudan.

Am quid excea accullorit, voluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vella.


Eped quiae dia perest aut eat micelle dolores


Unditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vellabo repudand.


Typo

Main identity font Krona One is paired with TT Commons. We use TT Commons in main text and translations.


Järved ja jõed
 Lakes and rivers


 Am quid excea accullorit, voluptaerrum laborita expeliatem. Ure intem. Eped quiaie dia perest aut et issunditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vellabo repudandae minit laboruntibus quossendis aut veliam qui simagni hicimin ratio dolorumque od quas pro id maximus, inctate sequ.


Eped quiaie dia perest aut eat micelle dolores


 Unditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vellabo repudan.

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Eped quiaie dia perest aut eat micelle dolores

Unditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vellabo repudand.


 1,5 m

Typo rules

We do not use as all caps. Text aligned left as standard.

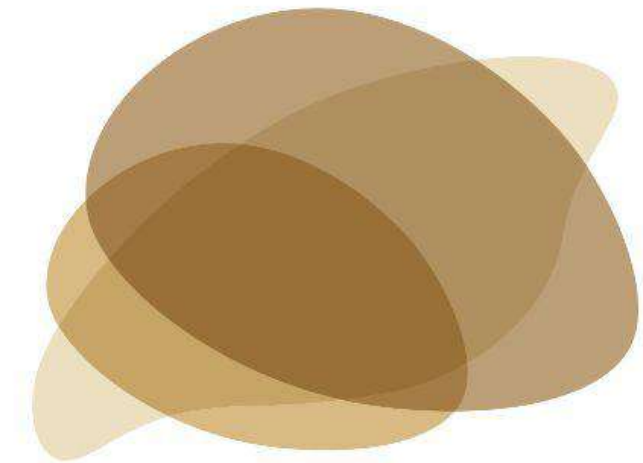
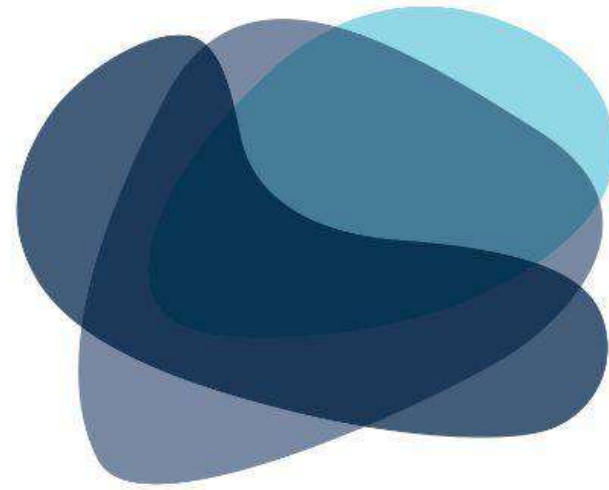
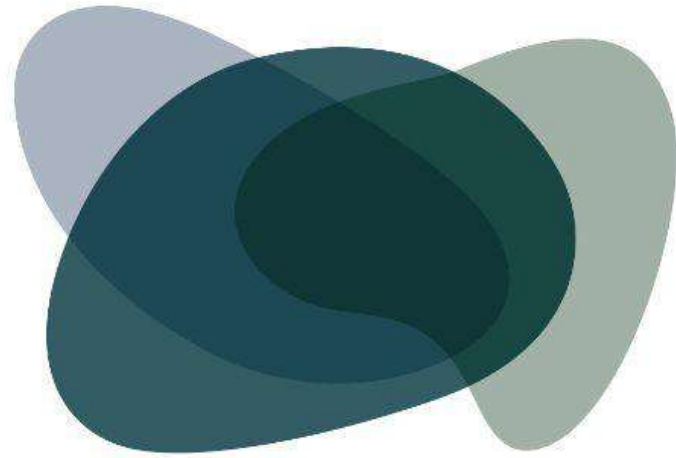
Headline in english and subheadlines are with TT Commons Expanded

- better visual combination with Krona One which is also extend.

Main text is standard TT Commons which is more compact and readable.

English text is always thinner.

Graphic design

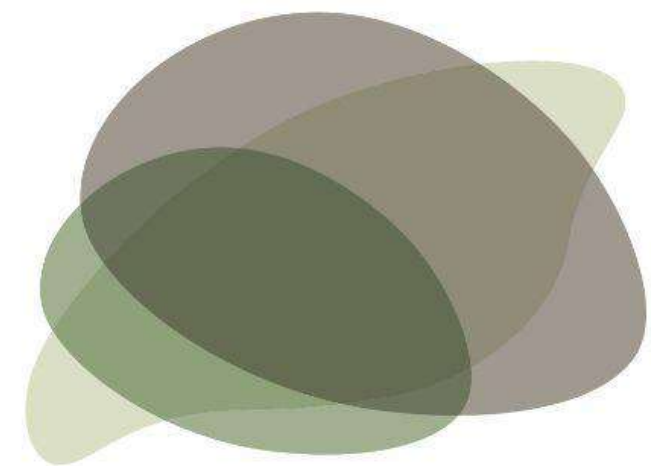
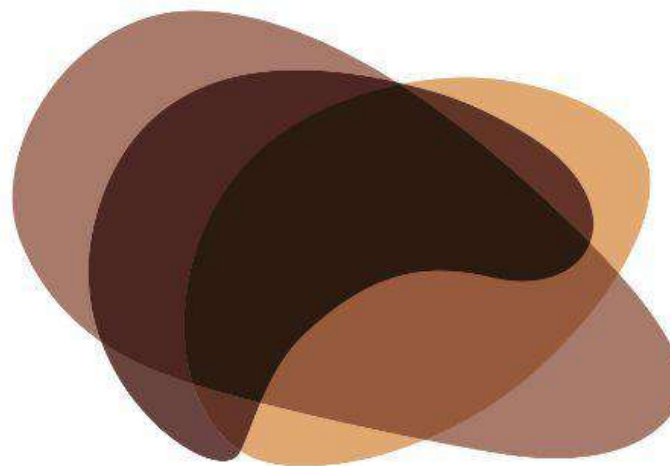
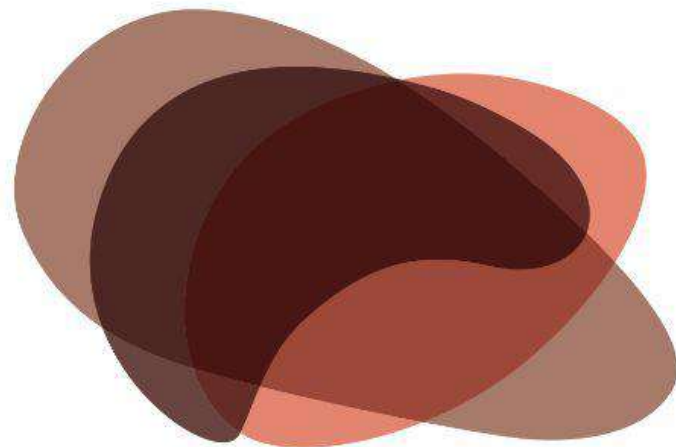


Variations

Lights and shadows

Layering

Reflections



Color palette

Color palette is inspired by forest, sea, coast and marshes.

Transparency makes it possible to convey the play of light and shadow in nature.

Dynamic movement of units unveils content and shifts perspectives.

Graphic design



Blur effect

Use blur to focus attention on the text.

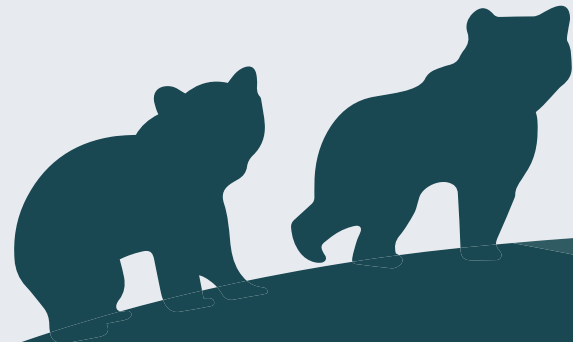
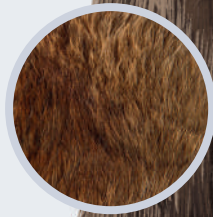
Karude salasooovid

Secret desires of bears

Karude jooksuaeg kestab mai keskpaigast juuni keskpaigani. Talveuinak algab tavaliselt novembris ja kestab märtsi-aprillini. Pojad sünnivad karul reeglina jaanuaris. Vastsündinud on väga pisikesed ja nende sünnikaal ei ületa poolt kilogrammi. Peletades jaanuaris-veebbruaris poegadega emakaru pesast eemale, ei naase emakaru tavaliselt enam poegade juurde.

Am quid excea accullorit, voluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliquae id ut re nobitae odipsum nimporesenim accupici ut a sequid et elit vellabo repudandae minihit laboruntibus quossendis aut veliam qui simagni hicimin ratio dolorumque od quas pro id maxim.

Puuduta
Touch



A

Am quid excea accullorit.
Doluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliqua.



B

Am quid excea accullorit.
Doluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliqua.



C

Am quid excea accullorit.
Doluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliqua.



D

Am quid excea accullorit.
Doluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliqua.

Am quid excea accullorit.
Doluptaerrum laborita expeliatem. Ure intem. Eped quiae dia perest aut eat issunditam aut hit abor seque parumquatet quae aliqua.

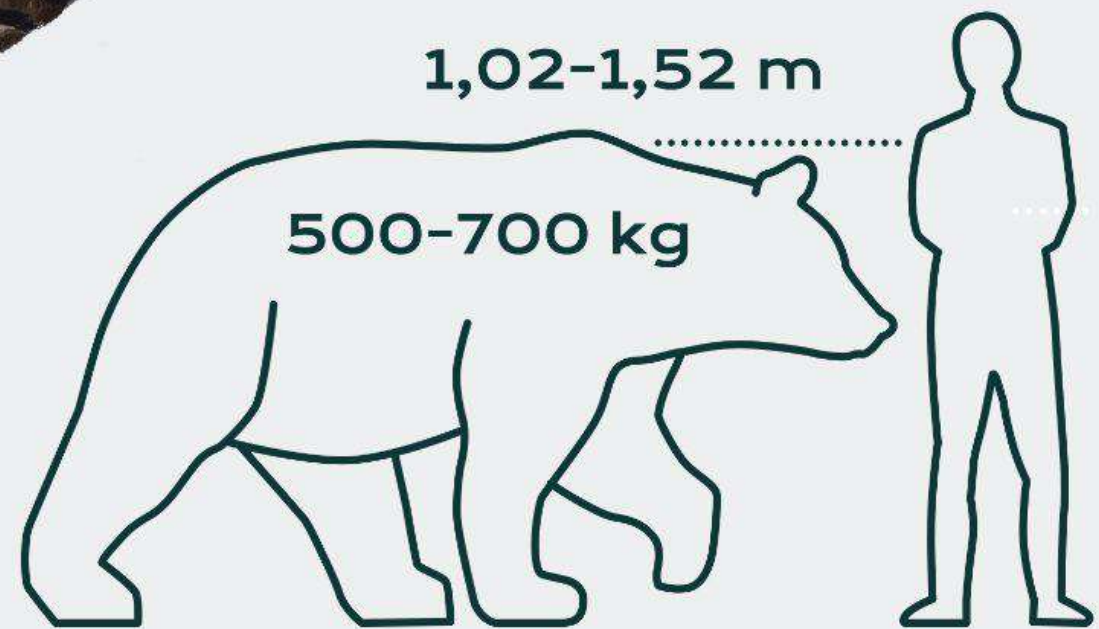
Illustrations

Main illustration is detailed. Secondary illustrations are simple, mainly using 2-3 colors. Wall texts are as short as possible. Fragmented texts are combined with illustrations. Transparent color shapes combined with blur add layering and spaciousness effect. If possible, there is always something to touch - for example, a piece of bear skin.



1,02-1,52 m

500-700 kg

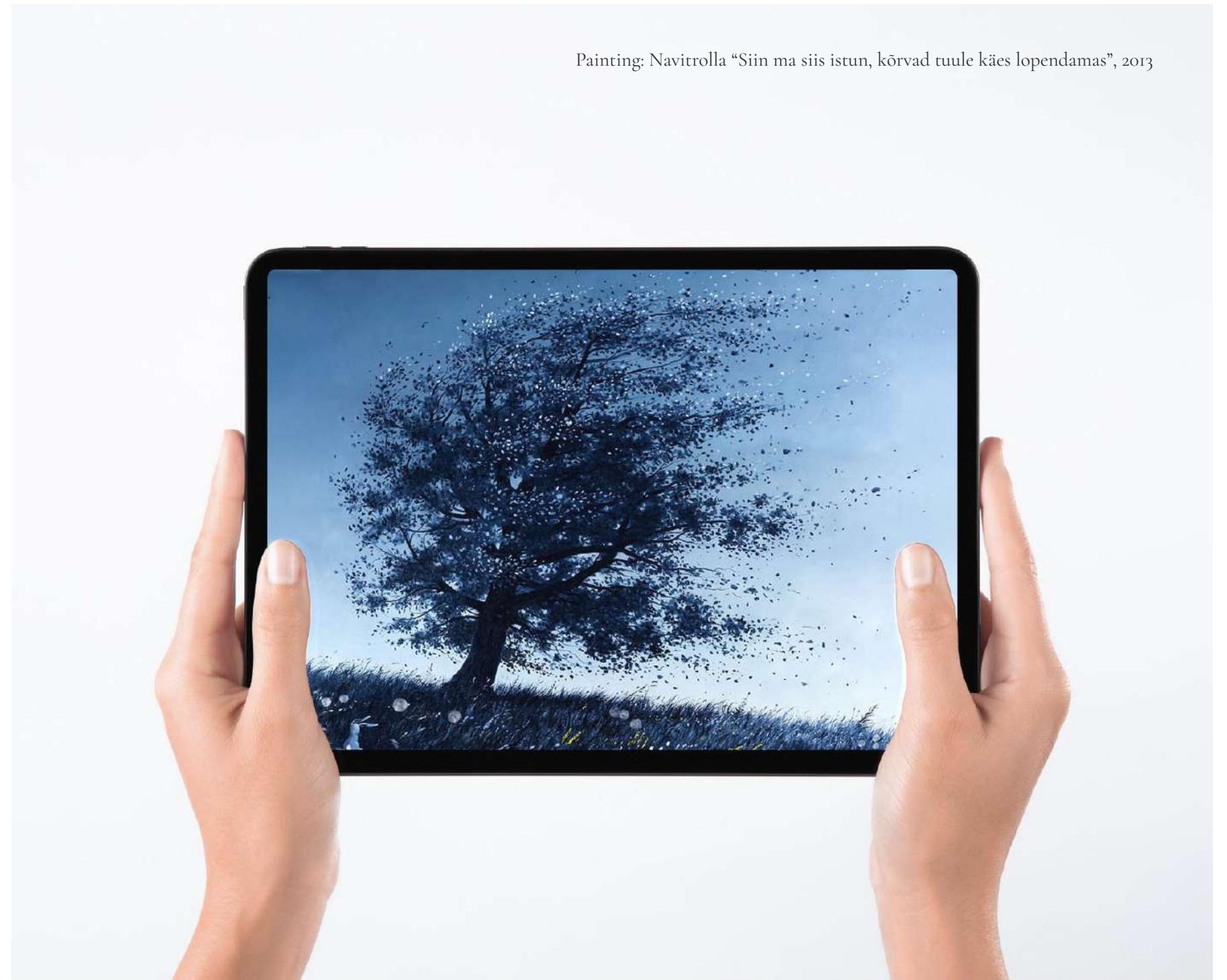


Graphic design

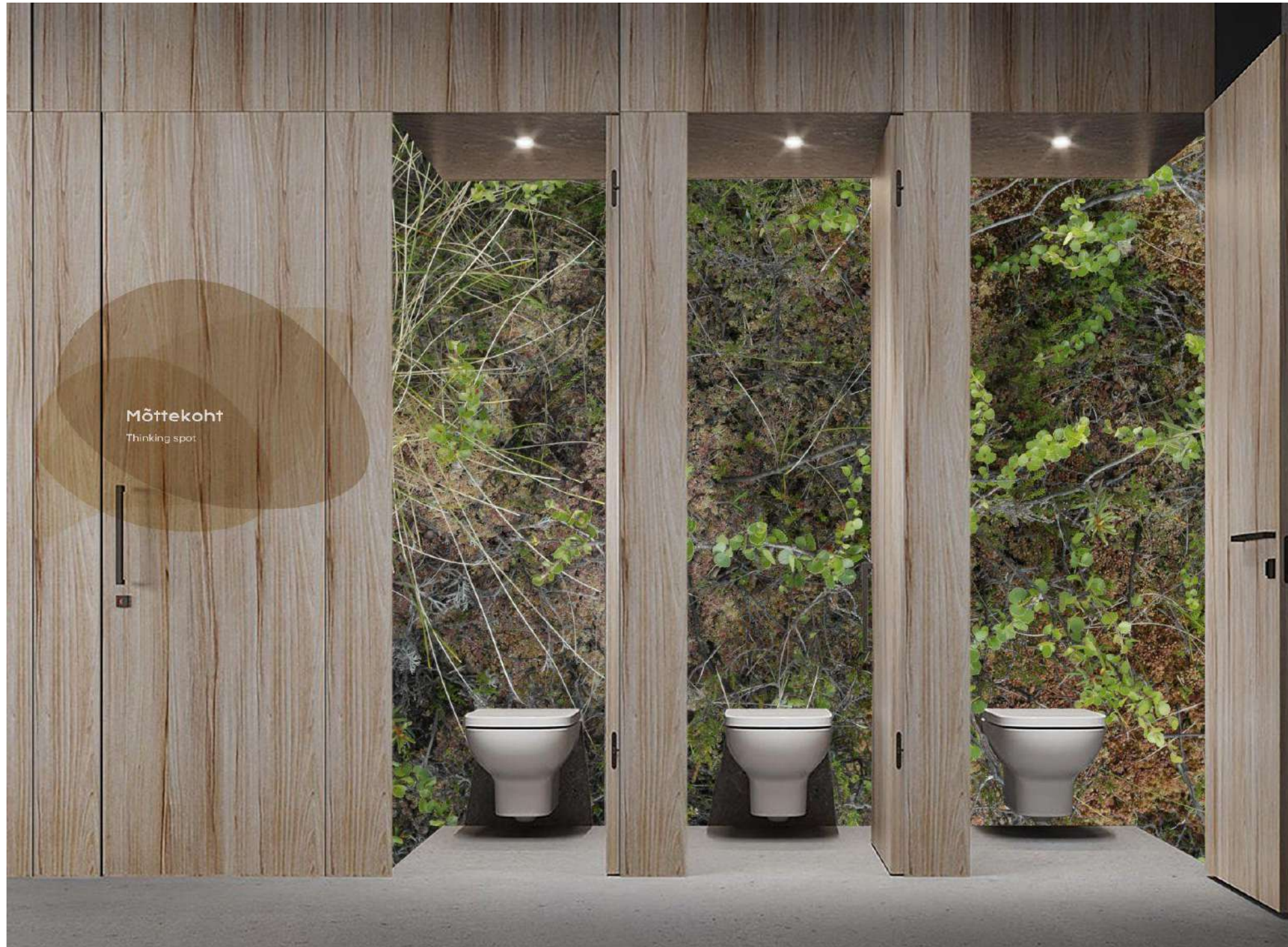
Small movements in digital images

To convey the flow of life and time, we suggest using videos instead of photos on the screens, where subtle movements are added to the images. For example, the wind moves a branch, a leaf falls, a stream flows gently, and clouds drift across the sky.

Painting: Navitrolla "Siin ma siis istun, kõrvad tuule käes lopendamas", 2013



Graphic design



Graphics in public areas

See how the ground would look if you were flying over it as an insect.

Photos shot from top to bottom with over ten times magnification, the landscape can be incredibly spacious.

Graphic design



Pssst!
Have you seen a hunter?

Photo: Jarek Jõepera

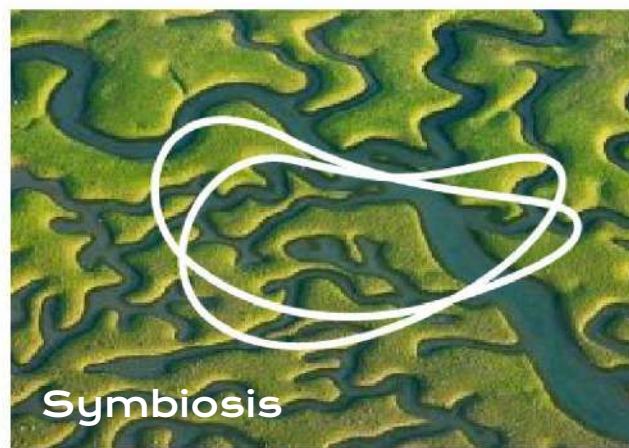
Graphic design

For children

The little Owl is presented on workbooks and marks the places for the kids to explore.



Graphic design



Inspiration

The graphics is inspired by coexistence, symbiosis, mutual connections and interrelations that exist in the nature.



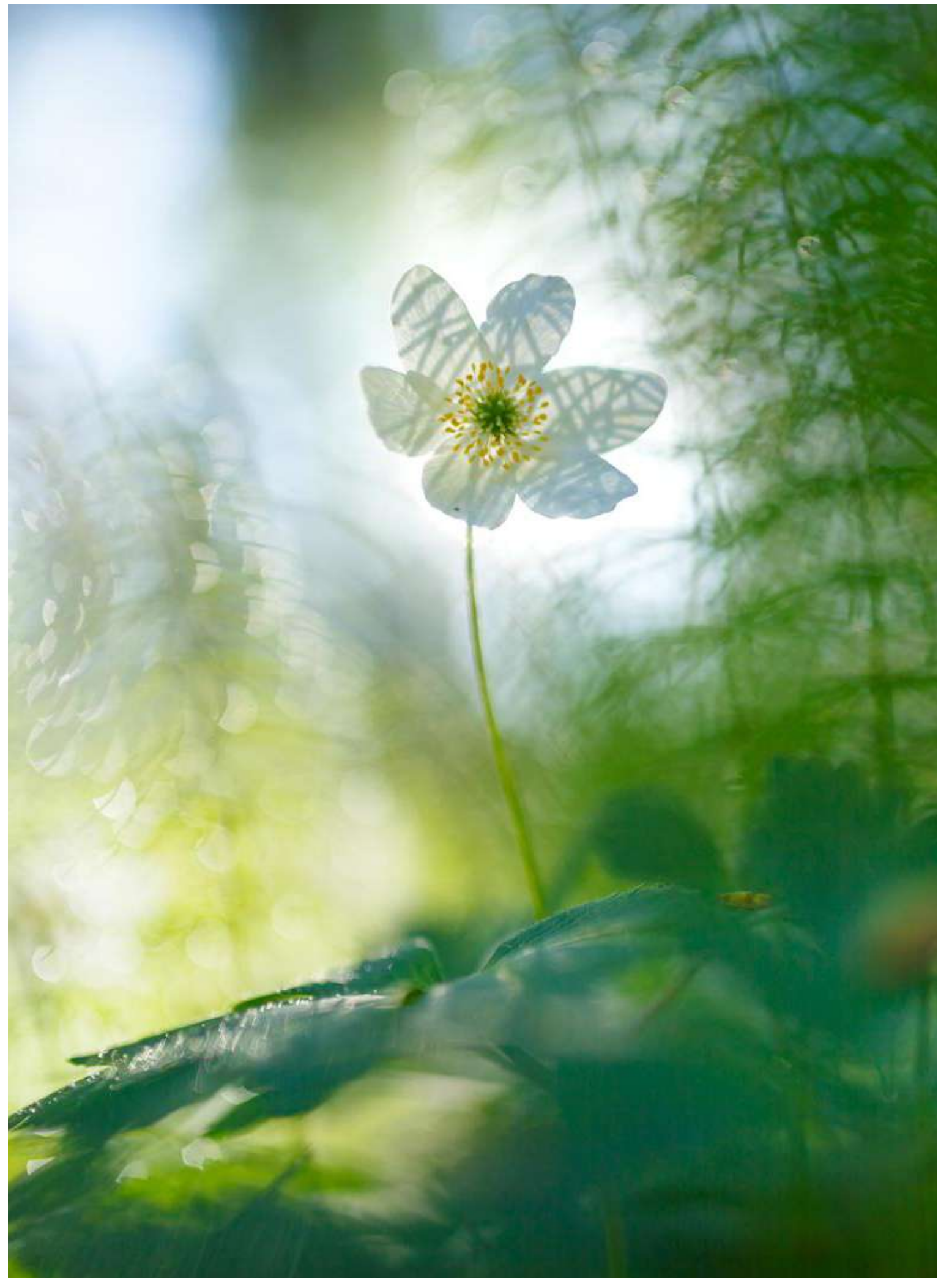
Inspiration

Idea - 3D cutted patterns on stands and walls to combine structures of Examples of textures from which 3D patterns could be generated nature with graphics.

Inspiration

The Nightingale and the Flowers
by Anton Hansen Tammsaare

In a beautiful spring, a nightingale sang in the meadow.
In the same spring, flowers began to bloom there.
And when the nightingale saw these beautiful flowers, it thought:
“They bloom only beautifully because I sing.”
And the nightingale sang even more beautifully.
But the flowers that heard the nightingale's song thought:
“He sings only beautifully so that we may bloom.”
And they bloomed even more beautifully.

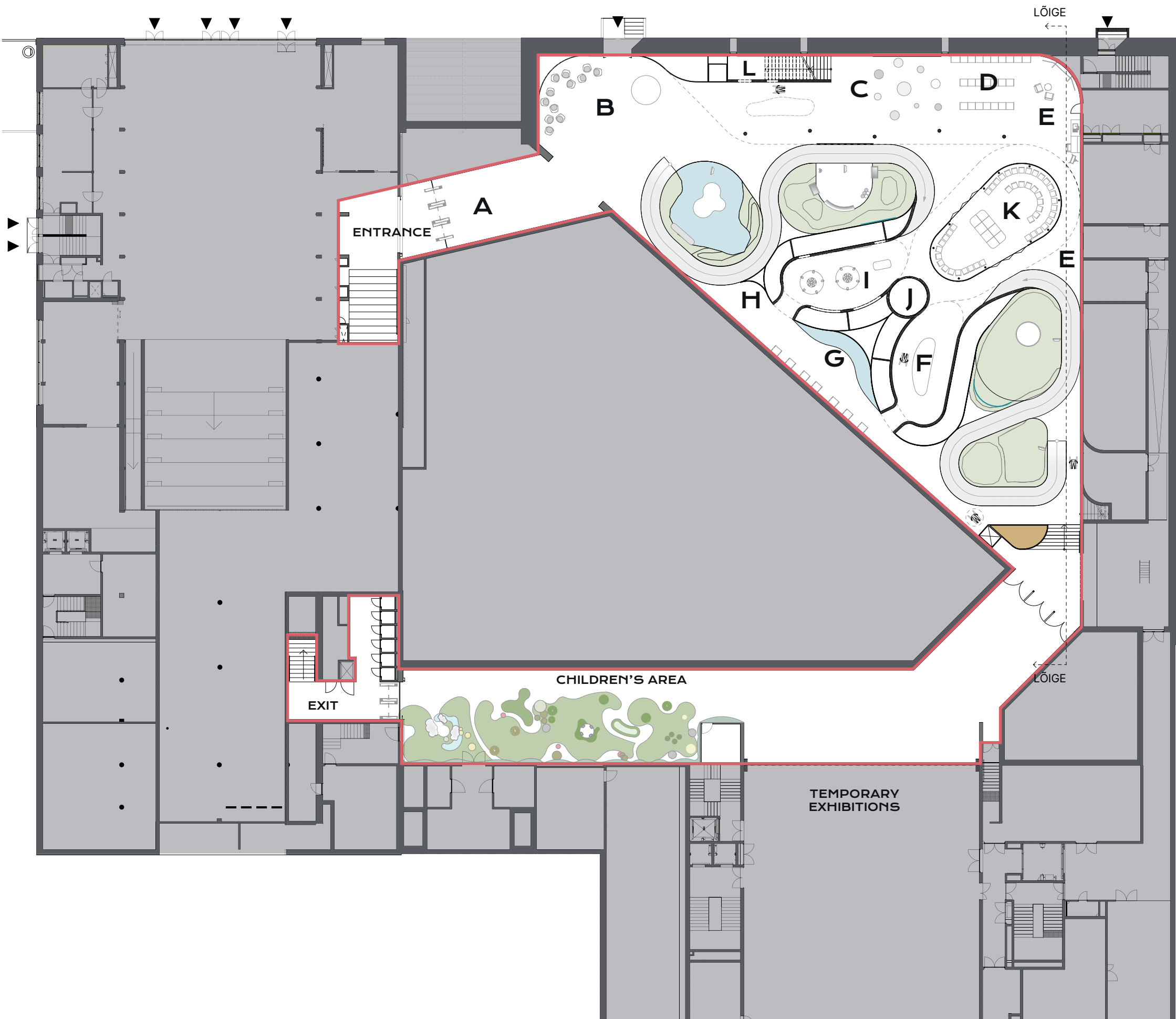




Exhibition Plans & Sections

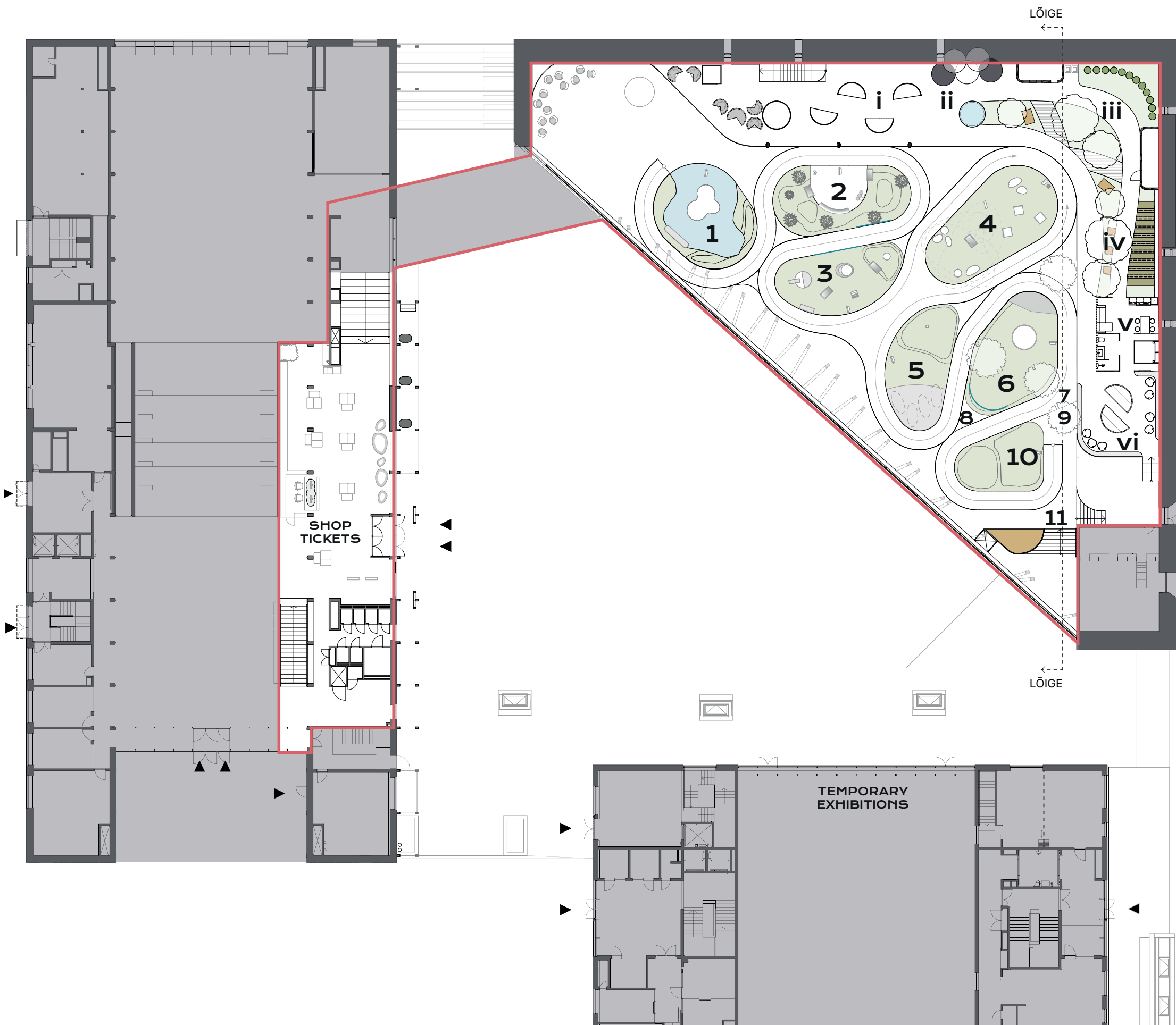


Overview of the main hall



Plan 1st floor

- Area A - The Entrance Tunnel
- Area B - Welcome Area
- Area C - Global Energy Flows and Nutrient Cycles
- Area D - Curiosity Corner
- Area E - Behind the Scenes: Museum Research in Action
- Area F - Ancient Waters: The Secrets of Estonia's Geological Past
- Area G - Formation of the Land
- Area H - Interactive landscape
- Area I - Life of the Baltic Sea
- Area J - Baltic Sea Dive
- Area K - Science Theatre
- Area L - Children's Mini-Exhibition with Aquarium



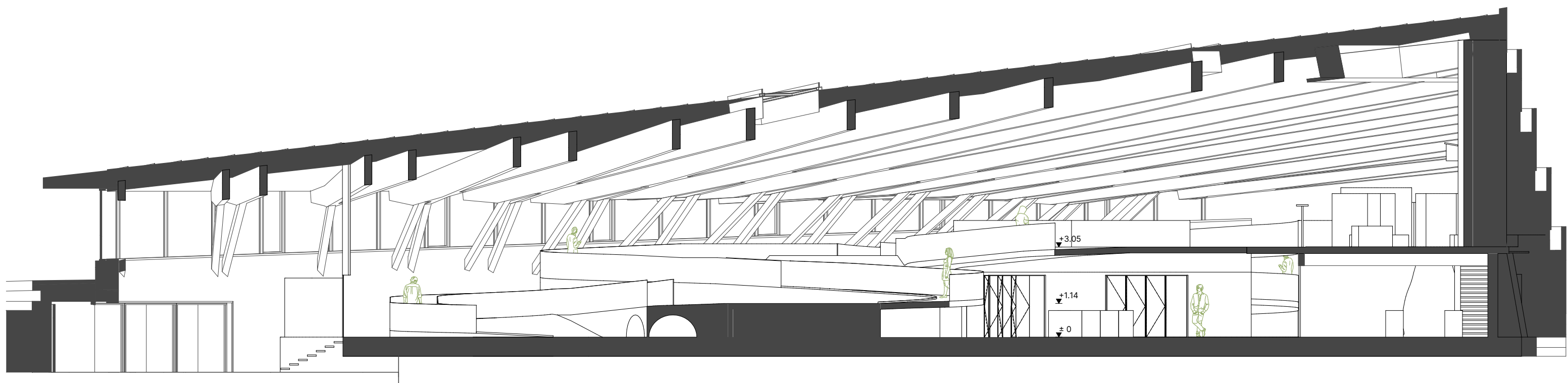
Plan 2nd floor

Along the ramp:

- Area 1 - The Lakes and Rivers of Estonia
- Area 2 - In the Heart of Estonian Mire
- Area 3 - Meadows of Memory
- Area 4 - Think-tank
- Area 5 - Estonian Wildlife and Skyscapes
- Area 6 - The Forest Web:
Energy, Cycles, and Micro Life
- Area 7 - *Umwelt*:
Jakob von Uexküll's Legacy
- Area 8 - Wild Boar Family
- Area 9 - Badgers' Cave
- Area 10 - Primeval Forests and
Nature Conservation
- Area 11 - Forest Wall

On the balcony:

- Area i - Global Challenges
- Area ii - Urban Nature:
A Moment of Peace
- Area iii - Futures in Green:
Solutions for Tomorrow
- Area iv - From Earth to Table:
Challenges and
Solutions in Agriculture
- Area v - City Life: Nature in Our Homes
- Area vi - Benefits of Nature



Section



Aitäh!