

DISCOVERY PARK environmenital learning center

Alex Burgos + Ellie Murray

Discovery Park at a Glance



Discovery Park is a 534-acre public park containing 11.8 miles of walking trails, the United Indians of All Tribes' Daybreak Star Cultural Center, a lighthouse, and a sewage treatment plant. The park is built on the historic grounds of Fort Lawton and the landscape is dominated by forests, beaches, prairies, and bluffs.





The Environmental Learning Center is located directly behind the Discovery Park Visitor Center



Park History

1881 West Point lighthouse built 1898 **Construction of Fort Lawton begins** 1940's + 1950's Fort becomes port of embarkation during WWII and the Korean War 1966 Sewage treatment plant completed Land is deeded to Seattle for use as a park 1972 1974 Environmental education programs begin 1975 First habitat enhancement/restoration project beings with the help of volunteers First Discovery Park Nature Daycamp program established 1978 Shoreline Park Improvement Fund allows the enhancement of habitats and the 1995 improvement of visitor access New environmental learning center opened 1996

Nature Kids Preschool Philosophy

Goals:

- provide an enriching, fun, child-centered program for children ages three to five
- nurture the emotional, social, physical, and academic growth of children through hands-on experiences in the classroom and outdoors

Program:

- experiential approach to learning with a variety of materials for children to see and touch
- engage all parts a child's development through activities such as science experiments, arts and crafts, music, movement, and stories
- use a thematic approach to learning in order to explore the world and develop an emerging awareness of the ever-changing environment
- focus on creative arts, science, math, language, and movement

Example:

- To learn about habitats, children might paint a habitat for a bird in the art area, observe ants at work building their nest in the science and math areas, read and make a book about a habitat in the language arts area, and act out what an animal needs for a healthy habitat in the movement area



Nature Kids Preschool Program



Developing Creative Art Abilities:

- make an art or craft project daily along with a movement activity
- look for inspiration in nature while exploring outside
- encourage self-expression through visual arts, song, movement, and dance

Science Investigations:

- emphasis on nature and ecology
- discovery Park serves as a living classroom to learn about science through observing different types of weather, gaining an understanding of the life cycle of a tree by planting seeds, and walking through the forest
- nature based and hands on

Math:

- math always incorporated in time spent outdoors
- use nature as the basis for learning about math

Outdoor Classroom

• Open space and seating to facilitate outdoor expression, exploration, and education

While we didn't see anybody utilizing the space during our visit, this would be a great place to gather for meetings, a morning coffee, or music

practice









Playfulness



Wall space outside of indoor classrooms
 used for children to draw with chalk

We found this to be a clever way to incorporate children's creativity with the infrastructure and connected it to existing structures at Heron Meadow



Places of Intrigue + Exploration

 Trails lead from indoor/outdoor classrooms to rest of surrounding Discovery Park

Bianca had mentioned that the Heron Meadow had no places of intrigue. We found that the trails that lead to the greater Discovery Park were a fun, whimsical way to engage children in nature play

Multifunctional Design



- Large stones used as something to climb on, present from, and sit on
- Open field for gathering, playing, and doing group activities
- Surrounding vegetation provides opportunity for ecological learning, exploration, play, and shade

There were different materials, spaces, and vegetation at Heron Meadow that could be used for many purposes. Thus using less resources and creating a more dynamic space

Accessibility

- Large stepping stones lead from the visitor center to the outdoor/indoor classrooms making access difficult
- All other paths are flat and wide but created with dirt/woodchips, making year round access difficult

Improving the trails would benefit those who cannot easily access this sight greatly and should be a priority for the Heron Meadow re-design



Overall:

- This precedent shows a fun, engaging way to incorporate nature with children's learning
- The open meeting space can be used for a variety of reasons, something that we saw at the Heron Meadow but can be expanded upon i.e the little girl getting violin lessons and the place we met to chat after the tour
- The use of materiality is interesting here- from using a building as a canvas to stones as seating, there is a natural, playfulness to the design of this space that could inspire the redesign of the Heron Meadow using the resonant materials on site
- While there are beautiful trails and places to be immersed with nature, there is a slight equity issue with the lack of accessibility. This is definitely something to keep in mind for the Heron Meadow to not be exclusive



Lewis Creek Visitor Center and Play Area

Claudia Sackett Hennum | October 2020

Lewis Creek Visitor Center and Play Area

Heron Meadow

Google Earth



Lewis Creek Park Visitor Center and Play Area is the entryway to Lewis Creek Park, a natural area with varied plantings and 2.3 miles of trails.



Amenities

Site amenities include a play area, soccer field, baseball fields, a basketball court, trails, the visitor center, picnic areas and public restrooms.



Ecological Intervention

Lewis Creek drains into lake Sammamish. The preserved wetlands act to slow, sink and filter water, **improving water and habitat quality**.



Accessibility

Lewis Creek Park has many **wheelchair accessible paths** in and around the play area and visitor center. Some of the trails are wheelchair accessible and almost all of them are **broad and flat**, with occasional boardwalks supporting outdoor recreation for people of various abilities.





Interaction

There are various programs focused on connecting visitors with the wildlife and ecology of the park. The Lewis Creek Park Visitor Center offers **nature and environmental courses** for all ages. Additionally, there are monthly guided **nature walks**, organized **scavenger hunts**, and opportunities for **self-guided exploration**.



Lewis Creek Visitor Center and Play Area

Experience

The Visitor Center, Play Area and sports fields are set against less formal planted areas, encouraging an experience of **immersion**.





Lewis Creek Visitor Center and Play Area

Story

Signs guide visitors along the various paths which loop around Lewis Creek. **Interpretive signs** near the visitor center share the story of the watershed. Colorful chalk markings communicate a different narrative; one of creativity and **play and educational programming**.



Lewis Creek Visitor Center and Play Area

Artistry

The Visitor Center has a **green roof** and is constructed of **sustainable materials**. Designed by **Boxwood** with structural design by **MLA Engineering**, the building has a **contemporary aesthetic** with an iconic cantilevered roof. The building is relatively low and unimposing, however it's placement atop an embankment allows for views of the adjacent natural area.

The surrounding sports fields and trail system was designed and improved by local landscape architecture firm **Hafs Epstein**.





Sources

Building and trail maps:

https://bellevuewa.gov/city-government/departments/parks/rental s/indoor-rentals/lewis-creek-visitor-center

Building photo: https://www.mlaengineering.com/lewis-creek-visitor-center

Context map: Google Earth

Program information: <u>https://www.seattletimes.com/life/outdoors/bellevues-lewis-creek</u> <u>-park-packs-in-the-programs/</u>

Interaction photo: https://www.parentmap.com/calendar/lewis-creek-park-self-guide d-scavenger-hunt-0

Architectural drawing: https://www.eboxwood.com/institutional/lewis-creek-park-and-vis itor-center

Ramp photo: http://www.hafs-epstein.com/lewis-creek-park



Billy Frank Jr. Nisqually Wildlife Refuge

A Precedent Study by Jocine and Lena

From Riparian Forest

To Saltwater Mud Flats

Why does it relate to the Heron Meadow?

- Combines historical, educational/research, and nature play programs for a wide variety of visitors
- A restoration project with diverse stakeholders: Nisqually Tribe, US Fish and Wildlife Services, Ducks Unlimited, US Geological Survey and Friends of the Nisqually NWR
- The site is of Indigenous cultural significance and this informs the design of the site
- The watershed the refuge is located in is of ecological significance for the PNW
- Fully accessible for all mobilities
- Simple and beautiful landscape design showcases seasonal and tidal changes and species diversity of an endemic ecosystem of the PNW
- Historic preservation of buildings on site



Site Location



Historical Context

- 2 million to 15,000 years ago The Puget Lobe Ice Sheet (part of the Vashon Glacier) extends outwards just south of Olympia, creating the Puget Sound geology as it began to recede
- 11,000 years ago Meltwater from the Vashon Glacier, then existing only to the U.S.-Canada border, erodes much of what we see as today's existing Puget Sound
- 10,000 years ago Nisqually Tribe ancestors migrate from the Great Basin and settle along the Nisqually River



Historical Context

- Dec 1854 The refuge is the site of the first treaty signing in Washington (Treaty of Medicine Creek)
- Late 1800s Massive loss of estuarine habitats as settlers diked and drained areas for farming
- 1904 a pasture/agricultural land owned by Alson Brown
- 1974 Turned into a protected estuary
- The largest estuary restoration project in the PNW as of 2011 assisting in salmon recovery and other ecological functions
- 2009 Nisqually NWR and the Nisqually Tribe breached a series of dikes on both sides of the Nisqually River



Historical Context

- 2015 Obama signed Billy Frank Jr. Tell Your Story Act that redesignated the Nisqually NWR into Billy Frank Jr. Nisqually Wildlife Refuge
- Billy Frank Jr. was a Nisqually treaty and environmental activist that championed the fishing and environmental rights of all Tribes--a hero to many many people!
- The same year, Medicine Creek Treaty
 Memorial in the refuge to commemorate the historical event
- 2020 On our visit, the Visitor Center and Education Center were both closed due to COVID



Site Context

- Located on the Nisqually River Delta between the Nisqually River and McAllister Creek
- Where freshwater meets the Puget Sound to the North
- 762 acres of restored estuary!
- Located just off of the I-5 corridor between Olympia and Tacoma
- Operated mostly by the US Fish and Wildlife Services
- Most vehicular activity clusters near the south end due to the parking lots and highway, so it may be more polluted on this end.



Programs

- 4 miles of ADA accessible trails
- Observation and viewing platforms
- Norm Dicks Visitor Center education and art exhibits
- Environmental Education Center and Program over 8,000 students and teachers visit per year for indoor and outdoor education, and they provide a comprehensive educator guide to the site for field trips
- Medicine Creek Treaty National Memorial
- Activities: waterfowl hunting; boating canoes, kayaks, small boats with a ramp outside of the Sanctuary Area; fishing
- Nature Play Area



Nature Play

- Allows children to use their senses to explore nature, developing skills of scientific inquiry and ecological learning
- The Washington Conservation Corps used downed Cottonwood and Willow to build in nature play elements on site
- 110 year old orchard supports wildlife and children by intriguing and providing a shady and quiet area
- Includes gathering, art, nature's treehouse, dirt digging, building, messy materials, and music & movement areas





Nature Play


Structures



Structures



Visitors Centers





Wetland area surrounds an elevated Visitors Center and Education Center, which are closed at this time

Estuarine Relations

- Diverse landscapes: estuary, freshwater wetlands, grasslands, and riparian woodlands host ample critters
- 300+ species of birds, mammals, fish, reptiles and amphibians inhabit the refuge
- Conifer forests on bluffs above the Nisqually Delta provide perches for bald eagles
- Salmon and steelhead trout use the estuary to swim upriver and transition to the Puget Sound



Estuarine Relations





The refuge interpretive signs provide ample information on the diverse species that call the refuge a home.

PEOPLE OF THE RIVER: THE NISQUALLY TRIBE

The Normally people once accurate 40 villages along the banks of the Normally Rove and no verarias. They used the enrice Normally Rove and no ver-Mount Rainier to the Pages Sound. On the particle they harvasted causas. They gathered berries and hunced doer in the alongs of Mount Rainier. They harvested bullish and salmon on the Normally Filas and the waters of e Normally Rever and Medicine Creek.

The Nisqually had strong ties with tribes exist of the Cascude Mountains, through trade and intermarriage. From these people they obtained horses, which grazed on the prairies and the saltmarsh grasses of the lisqually Delta.

In 1883, the Hudson's Bay Company established a fort on Niopailly land, For 20 years, until the signing of the Medicane Corek Trasy, relations between the Niopailly people and their new neighbors were good. The Company related with the Niopailly for first, and tried them to work at the fort. Many Niopailly adopted morpen ofotning and castons, while continuing to nt, fish, and travel between their summer and winter tres as they had for generations.

Tody the Tribe numbers about 800 people. Fishing continues to be an important aspect of the Tribe's economy and cultural identity. The Nisqually Tribe manages the Clear Creek salmon hatchery and has restored 140 acress of estuary and 50 acres of riparian habitar on tribal lands east of the Nisqually Rever.



Sensory Experiences

- Despite a large number of cars in the parking lot, people were comfortably spaced out due to wealth of wide trails and boardwalks
- Prospect vs. Refuge moving from the enclosure of the forest to the exposure of the mud flats
- The ability to understand the place through your senses; the wet moss to the brininess of the sea, fleeting birdsong to sparse sounds of seabirds
- Inspiration should be drawn from the simplicity that allows humans to connect with nature at this site



Sources

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- Washington State Department of Natural Resources Geology - <a href="https://www.dnr.wa.gov/programs-and-services/geology/explore-popular-geology/puget-sound-and-coastal-geology#:":text=Puget%20Sound%20Geology&text=Both%20were%20sculpted%20by%20the.south%20to%20just%20beyond%20Olympia.&text=These%20glacial%20sedime <a href="https://www.dnr.wa.gov/programs-and-services/geology/explore-popular-geology/puget-sound-and-coastal-geology#:":text=Puget%20Sound%20Geology&text=Both%20were%20sculpted%20by%20the.south%20to%20just%20beyond%20Olympia.&text=These%20glacial%20sedime https://www.dnr.wa.gov/programs-and-services/geology/explore-popular-geology/puget-sound-and-coastal-geology#:":text=Puget%20Sound%20Sedime wttps://www.dnr.wa.gov/programs-and-services/geology/explore-popular-geology/puget-sound%20Olympia.&text=These%20glacial%20sedime https://www.dnr.wasseduction.south%20to%20years%20ago https://www.dnr.wasseduction.south%20to%20years%20ago https://www.dnr.wasseduction.south%20to%20years%20ago https://www.dnr.wasseduction.south%20to%20years%20ago https://www.dnr.wasseduction.south%20to%20years%20ago https://www.dnr.wasseduction.south%20to%20years%20glacial%20years%20ago https://www.dnr.wasseduction.south%20to%20years
- Nisqually Tribe History Link https://www.historylink.org/File/20671

IslandWood Bainbridge Island, WA











Overview

IslandWood is an environmental science and education nonprofit that creates experiences that help students and educators understand their environment and discover the impact they can have on their world and their community.

The 250-acre campus on Bainbridge Island, WA welcomes more than 13,000 people every year for our School Overnight Program, graduate program, meetings and retreats, weddings, special occasions, summer camps, and public events for adults and families. Our campus features six different natural ecosystems, miles of trails, a garden classroom, and sustainably-built infrastructure that facilitates learning, discovery, and community building.

Sustainable Design

- Solar meadows and building orientations maximize passive solar gain. High performance windows optimize solar heat gain and reduce energy consumption.
- All concrete contains 50% flyash, a recycled utility waste product of coal.
- Natural ventilation replaces air conditioning. Buildings designed using computer modeling to locate window openings and operable skylights for maximum air circulation.
- Walk-off mats at entry doors are made from recycled tires.
- Many building materials are left untreated to reduce off-gassing of volatile organic compounds.
- Roof rainwater collected at several buildings used for landscape irrigation.
- Wood harvested from solar meadows used for exterior siding and interior trim throughout project.
- Affordable electricity production from readily available renewable resources is featured throughout the site, including: wind-power at the Learning Studios, a micro-hydro component at Mac's Pond, and the photovoltaic on the classroom roofs.

- All wastewater is treated on site using either the Living Machine or constructed wetlands. Both systems utilize a natural biodegradation process in which aquatic plants, microorganisms, and snails consume the organic matter and produce a highly treated effluent that can be re-used or applied safely to the surrounding soil.
- An on-site treatment system provides tertiary treatment of wastewater. The reclaimed water is used for low-flush toilets and potential landscape irrigation.
- A detailed site and resource analysis was used to locate campus buildings in areas that would cause the least impact to the most sensitive areas— including mature forests and wetlands.
- Initial "bio-mass re-use" of all organic debris on site during the clearing and construction.
- Children and visitors help restore the site with native plants from an on-site nursery.
- Extensive native plantings throughout, and long-term planning for invasive species eradication.
- Vermiculture and "Earth Tub" composting systems for food and plant waste.



Programming

IslandWood has programs and events for all ages and communites.

- K-12 Education Programs
- Family Activities
- Classes for graduate students and educators
- Catered events such as weddings and conventions







Forest Canopy Tower



Seward Park

277 acres

Old growth forest, hiking trails and biking/walking path, Audobon Nature Center, picnic shelters, amphitheater, native plant garden, art studio, playground, beaches

> Seward Park Neighborhood, Seattle, WA





NATURAL ELEMENTS

The playground **incorporates nature or nature-like elements**. For instance, the floor of the playground encircles a few trees, creating a feeling of protection, providing welcome shade in the summer, and perhaps also inspiring children's imaginations.

There are vegetative beds surrounding the playground including some native plants, such as ferns. Their presence might strengthen children's familiarity with plants native to the Pacific Northwest.

Other nature-like elements include stump-like seats, rock-like climbing structures, a tree-like climbing post, a fiddle-head-like sculptural post, and a river-inspired design on the playground floor. Incorporating actual natural objects might have even more of a positive impact on children.





ECOLOGICAL ENHANCEMENT, RESTORATION, EDUCATION

The Audobon Nature Center holds **restoration projects** for restoring native vegetation to areas of Seward Park. Through the Tenacious Roots youth leadership program, teens help manage volunteers in restoration work.

The areas that have been restored are not clearly labeled. There is a winding **Native Plant Garden** behind the Audobon Nature Center leading into the park's trails. However, only a few of the plants are labeled.

On one sign, the park managers **define 3 bird habitats** in Seward Park: magnificent forest, prarie/open woodland/scrub areas, and open lake/shoreline. This might be a helpful scheme for helping visitors conceptualize the ecosystems of Heron Meadow, too. Other **interpretive signage** includes a map of nearby watersheds (including the Lake Washington/Cedar/Sammamish watershed of Seward Park) with information about stormwater, salmon habitat, invasive species, and floodplains; a Native Plant Garden sign describing plant and animal associations; and a whiteboard where visitors can share flora and fauna sightings.

CULTURAL NARRATIVES

Sharing cultural narratives does not appear to be a strength of Seward Park, at least outside of the website and Audobon Nature Center. The areas surrounding the Center are lacking inclusion of Indigenous histories, narratives, or current relationships. The Center's website mentions that the Duwamish people were known to use the area heavily for hunting and fishing and for building reed houses in the summer, and that they called the peninsula skEba'kst, or "nose", and the isthmus cka'lapsEb, or "neck". I wasn't able to find any signage with this information during my visit. On the park map, only one trail is labeled in what I think may be Lushootseed, "Squabaqsad Trail" (the service road).

Somewhat hidden inside a traffic circle at the entrance of the park is a Taiko Gata Stone Lantern, a gift from the city of Yokohama, Japan in 1931 as a thank you to Seattle for its assistance after the Great Kanto Earthquake. Plaques nearby the lantern mention the "peace and good-will" and "growing amity" between the people of Japan and the United States. There are no more recent additions to continue the narrative of this relationship into the remainder of the 20th century and present day.

The website speaks of the recently restored, Tudor Revival-style Audobon Nature Center building, which was first the Seward Park Inn. I could not find any information about the building outside of the Center.

Source: The History of Seward Park & Ye Old Seward Park Inn. Seward Park Audobon Center. https://sewardpark.audubon.org/visit/history-seward-park-ye-old-seward-park-inn







ARTFUL TOUCHES

One artistic element in Seward park is the **playful tiles** embedded in the pavement around the playground. It looks like children have etched drawings into the tiles.

Another element I appreciate is the **stone signage**. Each stone has a drawing of the trail map on top, which is more decorative than functional (there aren't any markings displaying where you are). However, it **unifies the trail system**. This element might be even stronger if the designers used a type of rock found in Seward Park and explained this to visitors somewhere.



FUNCTIONAL ELEMENTS

A key feature of Seward Park is the abundance of covered and uncovered **gathering spaces**. In addition to a gathering place with 10 small stumplike stools for kids next to the playground, there are five covered picnic areas with seating, tables, and grills. This supports the **impressive programming** held at Seward, including classes, workshops, lectures, bird and bat walking tours, restoration projects, veteran gatherings, teen leadership activities, school field trips and in-class activities, summer camps, and early childhood courses. Perhaps Heron Meadow could benefit from additional gathering spaces to host its school and volunteer programs.

On the other side of a hill behind the Audobon Nature Center is a **large amphitheater** built in 1953 to host the Music in the Park Series which only lasted until 1960. An ampitheater might enhance the musical performances that VCA holds in Heron Meadow, as long as it would not overly disrupt the habitat and hydrology.





THOUGHTFUL LAYOUT

I like that the sitting area for kids and one of the covered picnic areas are all **clustered together** with the Audobon Nature Center. This seems like a thoughtful way to usher visitors through the experience of arriving at the Center, meeting up with staff members or volunteers who can impart information to groups, and then departing on walks or restoration projects. A ramp curving around the playground makes its various features **more accessible**.

I also appreciate the location of the Native Plant Garden that **transitions** visitors from the Center into the less programmed trails of the park. The **switchbacks** of the Native Plant Garden behind the Audobon Nature Center is another example of the ways the designers curate visitors' experiences, revealing different views. The switchbacks do include sets of stairs that make the experience in accessible for many folks. However, a more gentle winding path could similarly create a sense of discovery in Heron Meadow.

















Level 2: Merrygo-round, gathering circle, toddlers' play area.

Level 6: Highest level. Forest exploration area for older youth.

Level 5: Top of main play structure.



PLAYING WITH TOPOGRAPHY

The playground designers of the firm Johnson +Southerland worked with the sloping terrain and forest/ parkland interface to create distinct nature play experiences for all ages up and down the slope.

Level 4: Top of zip line and top of rock climb.

Level 3: Swing set and bottom of main play structure and rock climb.

Level 1: Lowest level. Bottom of zip line.





Tacoma Nature Center, Discovery Pond Nature Playground

The Tacoma Nature Center is a 70-acre nature preserve encompassing Snake Lake and the surrounding wetlands and forest. School and group tours, outreach programs, community programs and special events all grew to meet the needs of an ever-growing and changing population.

Discovery Pond Nature Playground is a natural play area for children designed to inspire creative play and environmental learning. It is an environmental playground built with nature itself. Kids can enjoy a tree house, waterfalls, and a log crossing. The playground has tons of rocks, logs, gardens, and other things for children to play on.

Source: https://www.metroparkstacoma.org/discovery-pond-tacoma-nature-center/

Major Features of Discovery Pond

- Engage children into the environment by providing unconventional natural play elements
- Help children to appreciate nature and to learn about their environment.
- Promote deeper connection with nature and local culture through play and observation
- Stimulate children's imagination and creativity
- Cultivate children's problem-solving abilities













Experience and Inspiration of Discovery Pond

Discovery Pond was designed as a bridge between the created and natural habitats found at Snake Lake.

Snake Lake and wetlands surrounding it provide plenty of habitats for a wealth of plants and wildlife. The pond with waterfall in the Nature Playground seems like a "mini-lake" which provides "home" for local plants and animals.

Natural elements like waterfall and rocks attract children to engage into the nature. The water itself is just a creak, so it is safe for children to have fun with friends around the water.

In the process of playing, children gradually get familiar with local species which help them know more about nature and local environment.

Photo Sources:

1.https://www.metroparkstacoma.org/place/tacoma-nature-center/ 2.http://www.willhiteweb.com/puget_sound_parks/tacoma_nature_center/ snake_lake_258.htm

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Experience and Inspiration of Discovery Pond

Natural play settings like a tree house, boulder scramble, slide inside a hollow log, snag climb are placed in the playground. These unconventional elements attract children start their adventure in the Natural Playground.

Problem-solving and social skills will be cultivated in the process of exploration since these play settings are not as easy and simple as usual ones. The process is also helpful for children to make friends since some work need them to collaborate with each other.

Photo Sources:

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Skovlegeplads (Forest Playground) Fanø, Denmark



Thatched roof shelter

Climbing structure

Low coastal forest

Neighboring beach





Map on the site





Site + Environment



Rustic construction & exposed joinery e.g. wedged through-tenons. A child could see how things fit together.

Untreated wood and live edges. A forest playground made out of the forest.





Material + Craft

Play structures, sculptures, and site-furnishings share material





Weathered and cracked wood shows change over time and conveys a feeling of age.

Theme of discovery. Visitors have to explore the woods to find all the sculptures which is appropriate for the visual theme of trolls and magical creatures. A fantastical world hiding just out of view.





Sculpture + Play

Large timbers forming an

Vadehavscentret The Wadden Sea Centre



Larch501 | Precedent | Robby Lai

Vadehavscentret

The Wadden Sea Centre is the visit center for the UNESCO World Heritage Site the Wadden Sea, an intertidal zone of the North Sea stretching from the Netherkands to Denmark. Located in Vester Vedsted, Denmark. The Wadden Sea is a unique marsh and tidal area and Denmark's largest, flattest and wettest National Park

This visitor center is designed by **Dorte Mandrup A/S**, and the courtyard landscape is designed by **Marianne Levinsen Landskab APS**. The design of The Wadden Sea Centre is to embed the building in its context, materiality and construction.



office | unheated barn | workshop area | exhibition space | café | shop | communication buildings | tundra garden

Materiality

Designing with thatched roof and facades which is from the traditional materials and crafts of the local region created the modern building reflects Wadden's sea and history. The thatch is harvested from local wheat fields, folds into walls, creating a singular, horizontal and monumental form.

The thatch offers a tactility and variation which breaks down its mass and provokes a strong impulse to touch. Its materiality is not only familiar, resonating with a local vernacular, but also is distinct in forming a new shape and hosting a public function.

Local Material | Extented from existing building



Nature

The cultivation of the outdoor area is based on the marsh landscape fromWadden Sea marshland. The intention is to maintain an connection with the existing landscape. The tundra garden is designed in a stylized form attempting to mimic the types of landscapes, elements and processes that characterize the area and its history: **salty meadows, wet ditches, dunes, wind and water** are components in the landscape. Here, nature is in constant change as the tide keeps reshaping the landscape.

Mimic the landscape | Extented from landscape



aerial view of the Wadden Sea

ebb landscape of the Wadden Sea



Courtyard

In the courtyard of Wadden Sea Center is established a stylized tundra landscape, and is covering with flora from the Siberian tundra, where the migratory birds breed. Small topographical shifts create conditions for the plants to thrive. Thrift, anthericum, bearberry, dwarf birch, sand pink, dryas, viper's bugloss, California poppy, sheep's fescue, mouse-ear hawkweed, sesleria.





Courtyard The courtyard functions as a learning and communication place with integrated play and stay.

the central area as playing area for children some stakes and stones are set -





and plants

the building's powerful geom

etry and sheltered against the

fierce west wind





the central rain garden with diverse plants simultaneously playing ground for children

Play

The courtyard is designed with bricks rolled in sand, with large cushions of various meadow grasses, as well as pools for play and experiments with materials, sand, oyster shells, etc. Children should be able to enjoy and experience the possibilities for play and activities. In the courtyard, the sandbox is well designed so that it is easy and unobstructed to roll into with a wheelchair and "sand bowls" are designed at a height so that children in wheelchairs can join the play. All elements for play and nature dissemination are connected by a level-free and coherent course of action.





VALBYPARKEN nature playground

DESIGNED BY HELLE NEBELONG

SAEED AL-SHIDHANI
GENERAL INFO

 $\mathsf{AREA}\mid \mathbf{20}\;M^2$

RENOVATION | 1994 - 2004

LOCATION | COPENHAGEN

CONSTRUCTION | UNEMPLOYED PUBLIC

GOALS | ALTERNATIVE TO AMUSEMENT PARKS REPLANT A GARBAGE DUMP

DEVELOPMENT TIMELINE



1994 ■ BEGINING RENOVATION HIDF GARBAGE DUMP 1996 COPENHAGEN AS EURO CULTURE CITY PART OF 17 GARDENS TO BE RENEVATED 2001 HELLE NEBELONG COMISSIONED PLAYGROUND CONSTRUCTED 2004 FINAL RENOVATIONS

CONSTRUCTION

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Dumped garbage cannot be removed

1/2 meter of earth needs to be replaced

The contaminated earth was piled into earth and replanted

The hills were utilized as an obstacle course for kids

The hills also separate from the remaining park











AREA ELEMENTS | Original woodland New hills Wide mead<u>ow stretch</u>

PLAYGROUND | area with sand and gravel green islands winding paths a village of woven willow huts and plaited fences obstacle mounds

The whole playground is pulled together by a circular 210m wooden bridge, which "floats" ½ meter above the ground

The planks in the bridge are from the many elm trees, felled in Copenhagen

The five towers of the playground were a collaboration work between Helle Nebelong four students from Denmark's design school

Each of the five towers was given a name, Light's tower, Wind's tower, Green tower, Bird tower and The tower of Change



THE PLAYGROUND | PRESENT (2019)

BY LAUREN IVERSEN

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THINGS TO CONSIDER

How did the site change from its initial construction?

- 1. The hills deformed slightly, but stablized once vegetation and plants grew larger
- 2. Trees and plants grew larger, some invaded the playground, but were later deemed character of the park, however some plants are manicured
- 3. Maintance of the playground is done frequently
- 4. The playground was, initially rejected to be opened for children due to the existance of the waste used used as fill. Tests were conducted to test for contamination within the soil, and it was deemed safe as long as no diggin is done.

