

PRECEDENTS

Inspiration for Nature Education, Exploration, and Play

Introduction

This document contains inspiring examples of outdoor spaces that feature indigenous knowledge, habitat restoration, infrastructure, art, interpretation, outdoor shelters and classrooms, wayfinding, and nature play. After broad research and exploration, these precedents were chosen based on their illustration of thoughtful planning and creative design that focuses on ecological health, user accessibility, and experiences that promotes a deeper connection with the landscape through play, education, art, wildlife viewing, and recreating.

These successful local and international precedents can provide inspiration for conceiving and funding future projects for our parks and open spaces. They may also help to inform the development of innovative and impactful designs that contribute to the understanding, stewardship, enjoyment, and preservation of our most valued places.

This document was created by Ilsa Barrett and Lauren Iversen, interns through the University of Washington Green Futures Lab, with advising from Professor Nancy Rottle. Funding for this projects comes from the Washington Recreation and Conservation Office obtained by Department of Natural Resource's (DNR) and the City of Issaquah. The grant analyzes, explores, and vision's opportunity along the I90 corridor comprising of West Tiger Mountain Natural Resources Conservation Area (NRCA), Tradition Plateau NRCA, Grand Ridge Park and Mitchell Hill based upon its ecological resources, experiential characteristics, and stories of the past, present, and future. This document works alone or as an appendix to the "Tradition Plateau and Tiger Mountain Gateway" report.

Topics Explored

- Indigenous Knowledge
- Habitat Restoration & Management
- Infrastructure
- Art
- Interpretation
- Signage
- Shelters & Outdoor Classrooms
- Wayfinding
- Topographic Maps & Models
- Nature Play

Locating Precedents, Near and Far

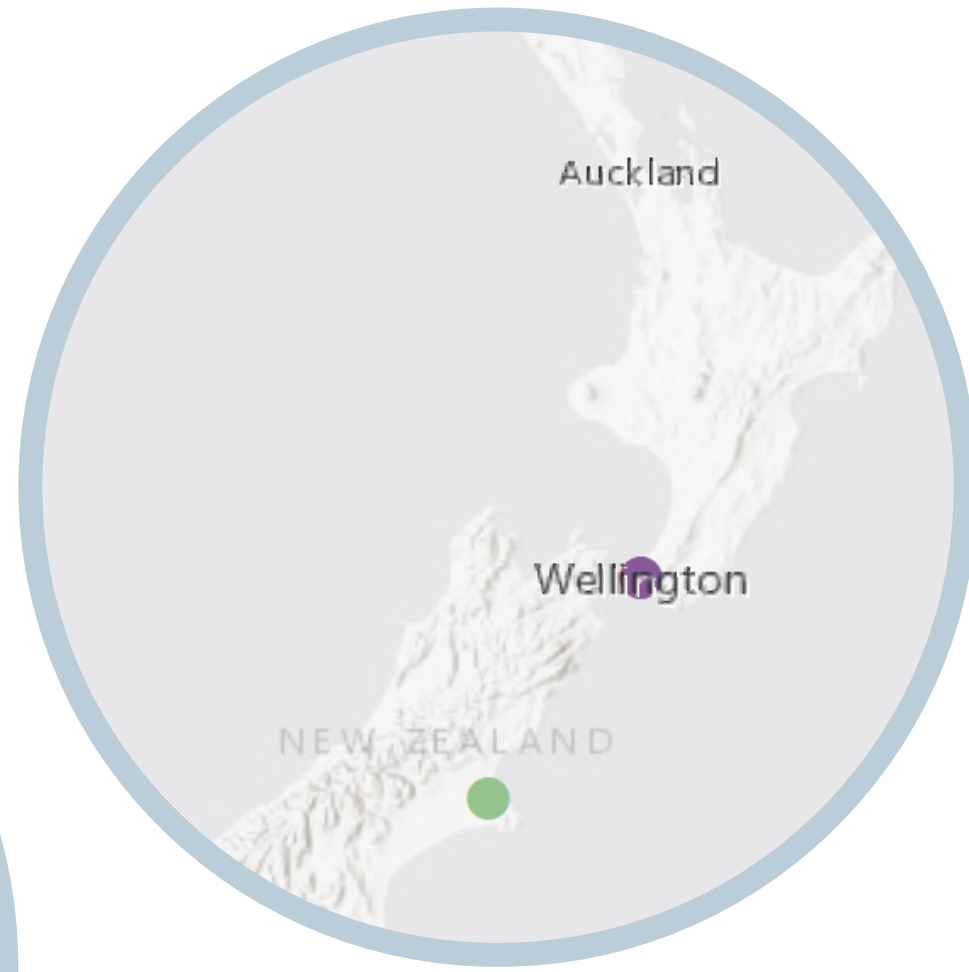
Inspiration comes from many places. Nearby forests in Washington offers local examples to learn from. Looking beyond the borders of Washington provides insight into ways of expressing indigenous culture, protecting and managing forests, and engaging people to learn about nature in different ways.



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

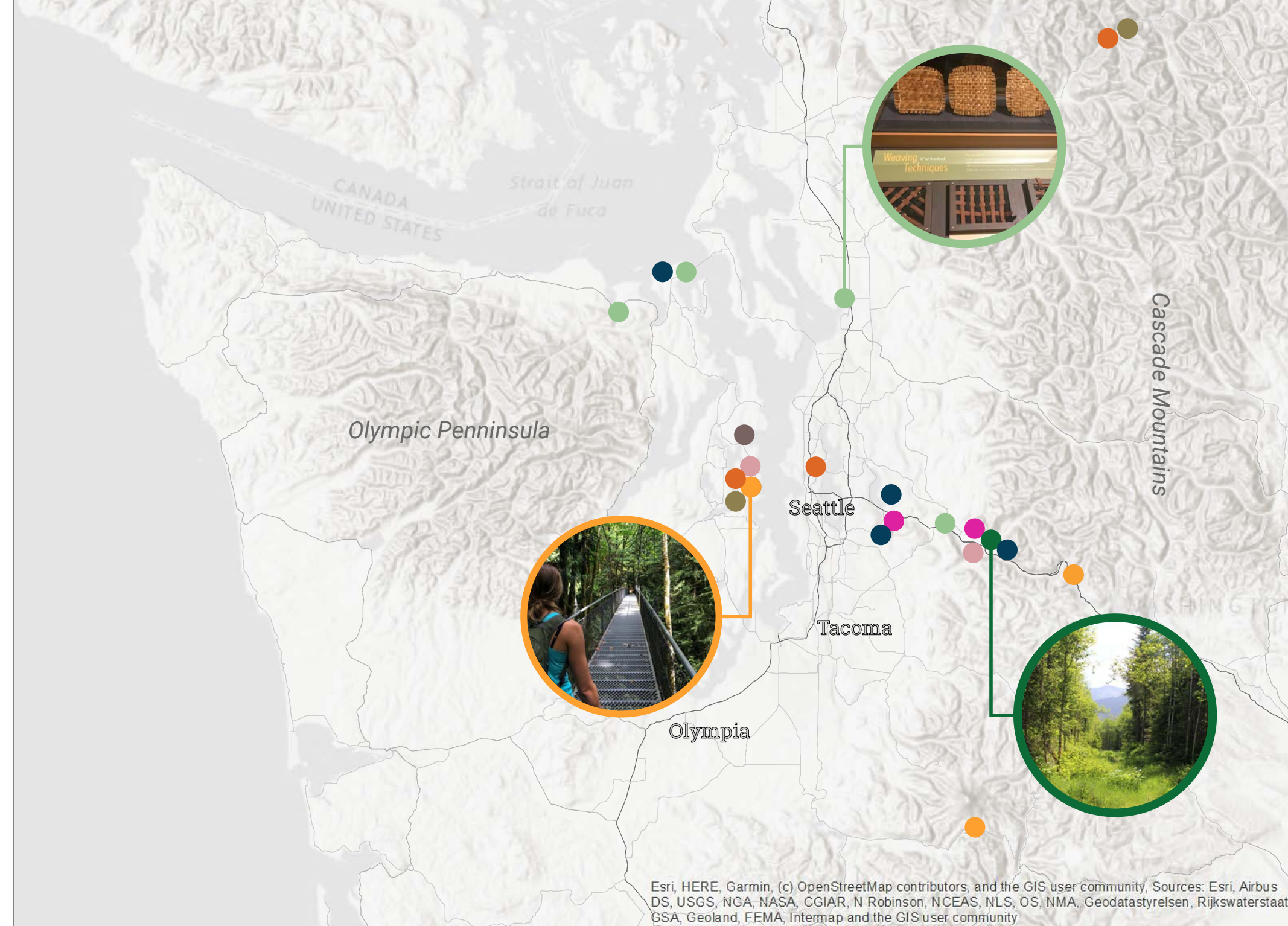
Searching Abroad

Study abroad trips attended by Green Futures Lab interns provided opportunities to visit and reflect on ways to incorporate indigenous expression, art, and play with nature. The perspectives of other cultures offers reflection on our own values and ways of communicating with nature. New opportunities can be found across every corner of the earth.



Looking Local

The state of Washington, and more specifically the Salish Sea, offers an immense amount of best practices for signage, trail infrastructure, and engaging people in nature. Utilizing the knowledge from practitioners around the state can provide insight into methods for building and expanding ideas on Tiger Mountain, as well as other local forests. The Puget Sound experience is unique and should be celebrated and cherished in its natural areas.



Local indigenous knowledge connects the native people of the northwest to the ecological world. Since time immemorial, the Coast Salish people live and tend to the lands of the Pacific Northwest. Learning about the native communities by non-native colonists and immigrants acknowledges the complex skills, language, social interactions, rituals, community, and philosophies of the many tribes that were diminished by colonization. Washington's outdoor spaces are a place to utilize traditional ecological knowledge for restoration, education, and interpretation so that continued generations can share and enjoy the mountains, waterways, and forests of the Pacific Northwest.



Image from Lauren Iversen



Image from Lauren Iversen

Traditional Knowledge Trail Snoqualmie Tribal Reservation

A 0.25 mile trail built on sacred land by the Snoqualmie Tribe (sduk^walbix^w). This trail shares ecological knowledge of over 20 native plants and their usage by indigenous people. Each sign along the route is small, easy to read, and provides access to additional information through a QR code. The interpretation includes artwork, photo imagery, and plant names in both English and Lushootseed, the native language of the tribe.



Images from Ilsa Barrett

The Cicomhan Trail Port Townsend, Washington

The čičməhán Trail is made up of 18 sites throughout the city of Port Townsend that are divided into 3, 6 or 12-mile loops that use symbols (right) as a wayfinding tool. The goal is to educate the public on the relationship between the S'Klallam people who and the European settlers who arrived in Port Townsend in the mid-19th century. Each sign on the trail touches on a small part of the story of historic and modern-day S'Klallam people.





Whāriki or welcome mat, in Victoria Square is one of 13 in the central city.
Image from David Walker



Albert Park Path - Gateway 1990, Chris Booth: Commissioned by AMP Society with assistance from ASB Community Trust, 1988; Collection of Auckland Art Gallery Toi o Tāmaki. Image from Patrick Reynolds



Pouwhenua on Mount Victoria carved by Rangī Hetet + Sonny Davis and their team.
Image from Patrick Reynolds

Maori Art Aotearoa (New Zealand)

This artwork study by University of Washington student Zoe Kasperzyk investigates sculpture of the Maori people embedded into their native land. To the Maori, human life and the natural world are one. Art that reflects these values can be found throughout urban and rural locations on their native land Aotearoa, or New Zealand. Siting art along rivers, coasts, and mountains reflects different sacred spaces. While colonization has changed the landscape and way of life for the Maori, the presence of art shares their stories and values for future generations.



Images by Ilsa Barrett

Jamestown S'klallam Tribe Tribal Headquarters Sequim, Washington

A dance plaza, a covered gazebo under a large red cedar tree, and a scenic bridge over a creek that filters stormwater from the parking lot can all be found around the Tribal Headquarters of the Jamestown S'klallam Tribe. The beautiful outdoor space that looks over Sequim Bay the also contains a covered classroom, totems, a play area, and a veterans memorial.



Habitat restoration and management can improve ecological health and ecosystem benefits, while also providing wildlife viewing opportunities.

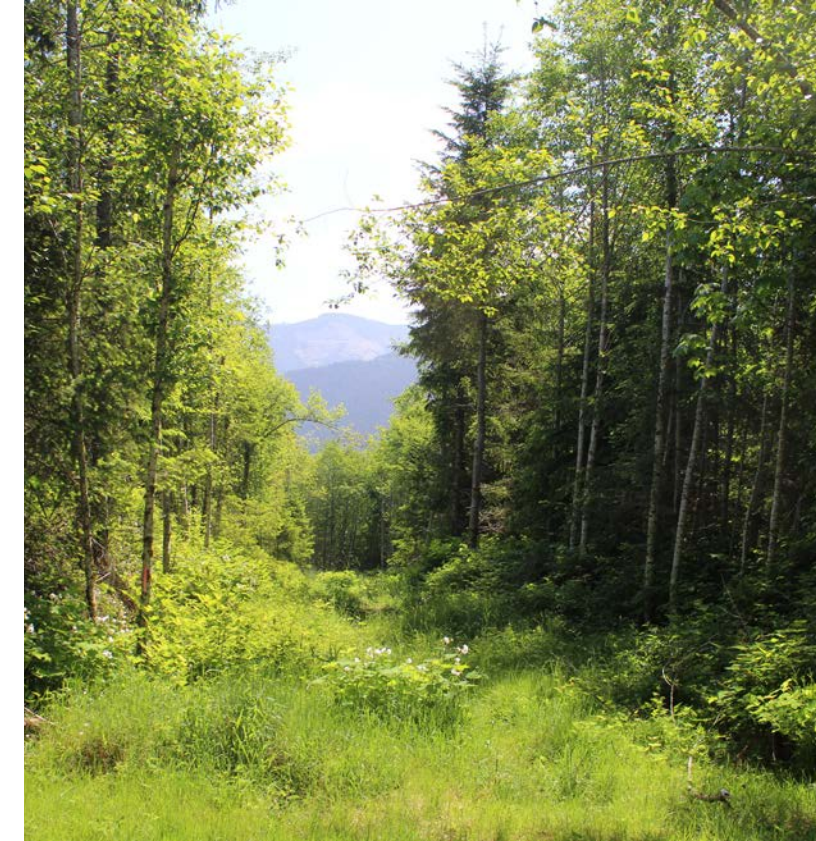
Managing landscapes with a focus on ecosystem health might include ecological enhancement through restoration efforts, intentional design that preserves fragile ecosystems while allowing public access, or conservation of greenways to create animal corridors and avoid fragmentation. Public green spaces with healthy habitats offer opportunities for wildlife viewing and, in some cases, hunting or harvesting.



View from the bird blind - Images from Nancy Rottle

**Travis Wetland
Christchurch, New Zealand**

Travis Wetland is the largest freshwater wetland in Christchurch and provides crucial habitat for plants and birds. It was purchased in 1966 by the Christchurch City Council, saving it from threats of development. To keep the habitat of the wetland healthy, invasive species are removed, native species planted, and predators are controlled. This Nature Heritage Park features boardwalks through the wetlands, a bird blind, interpretive signage, and a shelter offers beautiful views of the wetlands.



Linear meadows CCC flats management area. Image from Laura Cooper

**CCC Flats Elk Habitat Improvement Site
North Bend, Washington**

The CCC flats, named for the 1930's Civilian Conservation Corps camp that previously occupied the area, is now home to a herd of elk and other Cascade Mountains wildlife. The area contains strips of linear meadows and forests, which provide multiple types of habitat for foraging. Densely planted strips of meadows are important food sources, while the trees provide protection from predators. While planted and maintained to improve elk herds, other wildlife has been spotted including black bears and grouse.



A bear spotted along the habitat corridor. Image from Harold Erland



A grouse enjoying the linear meadows habitat. Image from Harold Erland



Images from BC Hydro

Pollinator Pasture Richmond, British Columbia, Canada

The Pollinator Pasture was built below the BC Hydro transmission power lines in Bridgeport Industrial Park. The project is part of a pilot program for the Border Free Bee Project and received the 2017 Pollinator Advocate Award for Canada. The project started after BC Hydro had to remove over 100 overgrown pine trees that threatened the safety of the power lines. BC Hydro and the City of Richmond developed a low maintenance land use solution for the powerline corridor that has ecological benefits. The site features a 'Bee Hotel' for interpretation and hosts public events like a pollinator picnic.



The 'Bee Hotel' interpretive signage. Image from BC Hydro



Views from Cougar Bay. Images from Ilsa Barrett

Cougar Bay Coeur d'Alene, Idaho

Cougar Bay Preserve is on Coeur d'Alene Lake and is comprised of land owned by the Nature Conservancy and the Bureau of Land Management. The wetland, forest, and meadow ecosystems provide habitat for migrating and nesting waterfowl, shorebirds, songbirds, moose, beaver, otter, and deer. Thirty-four rare species have been seen utilizing the site. The trails carefully wind through the ponderosa and jack pine forest, offering recreational opportunities, educational signage, and wildlife viewing, without damaging the fragile shoreline.



Images from Ilsa Barrett

Infrastructure added to the landscape can provide better access for people and wildlife.

Bridges and towers are just a few examples of ways a man-made structure in a wilderness area can make the wilderness more accessible. Bridge connections over the highway create safe passage for animals, and prevent habitat patches. Towers bring unique views of the geography below and habitats in the upper canopy. The connections that bridges and towers can provide for humans allows new perspectives on the ecological systems of an area. These perspectives educate users on important environmental systems, which can foster further care and value for preservation for natural areas.



View from the top of the tower. Image from Lauren Iversen



Image from Lauren Iversen

**Islandwood Canopy Tower
Bainbridge Island, Washington**

The fire tower brings users up to canopy height. From this location, users can experience the different tree tops of the forest and nesting birds. The view from the fire tower is expansive in all directions, connecting the city, water, and mountains. This fire tower is situated within the topography, making the experience one of close contact with the forest. If situated on top of the slope, the view would provide more bird's eye experience of the forest canopy below.

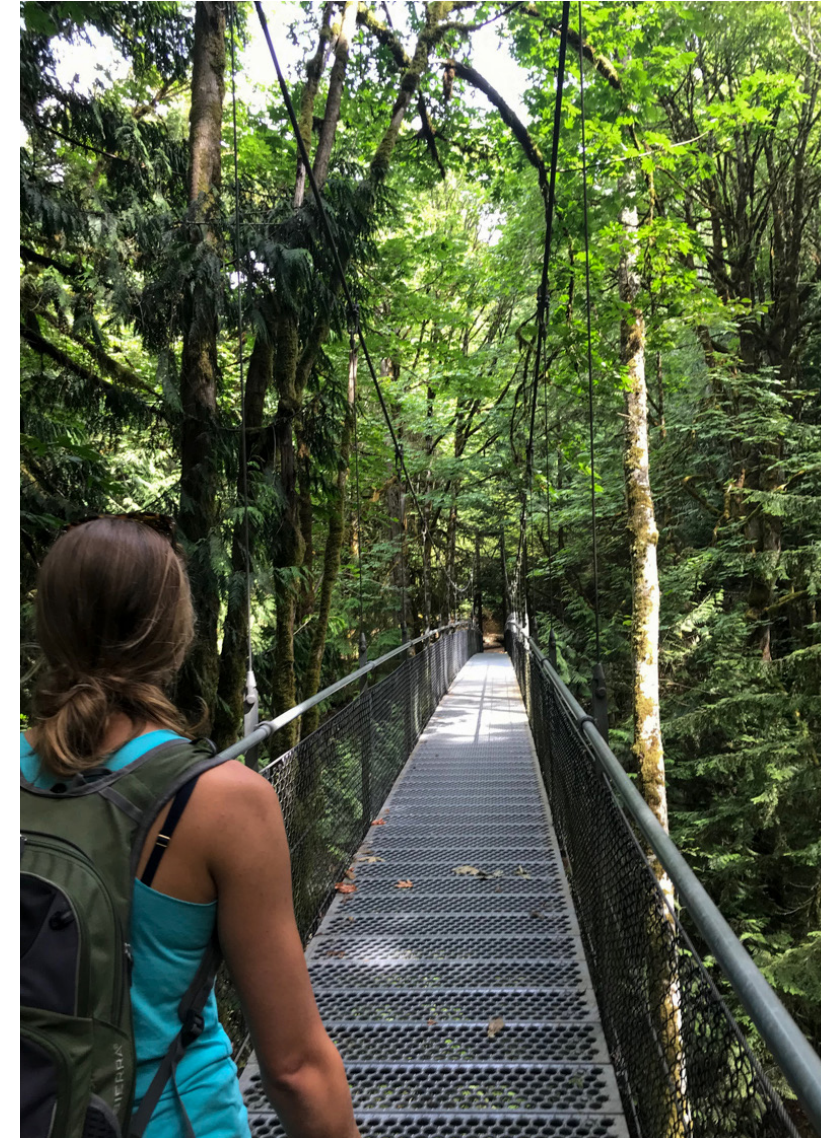


Image from Lauren Iversen

**Island Wood Suspension Bridge
Bainbridge Island, Washington**

The suspension bridge at Islandwood connects the user over a steep ravine. The bridge offers a unique way to view the ravine and canopy. From up high, users may challenge their fear of heights as the bridge sways.



Image from Washington DOT



Image from America's Transportation Awards

**Wildlife Corridor Bridge
Snoqualmie Pass, Washington**

Bridges over highways can provide safe crossing corridors for animals and humans. The bridge located just east of Snoqualmie Pass, finished in 2019, is a wildlife only bridge crossing. Depending on the goals for the bridge, the infrastructure can be a connection for different types of recreation, wildlife, or an integrated use for both.

Art in the landscape can be a discovery or a destination. It offers users a chance to experience nature from a different point of view. Users of all ages and abilities can enjoy artwork, and each takes away their own ideas about its meaning. Human interactions with artwork that makes its way into the forest can be climbable, touchable, educational, or even playable. The artwork may be discovered by users while on a hike or picnic. It may be a delight to find for the unsuspecting trail runner or dog walker. The draw of interesting artwork makes it a destination, drawing users that would not normally spend time with the forest. The unique experience of the art may draw urban citizens unfamiliar with the natural resources so close to home, and be a way of first experiencing the humbling quietness of a walk in the woods.



Image from Thomas Dambo



Image from Thomas Dambo

Thomas Dambo Trolls Various Locations

This sculptural artist from Denmark tells stories with his large wooden trolls. Often hidden in forests outside the city, the giants encourage people to explore forests they may not typically visit. Each troll tells its own story, but allows users to help finish the narrative.



Image from Lauren Iversen

Louisiana Museum Sculpture Garden Humlebaek, Denmark

Richard Serra's "The Gate in the Gorge" at the Louisiana Museum in Denmark changes the experience of the forest as you move through. The large artwork offers new views and is interactive as you walk through.



Image from Nancy Rottler

Literary Sculpture Park Fanø, Denmark

This nature playground incorporates sculptural artwork as a playground. The carved wooden sculptures remind children of some famous stories of Denmark. The different scales and forms allow for many types of play by visiting children.

Interpretive elements tell stories of the landscape. Signage, art, and interactive elements educate the public about natural processes, ecology, animals, the history of the people that once inhabited the area, or any other subject or narrative that is unique to the place. Generally interpretation is built in the form of signage that describes more information of the surrounding environment with text and images. However, interpretation is not limited to signage. Other examples of interpretation include new and historic photographs, statues, audio tours, maps, or interactive elements.



Image from Nancy Rottle



Images from Lauren Iversen

Cedar River Watershed Education Center North Bend, Washington

The Cedar River Watershed Education Center tells the story of the source of Seattle's drinking water through signage, interactive games, and maps. Green-roofs, a rain drum art installation and a small creek that runs through the buildings highlight water and demonstrate how it interacts with the landscape. Old artifacts from previously existing infrastructure are incorporated throughout the building to tell the story of previous land use and conservation in the region.



Images from Lauren Iversen

Japanese Exclusion Memorial Bainbridge Island, Washington

The Japanese Exclusion Memorial serves as a reminder of the forceful displacement of 276 Japanese and Japanese Americans from Bainbridge Island on March 30, 1942. A red cedar, granite and basalt wall honors the names of the people who were exiled and interned. The memorial also exhibits interpretive art and signage with origami art, old photographs and artifacts.





Images from Lauren Iversen

Victoria Park Adventure Trail Wellington, New Zealand

The interpretive signage at the Victoria Park Adventure Trail in Wellington is mounted on tree rounds cut at a diagonal. The playful colorful signage offers information through text and illustration and works well with the nature play theme of the trail.



Images from Ilsa Barrett

Cougar Bay Coeur d'Alene, Idaho

The signage at this Nature Preserve offers information on the local ecology and ecosystem benefits. The illustrative signage is placed slightly off the trail in locations with views of the landscape.



Images from Ilsa Barrett

Mercer Slough Bellevue, Washington

The Mercer Slough offers interpretive signage throughout the park. Hand drawn diagrams demonstrate the previous level of the lake. It is placed in a location that would have been underwater before the lake level was lowered so the user can visualize what the previous shoreline might have been. This sign also uses hand drawn topography maps to further demonstrate this information.



Images from Nancy Rottler

Mountains to Sound Greenway North Bend, Washington

Interpretive signage that can be found throughout the Mountains to Sound Greenway. This particular sign uses photos, illustration and text to tell a story about the history of the landscape. The sign is constructed with log rounds to represent logging in the area.

Outdoor shelters offer opportunities for educational or social gatherings in unique outdoor environments.

Outdoor classrooms have the potential to increase the quantity, quality and benefits of outdoor experiences for children and adults. Outdoor shelters also provide a place to sit and observe the surrounding environment without being exposed to the elements. They can highlight specific features in the landscape, offer storage, seating, tables, educational tools, or provide interpretation. The shelters also draw groups of people together for celebratory events and gatherings.



Images from Lauren Iversen

**Islandwood
Bainbridge Island, Washington**

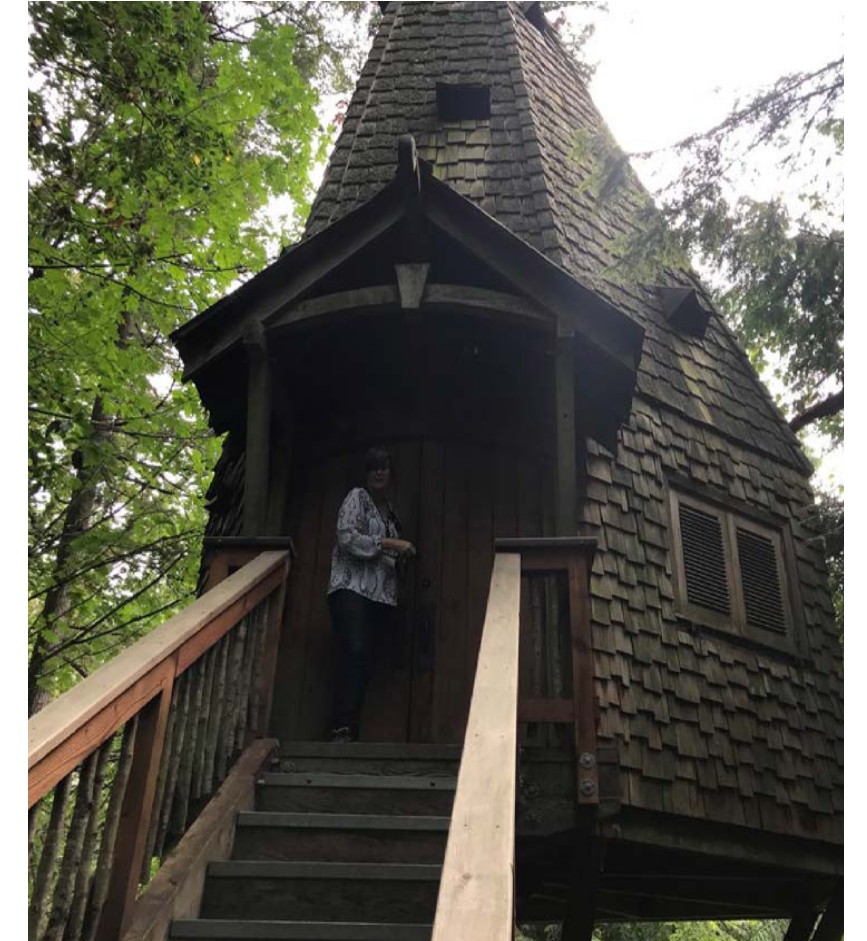
Islandwood has many examples of immersive outdoor classrooms and shelters used for environmental education or hosting large events. Examples include a firepit gathering place with stadium seating and a covered shelter with views of the forest canopy.



Images from Lauren Iversen

**Islandwood
Bainbridge Island, Washington**

A bird blind (above) offer opportunity for wildlife viewing at islandwood. Treehouses strategically placed throughout the landscape provide playful shelters that can be used as classrooms, wildlife viewing platforms, and solitude.





Images from Ilsa Barrett

**The North Cascades Institute
Marblemount, Washington**

The North Cascades Institute has a large outdoor amphitheater for larger events as well as a series of outdoor classrooms strategically spaced along a trail, specifically designed with natural light and viewing frames in mind.



Images from University of Washington

**Strong Hold - Brian Tolle
Seattle, Washington**

Located on the University of Washington Campus, this gathering place created by Brian Tolle is created to look like an old growth stump, demonstrating how large the forest might have once been in this area. It is uncovered and offers a view of the lake.

Wayfinding signs and markers help trail users navigate and stay safe in the outdoors. Wayfinding can provide information for simple trail networks, large parks, and complex trail networks. Wayfinding signage could include maps with elevation, mileage, and 'you are here' indicators. Other helpful wayfinding elements might include color coded trail markers that ensure you are on the right trail, or trail signs indicating distance to destinations. Coordination with different land managers and natural areas helps make connections between trail networks and creates cohesive outdoor environments.



Image from Ilsa Barrett

**Lake to Lake Trail
Sammamish, Washington**

This trail features color coded markers that provide information including distances to destinations.



Image from Ilsa Barrett

**The čičməhán Trail
Port Townsend, Washington**

The čičməhán Trail features maps along the trail as well as on brochures. Symbols in the sidewalk or road indicate the direction to the next destination.



Image from Lauren Iversen

**Park Pointe
Issaquah, Washington**

Park Pointe is a City of Issaquah open space park with its own signage network. Similar to the Little/Big Si trail signs, they are located at each intersection in the trail. The signs are laminated plastic with a printed map of the area. In addition to trail distance markings, each intersection includes a symbol to mark where the user is on the map.

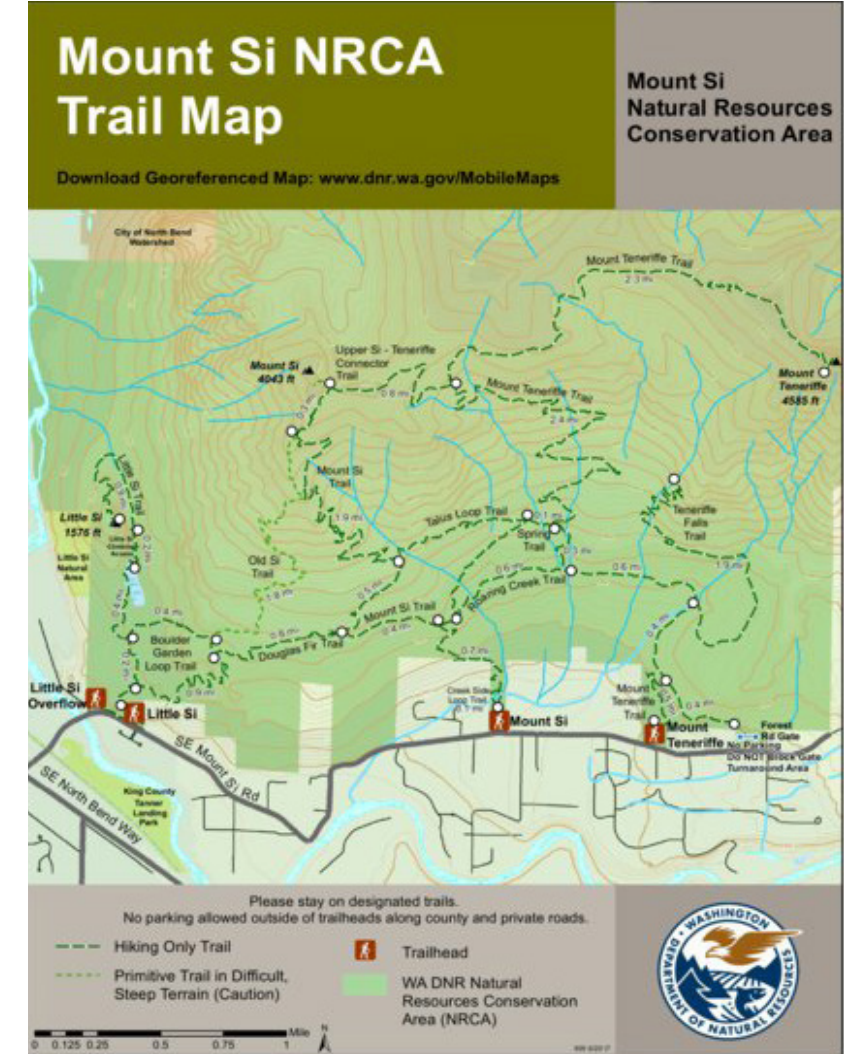


Image from Washington DNR

**Mount Si
North Bend, Washington**

Mount Si Natural Resource Conservation Area contains several very popular hikes including Little and Big Si. The trail maps located at each intersection on the trails are very clear and easy to read and incorporate trail mileage and topography.

Topographic maps and models offer accessible information about the physical space and the narratives that exist within it.

The model or map can represent the location, topography, size, features, vegetation along with any other stories that relate to the physical space such as the history or land formation. They can also be used as a way-finding tool to help the visitor better understand their location, the trails and how to navigate the park. Maps and models are a great educational tool and can be made interactive with elements such as lights or moving pieces.



Images from Lauren Iversen

**Islandwood
Bainbridge Island, Washington**

Located in the entrance of Islandwood is a large scale topographic model. The model clearly shows the layout of the campus, the topography, density of forest, nearby waterways, and streets. It is the first thing a visitor is introduced to upon entering the campus to offer context and grounds the landscape.

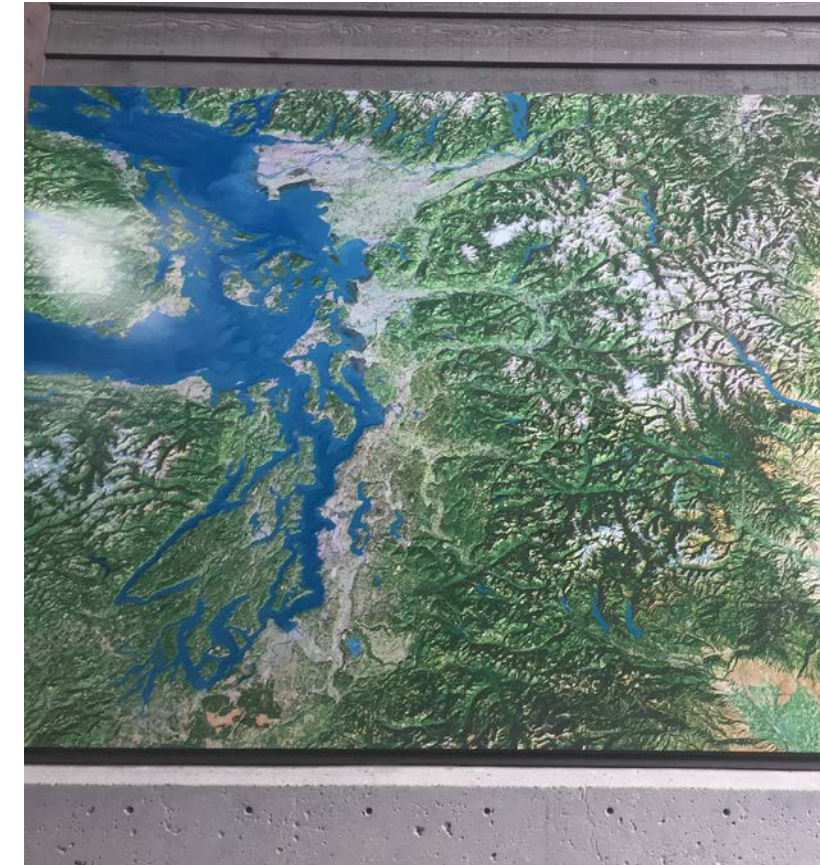
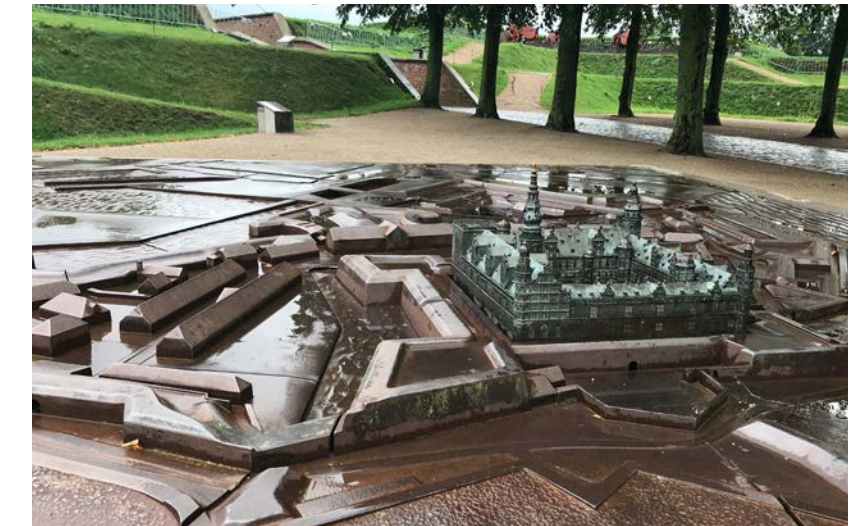


Image from Ilsa Barrett

**The North Cascades Institute
Marblemount**

On the wall of the visitor center of the North Cascades institute is a giant high resolution map of Washington State made of aerial photograph with topographic hill-shade. There are no labels or boundary lines but the map is easy to read and very informative in the level of detail provided. The map is an effective tool for teaching and enjoyed by visitors naming places they know.



Images from Lauren Iversen

**Kronborg Castle
Helsingor, Denmark**

This Bronze case model of Kronborg Castle located in Helsingor, Denmark represents how the castle and it's surroundings have developed over time. Each model shows the growth of the castle grounds, expanding over time. The bronze material is sturdy enough for the wet and cold climate.

Nature play can take many forms, but the primary goal is for children to have playful interactions with plants and natural materials. This style of play can promote confidence in the outdoors, risk taking skills, creativity, improved sensory motor skills, and cooperation with others. The playground may include built elements using logs, sand, topography, and other local natural materials as the play structures. It provides an opportunity to touch and feel these different elements. Some nature play may have an educational component, while others are primarily meant for fun. Found all over the world, nature play is growing in popularity as it is resourceful of materials, may be less expensive, and educates children about their local environment.



Image from Jake Halford



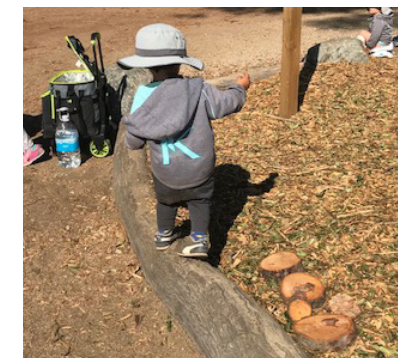
Image from the City of Wellington



Image from Eat Think Explore

Matarangi Nature Playground Wellington, New Zealand

This nature playground integrates play and ecologic learning. Play features are embedded into the landscape, using trees, grass, and boulders as part of the play structures. Each movement educates children about an adaptation of a local animal. Children learn to climb like geckos, navigate dense reeds like a bittern, and fly around like dragonflies.



Images from Nancy Rottle

Balboa Park Nature Exploration Area San Diego, California

This playground emphasizes loose parts as a means for creative play by young children. The wood chips and wood cookies are an opportunity for stacking, organizing, and building with. Logs are used for seating, tables, and climbable structures. Signs at the entrance notify users they are coming into a natural play experience.



Images from Lauren Iversen

Amagerfeldparken Copenhagen, Denmark

This park has an imaginative wooden ship with boulders for climbing, dead trees and wild plants define pathways, and a group gathering ring made with boulders. Play areas are found in forested, grassy, and swampy areas. Logs are used to create fitness equipment for both adults and children to balance, swing, and pull up on.



Images from Lauren Iversen

Valbyparken Copenhagen, Denmark

This natural play park is located in one of the largest urban parks in Copenhagen. The park has a wooden boardwalk winding through multiple tree houses. A wooded area stays cool for play on hot days, and grassy hills are warm on cool days. On the steep hillsides, logs offer different methods of climbing up and sliding down. Trees and long grasses make up the tops of the hills and offer shelter and views. This park offers many types of opportunity for creative play and interaction with nature and materials.



Images from Nancy Rottle

Suquamish Shores Natural Playground Suquamish, Washington

Suquamish Shores Natural Playground is a culturally themed play area that connects the Suquamish Museum to the Veteran's Monument. The park incorporates tribal art, natural play features, and an orca inspired play area that contains a water feature. The park includes traditional play equipment but is built using natural materials like logs and sand.



Image from Peter Samuels



Image from Peter Samuels

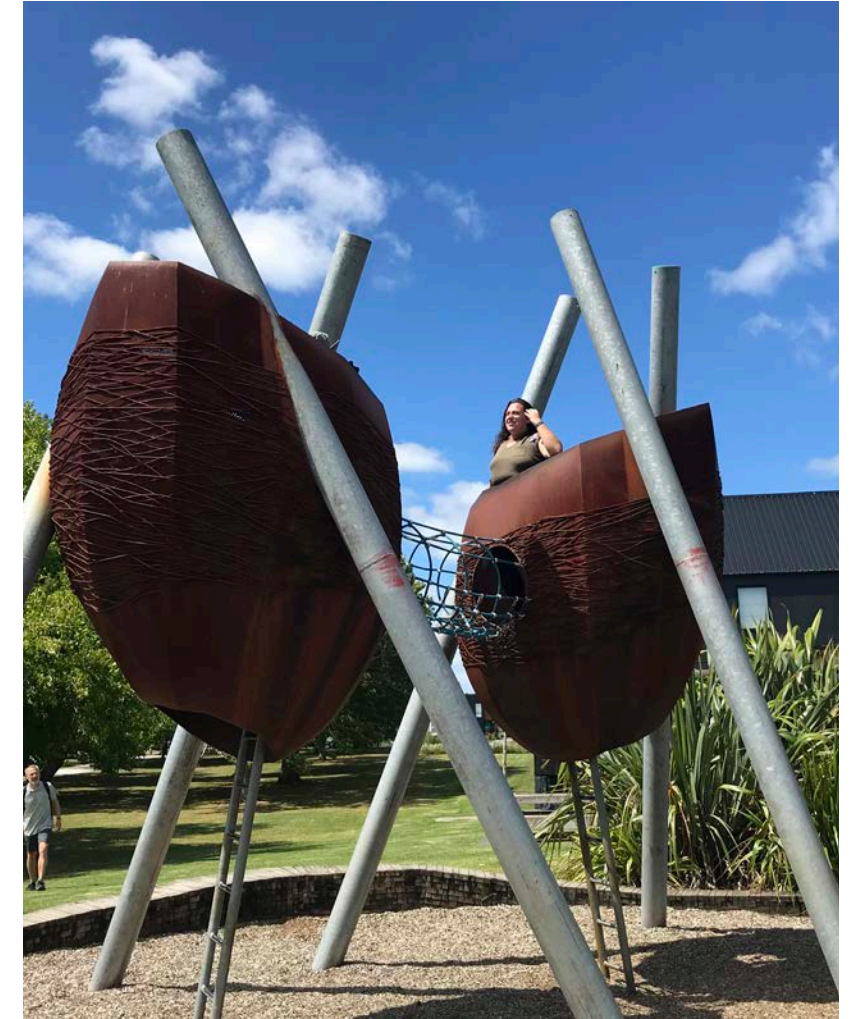


Image from Nancy Rottle

Hobsonville Point Park, NZ New Zealand

Hobsonville Point Park is an award winning park in Hobsonville, New Zealand. Sculptural seed pods of plants native to New Zealand fashioned out of steel are scattered throughout the groves of Harakeke (the native flax). Kids can climb up, crawl through, or slide down the structures, or choose to read the bits of information about the native plant species welded into the steel.



Images from Nancy Rottle

Victoria Park Adventure Trail Wellington, New Zealand

The Victoria Park Adventure Trail in Wellington New Zealand is a nature play trail that incorporates colorful signage and illustrations with driftwood, logs and stumps that are intended to be played on. This type of natural play utilizes some built play structures, but also utilizes downed logs and stepping stones as creative play elements.



Conclusion

These are just a few examples of outdoor spaces around the Pacific Northwest, New Zealand and Scandinavia that can be used as inspiration for future landscape design and land management projects. This document is intended to be used as a starting point when looking for examples of indigenous knowledge representation, habitat restoration, infrastructure, art, interpretation, outdoor shelters and classrooms, wayfinding, and nature play. Incorporation of these elements becomes authentic to the natural environment by working alongside community members, tribes, and government agencies to highlight the needs and dreams for that place.

