

# **Seeds Sense Place**

**Reconciling Access + Cultivation  
at Howard Buford Recreation Area**



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**1.**

## **Introduction**

**Land Context**

**Howard Buford Recreation Area**

**Site Analysis**

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**Biodiversity Loss**

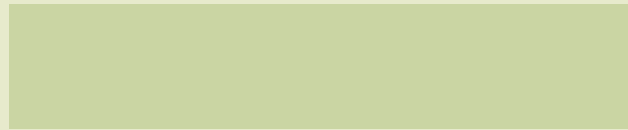
**Willamette Valley Land Use**

# Land Context

While we call this land HBRA today, it almost certainly had an Indigenous name given by the native Kalapuyans who inhabited the Willamette Valley since time immemorial.

When we give a land acknowledgement, we often refer to the Kalapuya as a single entity, however the Kalapuya were a complex civilization of autonomous subdivisions with at least three geographically delineated language groups and 15,000 people at the time of first contact with colonists in the 1770s.<sup>3</sup> In this region of the Willamette Valley, the Winfelly group of southern Kalapuyans called this landscape home. Today, the descendants of the Kalapuya people are primarily citizens of the Confederated Tribes of Grande Ronde and the Confederated Tribes of the Siletz Indians and continue to make important contributions to this land, this community, at UO, and beyond.

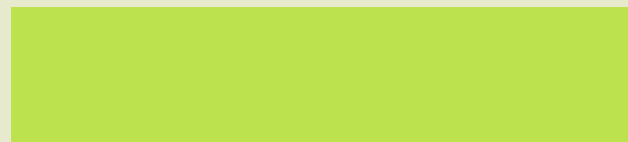
SEEDS SENSE PLACE



**Willamette Valley**



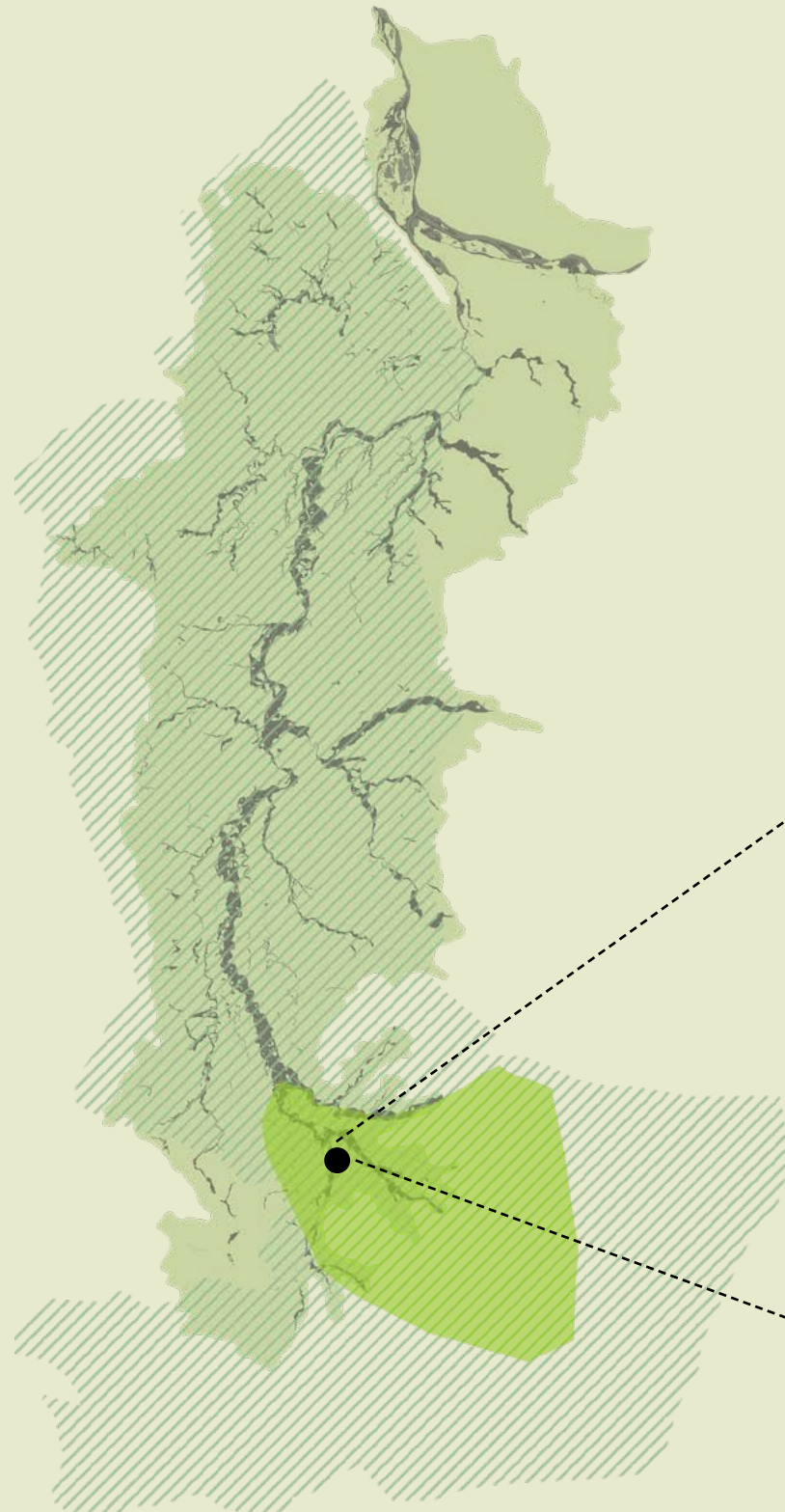
**Kalapuya**



**Winfelly**



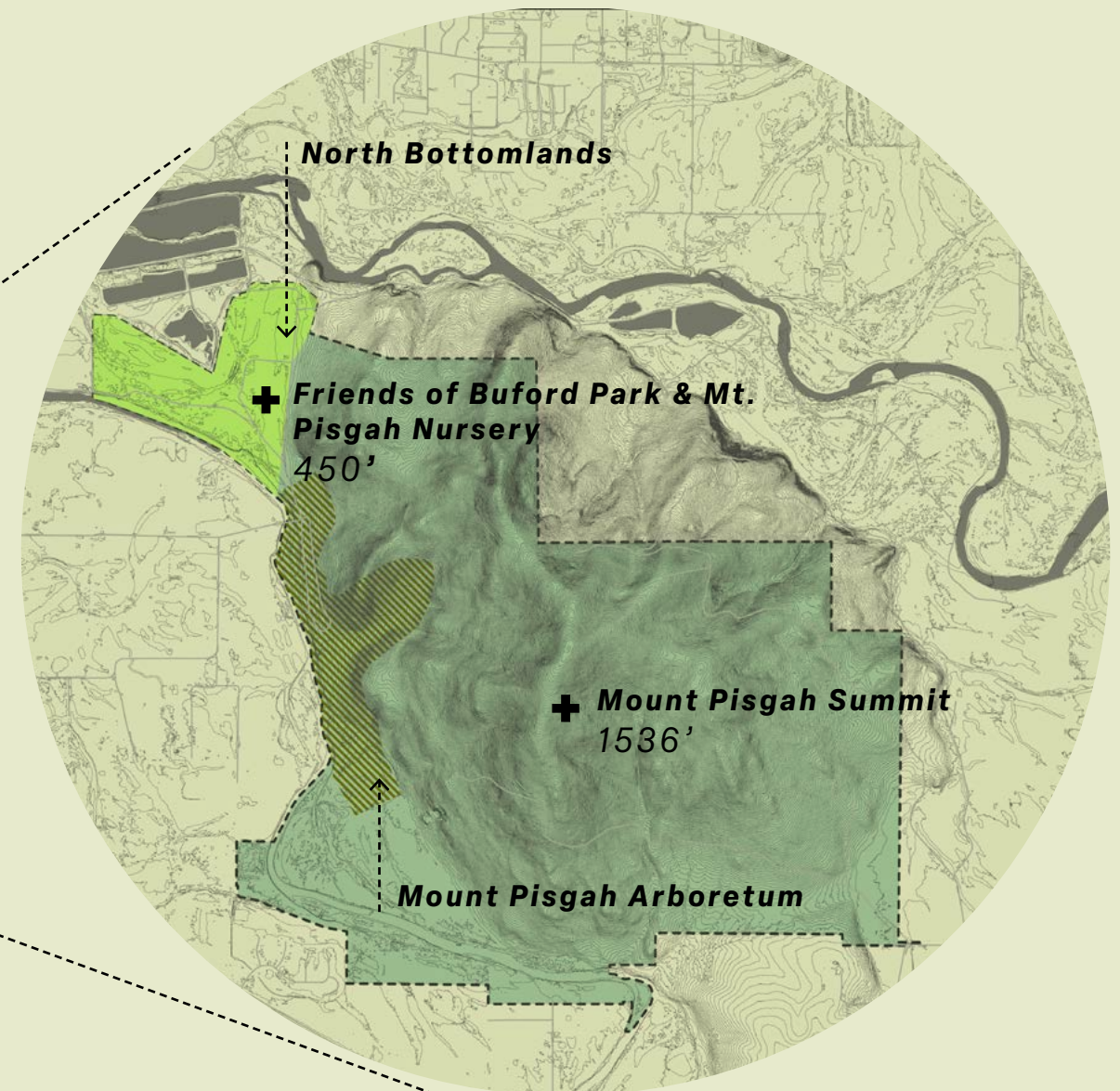
**Riparian zone**



# Howard Buford Recreation Area

Today, we have many colloquial names for this place. Howard Buford Recreation Area is the official name for a landscape we often call "Buford Park," "Mount Pisgah," or simply "Pisgah."

It is owned by Lane County Parks and contains the physical feature we call Mount Pisgah, the legally delineated Mount Pisgah Arboretum, and the Friends of Buford Park & Mt. Pisgah headquarters and native nursery located in the North Bottomlands.



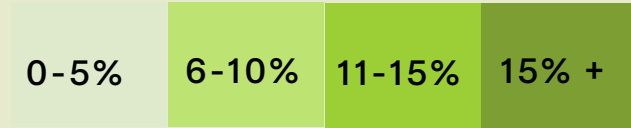
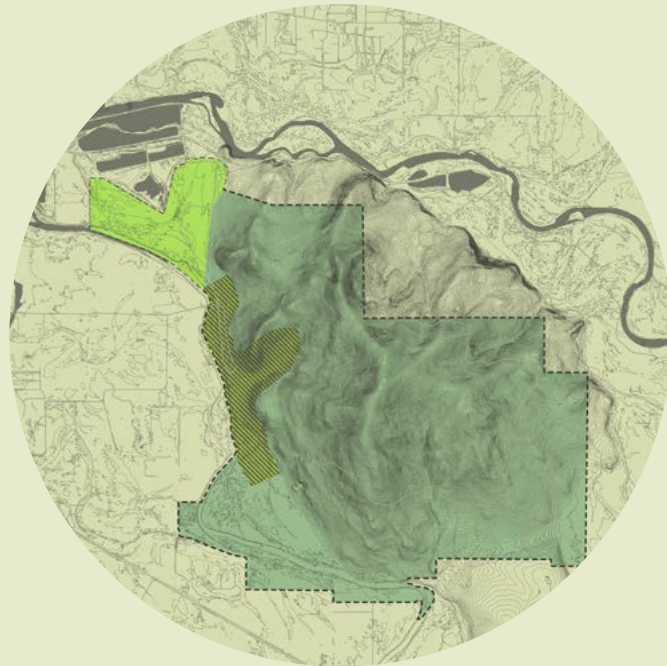
SECTION 01: GREETING & GROUNDDEED

# Site Analysis

SEEDS SENSE PLACE

The North Bottomlands itself is one of the less popular parts of the park, in part because it is quite flat. In many ways it is more ecologically similar to the adjacent Willamette Confluence where the Coast and Middle Fork join. In fact, Thompson' Slough which runs through the middle of the site is an old river course and retains some water seasonally; the primary woodland belt follows this slough and is made up of mature Oregon oak, Oregon ash, and Bigleaf maple; and there is a single access road that connects the native plant nursery and walking trails to the rest of the park.

Over the last two months, I have spent a great deal of time in this landscape. Walking this site several times a week has helped me understand the sensory experience of place, and my time as an intern at the Friends of Buford Park Native Nursery has helped me learn the plant palette.



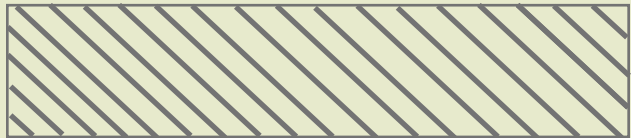
**Slope**



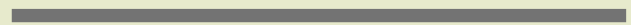
**Willamette Confluence**



**5' contour**



**Woodland**



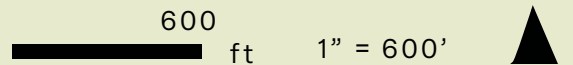
**Frank Parrish Rd**



**Avenza Tracks**



SECTION 1: GETTING GROUNDED



# Friends of Buford Park & Mt. Pisgah

The Friends of Buford Park & Mt. Pisgah, or from now on “the Friends,” is a non-profit organization working to “protect and enhance native ecosystems and compatible recreation” outside the boundaries of the Mount Pisgah Arboretum.<sup>4</sup> Through restoration thinning, invasive species removal, prescribed burning, and reseeded, the Friends steward critical habitat including some of the last oak savanna in the Willamette Valley.

A key component of this restoration and stewardship effort is the Friends Native Plant Nursery which grows 130 native annual and perennial grasses, forbs, and shrubs, almost all of which are sourced from populations of wild plants found throughout the park. While these plants are primarily cultivated for restoration seed production, the Friends nursery is selling an increasing quantity of plants to an increasingly interested community. Through my internship, research and conversations with nursery staff both at the Friends Nursery and Sevenoaks Native Nursery, the growing demand for native plants is abundantly clear and, I feel, a logical reaction to the psychological weight of our compounding environmental crises.



# Biodiveristy Loss

Of the many manifestations of the environmental crisis, none are as existentially threatening as human-caused biodiversity loss. We share the planet with roughly 10 million species – one million of which face extinction due to human activities.<sup>2</sup> While extinction is a natural component of the evolutionary process, this is not a natural event. We are witnessing species extinction at a rate somewhere between 1,000 – 10,000 times the natural rate.<sup>2</sup>

**Scientists attribute this to five main factors:<sup>4</sup>**



**Pollution**



**Over Exploitation**



**Invasive Species**



**Climate Change**



**Habitat Loss**

Of those factors, habitat loss and invasive species are the most critical with climate change is set to overtake them this century. As vast swaths of grasslands, wetlands, and forests are converted to agricultural, residential, and urban uses that lack ecological function, native plants and the food web that depends on them – including us – become fragmented and weak. When this is compounded by aggressive invasive species, the native plants and the organisms they have co-evolved with face significant and sometimes insurmountable obstacles to survival.

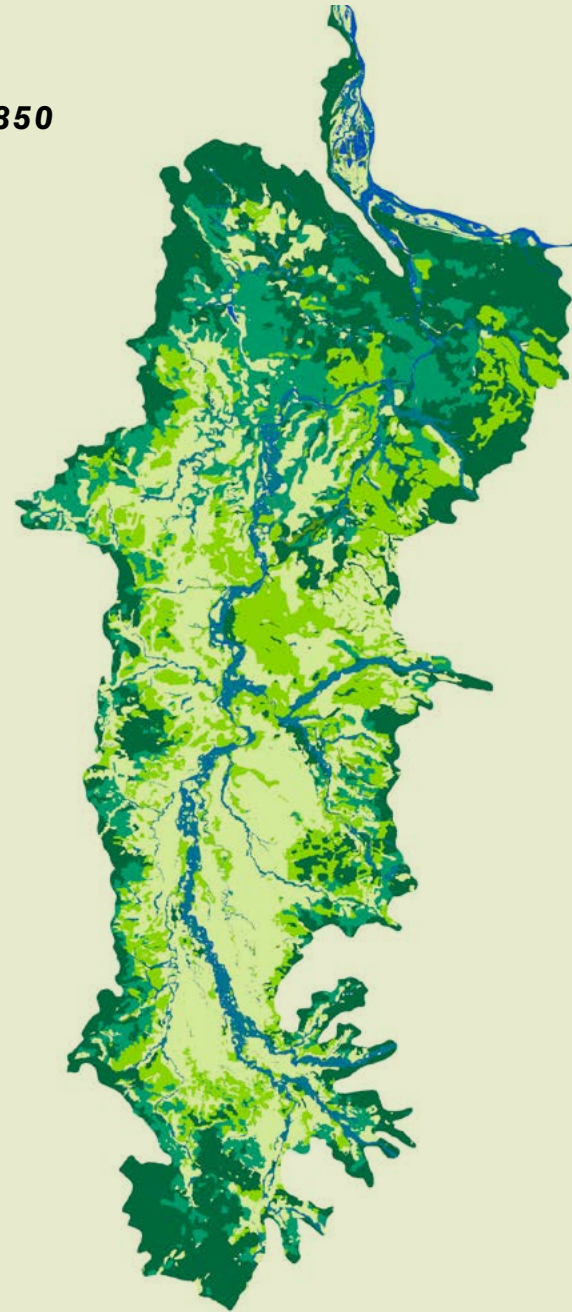
This global pattern can be seen in the local realities of the Willamette Valley. At the time of American settlement in 1850, the Valley was primarily a mosaic of savanna and prairies. While American settlers assumed this park-like landscape was naturally occurring, they were in fact experiencing the work of thousands of years of Indigenous land stewardship practices which included the regular use of low intensity fire to maintain areas for growing, gathering, hunting, and travelling.

Much of these prairies and savannas have since been converted to agricultural, residential, and urban uses with less than 10% of upland prairie and oak savanna remaining and less than 1% of historic wet prairies intact.<sup>5</sup> As a result, “the Willamette Valley has more rare and listed species than any other ecosystem in Oregon.”<sup>5</sup>

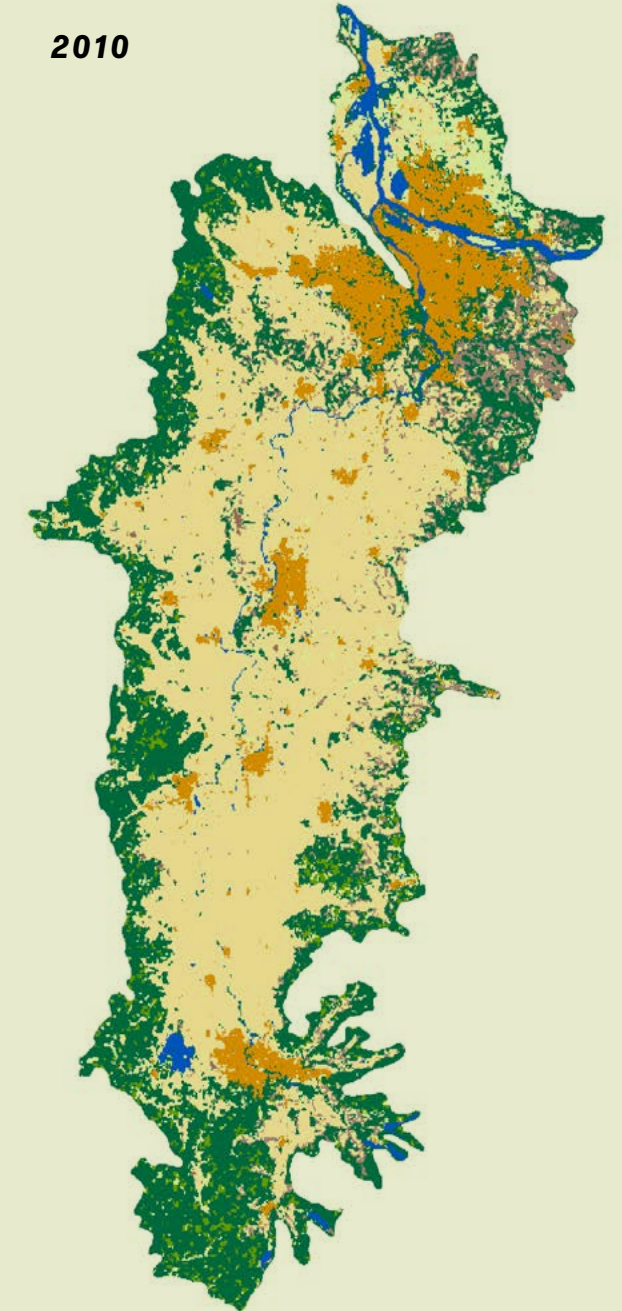


# Willamette Valley Land Use

1850



2010



While the biodiversity effects of this are immense, there is a psychological cost too. The lack of vitality in the landscapes around us means that we are profoundly disconnected from examples of what a truly living landscape looks, smells, sounds, and feels like. Those areas that are ecologically intact are often remote or restricted through lack of accessible infrastructure or private property boundaries.



**2.**

**Restoration**

**Ecological Restoration**

**The Role of Native Plant Nurseries**

**Landscape in Flux**

**The Porous Garden**

**Contemporary Land Use History**

**Universal Access in Natural Areas**

**Experiential Considerations**

# Ecological Restoration



# The Role of Native Plant Nurseries

Ecological restoration is one of the tools we have to reconnect ourselves with the sensory experience of place and rebalance the system. Defined as “the process of assisting the recovery of an ecosystem,” ecological restoration aims to restore an ecosystem to its “historic trajectory” rather than its historical condition.<sup>9</sup> Contemporary ecological realities mean that historic conditions may no longer be realistic, appropriate, or even possible to restore. Instead, ecological restoration uses an understanding of the past and an educated guess of the future to craft an ecosystem that might provide a point of continuity between the two. Providing key habitat for the species most in danger is of the utmost importance, especially since “about a third of the world’s vascular plant species face the threat of extinction.”<sup>5</sup> Supporting these species means creating the optimal conditions for them to thrive and, critically, having access to them in the first place.

*“The goal...is to return a degraded ecosystem to its historic trajectory, not its historic condition.”<sup>9</sup>*

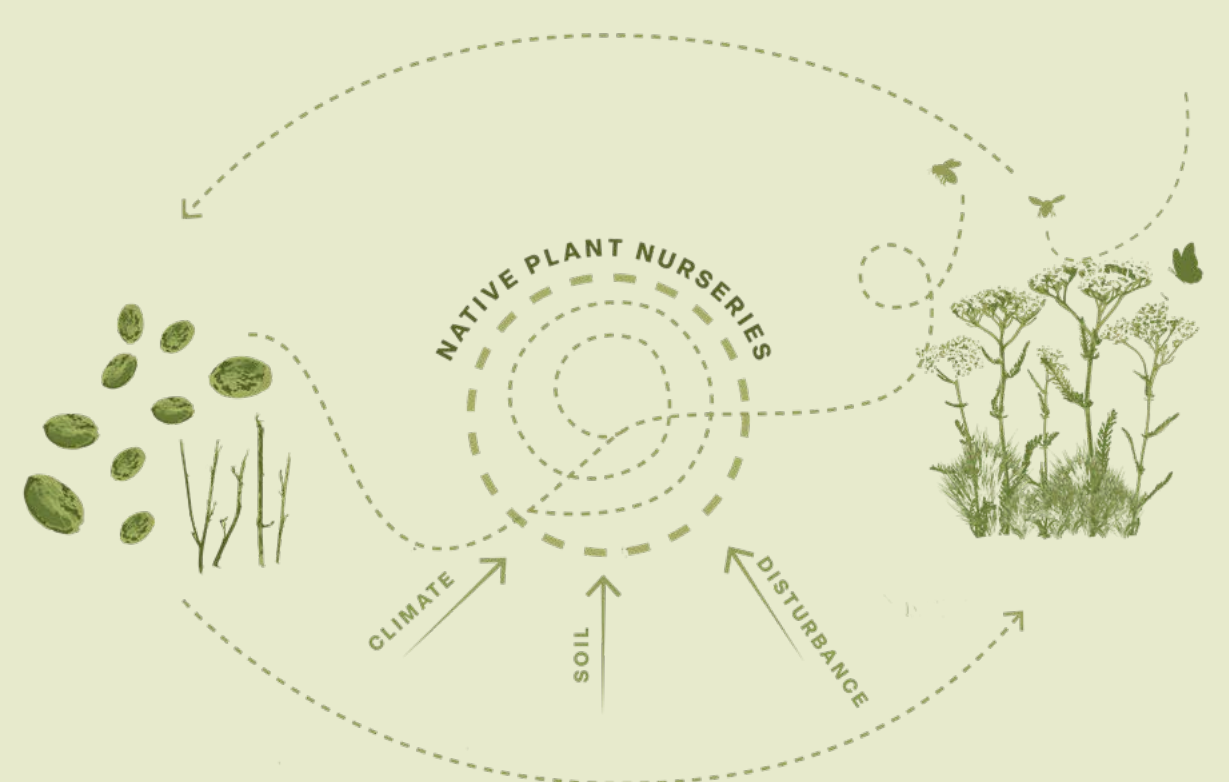
**Restoring landscapes to their historical trajectory requires seeds, and seeds have a sense of place.**

Over generations, plants become adapted to the particularities of place by responding to local climate, soil, and disturbance conditions. This natural feedback loop shapes a plant’s genetics in favor of conditions like its natural habitat, so sourcing seed locally helps bolster the success of each planting. However, this local adaptation must be balanced by diversity. Generally, diversity means collecting wild seed or wild cuttings from the recommended minimum number of plants and collecting throughout the blooming season of the plant. The number of source plants provides genetic variation while the timing of the plant material collection supplies phenotypic variation that might become useful to the plant in the future. Thus, successful ecological restoration relies on a sufficient supply of diverse, locally adapted native plants.

**Native plant nurseries are the critical link between the remnant patches of native ecology and restoring landscapes to their historical trajectory.**

Native plant nurseries are the critical infrastructural link between remnant patches of native ecology and the landscapes we hope to restore. Nurseries often collect their own wild seed and soft wood cuttings from wild populations which are then cultivated in line with their natural growing conditions in the nursery before being outplanted or seeded in the wild. However, the same interaction between site conditions and plant success that shape genetics in the wild, shape them in the nursery. So, nurseries aim to replenish their crops genes with wild seed every three to four years to avoid inadvertently favoring plants which thrive in the nursery but struggle in the wild.<sup>11</sup> In this way, native plant nurseries have and continue to play a critical role in the ongoing conservation of our native plants’ gene pool and the propagation of plant material available for restoration.

When we have access to good seeds, we’re able to plant resilient ecosystems, and when we have a resilient ecosystem, we have access to good seed. The degree to which our landscapes can be restored is directly linked to the availability of genetically diverse and locally adapted native seeds. This requires both the intact ecology to source seeds from and the nursery infrastructure to cultivate, clean, and distribute them. This also means that the degree to which our relationship to our local ecology can be restored depends on these seeds too.



# Landscape in Flux

In any discussion of restoration, we must remember that the landscape is always in flux and historical conditions were not static. Plants, more than any other natural feature, remind us of this through their annual cycles of dormancy and growth. As these cycles compound, long-term successional dynamics emerge, reflecting the slower movement of geologic, hydrologic, climatic, and disturbance processes constantly reshaping the landscape in ways both perceptible and imperceptible to human beings.

The Willamette Valley has been profoundly shaped by these dynamics. Between 11,000 and 15,000 years ago, glacial lake Missoula burst through its glacial dam, flooding much of eastern Washington and the Willamette Valley and depositing the sediments that settled into the fertile soil characteristic of the valley today. From oral histories and archaeological evidence, we know that the Indigenous people of the

Willamette Valley witnessed these floods, taking “refuge on the tops of Mary’s Peak and the Salem Hills until the floodwaters receded.”<sup>7</sup> These intense flooding events fundamentally altered the landscape. New silt and sediment deposits shifted the environmental conditions, and as responsive entities, plant communities shifted too. This in turn shaped the culture of human beings in the valley who relied on these plants for food, fiber, and shelter.

The Winfelly group, like the rest of Indigenous people in the valley, used a sophisticated suite of stewardship techniques including cultural fire, selective harvesting, and transplanting to shape the vegetation composition of the land. These practices helped maintain a mosaic of prairies and savannas and amounted to gardening in the wild

# The Porous Garden

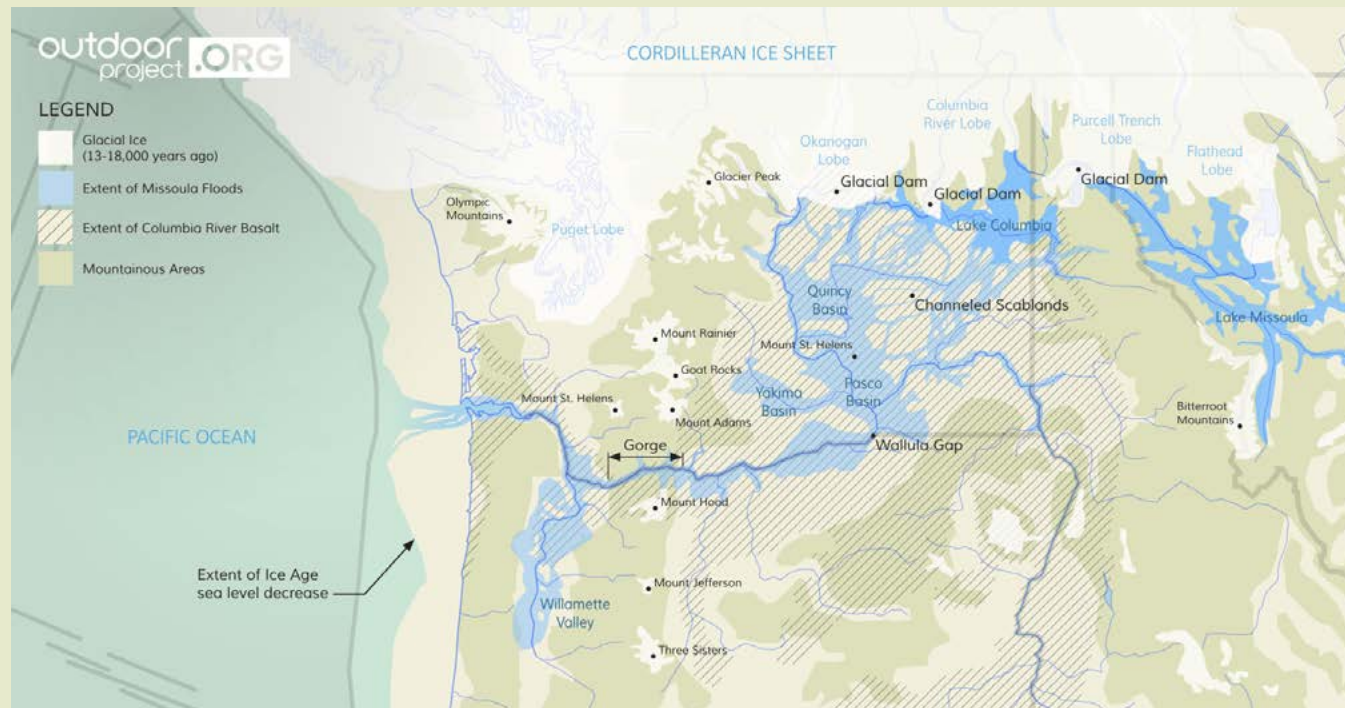
The classical western conception of the garden begins with the hortus conclusus, a walled and orderly sanctuary functioning as a counterpoint to the wild beyond the walls. In the context of Indigenous North Americans, however, the boundaries between garden and wild were more porous. For example, Dr. David Lewis writes that:

**“Bulb and root plants of the valley, like camas, were taken into the mountains and planted along the trails and in known upland prairies. These planted food sources sustained travelers and seasonal encampments of tribal families while they sought seasonal mountain food like huckleberries.”<sup>7</sup>**

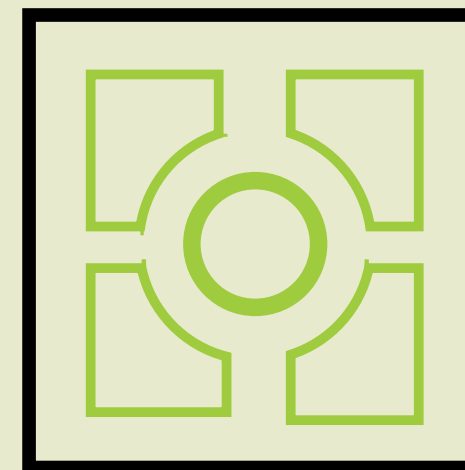
In this way, the “wild” was cultivated to create the conditions for desired plants, and while this type of cultivation may not look like the neat rows we associate with productive landscapes - agriculture or otherwise - it was certainly a form of gardening. This means that in any discussion of native plant nurseries, it is valuable to recognize that “the first native plant nurseries in North America were gardens of plants transplanted from the wild by Indigenous people.”<sup>8</sup>

SEEDS SENSE PLACE

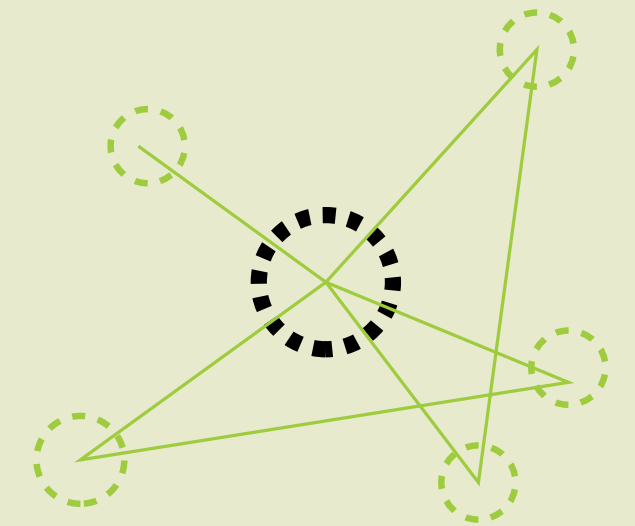
SECTION 2: RESTORATION



## HORTUS CONCLUSUS



## HORTUS POROUS\*



\*not a real term

# Contemporary Land Use History

With Indigenous peoples almost entirely removed from their lands in the 1850s, the Willamette Valley was remade into private property and settled extensively. American settlers “hunted out the game and plowed and fenced the prairies...The

regular seasonal cycles of hunting, fishing, and gathering were altered, and many food sources disappeared or became very hard to find.”<sup>7</sup> In the greater Mount Pisgah area, homesteads, agriculture, and livestock covered the landscape for the next century.

However, beginning the 1960s, growing environmental concern culminated in the state of Oregon purchasing the area that is currently known as HBRA in 1972, recognizing the “the conservation priority of the greater Mount Pisgah area.”<sup>15</sup> In 1973, the Mount Pisgah Arboretum was formed; in 1982, the land was solid to Lane County Parks; in 1989, the Friends were formed

to advocate for the stewardship of land outside the Arboretum, and in 2004, the Friends Native Nursery was established to grow out seed and plants for restoration efforts within the park. And in recent years, there has been an increased interest in expanding trail accessibility throughout HBRA and within the North Bottomlands specifically.

SEEDS SENSE PLACE

SECTION 2: RESTORATION

## 1851-1855

The U.S. government disposes Indigenous people of their traditional homelands. Settlers “fence and plow the prairies” into agriculture and pasture land

## 1970

Central Lane Region Parks Plan proposes 3540-acre Mt. Pisgah State Park.

## 1972

State and County officials formalize plan to purchase 2,363 acres of land at Mt. Pisgah, with Lane County Parks to lease land from State Parks.

## 1973

Mount Pisgah Arboretum formed.

## 1973

Mt. Pisgah State Park renamed Howard Buford Recreation Area.

## 1967

Governor Tom McCall proposes the Willamette River Greenway, a plan to conserve and protect public space along the river.

## 1982

Ownership of HBRA transferred from State of Oregon to Lane County Parks

## 1989

Friends of Buford Park & Mt. Pisgah formed to advocate for improved stewardship of the land not managed by Mount Pisgah Arboretum, as well as protection and conservation of natural lands within the great Mount Pisgah area.

## 1994

HBRA masterplan

## 2004

FBP Native Nursery formed to support ongoing restoration efforts

## 2017

Grazing terminated in the North Bottomlands.

## 2022

Liza Holtz (MLA '22) compiles guidance on universal access trails.

## 2024

Universal access trails set to be built June 2024 in North Bottomlands.

# Universal Access in Natural Areas

Former UO MLA student Liza Holtz compiled guidance on universal access trails that has been used to inform trail improvement within the Mount Pisgah Arboretum and will inform the new North Bottomlands universal access trail network that is set to begin construction this summer. With this ongoing accessibility improvement in the works, it's worth thinking critically about the opportunities this trail infrastructure might provide to restore a sensory experience of place for park visitors while cultivating readily accessible populations of wild plants that could refresh the nursery crop genetics as needed.

SEEDS SENSE PLACE

The Key Factors		ADA	Universal Access	Barrier Free
1.	<b>Running Grade</b>	0-5% any distance 8.33% maximum for ramps with landings every 30" rise	0-5% any distance 5-8.33% for 200' maximum 8.33-10% for 30' maximum 10-12.5% for 10' maximum	0-10% 10% + for short distances
2.	<b>Width</b>	36" minimum	36" minimum	any distance
3.	<b>Surface</b>	firm, slip resistant	firm/stable compacted gravel/soil	any material
4.	<b>Cross Slope</b>	2% maximum	5% maximum	within reason
5.	<b>Passing Space/ Resting Intervals</b>	60x60" minimum every 200'	60" wide every 1000' where trail width <60"	not required

SECTION 2: RESTORATION

\*Adapted from Liza Holtz (MLA '22)

# Experiential Considerations

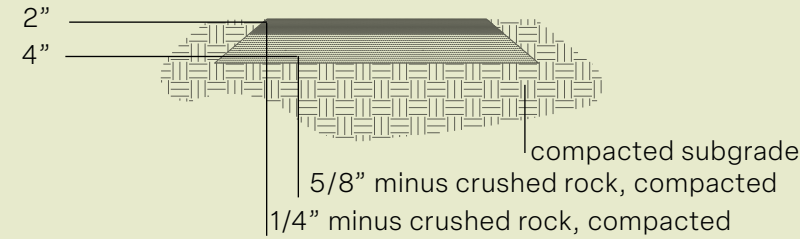
## The Basics

36" minimum width

*firm, compacted gravel or soil*

60" wide every 1000'

0-5% any distance  
 5-8.33% for 200' maximum  
 8.33-10% for 30' maximum  
 10-12.5% for 10' maximum



## The Experience

### accessible facilities

Access begins in the parking lot with accessible parking, restroom, and water facilities.

### detailed trail description

Providing this detailed information like surface conditions, slope, cross slope, and resting areas allows people to move through the landscape with as independently as possible.

### variety!

People show up to recreation areas with a variety physical abilities and desires - the trail should reflect that.

### shade + seating

Whenever possible, situate seating to take advantage of existing shade.

### unobstructed views

in viewing areas, it is important to consider the materiality and height of features. Park visitors using wheelchairs may be unable to access a viewshed if railings or retaining walls are in the way.





**3.**

## **Access + Cultivation**

**North Bottomlands Trail**

**Prairie Pause**

**Woodland Edge**

**Observation Blind**

**The Hedgerow**

**Living Willow Screen**

**Putting it in Perspective**

**Reconciling Access + Cultivation**

# North Bottomlands Trail

SEEDS SENSE PLACE



Filler text here

- 0.** **Parking lot**  
accessible restrooms  
accessible parking
- 1.** **Shaded seating**  
compacted gravel trail  
0-5% slope
- 2.** **Woodland Edge**  
compacted gravel trail  
0-5% slope  
winds through meadow and woodland edge.
- 3.** **Observation Blind**  
compacted gravel trail  
8.33% slope  
bird blind with views into Willamette Confluence.
- **Passing point**
- **Wild garden**
- **Compacted gravel trail**
- **Mowed path**
- **Friends Native Nursery**

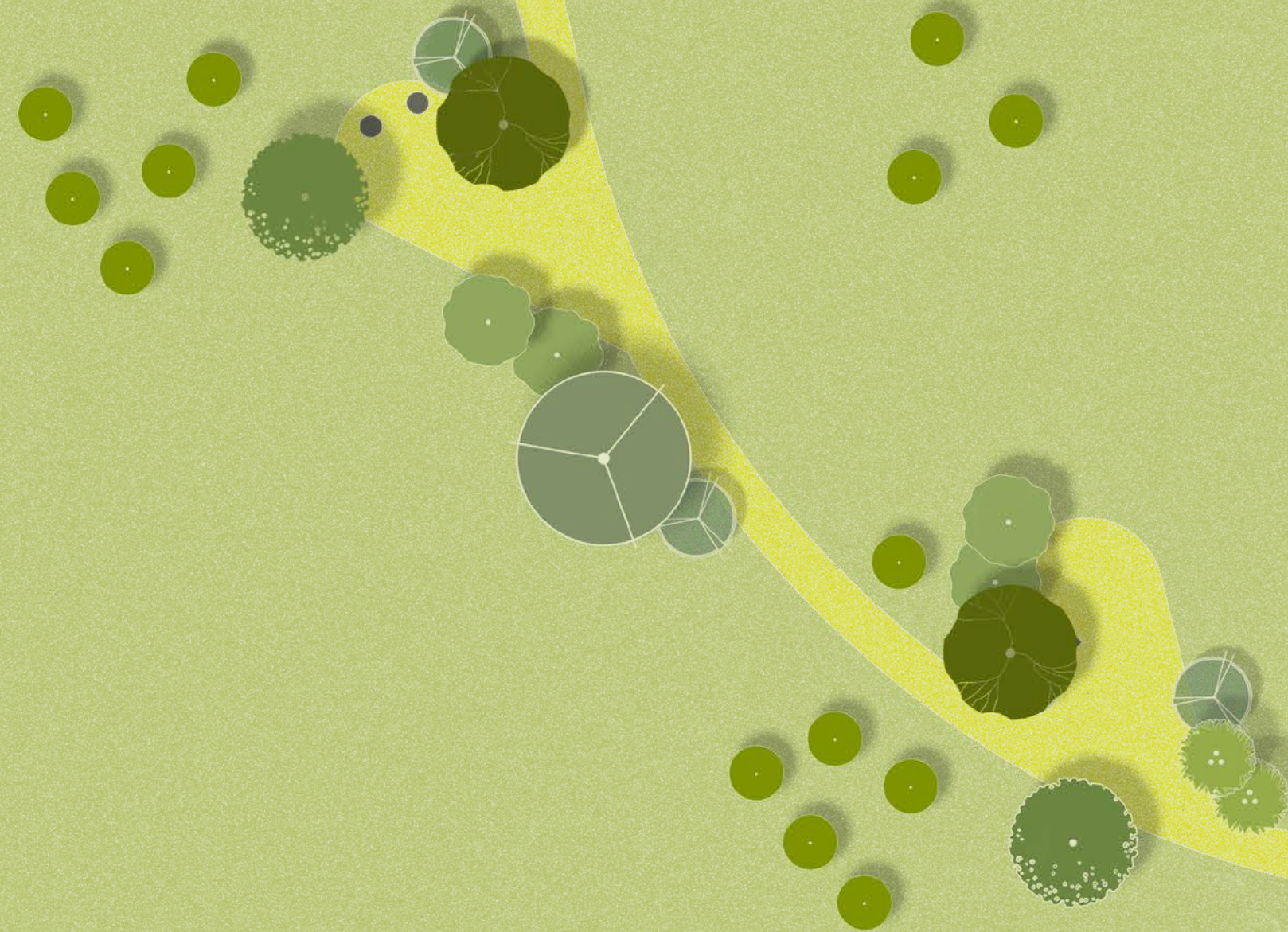


SECTION 3: ACCESS + CULTIVATION



## Prairie Pause

*In a place where there are no existing trees near the trail, there is an opportunity to think about a succession planting that would utilize fast growing shrubs and trees to intercept sun in the near term while slower growing trees mature.*



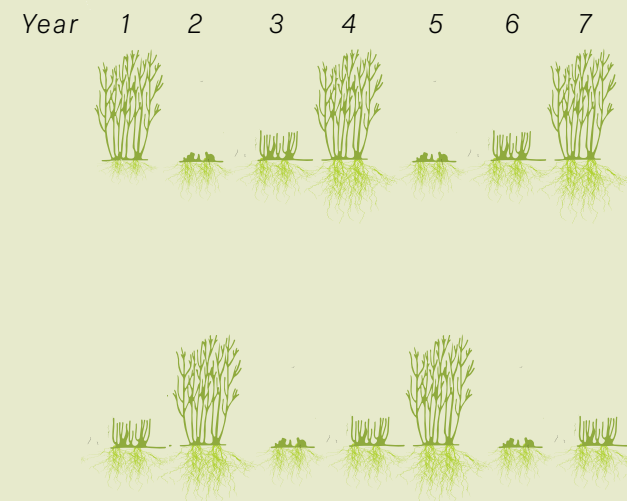
# Prairie Pause

Since the southwest sun is most intense, plants like Elderberry, Scouler's Willow, and Alder could be used to provide screening in the most intense part of the day while slow growing oak trees mature over the coming decades.

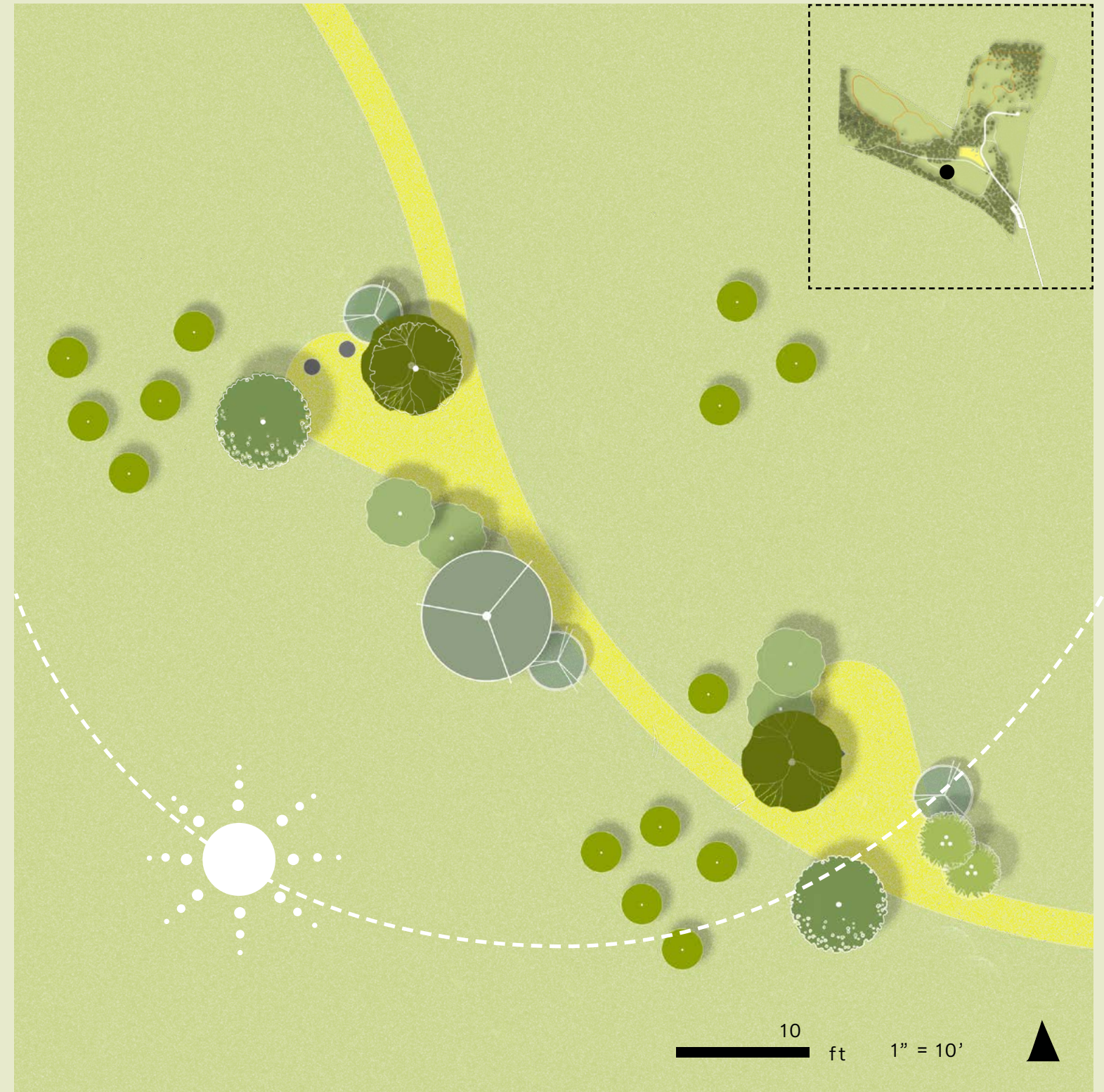
As fast and vigorous growers, Elderberry and willow respond well to coppicing. This is an ancient woodland management technique which involves cutting a plant to the base in late winter or early spring when the plant has the most sugars and starches in reserve for new growth. Traditionally, this technique was used for sustainable timber harvesting all across the world. However, in this instance this management regime is integrated as a design intervention.

Since both elderberry and willow can grow quite large quite fast, a coppice rotation would reset the plant back to the first few years of growth, keeping it in appropriately sized while taking advantage of the ability to create shade within a year or so. Staggering the rotation would provide birds and other wildlife continual habitat and humans with consistent shade, albeit in different spots, throughout a multi-year cycle.

SEEDS SENSE PLACE



-  ***Alnus rubra***  
Red alder
-  ***Sambucas cerulea***  
Blue Elderberry
-  ***Salix scouleriana***  
Scouler's Willow
-  ***Physocarpus capitatus***  
Pacific ninebark
-  ***Quercus garryana***  
Oregon White Oak
-  ***Ribes sanguineum***  
Red-flowering currant
-  **Trail**



SECTION 3: ACCESS + CULTIVATION

# Woodland Edge

*Since variety is a key component of a good trail experience, the gravel path forks with one arm running through the prairie grasses and another leading to seating along the woodland edge.*

SEEDS SENSE PLACE

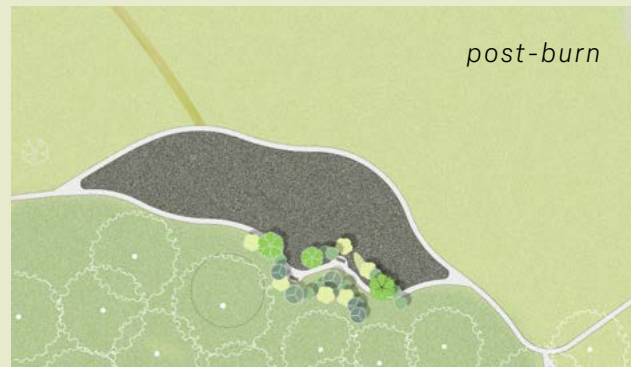
SECTION 3: ACCESS + CULTIVATION



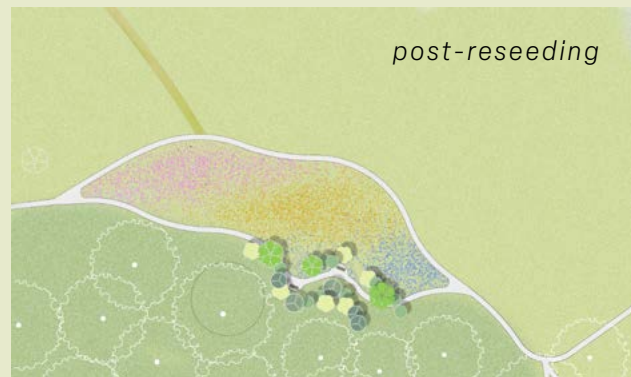
# Woodland Edge

While the forked path provides experiential variety, the materiality of the gravel trail also functions as a possible stewardship delineation as either a fire or weed break.

While making specific recommendations is beyond the scope of this project, there is good precedent for restorative fire and reseedling on site and delineating a zone like this with a hard surface control line on all sides would provide the Friends with the option to reintroduce fire to this prairie in a limited way if desired.

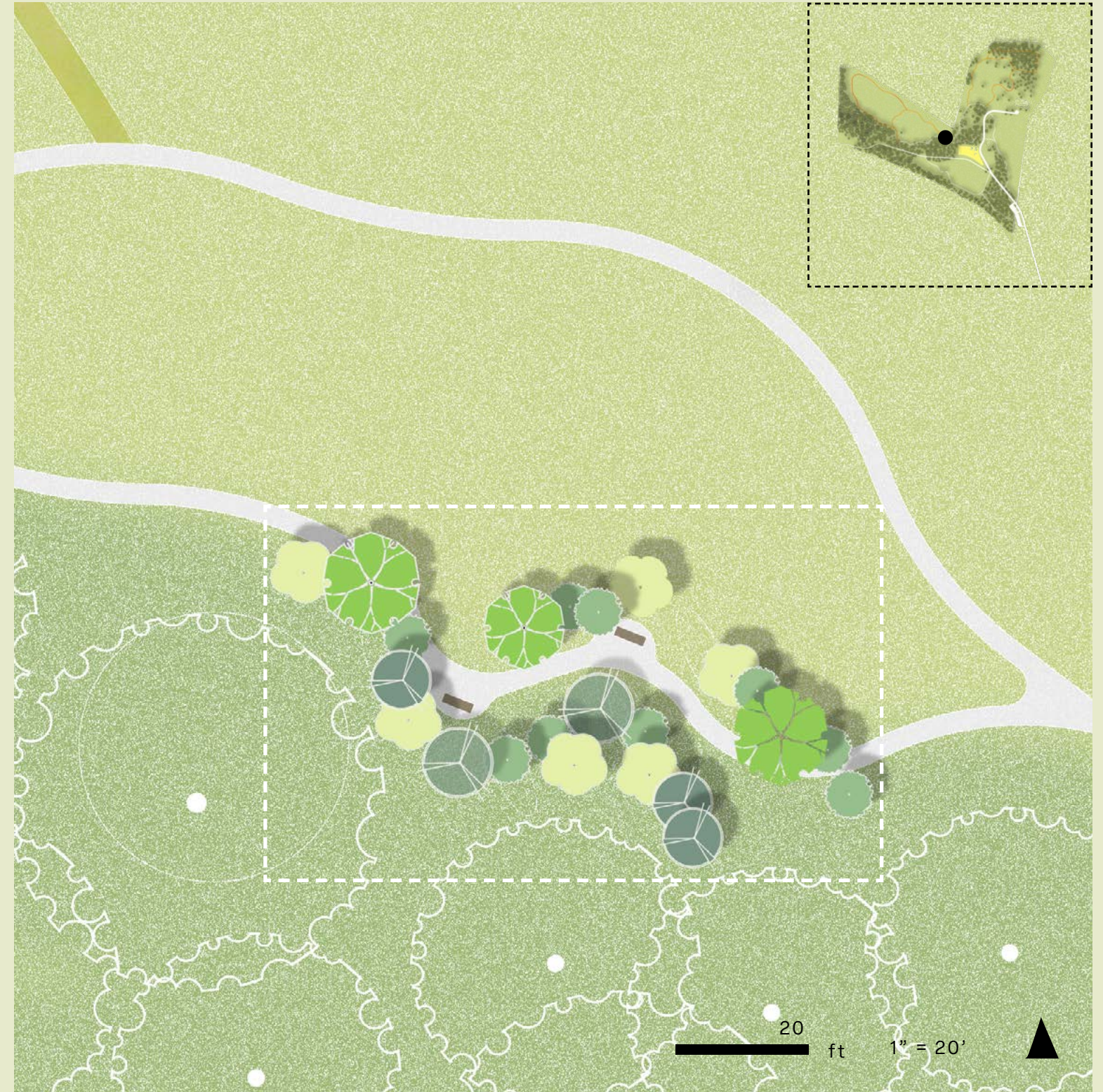


Regardless, delineating a demonstration prairie through the trail system could be a way to cultivate a desired plant community that might ordinarily be outcompeted by pasture grasses while providing visitors a side-by-side comparison of existing grasslands and native prairie.



Along the woodland edge, seating is situated back near the tree canopy. While the woodland in this zone is quite mature, there is relatively little native understory. Through my internship at the Friends Nursery, I saw the increased demand for several native shrub species that are difficult to find in commercial nurseries and which the Friends Nursery currently has a relatively limited supply of. This woodland edge has the potential to address both issues by growing a selection of Red Flowering Currant, Twinberry, Oceanspray, Hazelnut, and others which can be easily propagated either through softwood cuttings or seeds. At the same time, these planted bands help define the space, providing a sense of the seating being nestled into the landscape creating visual interest along the path.

-  **Corylus cornuta**  
Beaked Hazelnut
-  **Ribes sanguineum**  
Red Flowering Currant
-  **Holodiscus discolor**  
Oceanspray
-  **Lonicera involucrata**  
Twinberry
-  **Seating**



SEEDS SENSE PLACE

SECTION 3: ACCESS + CULTIVATION

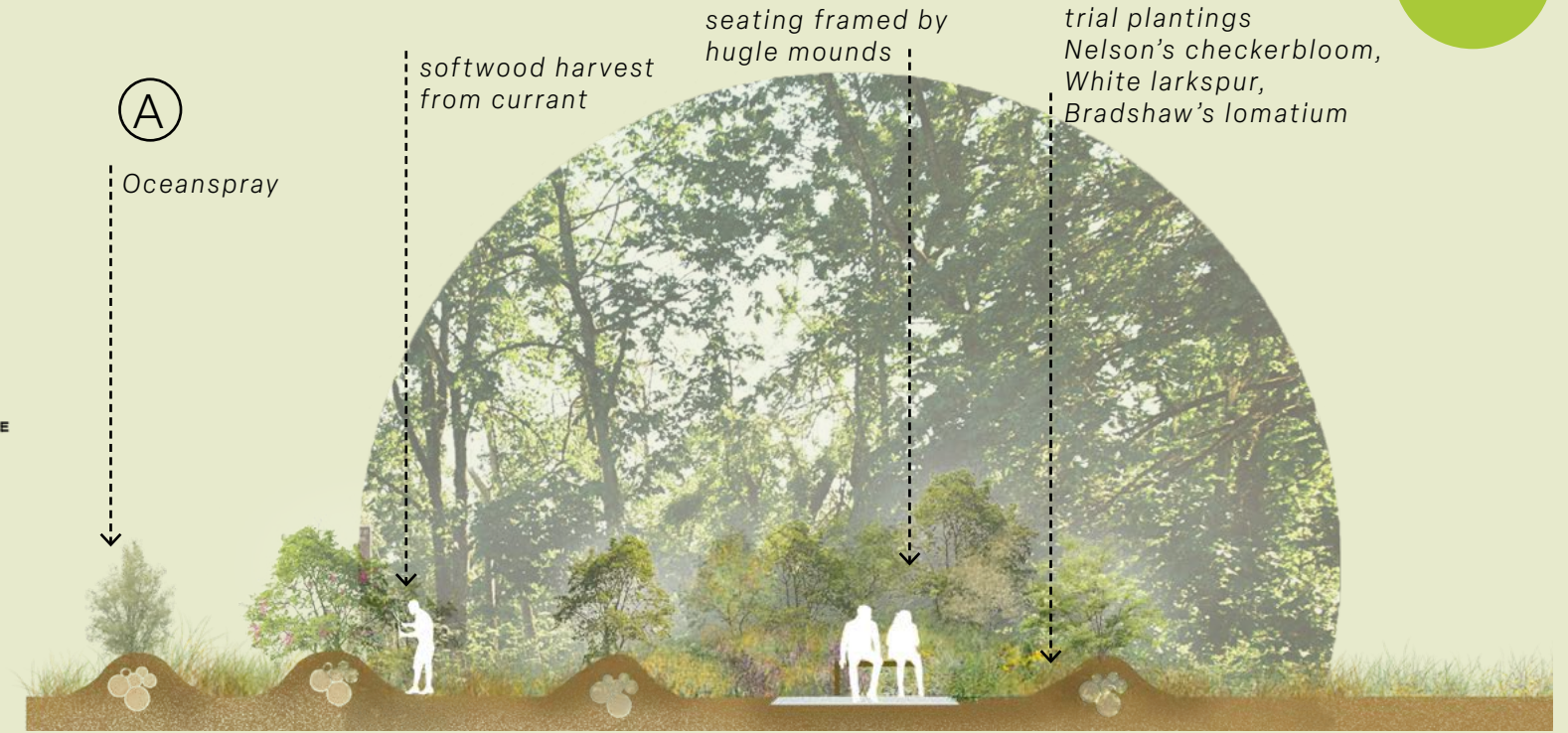
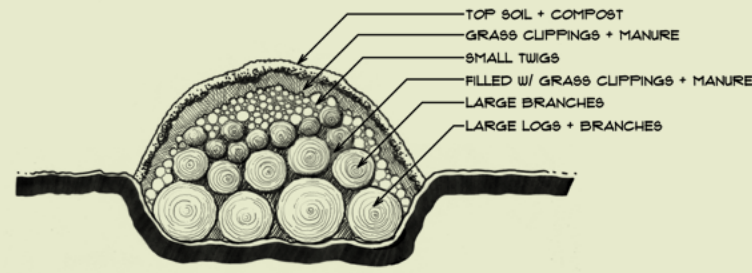
# Woodland Edge

SEEDS SENSE PLACE

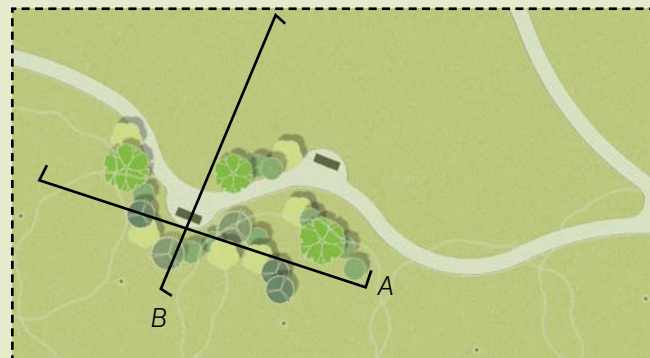
These new planted zones utilize a hugle mound system to define the space around the seating areas. Hugle mounds, which are created by burying branches beneath twigs, leaf litter, and soil, decompose over time – acting as a sort of slow-release nutrition source and water retention system. Maple, a common huglekultur base, breaks down relatively quickly and is plentiful on site with some downed branches remaining on site from the January 2024 ice storm.

In between these shrubs, woodland forbs like Meadowrue, Columbine, and Sticky cinquefoil could be coupled with some threatened and endangered species like White larkspur, Nelson’s checkerbloom, and Bradshaw’s lomatium in a location that is easily accessible to all park visitors.

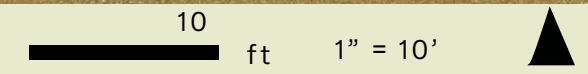
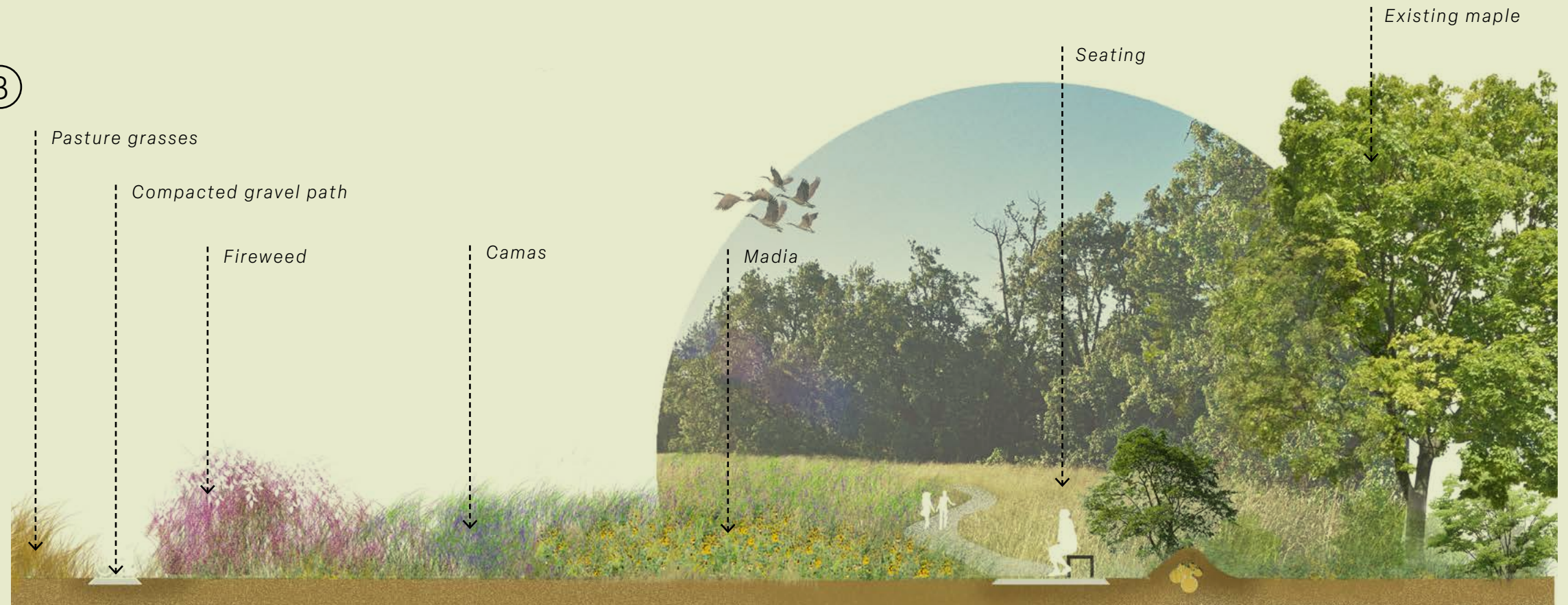
## Huglekultur mound



Taken together these two paths provide visitors with an experience of a woodland transect and provides the Friends nursery with a great supply of softwood propagation cuttings to meet the increasing demand for native shrubs in landscape design. At the same time, the seating locations create moments for visitors to stop and more closely engage with the plant communities that have been restored around them.



## B



SECTION 3: ACCESS + CULTIVATION

### Observation Blind

*This elevated point in the landscape provides visitors with a viewpoint into the adjacent Willamette Confluence, while native hedgerows and habitat snags attract birds from the nearby Aardvark Pond, creating a point that attracts park visitors of all species.*

SEEDS SENSE PLACE

300'

SECTION 3: ACCESS + CULTIVATION

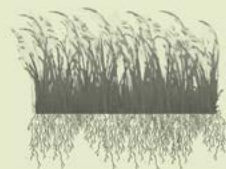
# Observation Blind

This landform uses soil stockpiled on site to create a 10' elevated point in the landscape that will provide a viewpoint into the adjacent Willamette Confluence while attracting birds from the nearby Aardvark Pond just across the property boundary. This design takes inspiration from the biodiversity hedgerows frequently seen in sustainable farming practices which use a great diversity of plants to provide maximum habitat for wildlife and pollinators. The 10' tall mound which is graded at a 8:1 slope is planted in such a way that the Friends mower – which mows 5' wide strips at a time – could navigate up and down the hill creating 10' wide clearings between the 20' wide hedgerows. However, because the stockpiled soil that would create this landform is full of weed seeds, significant site preparation will be necessary. There are a few options:

**Option A** would use a barley cover crop to stabilize the soil and prevent erosion. As weed seeds germinate with the fall and winter rains, selective spot spraying could be used to exhaust the weed bank before being seeded with a mix of natives.  
**Option B** uses an irrigation and solarization rotation to exhaust the weed bank before receiving the same native seed mix. It's worth noting this would only be possible if the soil was moved before summer when the heat is most intense and could kill weed seeds most effectively.  
**Option C** involves a water and flame torch rotation which would begin in summer by irrigating the landform and burning it once weeds germinate and could continue throughout the year as the fall and winter rains take over the irrigation.

## Site Prep

**A.** barley cover crop



spot spray



native seed



**B.** irrigation



solarization



native seed



**C.** irrigation



flame torch



native seed



# The Hedgerow



**Prunella vulgaris**  
Self-heal



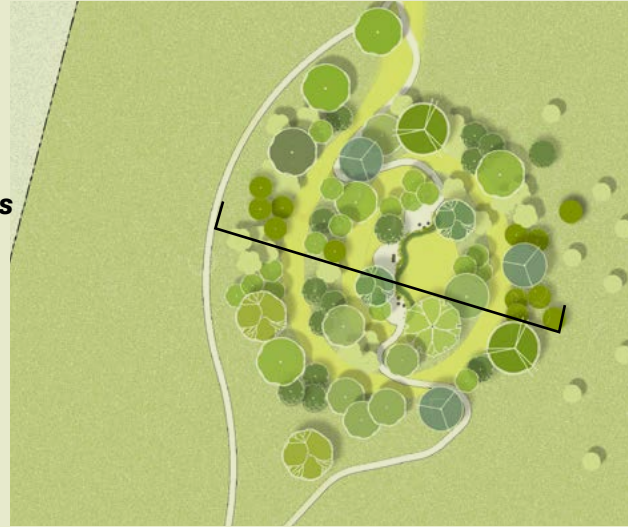
**Sidalcea campestris**  
Checkermallow



**Wyethia angustifolium**  
Narrow Mule's Ear



**Madia gracilis**  
Common madia



**Eriophyllum lanatum**  
Oregon sunshine



**Gilia capitata**  
Blue headed Gilia



**Achillea millefolium**  
Common Yarrow



**Amelanchier alnifolia**  
Western Serviceberry



**Crataegus douglasiana**  
Douglas Hawthorn



**Corylus cornuta**  
Hazelnut



**Prunus emarginata**  
Bittercherry



**Malus fusca**  
Pacific Crabapple



**Rhamnus purshiana**  
Cascara Buckthorn



**Cornus sericea**  
Redtwig Dogwood



**Acer macrophyllum**  
Bigleaf Maple



**Alnus rubra**  
Red Alder

## Initial Seeding



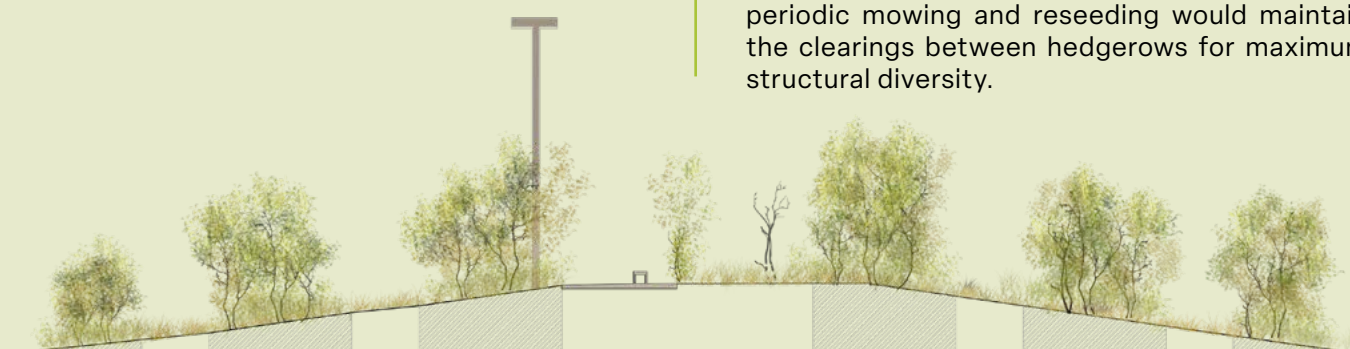
Regardless of site preparation, the new landform would then be seeded with a native seed mix that includes plants like Yarrow, Madia, Western Buttercup, and Clarkia.

## Initial Shrub Planting



This native seeding would be accompanied by a planting of native trees like Bigleaf maple, Red Alder, and Bitter Cherry with an understory of Western Serviceberry, Red-twig Dogwood, Blue Elderberry, and others.

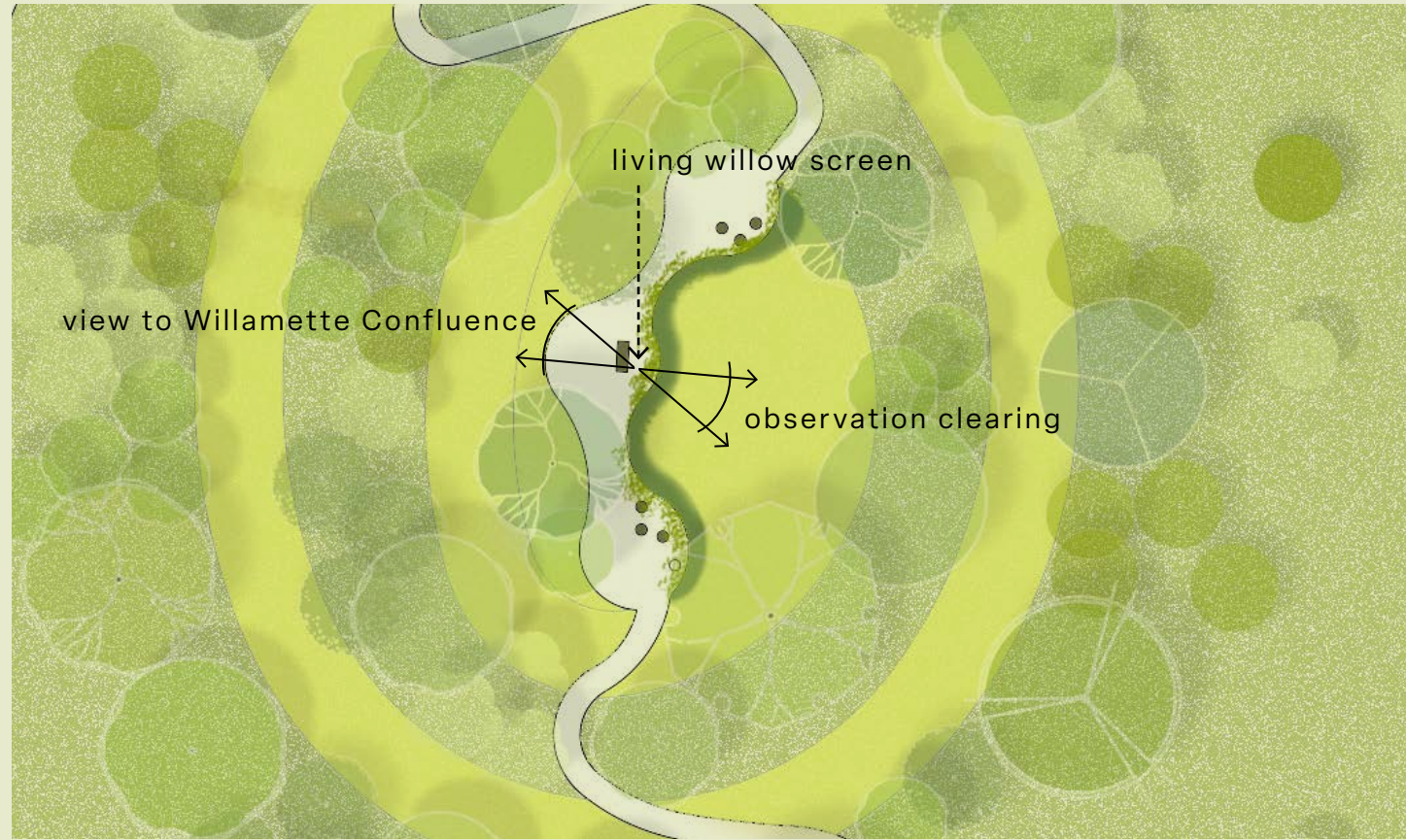
## Hedgerow + Mow



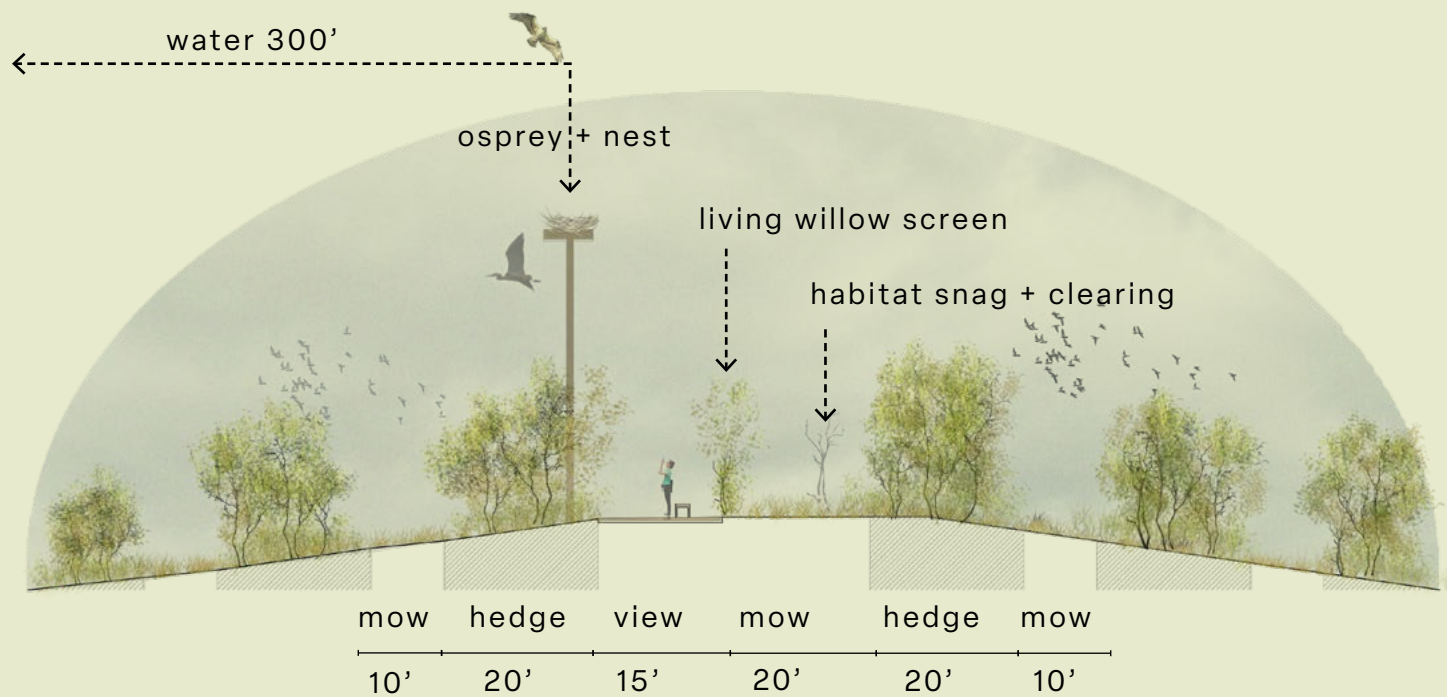
Over time, these trees and shrubs would eventually shade out the native seed mix, but periodic mowing and reseeding would maintain the clearings between hedgerows for maximum structural diversity.



## Hedgerow + Mow



SEEDS SENSE PLACE

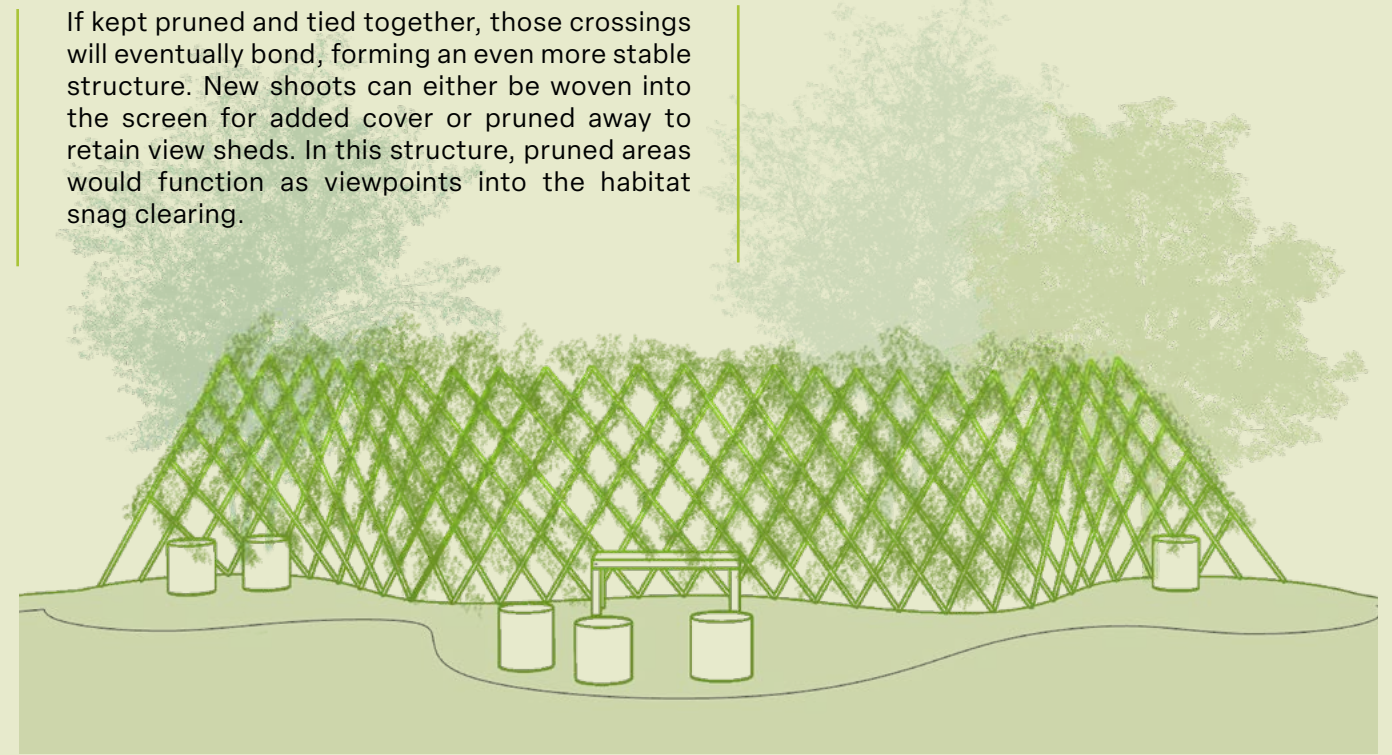


## Living Willow Screen

Willow is frequently used in ecological restoration because it roots easily from almost any cutting. This easy rooting can be harvested to create a living structure which would conceal bird watchers while simultaneously providing habitat. This willow screen could be grown by planting live stakes 1.5' feet from one another and weaving them into a lattice.



If kept pruned and tied together, those crossings will eventually bond, forming an even more stable structure. New shoots can either be woven into the screen for added cover or pruned away to retain view sheds. In this structure, pruned areas would function as viewpoints into the habitat snag clearing.



# Putting it in Perspective

The path to the observation blind winds through the undulations of grasses, flowers and dense hedges, creating a hide and reveal experience along this 12:1 slope. Once at the top, three open landscape rooms allow for people to move through the space and find a space that's comfortable for them. At no point is any width less than 4' wide to allow easy passing of visitors in wheelchairs. Dedicated viewing places will be pruned, but part of the life of this structure is that use will likely determine some of the form. Certain viewpoints might emerge as birds begin nesting near a pacific ninebark or willow, when a new avian friend begins regularly perching on a branch on the opposite side of the clearing, visitors might carefully prune a few twigs away too get a better view. This dense screening to the east contrasts a more open planting on the west which aims to retain structural diversity without obscuring views to the Willamette Confluence and Aardvark Pond.

SEEDS SENSE PLACE



SECTION 3: ACCESS + CULTIVATION

# Reconciling Access + Cultivation

If we reconsider the diagram we began with, the universal access trail is now a corridor of access, habitat, and cultivation that offers a series of benefits to park visitors, nursery staff, and the wildlife that call this landscape home. Using the materiality of the gravel pathway as a weed and fire control line gives stewardship staff options in how they choose to manage specific patches of the land. Downed wood from the ice storm can be repurposed into hugle beds outside the nursery that sustain source populations of desirable plants. And natural material like willow cuttings from coppicing rotations can be used to create living structures that allow humans to pay close attention to the wildlife around them.

SEEDS SENSE PLACE

- 36" minimum width
- firm, compacted gravel or soil
- 60" wide every 1000'
- 0-5% any distance
- 5-8.33% for 200' maximum
- 8.33-10% for 30' maximum
- 10-12.5% for 10' maximum
- accessible facilities
- detailed trail description
- variety!
- shade + seating
- unobstructed views

greater diversity of plants brings greater diversity of birds

gravel path designates stewardship zones + wild seed collection locations

living structures for human and wildlife use

planted shrubs for softwood cuttings and increased understory diversity



**Bringing cultivation to a universal access trail is an opportunity to restore a fragment of connection between people and place. By attuning to the plants and wildlife around us, we become more fully present, rooting into landscapes that support us and need our stewardship now more than ever.**

SECTION 2: RESTORATION

## Works Cited

<sup>1</sup>“Ambassadors Handbook: Friends of Buford Park & Mt. Pisgah,” n.d.

<sup>2</sup>“Biodiversity | Definition & Facts | Britannica,” April 1, 2024. <https://www.britannica.com/science/biodiversity>.

<sup>3</sup>Ferro, Jen. “LCC Research Guides: Kalapuya: Native Americans of the Willamette Valley, Oregon: Home.” Accessed April 15, 2024. <https://libraryguides.lanec.edu/c.php?g=453335&p=3096854>.

<sup>4</sup>Friends of Buford Park & Mt. Pisgah. “About Us.” Accessed June 10, 2024. <https://bufordpark.org/pages/about-us>.

<sup>5</sup>Institute for Applied Ecology. “Willamette Valley Native Plant Partnership.” Accessed March 26, 2024. <https://appliedeco.org/restoration/native-seed-partnership/willamette-valley-native-plant-partnership/>.

<sup>6</sup>“Investigations of Pre-Contact Indigenous Fire Stewardship in the Montane Forests of the Pacific Northwest,” n.d.

<sup>7</sup>Lewis, David G. “Natives in the Nation’s Archives: The Southwest Oregon Research Project” 6, no. 1 (2015).

<sup>8</sup>Nursery Manual for Native Plants: A Guide For Tribal Nurseries, n.d.

<sup>9</sup>“Restoration Resource Center What Is Ecological Restoration?” Accessed April 6, 2024. <https://ser-rrc.org/what-is-ecological-restoration/>.

<sup>10</sup>Varian, Caitlin. “It Starts with a Seed: Producing High Quality Native Seed for Restoration in the Willamette Valley | US Nature4Climate,” April 20, 2021. <https://usnature4climate.org/2021/04/20/it-starts-with-a-seed-producing-high-quality-native-seed-for-restoration-in-the-willamette-valley/>.

## Images

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**page 40:** “Sustainable Landscapes: Creating a Hügélkultur for Gardening with Stormwater Management Benefits,” *Oklahoma State University Extension*. Accessed June 5, 2024. <https://extension.okstate.edu/fact-sheets/sustainable-landscapes-creating-a-hugelkultur-for-gardening-with-stormwater-management-benefits.html>

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