

Seeing the Forest for the Trees

Rethinking
cultural landscape
conservation on
Vancouver Island

JESSICA UDAL
SPRING 2020



Cover Image: Seasonal Use Diagram (Udal, 2020)

Release Form

Landscape Architecture
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The Forest for the Trees: Rethinking Cultural Landscape
Conservation in Vancouver Island’s Forests

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Jessica Udal05/13/2020

NameSignatureDate

Abstract

This project argues that traditional modes of landscape conservation fail to highlight the complex social, political, ecological and economic dynamics that work to create cultural landscapes. On Vancouver Island, the ongoing tension between logging and conservation continues to reinforce the polarizing resource-wilderness dichotomy that has been so intrinsic to western perceptions of landscape.

By proposing 'gardening' as the programmatic basis for site intervention, this project suggests an alternative cultural landscape narrative for Vancouver Island's forests.

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Thank you to Daniel Roehr for generously providing design guidance and support, even in the midst of a pandemic.

I would also like to express my gratitude to my classmates for always lending an ear, to Celia Winters for the render wizardry, to Sahar Khelifa for her thorough edits, and to Carolyn Wu for the drawing help. Finally, thank you to my beyond wonderful friends and family for keeping me grounded and reminding me of what is truly important.

Fig. 1: Zoom-in of Wilderness and tourism infrastructure on Vancouver Island (Udal, 2020)

PART ONE: RESEARCH

Introduction

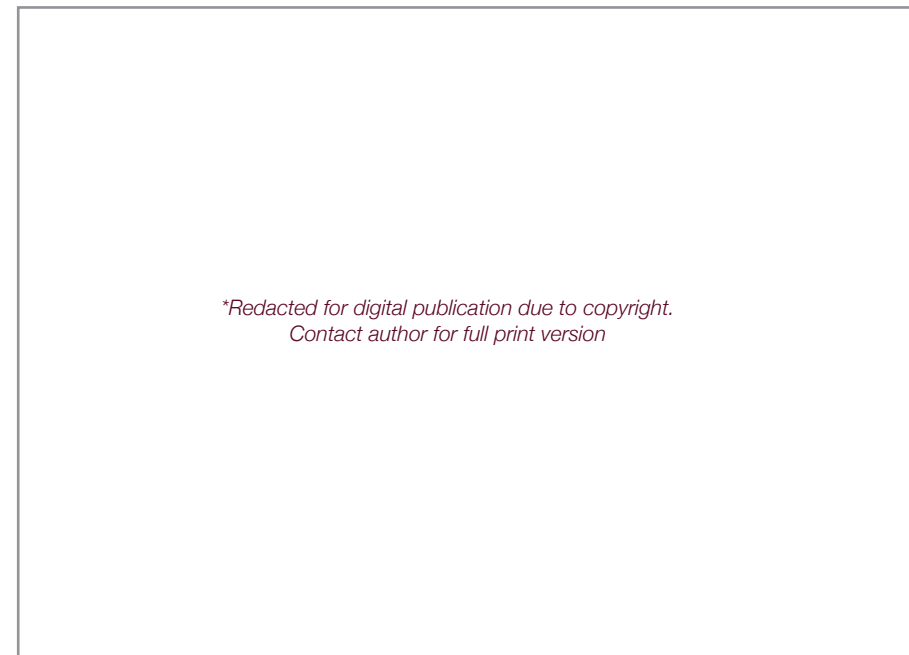


Fig. 2: Cheewhat Cedar, TJ Watt (<https://www.ancientforestalliance.org>, n.d)

Like most of Canada, Vancouver Island is a landscape caught between two ideas – resource extraction and wilderness. While ads for tourism evoke a vast, open and wild landscape, aerial satellite images reveal an almost island-wide patchwork of industrial logging cut-blocks. How do these two landscapes exist simultaneously? What do they reveal about our relationship to

our environment and our understanding of our place within it? The dichotomy created by looking at the natural world as either wilderness or resource has a long and complex history – one where landscape architecture has played, and continues to play, an important role. Conservation has been a tool used to espouse the wilderness myth and reinforce an idea of nature as

“I confess that I find the more extreme – and more vocal – forms of American environmentalism to be irresponsible and uncivilized. The best solution I see for this super-aestheticism is a more general recognition of landscape history: less emphasis on the old romantic theme of conflict between man and nature and more emphasis on the political, economic and technological forces which continue to shape our landscape.”

J.B. Jackson, ‘The Vernacular Landscape,’ in *Landscape Meanings and Values*, ed. Edmund Penning-Rowsell and David Lowenthal, (London: Allen and Unwin, 1986), p. 80

separate from humans. While this moralistic outlook has created work and validity for the profession of landscape architects, it is not an innocent pursuit. Conservation, as the other side of the extractive coin, has worked to reflect and reinforce an understanding and interaction with the landscape that often removes reciprocity, instead working to create small areas of preservation despite the fact that humans do, and always have, relied on landscapes and the beings within them for food, shelter and other resources.

As culture informs landscape and landscape informs culture, there is an ongoing process of creation between humans and their environment. Conservation exists as a product whereby natural elements, such as plants or geologic features, become symbols of cultural identity, and are reinforced through the creation of sites of memory such as parks or natural reserves. This works to support the continuance of particular ecologies and visions for what the landscape should be. As a practice of memorialization, conservation is a central element to a cycle of cultural landscape creation.

For the profession of landscape architecture, conservation is worth pursuing. In fact, as I argue, it is a framework with great potential to make visible the ecological, political, economic and cultural complexity of land use which, because of its many moving

pieces, is generally invisible to the public leaving management and decision making to governments with problematic priorities and allegiances. As architectural preservationist Jorge Otero-Pailos points out, conservation is one of the few areas of the built environment where the public has such a vested interest.¹ Rather than the traditional approach of putting aside tracts of land exchanged for others to be logged, I believe that landscape architects should use their skills of researching, visualizing information, and designing experiences to highlight the larger issues at play. The recent movement in conservation to approach landscapes from a cultural landscape perspective provides practitioners with a useful tool to reassert the intrinsic relationship between human culture and the environment. In order to do this, current guidelines around assessing cultural landscapes must be expanded to both better represent the landscape as an active stakeholder within that relationship and shed light on the ontologies that underly our beliefs about the natural world.

Notes:

1. Ted Shelton and Tricia Stuth, "Architecture and Human Attachment: An Interview with Jorge Otero-Pailos," *Journal of Architectural Education* 72, no.2 (2018): 190.

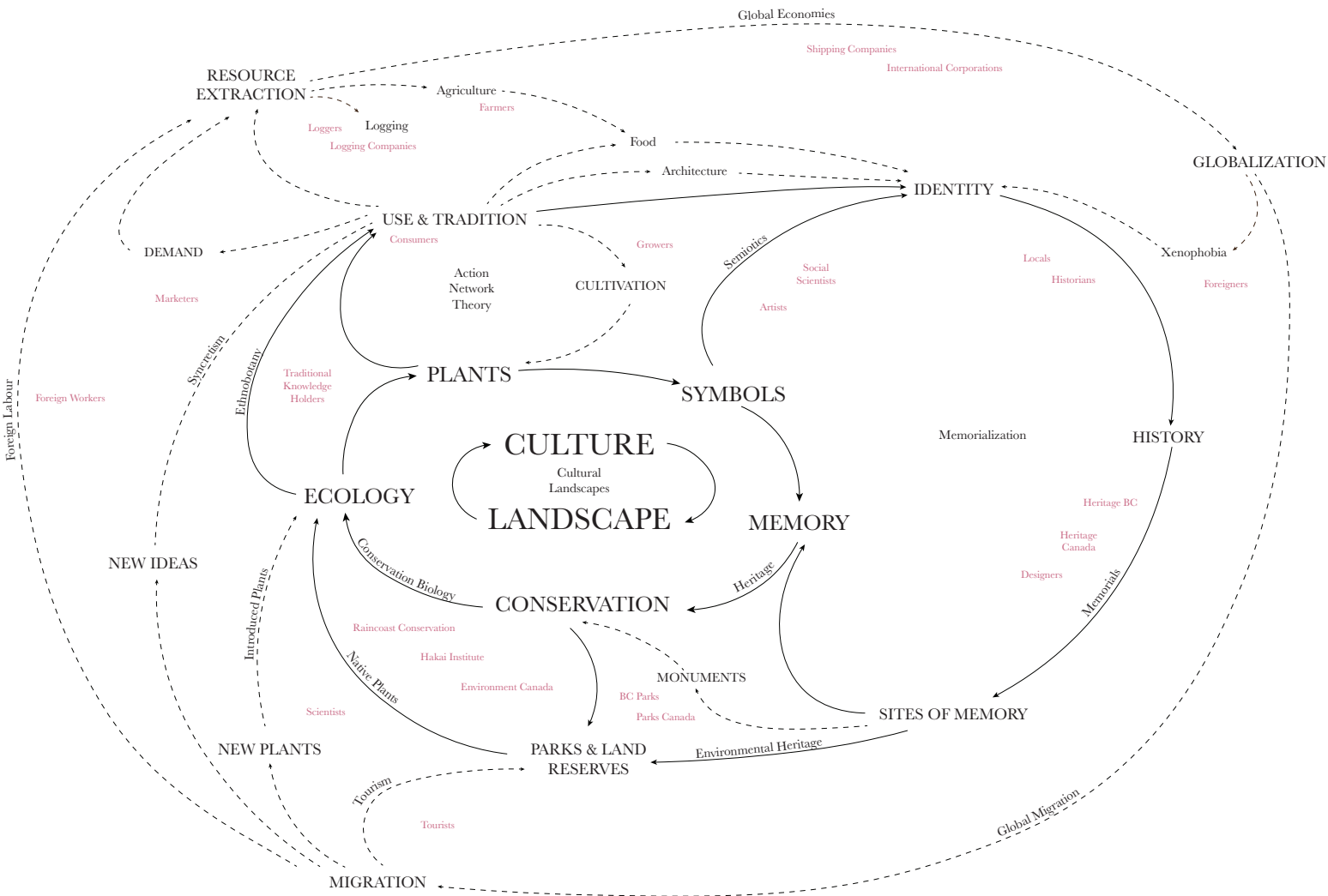


Fig. 3: Conceptual Diagram (Udal, 2019)

The Wilderness/ Resource Dichotomy

Though the story of understanding nature as an entity outside of humans in Western philosophy can be drawn back to the ancient Sumerians¹, the dramatic social and environmental changes of the Early Modern Period created an altogether new level of distinction between humans and what was understood to be the world around them. The escalation of trade, urbanization and population growth during the late Middle Ages and Renaissance initiated an exacerbation of resources, primarily wood, throughout Europe. It was in this context of a rapidly changing landscape and an ever-dwindling presence of old growth forests that both the need for resources to maintain the momentum of capitalistic growth as well as a nostalgia for an Edenic past became embedded in the European sensibility. This was especially at play in colonial expansion where wood shortages were one of the primary driving forces for exploration, allowing for the seemingly “untouched” forests outside of Europe to appear as a prelapsarian wilderness.²

On every continent, European colonial force and claim to power was driven by the demand for resources. In North America, logging in the eastern part of the continent was a primary resource that spread east to west with increasing industrialization. As the US population doubled every twenty years between 1790 and 1880, “the demand for timber was insatiable, the supply seemed infinite and for nearly a half century the production of lumber also doubled every twenty years.”³ In Canada, the consumption of forests was directly linked to European conflicts with Canadian timber providing naval resources to Britain, who's access to Baltic forests was blocked during the Napoleonic Wars.⁴ Similarly to the US, increasing European immigration and industrialization “accompanied an insatiable hunger for Canadian lumber and the notion that its forests were endless continued well into the nineteenth century.”⁵ In part, it was this appetite for resources in relation to the perpetuation of industrialization that led to the westward expansion of British and American colonial interests. It was also this movement that ignited a sense of

threat for the conservation movement. As Gene Namkoong explains, the “common enemy was the quickening pace of destructive logging that had decimated the forests of the eastern United States [and Canada] and threatened the rest of the country.”⁶

Notes:

1. In the epic of Gilgamesh, Gilgamesh, king of Uruk, represents man as separate from the world outside of civilization which is symbolized in his part-animal companion, Enkidu.
2. Gene Namkoong, *The Misunderstood Forest* (Victoria: BC Ministry of Forests and Range, 2008), 99.
3. Ibid., 57.
4. Susan Herrington, “The Forests of Canada: Seeing the Forests for the Trees,” in *Managing the Unknown: Essays on Environmental Ignorance*, ed. Frank Uekötter and Uwe Lübken (Oxford: Berghahn Books, 2014), 55.
5. Ibid., 55.
6. Namkoong, 54.

Fig. 4: History of Forest Narratives (Udal, 2019)



A History



Fig 5: View of Tutocanula Pass Yosemite California, Carleton Watkins (<https://commons.wikimedia.org/>, n.d.)

of Conservation

Despite its different environmental context, the history of the preservation movement in North America was born out of the philosophical lineage of romanticism in Europe. Cartesian ways of understanding the world had been a central backbone to the modern era in Europe, categorizing, rationalizing and separating humans as an extra-natural entity in the world. It was this framework that allowed for much of the scientific knowledge that we attribute with the modern era today. However, the massive societal and environmental shift that it incurred, particularly as a result of urbanization and industrialization, presented pause for some European thinkers and artists who found distaste in this changing world and lamented a pre-modern past. Romantic poets, artists and writers portrayed a vision of nature they termed *the sublime*, whereby emotional responses to the power and grandeur of the world outside urban or pastoral life was meant to strike its viewer with a considerable emotional-spiritual

response.¹ When translated to the North American context, alongside ideas of manifest destiny, rugged individualism, and the dramatic landscape, the philosophy of Transcendentalism, expressed in the writings of Ralph Waldo Emerson and Henry Thoreau, took European Romanticism and gave it a particularly American angle.² It was both the intellectual context of North America as well as the physical landscape itself that worked to formulate what would become a uniquely American outlook towards conservation.

As Gene Namkoong, former head of the Department of Forest Sciences at the University of British Columbia (UBC) explains in his book, *The Misunderstood Forest*, it was this context that allowed for the establishment of what would become the segregated land-use norm that continues today. Both contemporary resource extraction and preservation practices were built from a belief that the

natural environment was God’s gift to man with the understanding that humans were a separate and distinct entity.³ A shared concern for rapid deforestation prompted two conservationist camps to emerge, one headed by John Muir, father of the American National Parks movement and Founder of the Sierra Club, and the other by Gifford Pinchot, an advocate for forest management practices and eventual chief of the United States Forest Service. While Muir’s vision for a stable American landscape looked to what he saw as a past golden era, Pinchot’s looked to a future of sustained use.⁴

These two ideas about nature – one revered for its spiritual value to humans, the other for its economic value – has persisted. The resource argument has largely won out, however not without challenge and some accommodations made to those seeking conservation for spiritual means. Despite their shared history of conservation, this leaves us in the current situation that we are in today. As Namkoong, explains, “The hope in the United States then, as it is in British Columbia today, was that segregated land use could achieve a national peace by allowing each philosophy its own piece of

land.”⁵ Despite this, conflict has ensued between the two camps alongside multiple other voices and interests. He goes on to explain, “unfortunately, the human conflicts are based on deeply held but rarely examined beliefs and thus are not subject to easy solutions.”⁶

The field of conservation has a unique opportunity to highlight this dichotomy and present different narratives about human interaction with the forest landscape on Vancouver Island. The following section looks at the concept of cultural landscapes within the field of

conservation as a framework, albeit one in need of critique, to address this issue.

Notes:

- 1. Donald Kagan, Steven Ozment and Frank M. Turner, The Western Heritage, ninth edition (Upper Saddle River, NJ: Pearson Prentice Hall, 2007), 649.
- 2. Namkoong, 74-77.
- 3. Ibid. 68.
- 4. Ibid., 65.
- 5. Ibid., 68.
- 6. Ibid., 15.

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Fig 6: Adapted from John Muir in 1907 (Wikipedia, n.d.)

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Fig 7: Adapted from President Franklin D. Roosevelt and Gifford Pinchot (USDA Forest Service, 1931)

Cultural Landscapes

USE IN CONTEMPORARY CONSERVATION PRACTICE

The term “cultural landscape” refers to the interaction between groups of humans and their environments. This interaction is understood as not only physical, but also as psychological and symbolic whereby meaning and association equally indicates relationships between humans and the landscape.¹ The term is generally attributed to human geographer Carl O. Sauer from the University of Berkeley, although it was first introduced by German geographer Otto Schüller and expanded upon in the cultural relativist work of anthropologist Franz Boas.² In his 1925 article “The Morphology of Landscapes” Sauer’s definition reads: “The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the

“The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is the medium. The cultural landscape is the result.”

Carl O. Sauer, “The Morphology of Landscapes,” 1925.

natural area is the medium. The cultural landscape is the result.”³ Since then, the term has widely been adopted by academics and practitioners who seek to understand the relationship between human cultures and the landscapes they operate within. Specifically, the cultural conservation community in much of the Western world has taken on the term as its primary language to identify and discuss landscapes deemed historically and culturally significant. This adoption began in the early 1980s, coinciding with a movement within international conservation organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Council on Monuments and Sites (ICOMOS) to include landscapes

within their breadth of practice.

This shift was born out of the intention of the 1982 Florence Charter on Historic Gardens to include historic gardens as monuments to be conserved. Within a few years, larger rural areas, such as the Lake District in the United Kingdom, began to be proposed as World Heritage Sites.⁴ Then, in 1992 the World Heritage Organization officially adopted the term becoming the “first international legal instrument to recognize and protect cultural landscapes.”⁵ This movement to include landscapes within the tradition of architectural and monument conservation highlights a shift in conservation philosophy away from the consideration of singular objects towards larger and more

dynamic spaces. This effectively opened the door for a much more complex reading of heritage and culture within the realm of conservation, and blurred the lines between nature and culture, humans and non-humans.

The inclusion of cultural landscapes as heritage sites has revealed issues around classification and designation. The World Heritage Committee describes three categories of cultural landscapes: designed, evolved, and associative. While designed and evolved cultural landscapes exist at the intersection between individual or groups of humans and their physical transformation of the landscape, those categorized as associative may have little to no evidence of material intervention.⁶ Their heritage value therefore exists in the meaning that is ascribed to those landscapes and the elements within them by a particular cultural group. As outlined by Australia ICOMOS at the Asia-Pacific Regional Workshop on Associative Cultural Landscapes in 1995, “these may be physical entities or mental images embedded in a people’s spirituality, cultural tradition and practice. The attributes of associative cultural landscapes include the intangible, such as the acoustic, the kinetic and the olfactory, as well as the visual.”⁷

In Canada, cultural landscapes are used as the primary unit of heritage landscape conservation. According to the *Standards and Guidelines for the Conservation of Historic Places in Canada*, the primary document used to assess heritage sites and their value, cultural landscapes are defined as “any geographical area that has been modified, influenced or given special cultural meaning by people, and that has been formally recognized for its heritage value.”⁸ It supplies its user with eleven subsections to evaluate a cultural landscape including: *evidence of land use, evidence of traditional practices, land patterns, spatial organization, visual relationships, circulation, ecological features, vegetation, land forms, water features, and built features*.⁹ These categories provide the framework for investigating a landscape’s heritage value and effectively guide the process of inquiry for Canadian heritage practitioners operating in landscapes.

While the adoption of cultural landscape ideas in Canada are part of an international movement for cultural preservation to include natural systems, historically, heritage conservation has largely been used to communicate anthropocentric historical narratives – primarily that of a dominant ruling group – or to protect areas for their economic benefit. The

setting aside of land for ecological preservation has been a component of conservation since the impetus of the National Parks movement in the early 1900s, however this was, and largely has continued to be, built on an assumption of nature as an entity separate or outside of human culture. The concept of cultural landscapes is a shift towards a more integrated recognition of human’s place within nature and, in perhaps its most effective form, helps to highlight the assumptions that underly our current perspective of alienation. Admittedly, the result is often the opposite whereby in its most nefarious form, conservation works to normalize and reinforce existing hegemonic power structures without question.

Notes:

1. Ken Taylor, Archer St Clair and Nora J. Mitchell, ed., *Conserving Cultural Landscapes: Challenges and New Directions* (New York: Routledge, 2015), 2.
2. Taylor, 3.
3. Carl Sauer, “The Morphology of Landscapes,” in *Land and Life: Selections from the Writings of Carl Otwin Sauer*, ed. J. Leighly (Berkeley: University of California Press, 1964), 315.
4. Julian Smith, “Landscape and Cultural Landscape”, (Queenston, ON: Willowbank Centre for Cultural Landscape)
5. “Cultural Landscapes,” The World Heritage Committee, <https://whc.unesco.org/en/culturallandscape/#1> (accessed December 9, 2019).
6. “Operational Guidelines for the Implementation of the World Heritage Convention,” Annex 3, UNESCO (2019), 83.
7. *The Asia-Pacific Regional Workshop on Associative Cultural Landscapes: A report by Australia ICOMOS to the World Heritage Committee*, April 27-29 1995, <https://whc.unesco.org/archive/cullan95.htm> (accessed December 9, 2019).
8. Canada’s Historic Places, *Standards and Guidelines for the Conservation of Historic Places in Canada: A Federal, Provincial and Territorial Collaboration*, Second Edition (2010), 49.
9. Ibid., 50.

Cultural Landscapes:

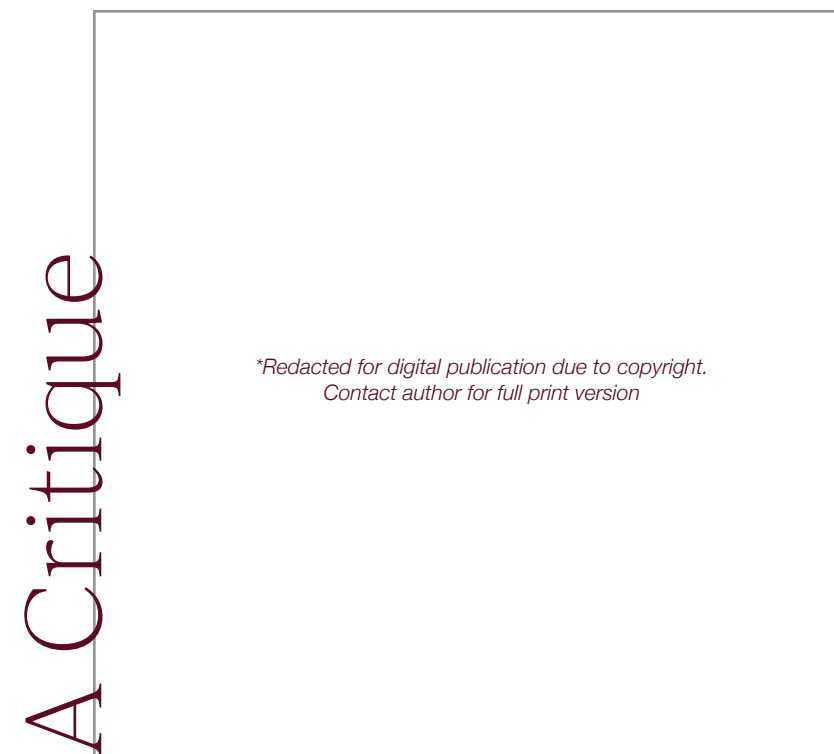


Fig 8: Adapted from *East Creek Logging on Vancouver Island*, TJ Watt (<https://sierraclub.bc.ca>, 2016)

It is my argument that despite having a long and problematic history, conservation is a tool that can allow us to see our societal values, beliefs and mores as well as the lineage of their conception. This requires a radical self-reflexivity within the practice of conservation and a commitment to highlighting narratives, systems and structures that are currently suppressed. The cultural landscape approach provides a useful framework for doing this as it has the potential to highlight flows and intricacies at a landscape scale and creates room for more extensive readings of meaning to be accessed, particularly because of its inclusion of associative values within its breadth. In order to perform conservation in this way, the practice needs to be expanded beyond the realm of policy and guidelines and find form in the creative expression of landscape architecture. Similarly to the way in which architectural preservationists like Jorge Otero-Pailos are using the preservation practice and techniques to

comment on the relationship between buildings and their environments, landscape architects should use the framework of conservation, a field in which they already operate and is a central force in their legitimacy as a profession, to make visible the complex relationships that define cultural landscapes.

The following critiques are meant to both challenge and contribute to the existing guidelines for the historic preservation of places in Canada and provide landscape architects with an expanded toolset to comment on the cultural landscape they are operating within.

1

Rather than looking at cultural landscapes as sites where culture is the agent and nature is the medium, the non-human components of the environment should be understood as agents that similarly work to impact and shape human culture. The site specificity of a cultural landscape is as much the product of the natural condition within which a culture exists as is the human culture itself.

2

The history and legacy of conservation should be a central theme made visible in contemporary conservation projects. Conservation is only useful as social commentary if it is self-reflexive.

3

Sensorial relationships beyond the visible should be included as character defining elements. Sounds (such as the presence of birdsongs or the sound of passing cars), scents, tastes, textures, as well as the variety of other ways humans navigate their environment should be looked to as elements intrinsic to a cultural landscape. How do those elements shape human relationships to the landscape? How do those sensations bring us into contact with the beings, processes and practices intrinsic to the landscape?

4

Vegetation and other non-human organisms should be considered stakeholders and looked at as a community rather than individual objects on the site. Rather than seeing these beings and processes simply as either 'Vegetation' or 'Ecological Features,' the entirety of the ecological system – the interactions between various actors – needs to be considered as that which gives the cultural landscape a particular character. For instance, in a forest, the soils, fungal networks and animals in that system are as intrinsic to the existence and feeling of that place as the dominant tree species.

5

Cultural landscape conservation should be considerate of past as well as current ascribed meanings across various stakeholder groups. Although multiple readings can be both complicated and sites of tension, it is this complexity that presents opportunities for dialogue. Multiple narratives and values must be simultaneously represented and navigated.

6

Multiple readings of a cultural landscape should be represented. Whether it is perceived of as a single cultural landscape with multiple interpretations or several overlapping cultural landscapes with a common environment, this spectrum must be captured and discussed.

7

Ecological and cultural conservation must be practiced in tandem. Environmental conservancy must recognize the cultural context to its implementation, while cultural heritage must understand how ecologies are intrinsic to the culture of place.

8

The small, fragmented areas that we conserve don't begin to cover the expansive and multiple landscapes that support particular ecosystems and the species within them – therefore, conservation is not expansive enough. It exists on the periphery of our attention, directed only in places of small concession to larger processes of extraction. It becomes memory, not practice; past, not present. Cultural landscape conservation should be considered and implemented at multiple scales that extend beyond a singular site.

The critiques above are based on analysis of the aforementioned 'Cultural Landscapes' section of the *Standards and Guidelines for the Conservation of Historic Places in Canada*. With the intention to apply a cultural landscape approach to the issue of conservation and forestry in British Columbia, they are meant to provide further guidelines for landscape architectural designs to address the issue. In addition to expanding the ways in which cultural landscapes should be analyzed, these critiques also intend to expand the understanding of who they are for and how projects can speak to the greater issues that the landscape exists within, shapes, and is shaped by. They are also intended to widen the scope of conservation landscape architecture practice to include creative participation and design.

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Fig 9: Adapted from East Creek Logging on Vancouver Island, TJ Watt (<https://sierraclub.bc.ca>, 2016)

Precedents

GROUNDING DIASPORA: NEGOTIATING
BETWEEN HOME + HOST,
ALISON HIRSCH AND AROUSSIAK GABIELLIAN
STUDIO AT THE UNIVERSITY OF TORONTO, DANIELS
FACULTY OF ARCHITECTURE, LANDSCAPE + DESIGN
2013.

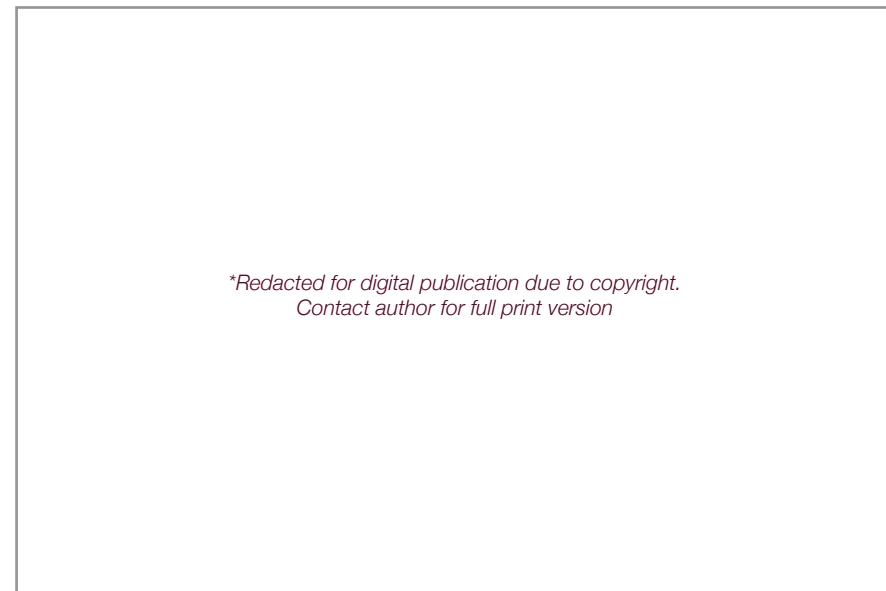


Fig 11: Meter, Jasmeen Kaur Bains (Alison B. Hirsch & Aroussiak Gabrielian, 2016)

In 2013, Alison Hirsch and Aroussiak Gabrielian, co-owners of Foreground Design Agency, taught a studio titled Grounding Diaspora at the University of Toronto's Daniels Faculty of Architecture, Landscape and Design School. The studio asked students to examine Jamaica Bay in Queen's, New York as a site of tension between the National Parks Service,

who's mandate is to protect the Bay's ecological integrity, and local Guyanese residents who use the bay as a space for cultural ritual and expression. While the salt marsh of the site has been subject to significant ecological challenges due to its urban context, the Indo-Caribbean practices of water rituals and the adoption of the bay as a "metaphorical Ganges"

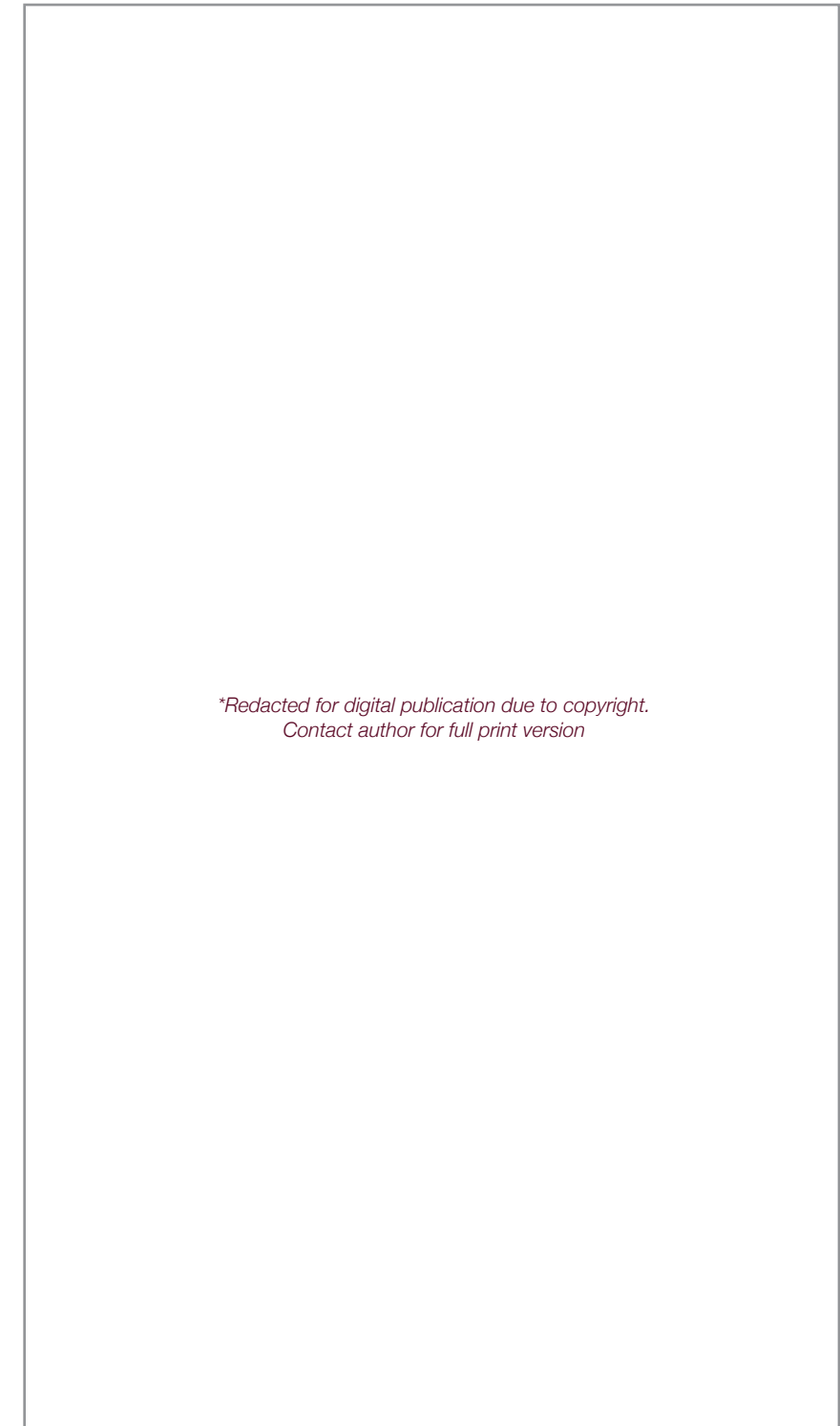


Fig 12: Tactical Deployments, Jasmeen Kaur Bains (Alison B. Hirsch & Aroussiak Gabrielian, 2016)



Fig 13: Meter, Benjamin Matthews (Alison B. Hirsch & Aroussiak Gabrielian, 2016)

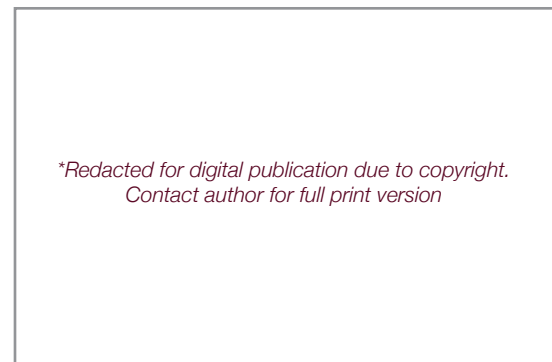


Fig 14: Structural components of the hybrid system, Benjamin Matthews (Alison B. Hirsch & Aroussiak Gabrielian, 2016)

have become a rubbing point between the seemingly opposing agendas of ecological and cultural conservation. The goal of the studio was to gain a deeper understanding of “diasporic heritage and [question] the relationship of place and cultural identity in a world of mass ethnic transplantation.”¹

Using anthropologist Clifford Geertz’

method of “thick description” of the social and symbolic interactions of a site, the studio presents a method for landscape architects to embrace the multiplicity and heterogeneity of cultural landscapes. This project situates itself to question traditional methods of both heritage and ecological conservation by highlighting that cultural landscapes involve more than simply one community’s interpretation and use

caught in a specific temporal and spatial location. As Hirsch explains,

This site and its conflicting values is perhaps at odds with the objectives of traditional heritage conservation, since it is the contested nature of the landscape that makes it unique and worth studying as a place for potential interpretive intervention.²

Not only is the methodology and framing of this studio a useful precedent for my own project which seeks to understand the complexity and tension between ecological and cultural conservation, its drawing outcomes provide necessary insight into the potential of these questions to materialize in designs. Student’s research and proposals show an engagement with culture and translation of it into a designed landscape that is clear.

While the methodology and research exercises of this studio allowed for a rich interaction with the site and topic, there is an overall lack of engagement with the National Park system as a cultural body. Although both of the above proposals show an understanding of the translation of cultural beliefs and practice into the built environment, I wonder how they would be different if they were offered as opportunities for the National Park to engage in cultural conservation in addition to its ecological interests. From

the cultural landscape perspective that they claim to ascribe to, it seems like a viable fit.

I would also be curious to understand how the Guyanese culture that they are primarily addressing interacts with other cultural agents in the area. In the diasporic situation that is the nature of a globalized world, how can landscape architecture work to address the points of interaction between multiple worldviews and relationships to landscape? Where are the rubbing points? Where do they flow together?

As a precedent, this studio and its resultant research exemplifies how complex cultural landscapes can be addressed and designed for. While more components and stakeholders within the cultural landscape of Jamaica Bay would have better exemplified its current condition, the positioning of the studio within the conflict of ecological preservation and cultural practice provides a good example of this topic as a framework for design.

Notes:

1. Alison B. Hirsch, “Cultural practice and place conflict: Negotiating a contested landscape along Jamaica Bay,” in *Routledge Companion to Global Heritage Conservation*, ed. Vinayak Bhame and Trudi Sandmeier (London: Routledge, 2019), 265.

2. Hirsch, 268.

THE ETHICS OF DUST
JORGE OTERO-PAILOS

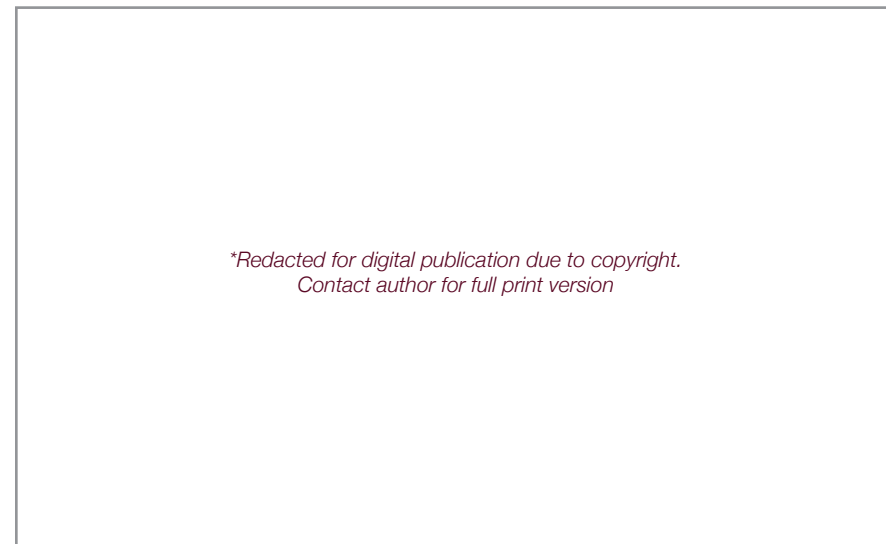


Fig 15: The Ethics of Dust The Ethics of Dust displayed in Westminster Hall in London (Studio Otero-Pailos, 2016)

The series of work titled 'The Ethics of Dust' by Jorge Otero-Pailos has engaged with seven historic buildings between 2008 and 2016 to capture and present their dust and surface pollution. Using the cutting-edge preservationist method of latex as a means of cleaning building surfaces, Otero-Pailos demonstrates how, by presenting these sheets as an object in and of themselves,

new narratives about architecture and preservation practice itself can be expressed. The latex sheets were generally displayed within the building itself, and in various cases were part of art exhibitions such as Manifesta and the Venice Biennale. The buildings that have been impressed and displayed include Mussolini's Alumix Factory in Bolzano (1937), The Doge's Palace in Venice (15th

“Preservation helps to understand, or to at least see change where others don’t see it. It helps us see the role that the built environment plays in cultural change, and if it is true that the built environment is a reflection of our cultural values, then how we relate to that built environment as those cultural values change, is fundamental. What experimental preservation has proposed is that we, as architects, as artists, as people working in the visual field, can help to attune people to certain realities. To really shape our relationship to what we consider to be real.”

Ted Shelton and Tricia Struth, “Architecture and Human Attachment: An Interview with Jorge Otero-Pailos,” in *Journal of Architectural Education* 72, no.2 (2018), 197

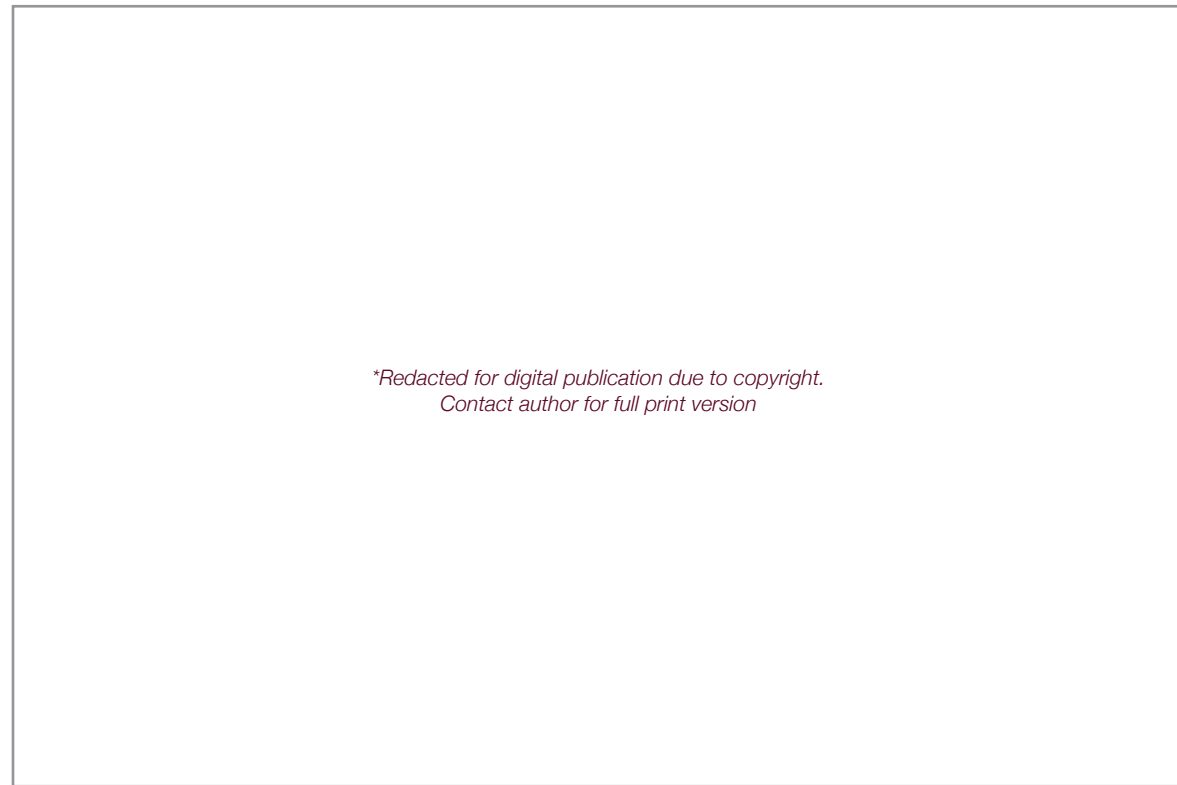


Fig 16: Jorge Otero-Pailos removing latex at the Doge's Palace in Venice, Italy (Studio Otero-Pailos, 2016)

C.), ancient Roman silver mines in Carthago Nova, the plaster cast of Trajan's Column at the Victoria Albert Museum in London (1864), the Maison de Famille Louis Vuitton in Paris (19th century), the Old United States Mint in San Francisco (1854), and Westminster Hall in London (1097).

By highlighting what John Ruskin described as a building's "time stain," Otero-Pailos simultaneously comments on the relationship between architecture and its environment and the act of preservation. Since the industrial revolution, pollution has had an incredible impact on the built environment and the perceived need for its removal has been a

justification for the work of preservationists. The suspension of this pollution in the various Ethics of Dust iterations not only helps us to perceive this impact, but it also brings to light the class, gender and other sociological issues entrenched in preservation.

As a precedent, I am interested in how The Ethics of Dust projects have used the medium of architectural conservation as a means to be self-reflexive as a discipline. How might this principle be applied in the practice of landscape conservation? What methods and practices can be used to communicate new narratives about cultural landscapes and the role of conservationists



Fig 17: The Ethics of Dust iteration at the Doge's Palace in Venice, Italy. (Studio Otero-Pailos, 2016)

within them? How can the imprint of living entities and stakeholders become part of a larger message of conservation?

While the project's latex impressions work to capture the quality and changes of a building material over time, they do not comment on the current uses and processes within the architecture today. Further, displaying the pieces within the buildings themselves works to perpetuate an economic and class divide that is so pervasive in architectural preservation, allowing only those with access to understand the work's commentary. How are similar challenges present in landscape conservation projects? How does a removal

of exclusivity allow for a greater conversation about the ethics of conservation?

The Ethics of Dust project provides a useful precedent for engaging with the field of conservation. The intrinsic nature of the project's medium and methodology within preservation practice give clues to some potential starting points for this kind of commentary within the field of landscape conservation and highlight the power of simplicity in material expression to communicate an idea.

THE BIOLOGICAL DYNAMICS OF FOREST
FRAGMENTS PROJECT
THE SMITHSONIAN INSTITUTE AND THE BRAZILIAN
INSTITUTE FOR RESEARCH IN THE AMAZON, BRAZIL



Fig 18: Aerial Image from the Forest Fragments Project, Richard Bierregaard (<https://news.mongabay.com/2011/08/lessons-from-the-worlds-longest-study-of-rainforest-fragments, n.d/>)

The Biological Dynamics of Forest Fragments Project (BDFFP) is an ecological experiment initiated in 1979 by tropical and conservation biologist Thomas Lovejoy. The project created various one, ten, and one hundred hectare forest fragments within the Amazon rainforest in Brazil to investigate the implications of size and number of landscape parcels in conserving biodiversity in fragmented habitats. The project has resulted in over

600 publications and dissertations, playing a significant role in the ongoing Single Large or Several Small (SLOSS) debate in the field of conservation biology. The project's primary goals were: What effect does fragment size have on the rate of species extinction? Would the local extinction rate eventually slow and halt, equalizing the number of species? How do species interactions and demography change as a result of reduced habitat? The

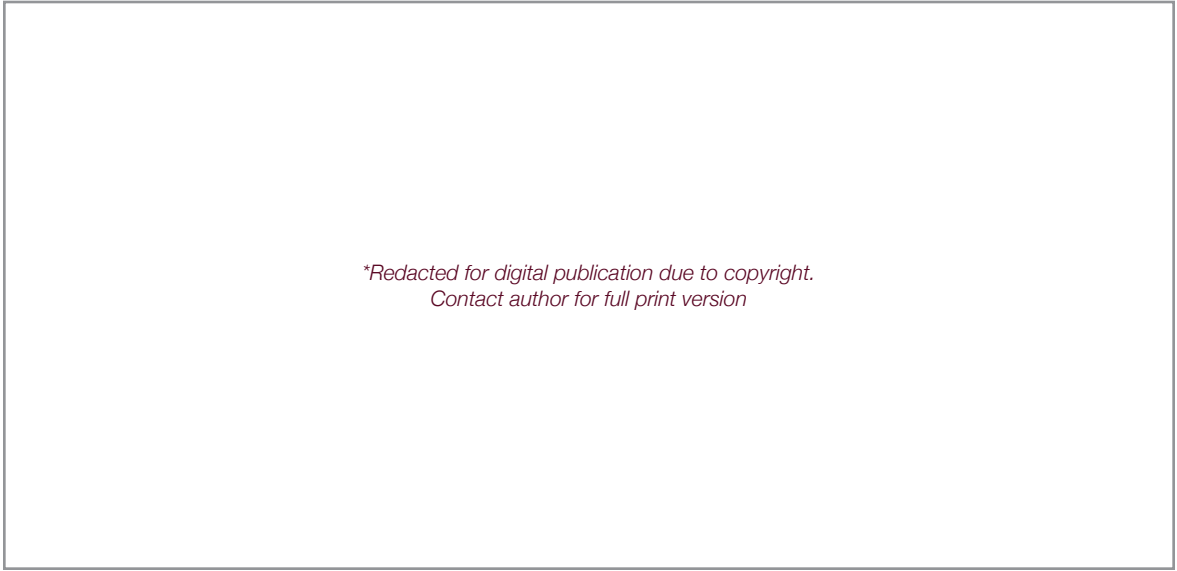


Fig 19: Biological Dynamics of Forest Fragments Diagram (W.F. Lawrence et al., 2011)

project spans approximately 1000km², has a total area of 3,288 hectares, and has been in operation for over 30 years.

The project is an interesting precedent as an experiment in landscape ecology and conservation. Its spatial and temporal span is unique as a project to capture data and understand ecological population dynamics. This is an example of looking at how multiple sites at multiple scales influence and interact with one another. As an approach to conservation, this provides a scale that is representative of the ways in which flows work across a landscape, both culturally and ecologically, where impacts span and move between spaces both spatially and

temporally.

As a precedent, I am interested in this project for its ability to use landscape as a tool for ongoing analysis and understanding. Though located within the field of science, its experimental quality suggests how landscape design might be used as both a space for occupation as well as one for knowledge creation. The fragmentation pattern being studied is strikingly similar to the spatial organization resulting from forestry practices in BC. How might spaces created by logging be understood as a network with ecological, as well as cultural implications? How might that understanding work to create more viable forms of conservation practice?

Vancouver Island

SITE DESCRIPTION

Vancouver Island is a 31,285 km² area located off the west coast of British Columbia, Canada. It is the ancestral territory of the The Kwakwaka'wakw, The Nuu-chah-nulth, Ditidaht and Coast Salish peoples who have been present in the area for time immemorial. The rich diversity of life and landscape types on the Island have created a heterogenous cultural landscape among its Indigenous inhabitants with resources being accessed and used in a variety of ways to support human populations. Since European contact in the late 18th century, these resources have continued to be sites of cultural landscape negotiation and have undergone heavy extraction corresponding with increasing settlement and the province's confederation with Canada. The island's already complex cultural landscape in the pre-colonial period

has been altogether more complicated by settlement from European, Asian, and other cultural groups.

Although Vancouver Island hosts a variety of landscape types, including urban and suburban areas, like the larger Pacific Northwest Context that it is situated within, it is most widely known for its forests dominated by coniferous species. These temperate rainforests are characterized by complex canopy layers, variance in tree stand age, the presence of epiphytes and a dense, shrubby understory.¹ While the majority of Vancouver Island's forests are wet and dominated by western hemlock (*Tsuga heterophylla*), forests in the southeastern portion are drier due to the Island's rain shadow effect and therefore have historically been prone to forest fires which

Area: 31,285 km²

Population: 799,400

Vancouver Island

Programmatic

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Issues

Due to their economic, ecological and cultural value, Vancouver Island's forests and logging practice has been a potent site of cultural landscape negotiation, particularly in light of the colonial conservation narrative described earlier. Multiple stakeholders exist and overlap within this and their varying interests and beliefs likewise intersect. The historic relationship between logging and conservation has continually evolved, adding many layers to the cultural landscape.

LOGGING

Early European resource exploitation was primarily focused on furs and pelts, but later coal mining and forestry came to be the primary means by which the landscape supported its inhabitants. Beginning in large part to support the growth of gold and coal towns in BC, logging began as a pursuit in BC with what seemed like an infinite supply of wood resources in its forests.⁴ By forcibly removing Indigenous people from their land onto reserves and claiming their land as

belonging to the Crown, the BC provincial government has been selling harvesting licences to private companies since 1905 which, in addition to "stumpage fees" – a tax introduced in 1912 paid to the government for every tree felled – has been a primary source of the province's revenue ever since.⁵ This explosion of industry, facilitated by steady progress in logging technology, has resulted in a rapid loss of the island's old growth forests and by 1990, half had been logged.⁶ Efforts were made by the BC government to slow the rate of logging throughout the 20th century including the introduction of an 'annual allowable cut,' which was meant to serve as a regulatory measure against overharvest.⁷ Further, the Forest Practices Code states that all tenure holders are required to submit a Forest Stewardship Plan which includes objectives for old-growth protection. Although this has led to the mapping and establishment of some Old Growth Management Areas (OGMA's), those considered legally binding account for only 30% of the total area.⁸ Despite these measures, logging of old

growth forest on Vancouver Island has continued, including in the Nahmint Valley in the fall of 2019. The Ancient Forest Alliance, a non-profit organization dedicated to forest preservation, estimates that only 9% of high productivity, valley bottom old growth forests remain today.⁹

Though logging practice continues, the secondary industry sector (including milling and trucking) have faced significant decline in the last 20 years. Timber companies are currently able to get better prices for their products overseas leaving a gap in the creation of value-added products locally. While some blame the BC government's strict environmental regulations for the loss of local industry, others believe the problem lies in the allowance of raw log shipments. In any case, workers in industry towns throughout the province are unhappy with the current situation. On September 26th, 2019, the same day as the climate action protests in Vancouver, hundreds of logging trucks drove into the city to protest the current state of BC's forestry industry.

PRESERVATION

In response to the logging that has occurred, the forests of Vancouver Island have been the subject of significant preservation efforts. Most notable among them is what has come

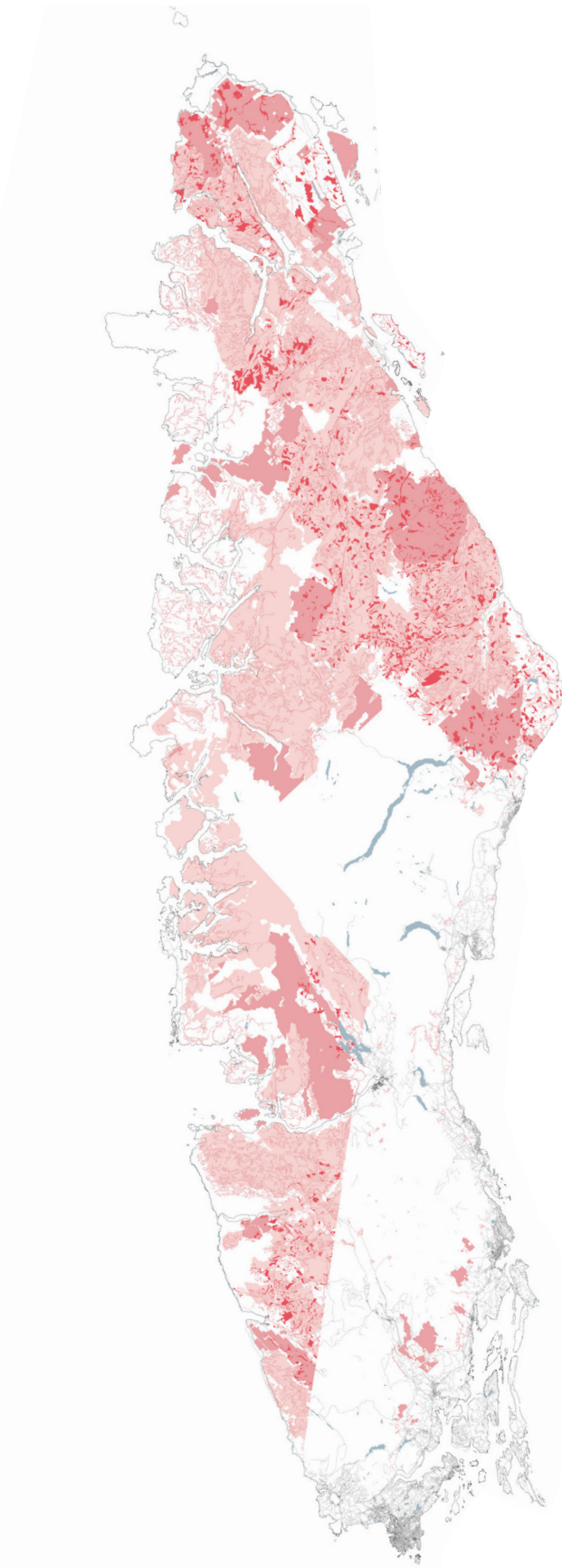


Fig. 21: Logging Infrastructure on Vancouver Island (Udal, 2020)

to be known as the 'War in the Woods' – a series of protests in the late 1980s and 1990s objecting to the logging of old growth forests in the Carmanah Valley and Clayquot Sound. Anti-logging activism of this era can be attributed to the environmental consciousness movement of the 1960s which, alongside a general wave of anti-establishmentarianism, objected to the ecological damage caused by modern technology and land use. The movement's nostalgia for a pre-modern peaceful relationship with the environment in many ways mimicked the language and ideas of its romanticist forebearers. For example, at the Carmanah protests, the camp located deep in the forest was dubbed 'Camp Heaven' while the one next to the logging road was labelled 'Camp Hell.'¹⁰ The protests, particularly Clayquot, received international media attention helping to increase the visibility of Vancouver Island on the global stage and worked to establish an image of a wilderness for the Island. Spatially this is communicated in the Island's parks such as Carmanah-Walbran Park, MacMillan Park, and Avatar Grove which are preserved areas of old growth forest. Increasingly, they have become a landscape typology of cultural and political significance, as well as primary destinations for tourists who want to experience this wild narrative of the coast. However, despite what is often seen as a win for conservationists, these are almost always exchanged for another nearby area to be logged.



Fig 22: Wilderness and tourism infrastructure on Vancouver Island (Udal, 2020)

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INDIGENOUS LAND OWNERSHIP

As previously mentioned, the history of logging and preservation has witnessed the removal and erasure of Indigenous people from the landscape. Only recently have movements been made to grant First Nations more control and access over forests on their traditional territories. In 1985 the Nuu-chah-nulth First Nation filed legal action against the BC government for logging on Meares Island resulting in the formation of the province's Ministry of Native Affairs.¹¹ Since then, individual Nations have continued to advocate for agency in the use and management and protection of forests. Various Nations in BC have established logging companies themselves and are owners of timber farm leases and mills. For instance, the Pacheedaht First Nation outside of Port Renfrew opened a sawmill in 2017 where wood is milled from from nearby tree farm license holdings, some of which is old growth, creating jobs for approximately 10

percent of their community.¹² While some environmentalists lament this decision of the Nation to perpetuate the logging of old growth forests and trees, the Pacheedaht claim to be considering the health and reclamation of these forests on much longer time scales than other logging companies, which is representative in the 2005 launch of their four-hundred year cedar conservation plan.¹³

ÉCOLOGY

Though forests may be understood as culturally important spaces for humans, they also hold value as habitat for the Island's non-human organisms. Many species have become threatened as a result of habitat loss caused by logging. On Vancouver Island, much of the conservation areas registered for habitat protection are specifically addressing the loss of the marbled murrelet, a native sea-bird that only nests in coastal old growth conditions and is red listed under the federal government's *Species at Risk Act*. Programs have also been in place to

address the concern that logging has on larger ecosystems, in particular the impact of stream disruption on salmon and the larger marine ecologies they play a central role within. At a similarly large scale, the work of UBC forest ecologist Suzanne Simard shows the vast communication and nutrient exchanges between plants within forests through fungal networks called mycorrhiza, indicating further complexity within living forest systems.¹⁴ Legislation around biodiversity and ecological impacts of development span multiple governmental scales and many non-government organizations are doing work to address a multitude of issues.

TOURISM AND RECREATION

In addition to parks and nature reserves, a new type of conservation culture has emerged, one that is much less official, but has equally, if not more, marketing and communication surrounding it. This culture takes its mark from its environmentalist predecessors, who also valued the landscape for its recreational

value, using outdoor activity and the image of a particular lifestyle to espouse a vision of landscape. Local clothing, beer and other businesses have used this image as a means to market their products, often alongside narratives of sustainable products and even percentages of sales going towards local conservation efforts. Unlike their forebearers, however, this culture is much less politically active and uses the conservation aesthetic to communicate a commodifiable image. This has played a large role in an increased tourist economy with visitors venturing to previously remote locations like Sombrio Beach and Port Renfrew. One sixty hectare area in Port Renfrew was estimated to receive 85% more income as a tourist destination than if it were to be logged.¹⁵

The relationship between this culture, forestry infrastructure and transportation is also notable. For those outside of industrial resource extraction, the ability to witness and experience remote landscapes has been facilitated by car accessibility. The

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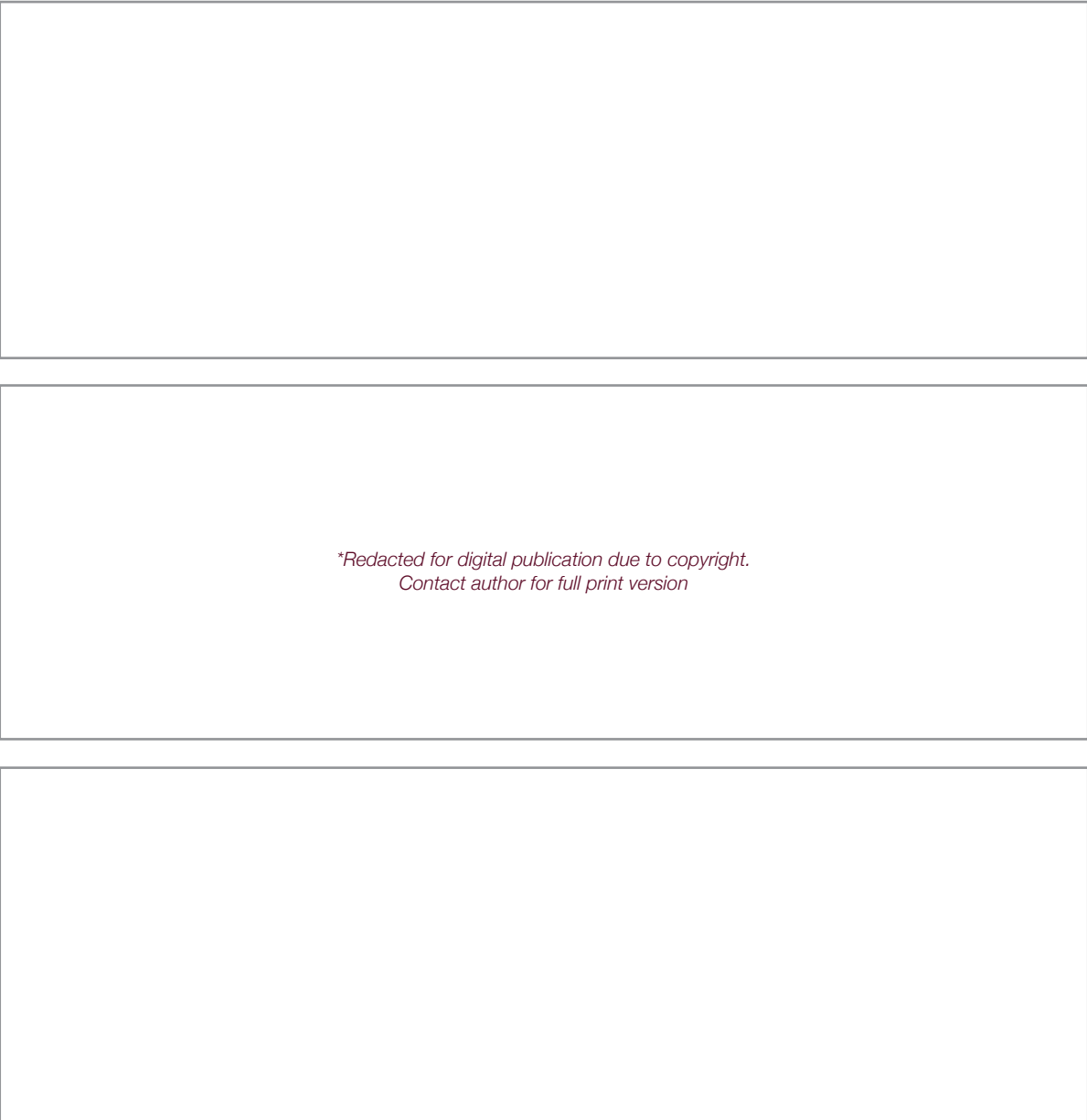


Fig. 25: Photograph from Anian Clothing's website (<http://anianmfg.com>, n.d.)
Fig. 26: Photograph from Tofino Brewing Company's website (<http://tofinobrewingco.com>, n.d.)
Fig. 27: Photograph from Ecologyst (formerly Sitka)'s website (<http://ecologyst.com>, n.d.)

creation of road networks within the network of logging infrastructure has presented access to locations that would otherwise be inaccessible. This has been instrumental in allowing the public to see the impact of industrial logging and can be understood as an important component in the development of a conservationist consciousness.¹⁶ Such accessibility has also facilitated the recreational use of these landscapes for activities such as mountain biking, hiking and skiing as well as dirt biking and shooting. Certain types of vehicles, those able to traverse the rough terrain of logging roads, have likewise also become tools as well as symbols for this cultural landscape interaction.

Conservation, particularly preservation, is a dominant narrative and way of perceiving the Vancouver Island landscape today. Logging and conservation culture reflect the resource-wilderness dichotomy that has become so intrinsic to colonial North American ways of imagining forests and resulted in significant tensions about their value and use. In the age of reconciliation, that agenda is at times both underscored and undermined by Indigenous claims to land rights, depending on the outlook and positioning of a particular Nation at any time. This will continue to play out in political arenas in light of BC's recent adoption of the United Nations Declaration of the Rights of Indigenous Peoples. Together and in conjunction with many other interactions

and relationships with landscape, these multiple readings make for a complex cultural landscape surrounding forests. It is this very complexity, however, that creates a unique opportunity for landscape architects to communicate and help express the political, social, cultural, ecological and economic forces that have and continue to shape this relationship.

Notes:

1. Jim Pojar and Andy Mackinnon, *Plants of Coastal British Columbia: Including Washington, Oregon and Alaska*, (Vancouver: Lone Pine Publishing, 1994), 17.
2. Ibid., 15.
3. Ibid., 16.
4. Harley Rustad, *Big Lonely Doug: The Story of one of Canada's last great trees* (Toronto: Anansi Press, 2018), 57-58.
5. Ibid, 58-61
6. Ibid, 82.
7. Ibid, 86-87.
8. Environmental Law Centre Society, "An Old Growth Protection Act for British Columbia," (Victoria, 2013), 4-5.
9. Ancient Forest Alliance website, <https://www.ancientforestalliance.org/>
10. Rustad, 93.
11. "Forestry and reconciliation: focus on BC," Indigenous Corporate Training Inc., <https://www.ictinc.ca/blog/forestry-and-reconciliation-focus-on-bc>
12. Rustad, 227.
13. Ibid, 229.
14. Ibid, 76-88.
15. Ibid, 223.
16. Herrington, 60.

Next Steps

DESIGN INTERVENTIONS

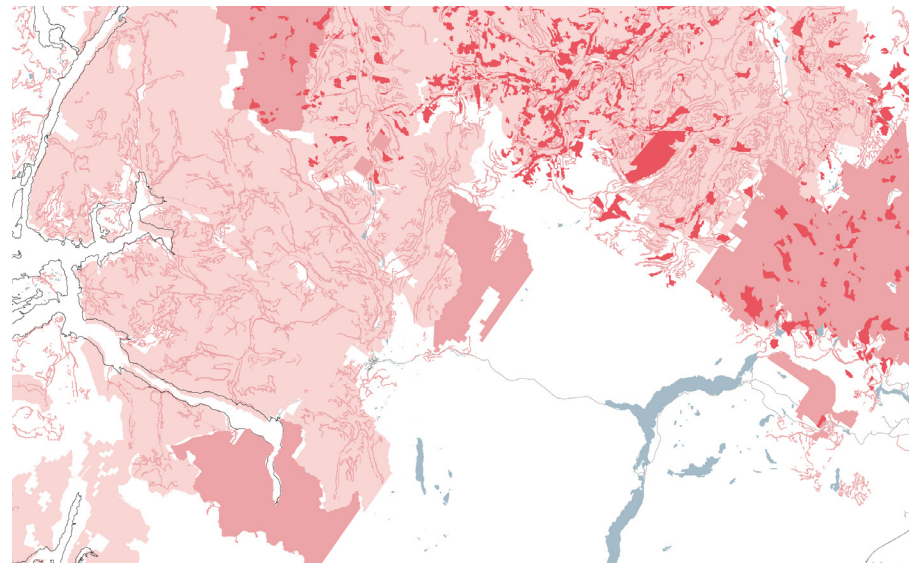


Fig. 28: Zoom in of Logging Infrastructure on Vancouver Island (Udal, 2020)

The research for this project so far has developed as an exchange primarily as literature review on the larger issues of the history and philosophy of forests, conservation, logging and cultural landscapes and then looking at how those issues play out on Vancouver Island specifically. Admittedly, this is a large and complex story spanning political, economic, social, ecological and cultural spheres and in no way can it be fully

addressed though the course of this design research process. However, as I explained earlier, it is possible for the landscape architect to use their skills to highlight these complexities through visualization and propose interventions that promote dialogue and public engagement. Moving forward with this in mind, the next phase of the project will carry out in the following steps.

Ex1: Primary Issue Selection

Identify and visualize the primary issues of conservation, forestry, and cultural communication on Vancouver Island.

Ex2: Cataloguing

Inventory and catalogue the primary tools and processes within the issues identified. This will be expressed through line drawing and collage.

Ex3: Mapping

Using spatial data and information gathered from analysis, map the spatial implications and flows of the issues identified.

Ex4: Site Selection & Analysis

Using the maps created, identify 3-5 sites of importance. Perform a site analysis review including producing scaled drawings in order to visualize necessary site information..

Ex5: Groundwork & Synthesis

Prepare narratives that communicate how these sites fit into the larger issues. Using illustrations and collage, set the stage for community engagement and dialogue with public stakeholders.*

Ex6: Experiments

Use the information gathered to propose 1-3 design interventions that address the issues identified. These will be communicated through models, perspectives and scaled drawings.

*It is understood that within the scope of this project, community engagement is not possible without ethics approval

PROJECTED SCHEDULE

January 6 - 15

Ex.1: Primary Issue Selection

January 16 - 24

Ex.2: Cataloguing

January 25 - February 5

Ex.3: Mapping

February 6 - 19

Ex.4: Site Selection & Analysis

February 20 - 28

Ex.5: Groundwork & Synthesis

February 29 - March 31

Ex.6: Experiments

March 31 - April 10

Drawing, Presentation Preparation

April 17 & 18

Thesis Reviews

End of April

Submit GP II Report

PART TWO: SITE

Site Introduction

CUTBLOCK 7190, BIG LONELY DOUG
__HECTARES, ELEVATION,

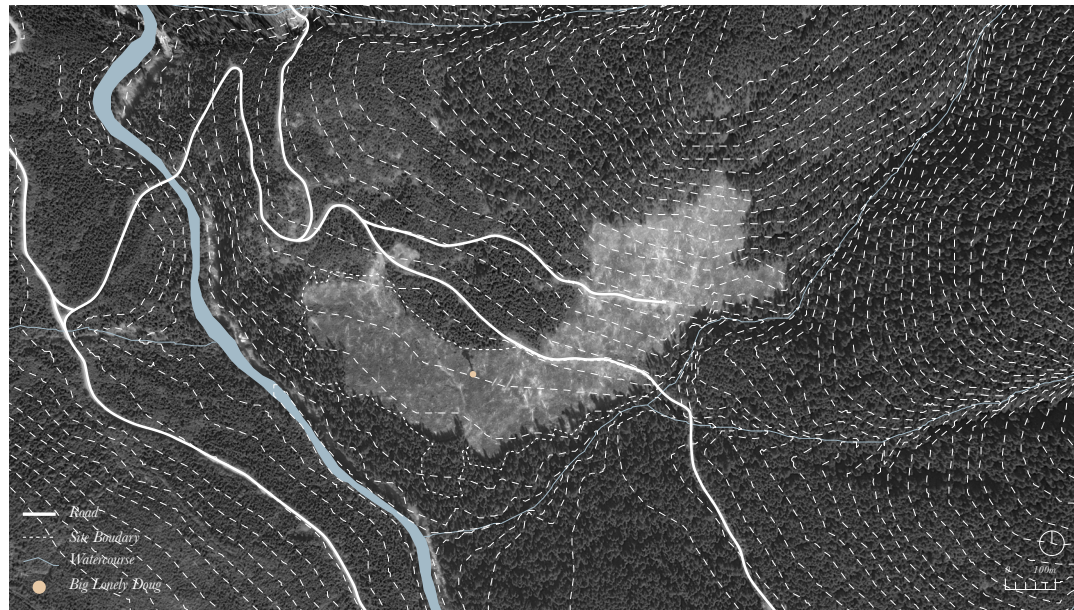


Fig. 29: Current Site Plan (Udal, 2020)

Just outside of Port Renfrew on Vancouver Island's southern west coast sits cutblock 7190. On this site lives a 70m tall Douglas fir tree, which is touted Canada's second largest and was essentially all that was left following the site's clearcutting in 2011. The tree, estimated to be between 600 and 1000 years old, has recently become a kind of cultural phenomenon since it was 'discovered' and 'named' Big Lonely Doug by Victoria based conservation group, The Ancient Forest Alliance, shortly after the site was logged. In

2018, Canadian writer Harley Rustad added to Big Lonely Doug's notoriety in his well-received book by the same name. In it, he describes the complex cultural, political and ecological context which has resulted in this unique and striking site condition.

The site is located on crown land and is accessed via long, bumpy logging roads which are currently maintained by Teal Jones, the Tree Farm License holders for the area. It is one of many cut block sites that pattern



Fig. 30: Cut Block 7190 Site Image (Udal, 2020)

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Fig. 31: Big Lonely Doug, TJ Watt (<https://www.ancientforestalliance.org/>, n.d.)

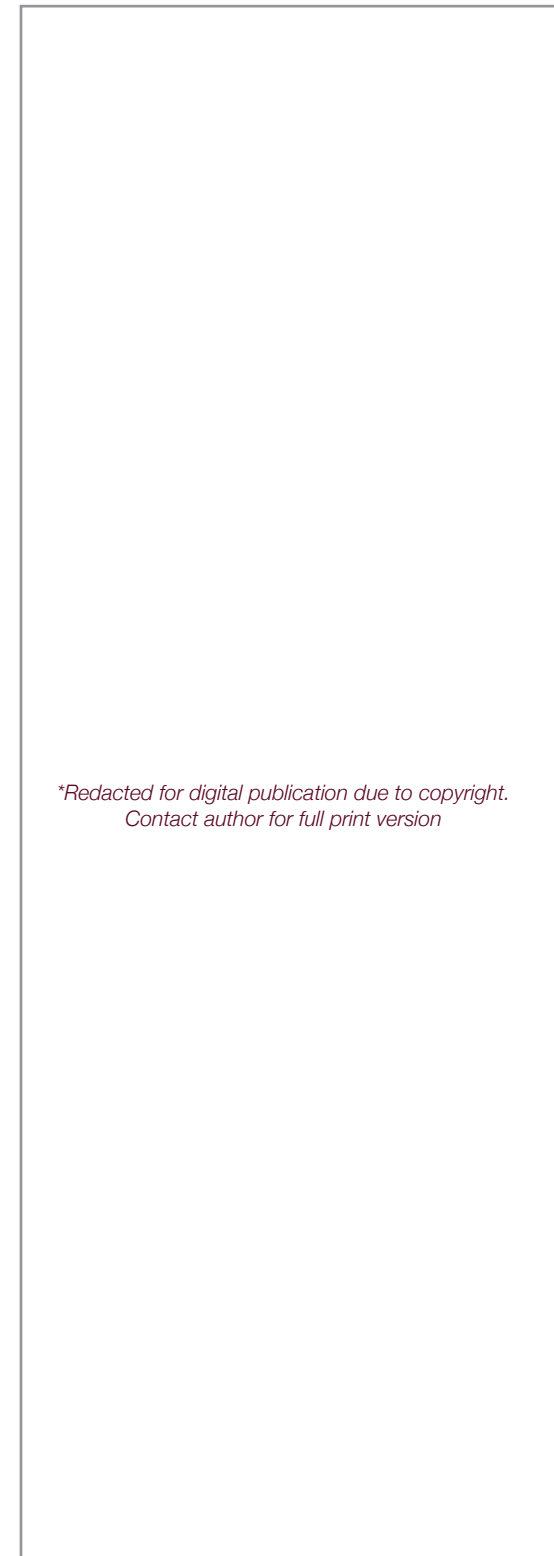
the landscape, all of which are at various stages of re-growth. Some pieces of intact old growth do remain along the banks of the Gordon River due to riparian protection measures. Unfortunately, however, the old growth located just east of the site on Edinburg Mountain is not afforded the same protection and is scheduled to be logged in the next several years.

The juxtaposition of this humongous tree within its clear cut context is a striking example of the wilderness-resource dichotomy that was described in part one of this study. The site's current condition, largely defined by low vegetation and sloping topography, maintain dramatic views to the tree and make visible the impact and scale of industrial logging in this part of the world. The enormity of the stumps and slash that define the uneven ground condition further accentuate the dramatic implications of industrial forestry on the landscape.

As required by BC law, the site was re-planted with conifer saplings following its clearcutting in 2011. As is the case with any tree farm, these species will be tended to until they reach a marketable size (around 40-60 years) when they will once again be harvested and milled for timber. Throughout that process, the grasses, forbs, shrubs, and hardwood trees that currently take advantage of the site's open condition will either be selectively weeded out or left to be shaded by tightly

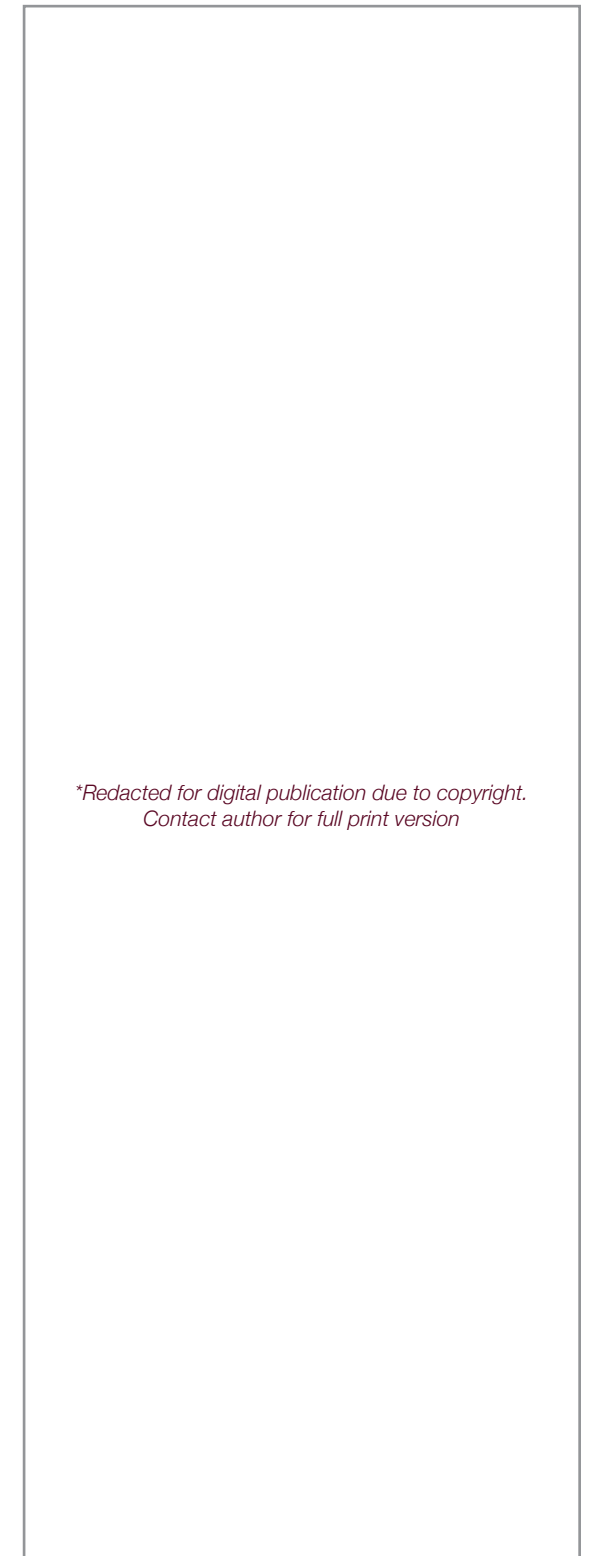
planted growing conifers.

The spatial implications of this type of forestry, and the perspective created by the image made at the site is not only impactful, but also recall a particular representation of the BC landscape. In her work throughout the early 20th century, Victoria based artist Emily Carr described a forest landscape that was quickly transitioning to industrial forestry with sublime and nostalgic tones. This story told by Carr continues today in various representations of BC's west coast landscape working to continually shape a dominant narrative based on contrast and juxtaposition.



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Fig. 32: Big Lonely Doug, TJ Watt (<https://www.ancientforestalliance.org/>, n.d.)



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Fig. 33: Scorned as Timber, Beloved of the Sky, Emily Carr, 1939 (Wikimedia Commons, n.d.)



Fig. 34: Context Map (Udal, 2020)

CONTEXT

A primary reason for the tree gaining notoriety and becoming the icon that it is, is due to the site's proximity to Port Renfrew. The town's economy has been based around logging and fishing since European settlement in the 1800s, but more recently has begun a transition to eco-tourism, largely due to the preservation and marketing of Avatar Grove, a section of old growth along the Gordon River, by the Ancient Forest Alliance. There are now a variety of big trees identified in the area and the town's accessibility from Victoria, its proximity to several parks and hiking trails, and the recent paving of the back road to

Lake Cowichan has resulted in an economic shift in the area.

At the same time, forestry is still very much a living industry in the area. The Pacheedaht first nation, which historically were the owners and inhabitants of this area down to Jordan River, have recently moved closer towards revenue sharing agreements with the BC government for logging practice and have built their own mill to use and profit from. As previously mentioned, the old growth forest on Edinburg Mountain, just east of Big Lonely Doug, has not yet been logged but is scheduled to be in the next several years.

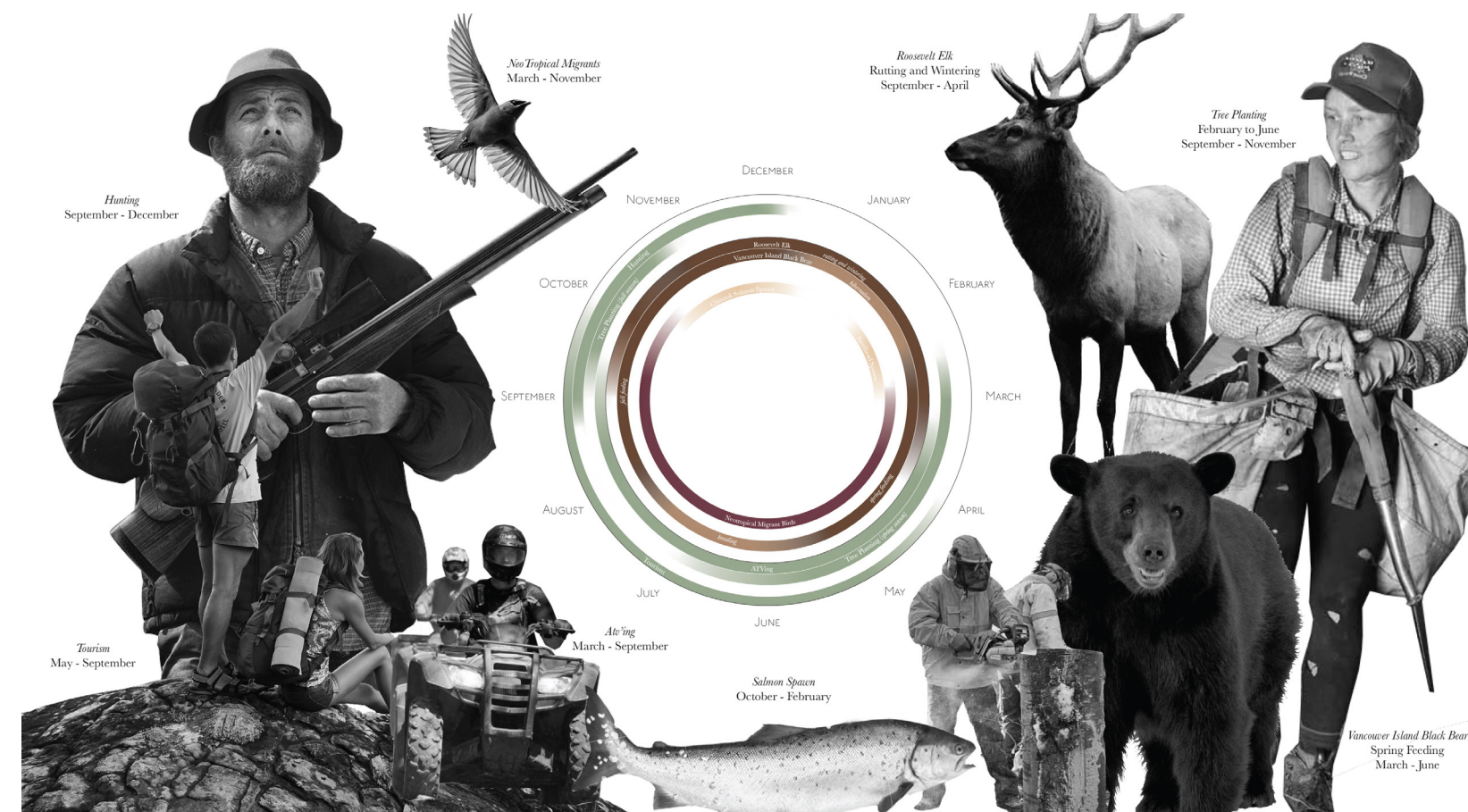
PROGRAM

Looking to this context and the site's different stakeholders, we can start to see how values are reflected in how people use the site throughout the year. Seasonal programs range from tourist activities such as hiking and tree spotting, to hunting and atv'ing by local users, and tree planting by seasonal workers.

These activities are very much a result of the condition that is created in this wet, temperate rainforest landscape and the flora and fauna that similarly live and use the landscape seasonally for their needs and interests. For instance, Vancouver Island black bears feed

on berries and salmon in the summer and fall months, while hibernating in surrounding old growth during the winter. Neotropical migrant birds also make use of the landscape, feeding in open areas and mixed forests in the summer before heading south to warmer climates during the winter months.

Fig. 35: Current Site Program and Use (Udal, 2020)



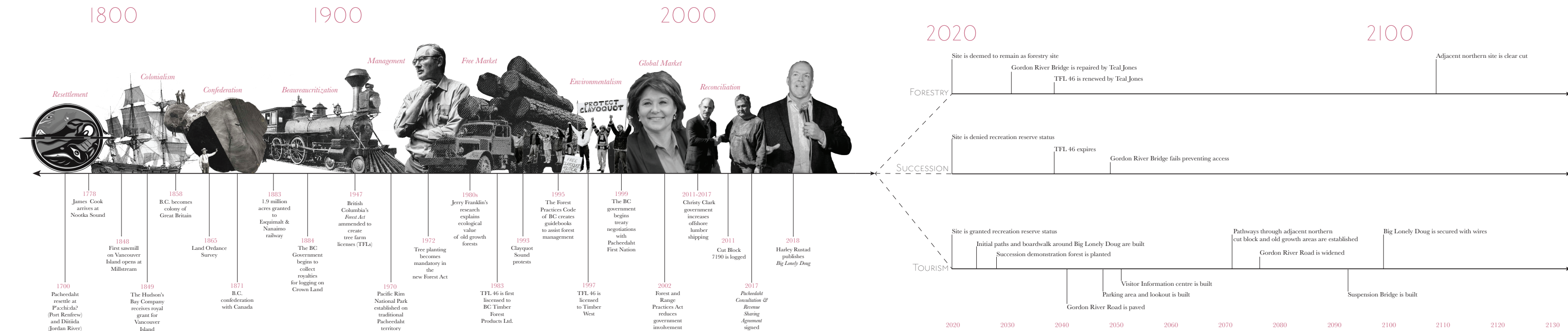


Fig. 36: A History and Future of Forest Values in British Columbia (Udal, 2020)

TIMELINE

In this timeline, we can see that it is over the last 180 years where Vancouver Island has become a colony of Britain and industrial forestry has become such a predominant use of the landscape. With the transition of land into the hands of the crown, more and more regulations have been made to ensure a future yield, albeit one that is also reflective of the interests of British Columbia's public. For example, the increase of management research and implementation in the mid-1900s was largely a response to the environmental protests at Clayquot Sound a few years earlier that made headlines worldwide and shed light on the destructive

logging practices taking place in BC's forests.

Through this short history we see changes in attitudes towards management which are reflected in various political and ideological shifts through time. Consistently, we see a theme whereby conservation responses in various forms work to counter or tame logging interests.

In short, as values shift through time, so do responses to land management. This is an ongoing dialogue surrounding how we should manage our forests and who should be involved in that decision making, both of which are always a result of social movements and current cultural values.

THREE FUTURES

Coming from this context, we might imagine three distinct futures for our site, each representing a different value system in isolation.

Played out here are three imagined trajectories: Industrial forestry, ecological succession, and tourism. As an exercise looking at these futures distinctly, we begin to see how varying values have different spatial implications in the landscape and offer the landscape practitioner a tool to navigate these different values that are all part of this cultural landscape.

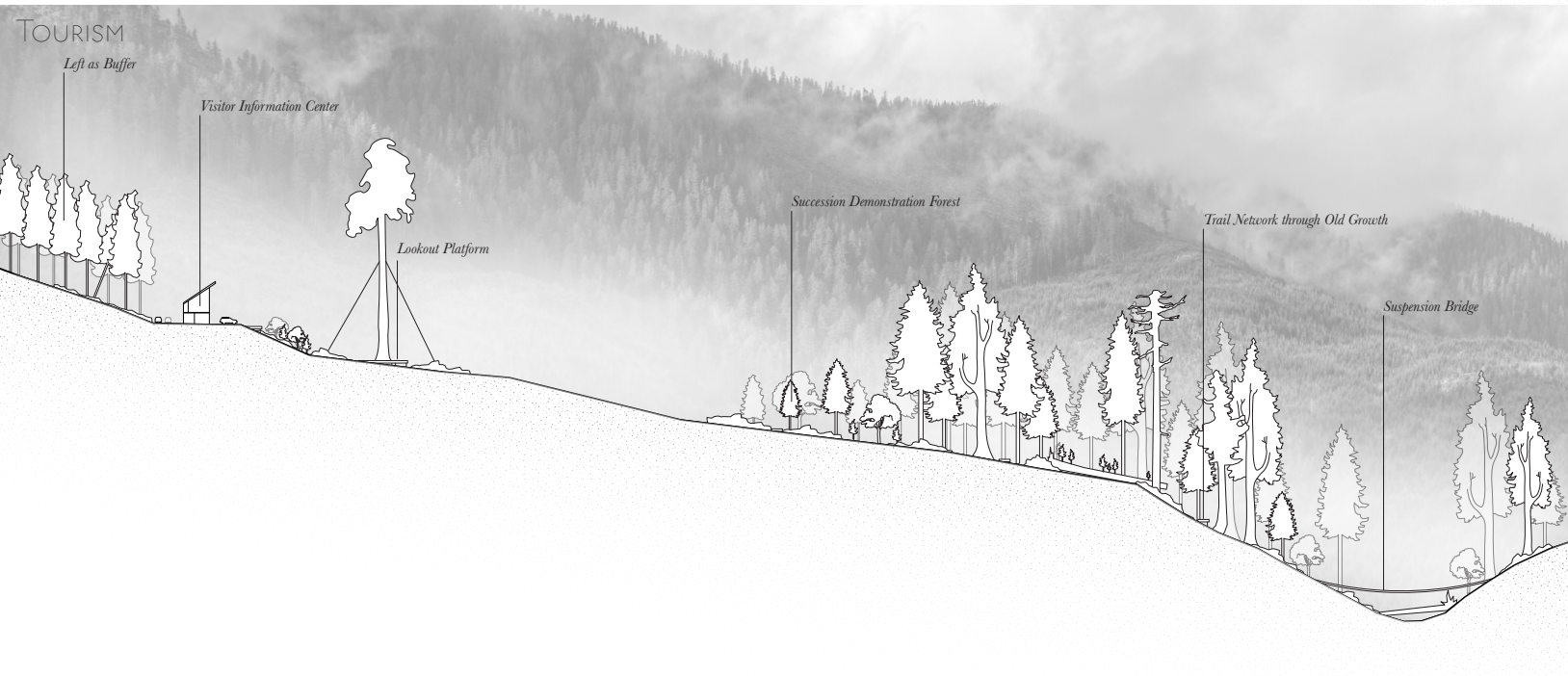
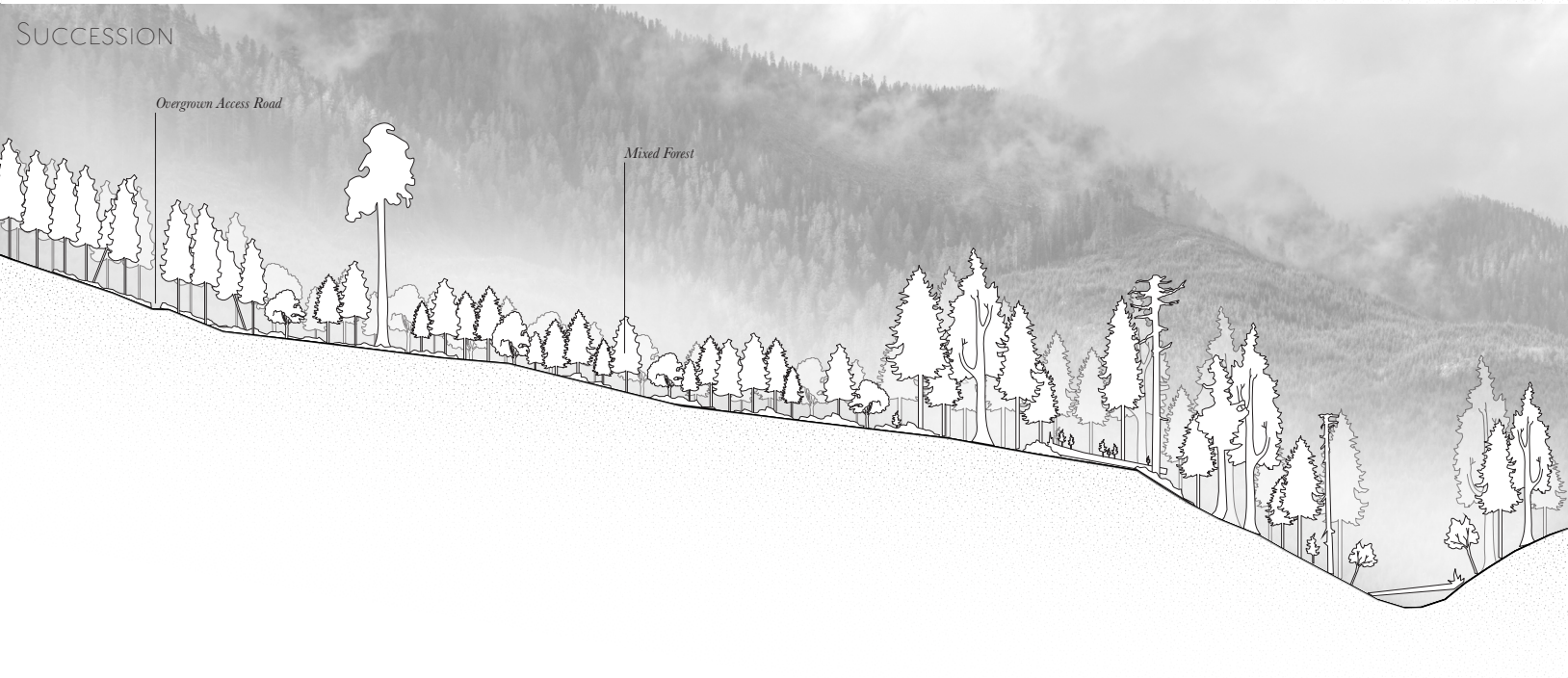
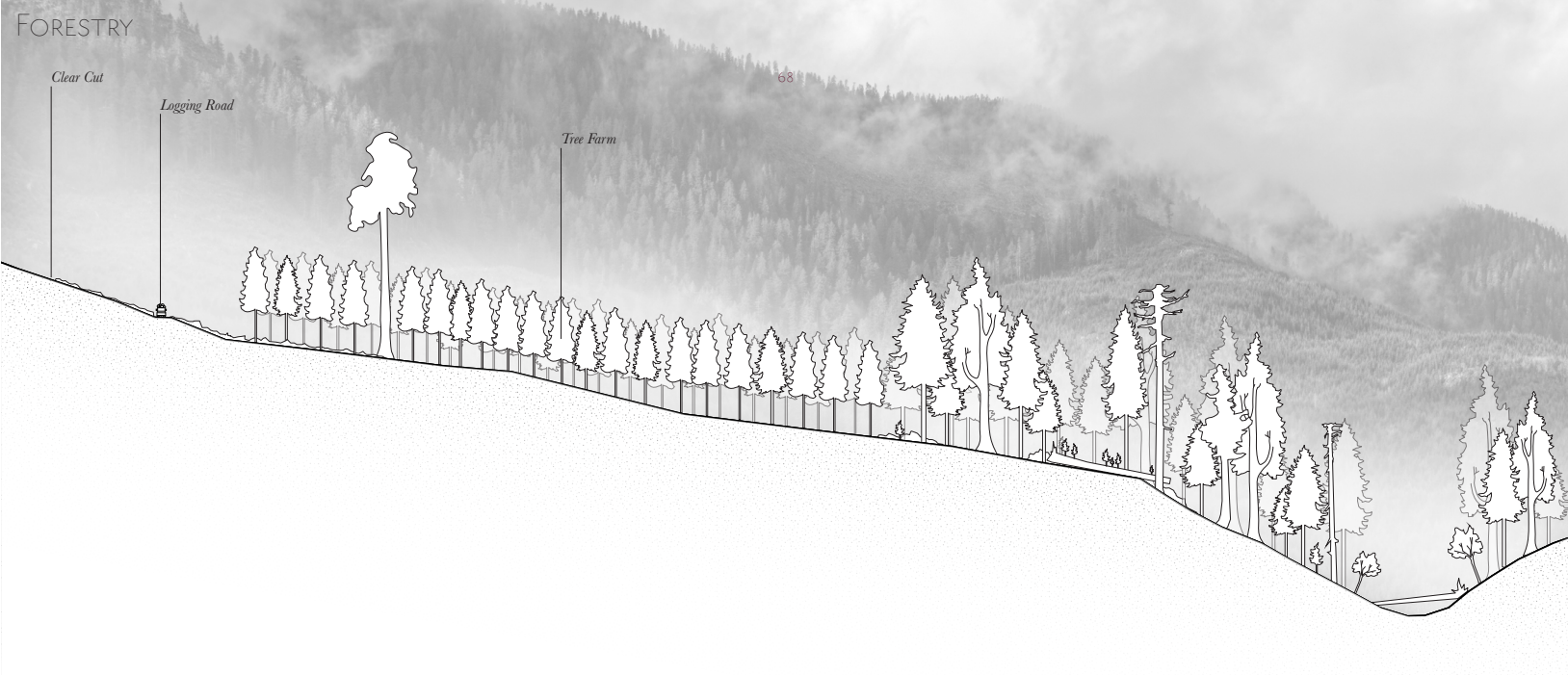


Fig. 37: Forestry: A Future (Udal, 2020)

Fig. 38: Succession: A Future (Udal, 2020)

Fig. 39: Tourism: A Future (Udal, 2020)

FORESTRY

In a future of logging, we imagine that the license for this plantation is renewed and that the site continues to be leased to a logging company for timber extraction. Within the site boundaries we see a homogenous forest regrow which is again logged between 50 and 100 years starting the cycle over again.

SUCCESSION

For succession, the Forest License is cancelled and without funding from forestry companies to maintain roads, the nearby bridge fails preventing access to the site. Grasses and forbs begin to move in and are quickly replaced by early seral species which put nutrients back into the soil and create patches of variability based on the topography and water flows on site. This creates a stratified early seral forest and we see a rise in biodiversity following the initial fall from logging.

TOURISM

With tourism as the driving force, we see the development of the site shift towards the purpose of drawing visitors and creating the conditions for them to see the spectacle that is Big Lonely Doug. The road widens to accommodate cars and a lookout, parking lot, and visitor information centre are built. Pathways are also developed to bring users

up close to the tree and views are kept open to the dramatic landscape. To ensure the old surviving tree doesn't blow down in a sudden coastal windstorm, wires are used to secure it in place and keep Doug upright like a monument. Paths are built through the adjacent forests for hiking and recreation along with a suspension bridge across the Gordon River to attach to the vast hiking network that has been developed throughout the region.

From this exercise we see how different value systems applied to the landscape result in different spatial outcomes. While cultural practices and ideas are shaping the landscape, the landscape is also informing the values and interventions applied to it. In this way, we see how choices made result in different ecologies, cultures and relationships to landscape, reflecting and reinforcing expressions of a cultural landscape.

PART THREE: DESIGN CONCEPT

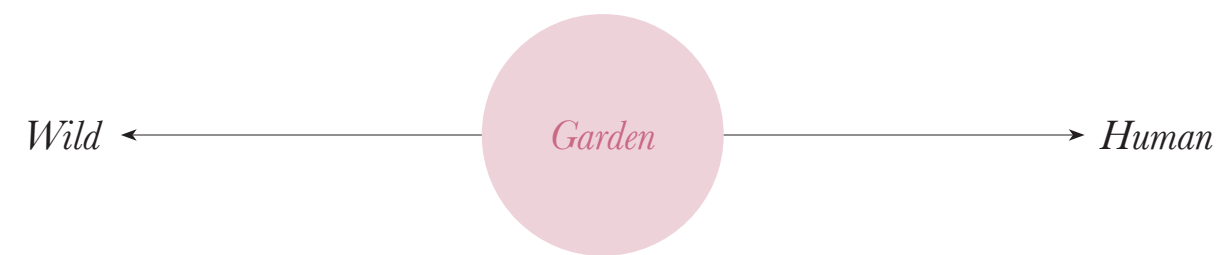


Fig. 40: Gardening Conceptual Diagram (Udal, 2020)

Gardening as Cultural Landscape Conservation

Dennis Cronin was the forestry engineer that wrapped a green strip of flagging tape around Big Lonely Doug marked with 'Leave Tree'.¹ As he walked through what would become the surrounding cut block, he made decisions and choices about the future of the site including where to put circulation routes and which plants would be left based on topography, views, and an affinity for this tree.

In a way, we could argue that what Cronin was doing was a kind of gardening. Within this resource-wilderness dichotomy that defines how many of us think about Vancouver Island and perhaps our world more generally, perhaps the notion of gardening is

closer to how humans actually relate to their landscapes. We make choices based on our values and needs resulting in landscapes that in some cases are unique, sometimes are homogenous, but always are a result of cultures informing and being informed by the landscape and vice versa.

If all of our interactions within the landscape are seen as acts of gardening, how does this change our understanding of ourselves as gardeners?

Notes:

1. Harley Rustad, *Big Lonely Doug: The Story of one of Canada's last great trees* (Toronto: Anansi Press, 2018), 11.



Fig. 41: It's All Gardening (Udal, 2020)



Fig. 42: Gardeners Diagram (Udal, 2020)

“Instead of being limited to a small space that we control, from now on the garden is placed within the limits of the biosphere. There we have a new enclosure.”

Gilles Clement

Writer and gardener Gilles Clement writes: “Instead of being limited to a small space that we control, from now on the garden is placed within the limits of the biosphere. There we have a new enclosure.”¹ Though gardens have traditionally been defined by their boundaries or walls, as any gardener knows, outside influences such as transient seeds and climate are always intrinsic components to the practice. Clement’s new boundary for the garden offers an expanded conceptual understanding of gardens and gardening.

From this perspective, we can also imagine the gardener moving beyond the capacity of the human. Fertilizing, seeding, pest control, weeding and pruning are all ways that animals ‘garden’, moving through spaces defined by their own agency and limitations.

In the process and acts of gardening, relationships with the landscape are created and developed. It isn’t a stagnant project, but rather one that is always changing, developing and resulting in new cultural and environmental outcomes.

Notes:

1. Gilles Clement, *The Planetary Garden and Other Writings*. Translated by Sandra Morris (Philadelphia: University of Pennsylvania Press, 2015), 80.

Aesthetics

Views

Life

Senses

Resource

Timber

Food

Monument

Program

Recreation

Work

Livelihood

At our site we see some central character defining elements that give it value for both humans and non-humans.

Its aesthetic quality is defined by the striking views, the life within it, and the sensorial experiences of being within the space. The

site also holds values as a resource, including timber, food from the early seral plants, and the monument of the tree as a cultural resource. Finally, it has programmatic value as a site for recreation, labour, and living off the land.

Fig. 43: Character Defining Elements (Udal, 2020)

PART FOUR: DESIGN

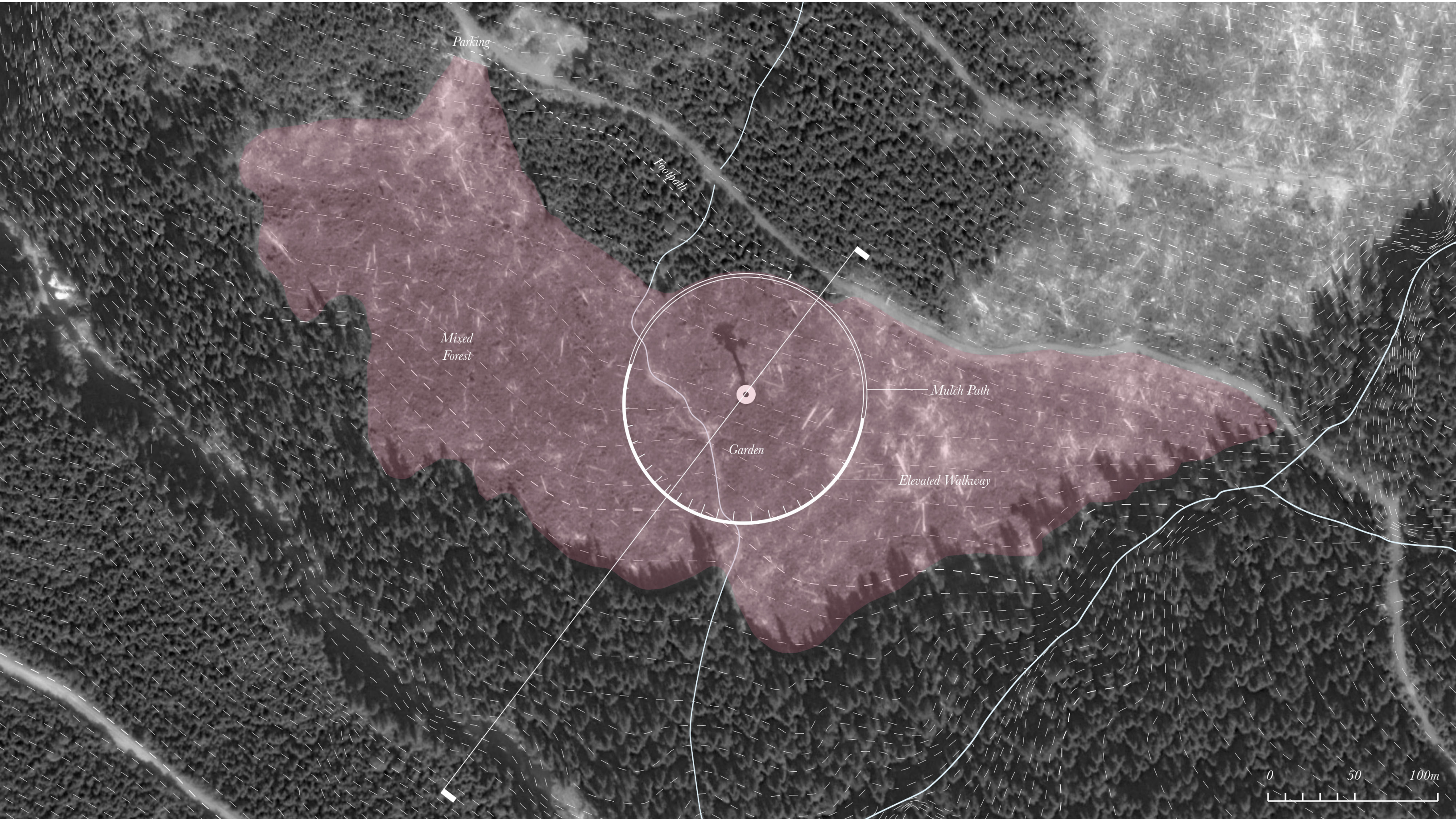


Fig. 44: Garden Site Plan (Udal, 2020)

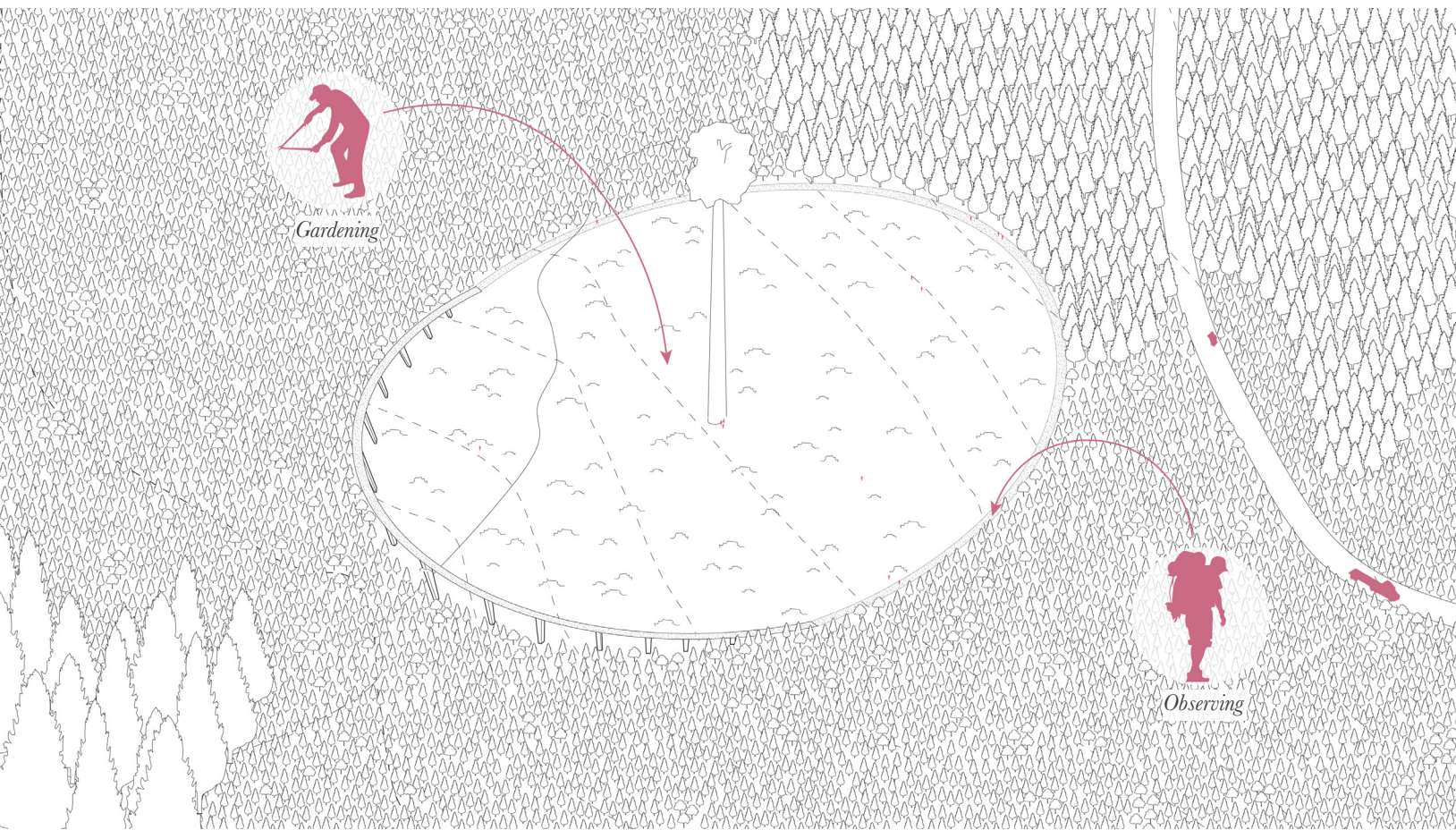


Fig. 45: Garden Axonometric (Udal, 2020)

SITE DESIGN

Based on the aforementioned character defining elements, the following design proposes a garden in the area surrounding Big Lonely Doug.

The garden is outlined by a circular path that differentiates the garden from the surrounding condition which will become a mixed forest when it grows back. The garden has a radius of 70m, mirroring the height of the tree, creating a 140m wide open and maintained area which speaks to the value of Big Lonely Doug as a cultural resource and impetus for this space becoming culturally significant. When the tree eventually dies, this site's dimension allows for the tree to fall within the created space, albeit in an unknown direction, meaning that it can continue to be defined by the scale and dimension of the tree itself.

Looking at the site from a three dimensional perspective, we see that half of the path is on the ground level while the other half takes the form of an elevated walkway, transitioning

around the 120m contour. Stepping off from the sloped ground level, the elevated walkway lifts the user up onto a flat plane to enjoy a view and understanding of the site's geometry and spatial relationships. This experience provides a means to look back at the site, rather than simply outwards. This perspective will be most vivid when the surrounding forest grows in and views outward are blocked by the forest edge.

While the path defining the garden's physical edge is primarily directed towards a program of experiencing and observing the scale of the tree and site, the inner garden is dedicated to the process of gardening. Members of the local community will be hired to perform the majority of the work, however this does not stop visitors from entering and interacting with the garden as they come. Entry and movement within the garden area is encouraged, but paths are not planned. Rather, circulation will be left to the gardeners, both hired and otherwise, to create and recreate as they see fit.

MAINTENANCE

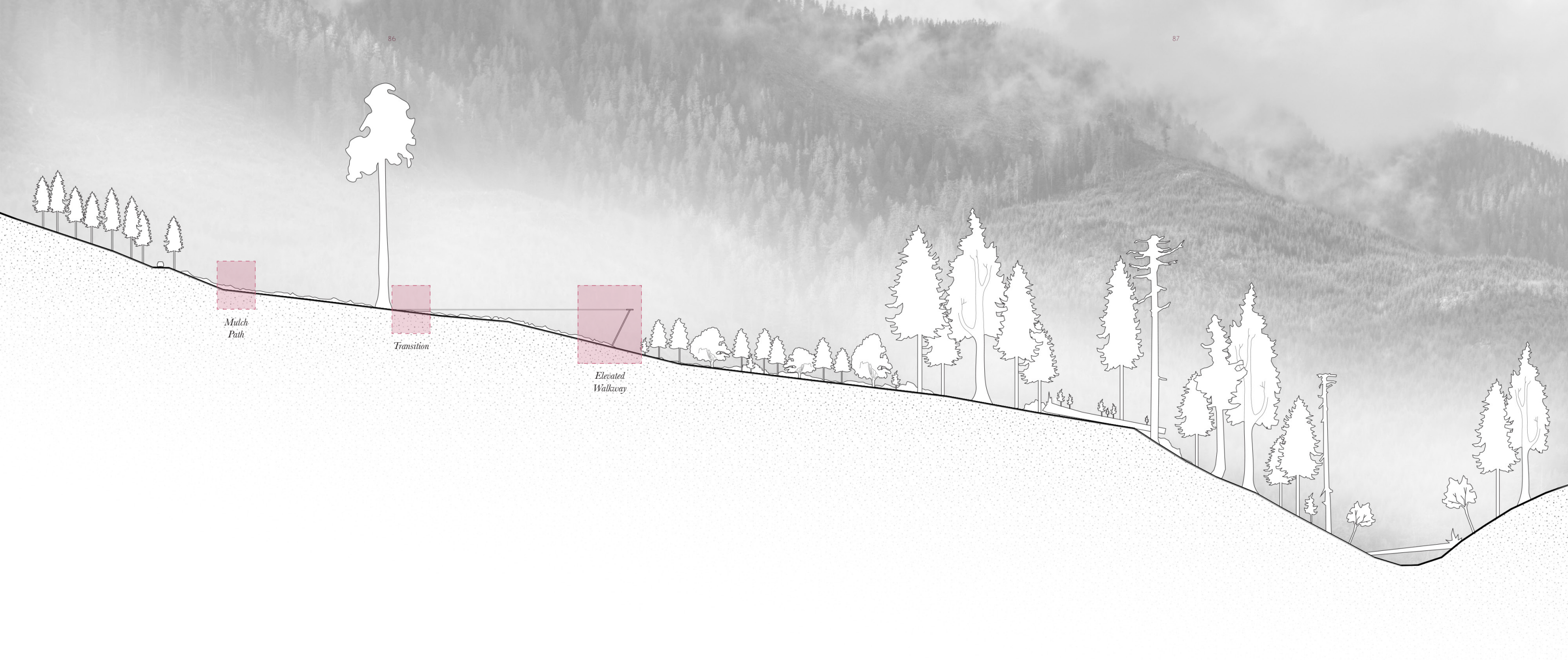
The garden itself will be maintained through the cutting of existing conifer saplings to ensure the continuance of the current lower growing, early seral condition that is largely defined by berry-producing shrubs including salmonberry, huckleberry and salal.

Rather than allowing the forest to become shaded through the growth of tightly planted conifers, the proposed condition will allow

for the views that give the site much of its value to be maintained, while simultaneously creating a unique 'garden' landscape that is maintained for its open condition and fruiting capacity. This maintenance regime is meant to be a loose guideline rather than a strict regime, however in contrast to the ridged geometry of the path, the garden will largely maintain a naturalistic quality.



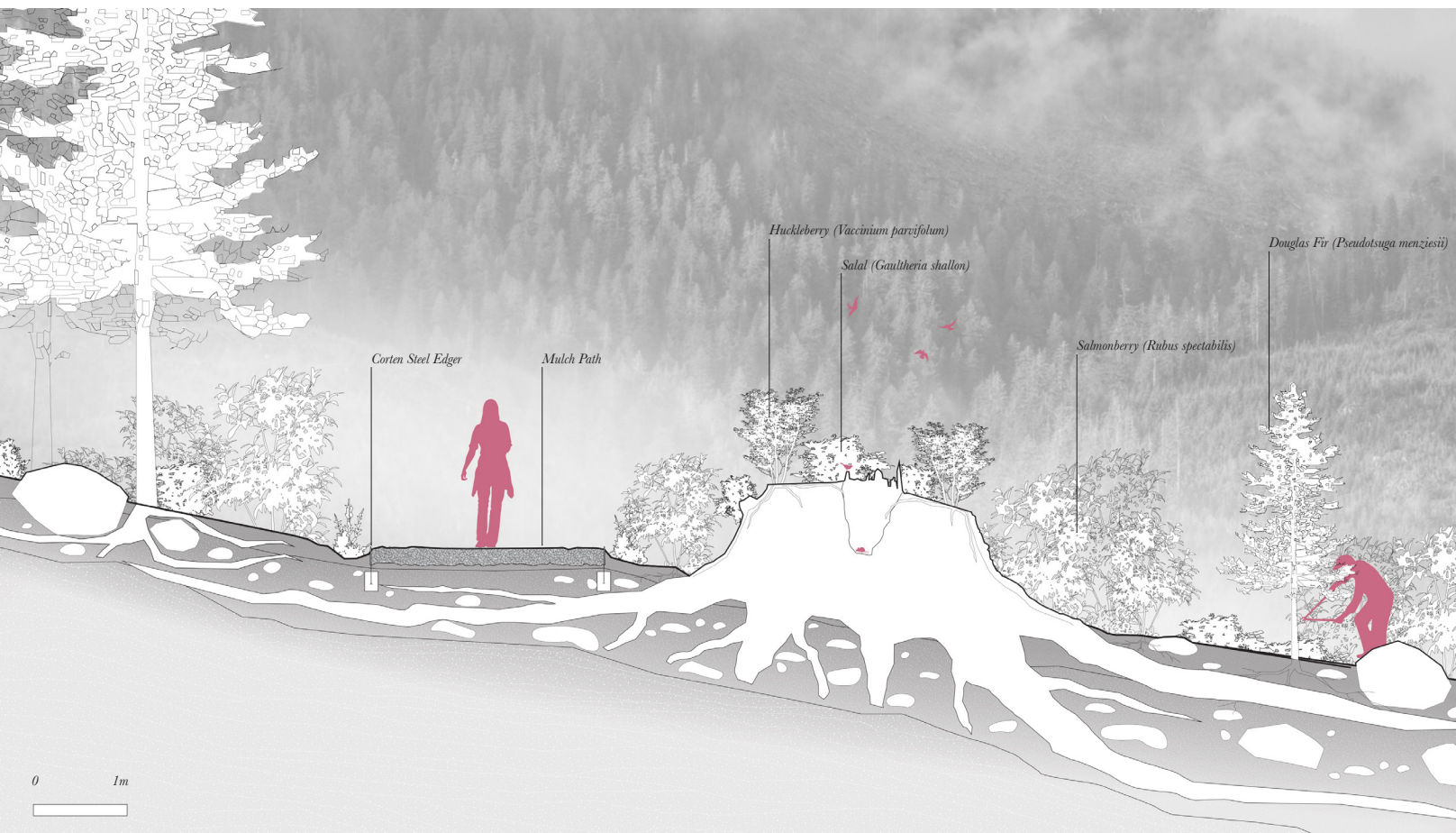
Fig. 46: Maintenance Diagrammatic Section (Udal, 2020)



DETAILS

Highlighted in this long section through the site, we see that there are several varying conditions that the path takes: the ground-

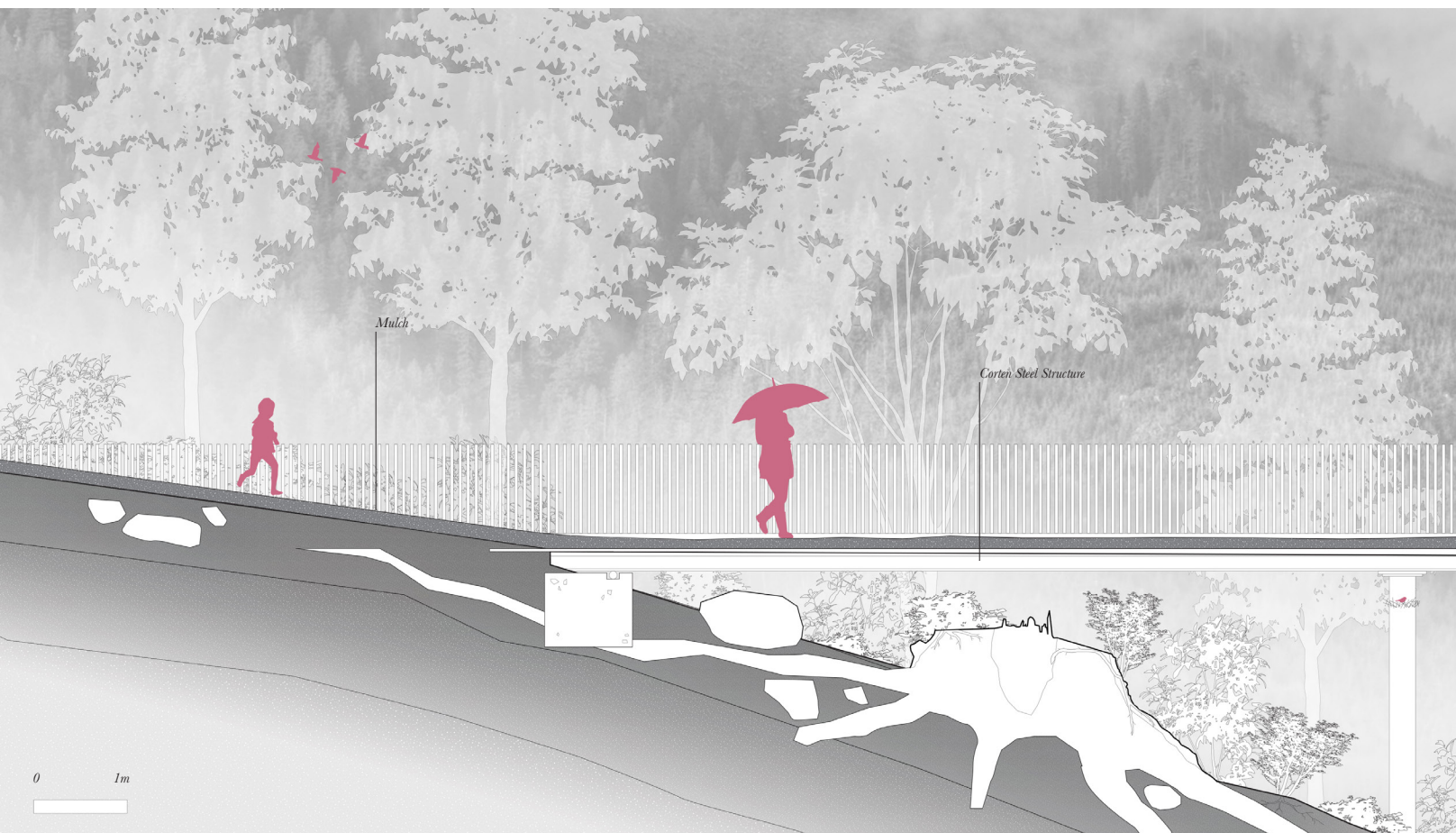
level mulch path, the elevated walkway, and the transition between them.



MULCH PATH

Here we see a drawing cutting through the mulch path at ground-level with the garden on the right side of the path and the surrounding mixed forest on the left. The uneven terrain hosts a variety of shrubs growing on decomposing wood and the soil. These stumps provide hiding and nesting areas for small birds and mammals and deliver nutrients into the soil through their decomposition.

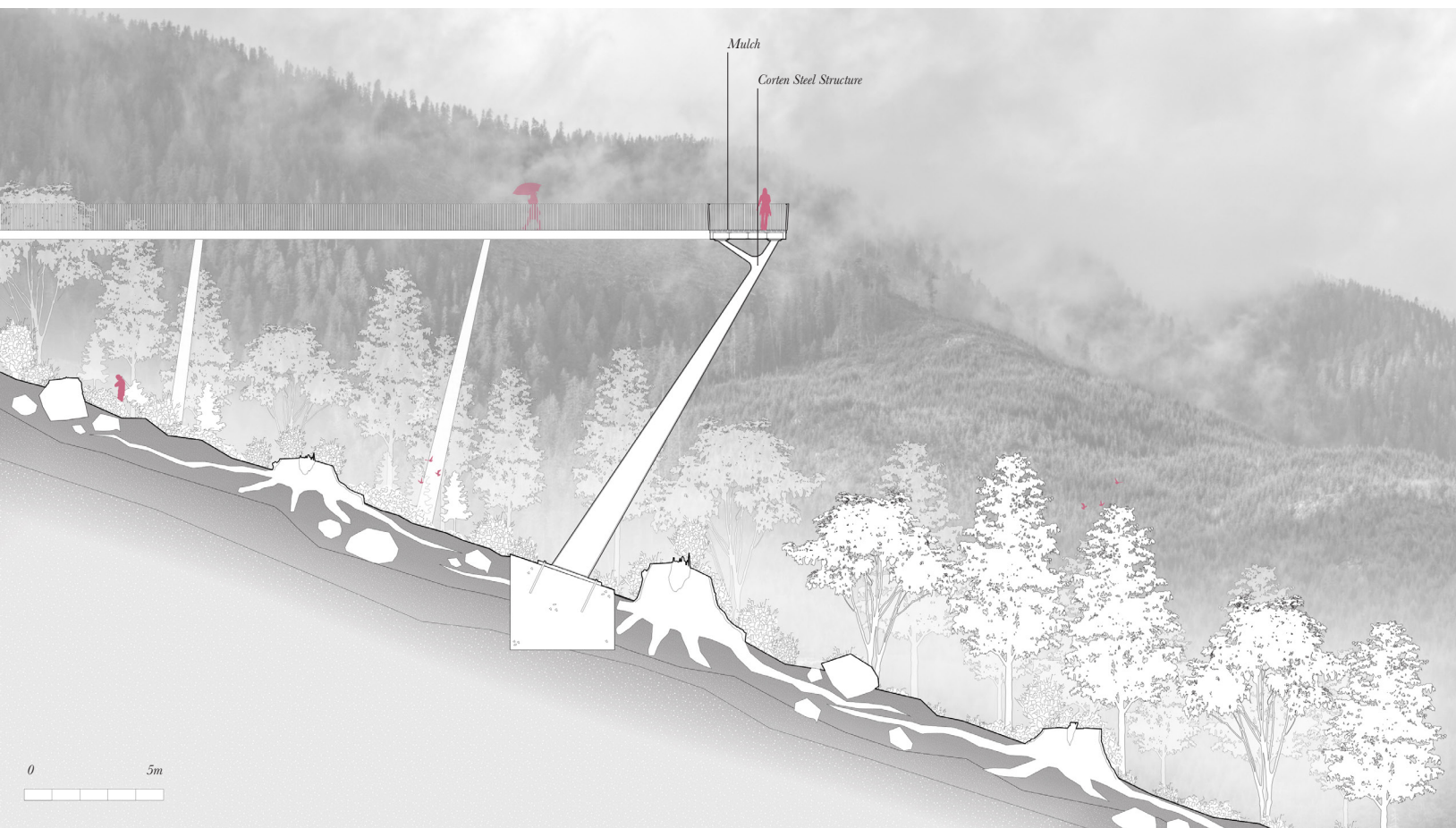
The path itself is outlined with thin strip of corten steel to define its edges. The rusting colour of the metal blends inconspicuously into the surrounding environment, but the hard metal quality stands out just enough to remind the path user that this is indeed a human intervention. Mulch is created from the continual removal of conifer saplings and spread along the path between the metal edgers as needed over time.



TRANSITION

As the path transitions from the ground plane onto the elevated walkway, the mulch continues beneath your feet creating a seamless transition. Thin vertical railing posts made of steel at a slight outward slope begin to appear along the path before you step

off of the ground plane, marking your shift from earth to structure. The slender spacing between them with no horizontal bar create an increased sense of fluidity between the walkway and the world around you.



ELEVATED WALKWAY

Cutting through the elevated walkway in section, we see the profile of the structure with its continuation in elevation in the background. At its highest point, the walkway juts out at 15m off the ground providing an elevated view of the site and the surrounding area.

Corten steel is used to reference the industrial quality and history of the site, providing a reminder of the human element of the site's construction. The material allows

for the structure to take its slim and angular profile, which reinforces the minimal form of the circular path and provides an increased sense of suspension as you walk through the air, absorbing the views around you.

Marking the boundary between garden and forest, trees will grow up on the outside of the walkway, eventually creating the experience of being within the trees at the forest edge looking down into the shrubby garden landscape below.



Flows

Looking at the site in context to its surrounding environment, we can see that the structural elements of the path intervention serve as a framing of the garden site, but one that can easily be moved across from outside of its surrounding context.

Across its space, the garden will be maintained by both human and non-human users through different actions or 'gardening'. In this way, agency is shared and the program

works not only to activate the site, but to form it spatially.

Humans enter into the site after travelling along the adjacent logging road; the Swainson's thrush moves between the open shrubby landscape to feed and the surrounding forest where it nests; And the Black bear crosses into the garden to feed on berries while also using the nearby river for fishing and its surrounding old growth for denning.



WINTER

In winter, as mostly dormant vegetation creates an open condition, elk come to forage on what is left of the forbs and grasses and later much on new shoots, effectively weeding out certain plants and pruning back others. The lack of leaves creates a clear condition that is optimal for observation of the site and the life that utilizes it during this period.

As an experience, the bridge is designed to facilitate this observation allowing the user to see the various animal and plant actors within the site and create a prolonged moment of perspective on the intersection between these living systems and the extractive treatment that we put on them



Fig. 53: Elevated Walkway in Winter Render (Udal, 2020)



Habitat created by the forest edge butting against the open shrub landscape of the garden creates the condition necessary for nesting and feeding by many birds that rely on this edge condition. Rather than swiftly planting a disturbed site to create a yield of lumber as quickly as possible, allowing the forest to grow with both deciduous and conifer species while inviting variability in landscape type offers habitat to both the resident and migratory birds that rely on this BC's coastal forests.

Longer days and warmer weather invite the twiggy plants to begin budding their leaves and flowers. As human gardeners make decisions about which plants to keep and which to remove for the year ahead, the song of the Swainson's thrush moving through to its eventual southern destination can be heard calling in the soon-to-arrive Salmonberry as it feeds on bugs that enjoy the plant's tender fresh leaves.

Fig. 54: Seasonal Use Diagram: Spring (Udal, 2020)

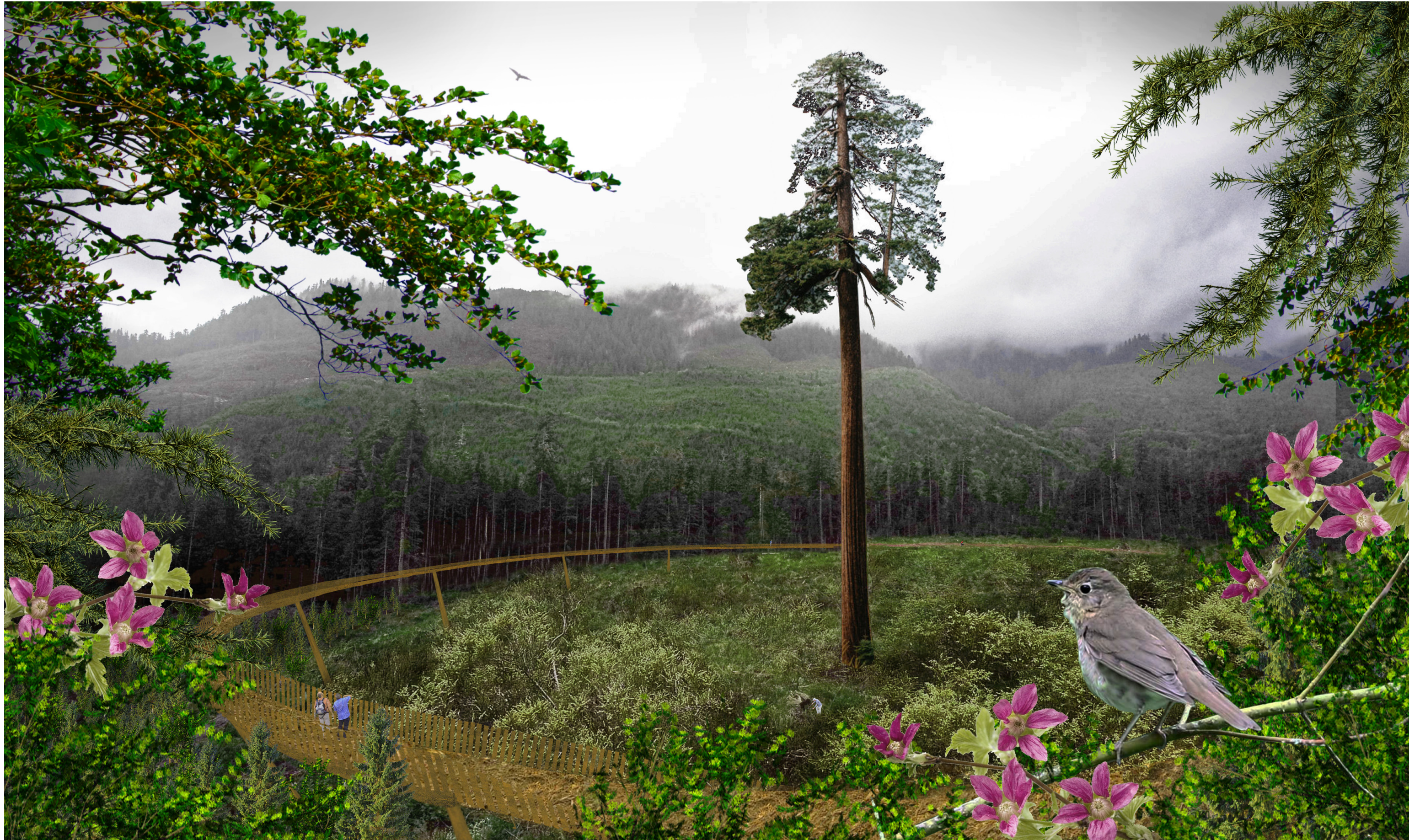


Fig. 55: Forest Edge in Spring Render (Udal, 2020)

In this high demand landscape, multiple gardeners must be cognizant of one another. Human visitors look out for bear scat full of ready-fertilized seeds and sing or make noise to make their presence known.

In maintaining the garden for fruit bearing plants, many animals that seek out a sugar fix are attracted to come feast. Of course one's own safety is never out of mind, but perhaps this invitation to multiple users can allow for a sense of empathy amongst them and an ongoing negotiation in navigating one's use of the site.

Fig. 56: Seasonal Use Diagram: Summer (Udal, 2020)



Fig. 57: Black Bear Eating Berries in Summer Render (Udal, 2020)



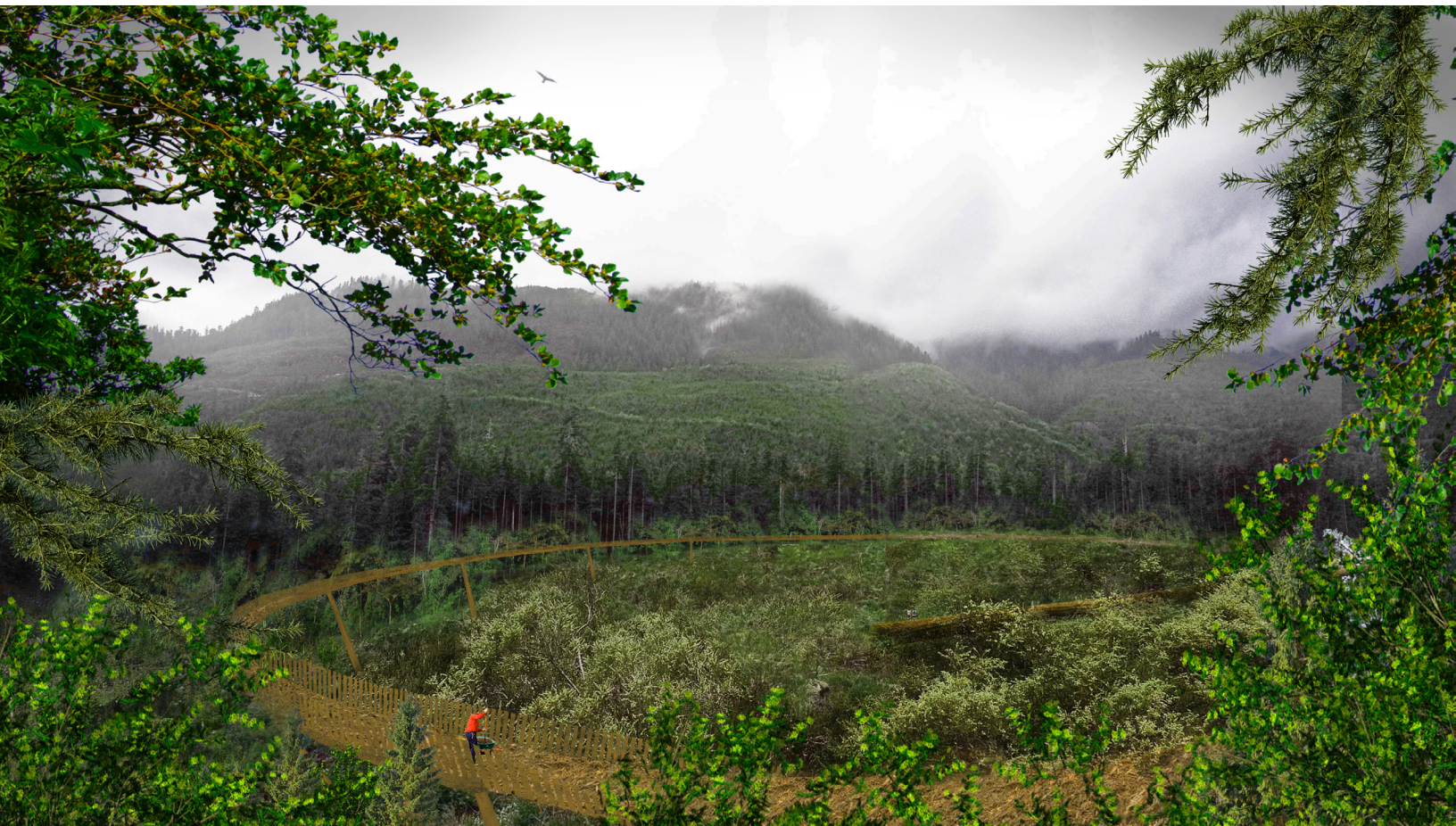
FALL

As fall comes and leaves are shed, once again a clean-up to prune back woody branches to make sure there are fresh shoots for the following year takes place. The salmon return to the nearby river to spawn upstream making an important meal for bears before their long winter without much food or movement.

Bringing the fish carcasses on site helps to fertilize the soil adding nutrients that allow for growth once again the following spring. This transfer of energy reminds us that no landscape exists in isolation, be it spatially or temporally.



Fig. 59: Black Bear Fertilizing with Salmon in Fall Render (Udal, 2020)



There are always multiple forces and narratives acting on a site that not only shape its physical form, but also how it is imagined in regard to our understanding of the world we live in.

This project serves as an experiment to see how cultural landscape conservation might work to embrace the dynamic context in which it operates and use design to explore how new typologies can provide insight on existing ones.

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