

Sawdust Empire, Sawdust Mountain, and Beyond: The Challenges for the State of Jefferson, as Seen Through the Photographs of Eirik Johnson's *Sawdust Mountain*

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Abstract

Eirik Johnson's Sawdust Mountain portfolio of photographs explores the past, present, and possible futures of the rural Pacific Northwest including the State of Jefferson. Jefferson has been dependent on and shaped culturally and economically by logging and fishing, but these extractive industries have been transformed by technology and are declining in importance. Johnson's photographs portray specific instances of these shifts and the uncertainties and ambiguities of the present. His photographs suggest three possible directions for Jefferson's future. One is continued resource extraction, modified to suit contemporary attitudes and values; a second is suburbanization; and a third involves a relative retreat, leaving the area remote, and allowing nature to regrow. Johnson's photographs allow us to experience visually the changes in and possibilities for Jefferson.

Introduction

Eirik Johnson's photographic series, *Sawdust Mountain*, and his book by the same name (Johnson, 2009) document the current state of the traditional industries and culture of the Pacific Northwest (PNW), including the State of Jefferson (SoJ). Before the rise of aerospace and silicon industries, the region's largest industries were logging and fishing. Environmental, economic, and demographic changes over the last century have reduced these industries dramatically and greatly affected the livelihood and futures of the residents of the PNW, challenging the identity of the residents and the region itself.

Johnson's photographs document the greater PNW as well as the State of Jefferson, and in this article we¹ use Johnson's photographs to explore the past, present, and future of the State of Jefferson. While his photographs do range beyond the official boundaries of the SoJ, many of the photographs fall within this physical boundary, and all the photographs explore themes relevant to the SoJ, including the growing urban-rural divide, the human relationship to nature, the changing economics and environment of the area, and how all of these issues will affect the future of the people and place of the SoJ.

This project is a very personal one for Johnson. As a Seattle native and resident, his identity and history are tied to the region. His impetus to begin the project was to create a personal reflection on "the region's past, its hardscrabble identity and the turbulent future it must navigate"² as the pillars of PNW identity—salmon and forest—have declined while new high-tech industries have moved in. This article interprets Johnson's reflections as documented in his photographs in relation to the State of Jefferson's identity and uncertain future.

One of the first photographs in the monograph of *Sawdust Mountain* is "Starlite Drive-In, Roseburg [Jefferson], Oregon" (see Figure 1). The image depicts a drive-in screen reflecting the lights of cars and gas stations off of Interstate 5, with the sun setting behind it. The screen is much brighter than its surroundings, with the trees behind completely dark, and on the screen is a shadow of trees and power lines.³

This image sets the framework for this article and touches on many of the interpretive strategies used by Johnson. To begin, the subject of the photograph, the movie screen, recalls



Figure 1. "Starlite Drive-In, Roseburg, Oregon" (Johnson, 2009, p. 13; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006591/full>).

cinema and the narrative arc of most movies with an introduction that sets the stage for the story to unfold, a longer middle section that builds up to the climax or crisis, followed by the denouement.

This cinematic plot arc is mimicked in the elements that compose “Starlite Drive-In.” In the beginning (“the beginning” from the point of view of Anglos) when the Anglo settlers came to the Northwest for its abundant natural resources, they struggled to fell giant trees, and these resources remain behind the screen in Johnson’s image: the drive-in is built against a forested hill. The narrative’s middle is represented by the screen and the cleared parking area: human technology and culture building into nature and clearing spaces for human action. Improved technologies, along with the rise of cities, rails and roads, and culture (e.g., literature, movies, libraries, restaurants), are all part of the development of the area. The drive-in screen is a sign of civilization domesticating untamed wilderness, bringing culture to the area, and indicating the rise of population and settlements. And the ending, or the climax between the middle and the denouement, the Starlite Drive-In as it exists in the photograph shows exhaustion and abandonment (it closed in 1997)—but also provides hints towards the future.

The drive-in movie theater is a disappearing pastime, fittingly at the end of a specific epoch, the end of plentiful lumber and salmon, the exhaustion of much of the natural resources of the area, the current abandonment of mills and homes added to the generations-old loss of commercial fishing. The drive-in is being replaced by newer technologies, much as logging and fishing have been overtaken as employers and profit-makers in the PNW by high-tech companies like Intel, Microsoft, Boeing, and the thousands of tech startups in Portland and San Francisco. Interestingly, the screen is also an odd preview of this technological boom, for the drive-in screen itself is an antiquated form of the new technologies (phones, computers, tablets) that all rely on screens.

The screen no longer plays movies; it only reflects light from I-5 and shows the shadows of trees and electric wires. But these reflections indicate three possible futures for this abandoned space, three possible endings of the cinematic plot arc of the photograph. One is that, although the drive-in may disappear, the area’s resource extraction will continue, perhaps with modifications responding to contemporary concerns. Another, suggested by the telephone wires and the light from I-5, is increasing population and suburbanization. Perhaps the screen will be cleared for development as better infrastructure allows more people to move in. Just as some logging companies have now become land companies, selling their clear-cut land as suburban lots, the drive-in’s owner might try to clear the area and create suburban lots—transforming the area, and Jefferson, by encouraging an influx of people, turning the ecosystem into suburban tract housing, and replacing a traditional communal gathering spot with the atomization of suburbia. Johnson’s image itself implies a third possibility: he captures a moment that the viewer can understand as the passing of an ecological and cultural balance when the drive-in and the forest coexisted; that moment and that specific balance have passed with the closing of the drive-in, but perhaps a third possible future is the reestablishment of a pact between human beings and nature—not with drive-in theaters, emblems of the past, but with new forms of human interaction with nature.

In this article we discuss how Johnson’s photographs reflect on the history of the SoJ as represented in the narrative arc of the “Starlite Drive-In”: how his photographs rely on the past history and identity of the region; how they present the current crisis represented in the changing timber and fishing industries; and how they raise questions about the future while also suggesting potential future options for the region. In particular, we explore the changing

relationship between humans and nature, the developing rural-urban divide, and the resulting possible modifications in the region's identity. With a specific look towards the future, we present three possibilities for the SoJ in the face of a seeming identity shift due to the magnitude of the transformations in the area. All three of these options are present in "Starlite Drive-In" and many of Johnson's other photographs, and of course some of these options will be highly localized in the SoJ and will last for different periods of time. Before we address these issues through Johnson's photographs, however, we need to contextualize Johnson's photographic project within the changes occurring in Jefferson and within his book's written materials, which, like the photographs, respond to these changes.

The State of Jefferson

The State of Jefferson is in many ways its own part of the world and is distinctive even within the PNW. Jefferson differs markedly from the populated urban areas characterized by aerospace factories (such as Boeing), silicon industries (from Microsoft to start-ups in San Francisco), and national and international businesses and trade. Jefferson is still overwhelmingly rural; much of the land is still sparsely populated. Its economy is still tied to resource extraction. The values that define the rural areas of the PNW come from long practices of extractive industries of logging and fishing; they are values centered around hard work, outdoor activities, the heroic struggle of human beings in a natural world whose trees are awesome, where timber can be logged and fish caught only by skilled individuals working together with others, in occupations where danger lurks with every felling of a tree, every fishing trip into open waters.

But for decades the major extractive resources of Jefferson and the entire PNW—especially fish and lumber—have been in decline. Old-growth forests have been depleted and patterns of international trade have shifted. The Oregon counties of the State of Jefferson have seen their timber production plunge from the 1950s, when newspapers called the Coos Bay region of Coos County "the lumber capital of the world" (Robbins, 1988, p. 107). In Coos County itself, the timber harvest has dropped almost 50% from its high in 1955 to 2004, around the time Johnson was photographing the area; in every other SoJ Oregon county except Klamath, the percentage decrease has been higher.⁴ Concurrently, rural employment has been declining.⁵ Wages from lumber have been falling in Oregon, if anything more sharply than production.⁶ Much remaining timber production is from tree farms, planted monocultures of fast-growing timber.

The drop in salmon production began earlier and has been even more severe.⁷ Even before 1900 the urban need for energy began its relentless increase, and rivers were dammed to produce electricity. The first permanent dam that blocked almost all salmon on the Rogue River was constructed in 1890, and as more dams have been built salmon populations and commercial salmon catch have plummeted (Taylor, 1999, p. 152). Even though most of the dams on the Rogue River have now been removed and there is hope for a return of the salmon, the return of large-scale commercial fisheries seems unlikely.

In the process of this decline, the landscape throughout the PNW has been markedly altered: old-growth forests have been replaced by tree plantations and free-flowing rivers by dams and reservoirs—even with the dam removals the Rogue still has a large electrical power dam on it. These transformations mean less monetary wealth for the area and, as jobs decrease in number and become more automated, the process of identity-formation through work changes.

At the same time, the State of Jefferson and its residents are caught in another bind that hinges on economics and identity. The SoJ is partly defined by the urban-rural divide that now exists within the Pacific Northwest: the opposition between Portland, Seattle, and San Francisco-San Jose, on the one hand, and the rural areas of the PNW runs deep. Jefferson's citizens inhabit one such rural area, remote from population centers, still bound to traditional activities like mining, logging, hunting, and fishing; rural inhabitants value their remoteness, which insulates them from the influences and corruptions of the city. Ironically, obtaining economic value from these extractive industries, where (and if) they can exist profitably, requires adding infrastructure such as ports and roads to take products to market or ship them around the world; it also, to residents of Jefferson, requires freedom from state and Environmental Protection Administration (EPA) regulations, which are generally seen as misguided governmental intrusions by outsiders. But the infrastructure necessary for this economic activity undercuts the remoteness and rural qualities of the State of Jefferson, and leaves it open to outside visitors who frequently want to see not a nature managed for economic value but a pristine nature devoid of human activity, visitors who want those state and EPA regulations to help maintain nature unspoiled. Already, the Jefferson cities along I-5 are growing in population, and the Rogue River's relative openness may mean an increase in tourists sport-fishing for salmon and steelhead. How will the urban-rural divide play out in Jefferson if it builds roads and other infrastructure?

For the SoJ as throughout the rural PNW, ways of living—the extraction of natural resources, the remote rural life, the values of independence and hard work—that created identity, pride, and a sense of place are coming to a close. There are no obvious new directions to follow, no readily discernible new ways of earning a living that will both reflect the rural, hard-working values of the state and sustain an identity for its citizens that can give them individuality, independence, and value. What will happen to the people and the settlements of Jefferson?

Johnson's photographic explorations of the region address these questions and uncertainties as the region undergoes significant disruptions; he presents and interprets in photographs possible meanings of such changes. The natural resource industries had been the bedrock of the region: they had harnessed nature, constructed communities, and developed the region economically—and, at the same time, had used modern technology and corporate power to lay bare the land and dam the salmon rivers. These accomplishments and costs have all been in flux, as the region was adjusting to the decline in the resource-extraction industries and facing a turbulent, uncertain future. Johnson's photographs portray the environment, natural and human, as responding to and transformed by the human (and corporate) activities of logging and fishing. The PNW is a place where, as Johnson says, 90% of the old growth forest is gone, the salmon catch is down by more than 90%, the good-paying jobs are long gone, and observers and inhabitants alike wonder what will happen now that these cultural pillars of the PNW have been so reduced.⁸

As he was taking the photographs for this project, Johnson described himself as wandering through makeshift landscapes containing makeshift—and shifting—displays of humanity, where the human attempts to construct a life and a living involved sometimes continuing to work on nature, sometimes improvising other jobs. The places and people in Johnson's work inhabit a kind of “in-between” status, never settled, never constant. Johnson's photographs depict places and people at a moment in time, as they are disappearing but before they have disappeared, a kind of living history or living memory. As he captures transitoriness,

he asks questions about what the future can be, but he refrains from answering them, or at least from answering them in any simple, straightforward, or univocal way. For instance, some photographs intimate the environmental and human costs of logging and fishing; but at the same time, as other photographs indicate, human beings need timber for shelter and fish for food. When after a lecture he was asked if his work was political, he answered: it is not political in the sense that it does not have a single point of view, perspective, or ideology that it pushes; but it is political in that it documents and makes public the environmental and human consequences of the extensive fishing and logging.

Johnson's photographs speak directly to transformations occurring in the rural PNW. Resource depletion and changing markets have meant that the fish and timber of the area no longer have the political and economic importance that they used to, and most of the mills have closed, so that the possibility of finding the traditional jobs of the rural PNW is very uncertain. The timber industry and the salmon are still present, but Johnson's images do not display giant trees, untouched wilderness, heroic loggers, or salmon swimming upstream. Instead Johnson presents landscapes whose traditional extractive industries are maintained through salmon hatcheries and tree farming, where a mill might close any day, and where the future is uncertain. As his images suggest the disruptions, they also indicate that the identity of the region is still deeply rooted in its traditional trades. As the raw materials are depleted and the mills close, what will happen to the people who used to work them and who formed their identity by their work? What will happen to the communities whose livelihood and sense of identity were formed by these jobs? How might the SoJ and the PNW respond to this turning point? To interpret Johnson's exploration of these questions, we look to the book's written material and to Johnson's other images to fill out the narrative arc introduced by the "Starlite Drive-In."

The Beginning of the Narrative Arc: The Anglo Settlers of Jefferson

The Starlite Drive-In image suggests a narrative to the history of the State of Jefferson. As the Anglo settlers arrived, much of the SoJ was seen as pristine, idyllic, or untouched nature, rich in natural resources such as fish and timber. Because some salmon runs were more plentiful than the settlers could imagine and some trees more imposing than any they had ever seen, and because the area itself seemed remote from other human habitation, nature in Jefferson was awesome, fearsome, and terrifying. At the same time, the settlers who braved the trek to Jefferson had to confront that sublime and terrifying nature—and that confrontation required heroic human action, the skills, quick thinking, and cooperative actions of loggers, fishers, miners, and others in extractive industries.

The photographs in the book are framed by a foreword by Elizabeth A. Brown,⁹ an essay by Tess Gallagher, and a poem by David Guterson, and these framings refer to the first stage in the narrative arc, when human beings confronted a wild and untamed nature. Brown puts Johnson's photographs into a context of western photographers. Her "Introduction" notes that Johnson "touches back to the epic scale and sublime beauty of Carleton Watkins's photographs" (Johnson, 2009, p. 5-6). Watkins, a mid-19th century photographer, exposed the country to the sublime grandeur of Yosemite through his stereographs and plate photographs, helping persuade the US Congress to pass an Act in 1864 declaring the area inviolable, dedicated "for public use, resort, and recreation."¹⁰ Watkins's photographs and the Congressional Act now can be seen as representing the urban desire for untouched rural nature and for regulations that prevent rural inhabitants from practicing their traditional trades

(Cronon, 1995). Johnson's photographs both echo Watkins's scale and sublime beauty, as when he photographs a 600-year-old spruce, and play off against Watkins's works with irony, as when Johnson presents a pile of sawdust or captures sweeping landscapes where vast swatches of stumps, bushes, and scrap wood are all that remain from extensive clear-cutting—or when we see that the 600-year-old spruce is solitary, not part of a wild and extensive forest.

Brown also reports that Johnson considers the photographer Darius Kinsey as a “touchstone” for his work (Johnson, 2009, p. 6). Whereas many of Watkins's images were of untouched nature, Kinsey photographed loggers at work, rest, and play in the logging camps of the PNW from 1890 to 1940.¹¹ Both Watkins and Kinsey portrayed a time when nature was wilderness (to Anglo eyes), trees towered, and rivers rolled powerfully. In Kinsey's photographs, however, human beings work to transform that wild nature for human goals. Skillful men and women exerted themselves to the fullest, working together—using saws powered by muscle, primitive machines and trains, and donkeys—to cut down soaring trees whose trunk diameter could reach 25 feet.

In her essay, Gallagher describes her parents as similar to Kinsey's subjects: her parents worked as independent loggers, sharing one pair of work boots between them, felling, trimming, and pulling timber to market, employing her from age four onward and struggling arduously to “wrest a living” from the woods (Johnson, 2009, pp. 127-128). (Only when times were bad would Gallagher's father go to work in a lumber processing plant.) From her parents' labor and her experiences in the PNW Gallagher draws up “intangible images” in her mind of the time when the forests of her childhood stood tall, the fish ran, and the processing plant was active (p. 133). Those images allowed her, when she returned to the PNW after some time away, to regain a sense of place, a sense of how the specific interactions of nature and humans generated a set of PNW values. David Guterson's poem, “The Closed Mill,” harkens back to the time when the mill was open and, despite the conflicts and dangers, the narrator is nonetheless “remorseful” about the passing of “that running mill. / All those trees pushed loudly through the saw / In the era when I was king” (p. 9), king in the PNW's “Sawdust Empire” (Brier, 1958). For Kinsey, Gallagher's parents, and Guterson's narrator, human beings confront a powerful nature with only human muscle power and some mechanical tools (which, important to the loggers decades ago, seem primitive and balky today).

Although Johnson's photographs were taken in this century, some do refer to this earlier stage of a pristine, idyllic nature, teeming wilderness, and natural landscapes of grandeur and power remote from centers of population. Like many contemporary eco-critics, however, Johnson does not portray nature uninfluenced by human actions.¹² Even when his photographs refer to Native Americans, it is clear that they are acting on nature; the land the Anglos settled was by no means untouched by humans.

Johnson includes two photographs of Native American gill nets, reflecting their traditional fishing practices. In “Makah Tribal Gill Nets on the Sooes River Outside Neah Bay, Washington” (Johnson, 2009, pp. 108-109¹³) the Makah, his net, boat, and shelter are set against the vastness of the river and the forested hills, occupying only a small portion of the image and suggesting the ability of the Native Americans to live within the carrying capacity of the land. The gill net itself extends only a short ways into the river, and gill nets catch fish with discrimination—small fish slip through the netting, larger fish are arrested by the netting and when they try to back out are caught by their gills. “Quinalt Tribal Gill Nets, Queets River, Washington” (Johnson, 2009, p. 63¹⁴) is a close-up of gill nets left on the river's edge, with

river, driftwood, and greenery surrounding the nets. The nets look small, even wraith-like; they fit into their setting and do not transform the landscape or the ecology.

Johnson's photographs of nature frequently reflect a sense of irony or ambivalence, unlike Watkins more straightforward images of an untouched Yosemite. Remnants of the old, pre-Anglo wilderness are presented in a few images. For instance, "Missy, Beneath Her Six-Hundred-Year-Old Spruce, Hoh River, Washington" (Johnson, 2009, p. 67¹⁵) shows Missy, a handsome 87-year-old woman, standing in front of an immense old spruce. Her stance suggests that she is protecting the spruce against being cut, although exactly what she is protecting is unclear: the tree as soaring, impressive nature (but nonetheless vulnerable to logging and dependent upon a human protector)? The tree as a human heritage? The tree as a memory guide to the past? The spruce is alone; no other old-growth trees accompany it in the photograph. The old-growth forests have been mostly destroyed, and only a few lonely specimens remain.¹⁶

Johnson does refer to the heroism Kinsey captured, but obliquely. In "Old Photograph, Seaport Lumber, South Bend, Washington" (Johnson, 2009, p. 80¹⁷) he photographs an old photograph of a sailing ship, docks, and train tracks for salmon fishing, processing, and export; in a corner of the frame is inserted a photograph of a young man whose garb and muscles suggest that he hauled salmon around in the processing plant. The old photograph is mounted in a room on what looks like a cheap veneer wall—all the abundant salmon and the grueling human labor have not produced a comfortable livelihood for the worker's descendants.

Johnson makes an ironic reference to Kinsey's heroic loggers felling majestic trees in his photograph of "Juan Abalos, Salvaging Cedar Shingle Bolts, Lower Hoh River, Washington" (see Figure 2). Abalos is photographed in a heroic or mock-heroic pose: he is standing almost on the top of a triangular pile of bolts, the upper half of his body outlined



Figure 2. "Juan Abalos, Salvaging Cedar Shingle Bolts, Lower Hoh River, Washington" (Johnson, 2009, p. 75; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006518/full>).

against the sky, his axe in hand, his chain saw at the ready, “salvaging blocks of lumber from old cedar stumps in a swampy clearing logged long ago,” as Johnson reports in his “Notes on Select Photographs” (2009, p. 136). Like the heroic loggers of past generations, Abalos works hard for his living, but salvaging lumber is far from the heroic activity of felling centuries-old trees 25 feet in diameter with a crosscut saw.

The Native Americans fished amidst abundant salmon runs, spruce forests soared, fishermen worked hard, and heroic loggers reshaped the landscape: Johnson refers to all of these, central to the first stage of the Anglo settlement of the PNW and Jefferson, mostly by their absence today. The first stage of the narrative arc has passed. But confronting the salmon and forests served to develop the culture and identity of Jefferson, constituted by independent individuals, skilled, self-reliant, able to take care of themselves and perform the heavy labor their jobs required. These individuals knew their natural environment because they worked on it¹⁸—with their hands or, until recently, with machines that were extensions of their bodies. With the development of modern technologies that increased the efficient extraction of nature’s resources, however, the culture and identity of Jefferson started to change.

The Middle of the Narrative Arc: The Efficient Extraction of Nature’s Resources

As the economic value of the region’s resources became clear, extractive industries thrived and more people moved to the region, establishing towns and a way of life tied to the lumber and fishing industries.¹⁹ Technological changes over time improved efficiency and modified the roles played by those working in extractive industries. First salmon fishing and then logging were transformed by new technologies and tools so that the nature’s grandeur, power, and plentitude reached their limits and were drastically altered by human activity. This marked a central shift in the relationship between humans and nature, where humans themselves, using powerful machines and advanced technologies, were able to shape and transform nature, reducing its sublime capacity to inspire awe, fear, and incomprehensibility, and reconstructing it into objects to be manipulated with no apparent concern for the health of the ecosystem. Trees and salmon were there to be harvested as efficiently as possible; rivers existed to be dammed to convert falling water into electricity for cities. Whether those actions affected other aspects of nature seemed not to be an important issue to those who harvested or who dammed.

During this past century when logging and fishing provided the chief livelihood for its residents, the State of Jefferson was becoming less remote, as populated areas like Gardiner at the mouths of rivers became towns that served as ports, transporting the fish and logs onto ships exporting them to Pacific coastal cities and eventually overseas. Larger populations drove a need for food from farming, for electricity from dams, and for cultural activities like the Starlite Drive-In.

The culture and identity of Jefferson were built on the struggle with nature, the daily victory of surviving, and the constant emergence of new challenges to face and overcome. Jefferson’s culture based on direct engagement with nature contrasted with urban spaces defined by impersonal, institutional, or monetary relations. The growth of Portland and the California cities meant that Jefferson continued to lack political power in state government and could be ignored (or taken for granted) as the urban economies of the urban areas diversified and grew.

Many of Johnson’s photographs refer back to this transitional era when modern, large-scale human structures and advanced technologies made their mark on the landscape. Although the Elwha River is in the state of Washington, his image speaks to the transformation of nature

by the settlers (see Figure 3). Like the Elwha, the Rogue River in Jefferson was rich in salmon until a combination of overfishing and dam construction made commercial fishing fragile by the 1910s and untenable by the 1930s. The photograph is divided into background and foreground. The background, the top third of the image, presents water and land in a seemingly natural state—trees growing on the hillside adjoining the dam and trees covered with snow on a mountain behind the dam. In the foreground stands the dam. The straight lines and right angles of the dam and the power plant contrast with the natural irregularities of the trees, hills, and mountains. The water, which runs off on the left through rocks, the remnants perhaps of a natural falls, gushes over the spillway to the right, its power suggesting the electrical power that the dam generates. The dam's builders evaded and violated even the minimal rules of a century ago for maintaining the fish population (Crane, 2011). They ignored the magnificence of the salmon run and its economic value to the fishers. The dam was an impassable barrier that almost completely destroyed the Elwha River salmon by blocking their migration. Whereas the Native Americans set up gill nets as limited and permeable barriers for the fish, many dams, like the Elwha River dam, effectively prevented the salmon from returning to their natural spawning grounds.

Almost completely obliterating the magnificent old-growth forests has meant the transformation of logging and of its traditional occupations. The cover image of the book,



Figure 3. “Elwha River Dam, Washington” (Johnson, 2009, p. 59; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006534/full>).



Figure 4. “Freshly Felled Trees, Nemah, Washington” (Johnson, 2009, pp. 68-69; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006527/full>).

“Freshly Felled Trees, Nemah, Washington,” speaks to the advanced mechanization that can remove vast swathes of planted trees (see Figure 4). The field that is the right fore- and middle-ground of the image was logged the day Johnson took this photograph, the trees to the left are ready to be cut, and the trees in the right background look like they too are ready to be harvested. Except for a small patch of grey sky, nothing else is in sight: the stumps of freshly felled trees, trees to be cut today, and trees in the background ready to be cut. What is left will be the stumps and waste in the front right foreground.

To some extent, as loggers have moved from old-growth giants to contemporary planted “tree farms,” the cutting has been transformed technologically to be more mechanized and more efficient, with fewer workers—although some are needed to drive the trucks that take the logs to the sorting yards (or to send them down the river to the yards) and to operate the machinery in the mills. This new lumber is of a lower quality, commands a lower price on the market, and is not unique to the region—tree farms with similar practices and trees exist throughout the United States. So job prospects and wages in the industry are greatly reduced. The mechanization of the labor and the ease and speed with which humans can now harvest natural resources further alters the relationship between humans and nature. What was once a heroic and monumental task in a natural landscape that seemed inexhaustible is now a highly efficient task requiring sitting and guiding machines in a landscape where all the quality old-growth lumber is already exhausted.

But Johnson shows us some of the socially beneficial results of that work. “Hoquiam, Washington” displays a small blue house with human beings and trees in symbiotic relationship

(see Figure 5). The trees on the hillside provide some protection for the house as well as having once provided larger trees for logging. The family's logging truck, loaded, is ready to take freshly felled logs to their destination at a mill, sorting yard, or port, earning money for the driver. Milled and finished boards have been used to construct the house, which accommodates a family with what seems to be adequate comfort. Not only in Washington but also in Gardiner, Jefferson (Oregon), in an image titled "Gardiner, Oregon" (Johnson, 2009, p. 45²⁰) does Johnson exhibit neat, tidy houses sheltering the families of a community. When resource extraction as an industry was flourishing, workers could lead comfortable if modest lives, even though the economic uncertainties and cycles of resource-extraction industries tended to be extreme.

The culture of logging and fishing, of working on the land and living off the land, carry with them further elements of culture and rural identity, as Johnson indicates in his images related to Missy. In one, already mentioned, she stands beneath a 600-year-old spruce, as though to protect it, a lone remnant of the era when logging began. Missy is tied directly to the first Anglo settlers—her grandfather was one of them—and Johnson provides other photographs of Missy that speak to the culture and identity of the region.

"Missy by Her Garden, Lower Hoh River, Washington" (Johnson, 2009, p. 34²¹) reveals that Missy herself works with her hands, as do workers in Jefferson: culture in Jefferson includes human labor and the knowledge of nature that comes from labor, from direct involvement with the soil and its fruits, with the processes of birth, growth, decay, and death. In



Figure 5. "Hoquiam, Washington" (Johnson, 2009, p. 99; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain/id/i5006491/full>).

fact, Missy studied botany and created a new species of potato that is particularly well suited to growing in the PNW (Johnson, 2009, p. 135). This demonstrates how interconnected the people and land have become in this region, as well as how established the region has become—the farms and creation of new plant varieties suited to the PNW shows a dedication to live in that specific place.

“Missy’s Studio, Lower Hoh River, Washington” gathers pictorial memories of the human past, portraits of men and women, pictures of them working, and still lives (see Figure 6). Missy’s pictures also speak to how long the Anglo settlers have been on the land and how they have imbued it with a sense of place. In the center is a painting by Missy of a man driving a tractor built decades ago; to the left, half out of the photograph, is a painting of a man on horseback amongst tall trees, harking back to a pre-automobile era. Missy’s pictures suggest that the residents have been here for a generation or two or three, and have really anchored themselves to the land. The studio also demonstrates the cultural production and leisure activities that have arisen in the area and are still connected to the land, nature, and a specific sense of place.²²

This sense of place still appears to be tied closely with the land and traditional logging and fishing industries, and yet “Weyerhaeuser Sorting Yard along the Chehalis River, Cosmopolis, Washington,” depicts a timber sorting yard that appears to be operating 24 hours a



Figure 6. “Missy’s Studio, Lower Hoh River, Washington” (Johnson, 2009, p. 107; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006487/full>).



Figure 7. “Weyerhaeuser Sorting Yard along the Chehalis River, Cosmopolis, Washington” (Johnson, 2009, p. 11; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006594/full>).

day without a human in sight—though presumably there are some to operate machinery (see Figure 7). In the image, the lights are on, the sky is grey, and it is dusk, dawn, or perhaps a moonlit night. The lights at the sorting yard shine brightly, illuminating the area, filling the wilderness with man-made light, and demonstrating the triumph of human engineering over the dark, once unknown wilderness. While there are many logs on site, there are no human beings in the image (and certainly no early 20th-century draft animals), only large heavy machinery. Gone are the old docks where lumber was loaded onto ships bound for far ports; all that remain are some silent, rotting posts. The machinery is taller than any tree. There is no place visible for human beings and their labor, no lumberjack, no heroic figure of a logger, just electricity and machines and logs and water. Nothing is on the scale of the human body. The sorting yard appears massive, unmanageable, unimaginable, and indeed inoperable without the giant machines that dominate the landscape.

The new technologies make it easy to harvest lumber and catch fish, increase the human ability to extract (and over-extract) resources, and displace human beings from the landscape. In an earlier time nature’s old-growth forests and rich salmon had runs that provided a catalyst for the sublime—the human response of awe at the grandeur, power, and incomprehensibility of nature; by contrast the timber-sorting yard stands as a realization and symbol of the human control and transformation of the nature.

Human beings have replanted forests in order to harvest them, or clear-cut them to build housing developments; they have established hatcheries to replenish the fish in the rivers, with not much success. Nature, once sublime and fecund, has been rendered much less terrifying and even docile by human industry and technological growth; but now what is terrifying is the human ability to utterly and completely transform the environment, sometimes without realizing it. Now it is the constructions of human power that evoke the sublime: the awe inspired by the dams, the imposing ability of human mechanized progress to fell forests and transform them into open space, the conquest and transformation of nature evident in the timber sorting yard that transforms night into day and overtops the remaining forests.

But this sorting yard, as Johnson's notes indicate, may soon be closed (Johnson, 2009, p. 134). What will happen to nature and to human beings—and to the State of Jefferson—both when the remaining mills continue operation and then when, as in Guterson's poem, Gallagher's essay, and Johnson's photographs, many or most are closed? What happens to the human domination of nature when nature's raw material is exhausted? What happens to the human beings displaced by mechanization and then put out of work when the mills close?

The Denouement of the Narrative Arc: Jefferson's Plurality of Possible Futures

Johnson's photographs suggest that the rural PNW generally and the SoJ in particular face an uncertain future. His photographs explore at least three possible futures, three alternatives that to some extent overlap each other. The first future course continues resource extraction, accounting for an altered environment, new ideas of sustainability, and shifting global demand. The second course involves the eventual suburbanization of Jefferson, which also includes seeking new job opportunities unrelated to resource extraction. The third potential future involves a relative retreat for Jefferson, leaving the area remote and allowing nature to regrow, with only small-scale resource extraction continuing to occur.

The first possible future, then, attempts to adapt the current industrialized, large-scale resource extraction to a changed environment and economy. The lumber and fishing companies have to maintain and plant the land they want to harvest to maintain production requirements, while also accounting for new demands locally and globally. Further consideration towards the kind of nature that exists in Jefferson has to take into account wildlife habitat and how much nature is maintained by human action.

A close look at "Freshly Felled Trees" can incite thoughts that other photographs make explicit: the environmental destruction that is possible with modern, mechanized, monoculture logging. In the field of stumps resulting from one day of logging, no trees or obvious wildlife remain. How much wildlife had lived there is also open to question: the forest planted is a monoculture—the same type of tree, all of the same age. Other photographs show, with poignancy or irony, equivalent transformations of forests and clear-cuts. For instance, in "Adolescent Bald Eagle, Queets, Washington" (Johnson, 2009, pp. 36-37²³), a solitary young bald eagle is perched on a spindly tree, denuded of leaves, surrounded by a clear-cut tract, with a row of trees in the background and partially clear-cut mountains rising in the distance. Not appearing as a manifestation of American expansion, exceptionalism, or power, the eagle seems lonely and forlorn, with lowered chances of survival and reproduction. Ecological diversity at all levels—a rich plenitude of animals, insects, and flora—requires diversity in the ages and types of trees.

In other photographs, Johnson probes potential practices that could create a more sustainable extractive industry. "Topped Trees Reserved for Wildlife, Nemah, Washington"



Figure 8. “Topped Trees Reserved for Wildlife, Nemah, Washington” (Johnson, 2009, p. 83; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006510/full>).

shows a row of trees with their branches and tops cut off to meet state laws on wildlife preservation (see Figure 8). As Johnson writes, “These trees were most likely left by the logging crew as ‘snags’ for wildlife habitat... While leaving a small stand of topped trees along the edge of a clear-cut might meet the state’s requirements for snag preservation or creation, it is no replacement for a diverse and healthy ecosystem” (2009, p. 137).

The practice pictured may meet minimum state requirements, but if logging continues, whether and how to create a sustainable nature needs to be considered. Is nature to be completely planted, and then later harvested, for lumber and food, or are areas, species, or ecosystems to be maintained through extractive techniques that respect nature and its diversity?

Johnson captures some of the technologies and people engaged in sustaining extractive industries and/or natural ecosystems (see Figures 9 and 10, next page). Tree seedlings must be planted and fish eggs hatched. Johnson’s photographs indicate that both are highly mechanized and ordered: the pink fish eggs are in their rectangular trays under eerie unnatural lighting, and the larch seedlings, planted neatly in rows, are growing in a greenhouse whose glass is opaque—protecting the seedlings in a highly controlled environment.

Several of Johnson’s portraits show men involved in attempting to sustain or restore natural resources. Roger Moseley counts Coho spawn nests to see how well the salmon are doing. Carl places salmon carcasses near where the fish spawn to produce water rich in essential nutrients for the spawn. Rather than plant alders, cheap quick-growing lumber, Jose tries to restore proud trees, planting Douglas Fir by hand (“Roger Mosley Counting Coho



Figures 9 and 10. Left: “Western Larch Seedlings, Webster Forest Nursery, Tumwater, Washington” (Johnson, 2009, p. 115; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006481/full>). Right: “Sol Duc Hatchery, Washington” (Johnson, 2009, p. 56; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006536/full>).

Spawn Nests along the Upper Sol Duc River, Washington” (Johnson, 2009, p. 23²⁴); “Carl Placing Hatchery Salmon Carcasses in Stream near Sappho, Washington” (Johnson, 2009, p. 113²⁵); “José planting Douglas Fir Seedlings outside Rainier, Oregon” (Johnson, 2009, p. 116-117²⁶)).

Juan Abalos and Juan Valencia log over already-logged areas, using hand-held machines (“Juan Valencia, Lower Hoh River, Washington” (Johnson, 2009, pp. 78, 81²⁷). This demonstrates a reversal from the time when loggers wasted thousands of board feet by cutting trees 15 feet off the ground (so that they had to saw through slightly less wood). But Abalos and Valencia also show that through careful and complete harvesting it is still possible to make a living off the land, although certainly the task is not as heroic, and probably not as profitable, as logging once was.

How resource extraction will proceed is still uncertain, especially as large firms such as Weyerhaeuser modify their operating strategies and consider closing mills and lumberyards. The Weyerhaeuser sorting yard may remain, but—as Johnson (2009, p. 134) notes about the photograph—Weyerhaeuser is closing many of its sorting yards and mills in the PNW because of its expanded global operations and the changing economics of timber production. As those reorientations occur, sometimes the timber company does not replant its land for tree harvest, but subdivides into suburban building lots, as Johnson documents in “Willapa Sands Estates, South Bend, Washington” (Johnson, 2009, pp. 84-85²⁸).

Subdivisions contribute to the second possible future for Jefferson, the growth of suburbia. Suburbanization would require new types of employment and a different relationship to nature and the landscape. A further question is how the new residents will further shift the demographics and culture of the region. What type of jobs will support this development is uncertain, and how much land will still be logged and fished is unclear.

Johnson includes a series of photographs showing diverse attempts at economic survival in a land whose traditional jobs have withered. He portrays a sweater store in a repurposed

Freemasons lodge running a sale, a trailer in a parking lot selling miscellaneous items from adult books to a used truck, and “Sucher and Sons” selling only Star Wars collectibles. These collectibles were presumably gathered over decades by the Suchers, exhibiting dedication to a particularly iconic movie and subculture. The store has been open since 1997 and represents one new, seemingly economically viable alternative to extractive industries. It is unclear how enriching the enterprise is; it could be a labor of love just as much or more than it is an economically sustainable store (“The Sweater Store, South Bend, Washington” (Johnson, 2009, p. 89²⁹); “Adult Books, Firewood, and Truck for sale, Port Angeles, Washington” (Johnson, 2009, p. 41³⁰); “Colin Sucher & Sons Star Wars Store, Aberdeen, Washington” (Johnson, 2009, p. 95³¹)).

Johnson also documents a “Just Sell It Now on eBay Consignment Store, South Bend, Washington” (Johnson, 2009, p. 93³²) that displays furniture and household items in the main window. Reflected in the window are a hillside and construction equipment, contrasting the hardscrabble lifestyle of the region with its interior comforts. And yet the store’s task is to sell these items on eBay, to ship the items to whoever is the highest bidder regardless of their location. Thus the store does not necessarily rely on a local economy, but a global economy connected via the internet. The store could exist anywhere and, like Sucher and Sons, does not necessarily relate to the traditional cultures or identity of the region. These stores could exist in any town or city, in some ways disconnecting them from any regional identity—though certainly something unique like a Star Wars store could become a local attraction as well. They are symptomatic of a changing or disappearing local identity based on direct engagement with the land.

Suburbanization also lurks in the background of some images—present, but not presented. The Starlite Drive-In is near an I-5 interchange, where sprawl manifests itself, and the mobility of the I-5 invites more suburban sprawl as well as the growth of Jefferson’s urban areas. Open farmland also invites suburbanization, as does the logging companies’ sale (rather than replanting) of their clear-cut areas. These forms of suburban development also differ from Jefferson’s identity of working on the land.

The third possible future involves a relative population retreat from Jefferson. In “Brad Balderson on His Longliner, the *Fish Hog*, Neah Bay, Washington,” Balderson has a worried, uncertain face as he sits in his boat with the outdoors reflected in the glass (see Figure 11, next page). As Johnson notes, Brad fishes for many types of fish, but “in addition to shrinking quotas and cost licenses for each fishery, he pays increasingly more for fuel. Brad thought that he might soon sell his own boat and permits to the Federal Government as part of its buy-out program” (2009, p. 138). He is uncertain whether he will have any livelihood at all; it is unclear where he is going and what he is going to do. Of his four sons, three are going into fishing; but the fourth, Harold Balderson (“Harold Balderson, Neah Bay, Washington” (Johnson, 2009, p. 111³³)), joined the army to see the world rather than staying in Neah Bay to fish (p. 138).

As the economic future for residents of the SoJ becomes uncertain or untenable, it is possible that many will move to find a livelihood elsewhere (especially the younger generation). Johnson depicts several abandoned homes and storefronts, such as “Arlington, Washington,” which shows an abandoned home in a dark green forest (not planted for harvest, though clearly second-growth), moss covering most of the roof, the wood rotted in places, and brush surrounding the side of the house (see Figure 12, next page). Working slowly over time, nature is transforming the structure, decaying its manufactured wood, overgrowing its roof, and eventually breaking down its windows and walls. Probably the house now hosts new flora and



Figure 11. “Brad Balderson on His Longliner, the *Fish Hog*, Neah Bay, Washington” (Johnson, 2009, p. 110; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006485/full>).



Figure 12. “Arlington, Washington” (Johnson, 2009, p. 19; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain-/id/i5006579/full>).

fauna. Nature's processes of growth and decay can carry a sense of promise as nature reclaims and remolds human artifacts.

In other cases, humans are removing their own constructions; many dams, including some pictured in *Sawdust Mountain*, now no longer exist. The dams on the Elwha River, like the dams on the Rogue, have been torn down, eliminating local sources of electricity and symbols of the human domination of nature. One of the main goals of dam removal is to restore salmon spawning habitat (Johnson, 2009, p. 136); humans are attempting to reestablish natural patterns long ago altered by human action.

Thus we have nature reclaiming abandoned human habitations and humans restoring natural habitat as part of this future of population decline. The future for the residents who stay may still be uncertain, but in many ways the identity and culture of the region would continue to be tied to the land. The area would become remote again, the industrial extraction industries would have left, and the few remaining residents could still survive off the land on a much smaller scale, by for example catching salmon one at a time or using tribal methods that are sustainable.

With this possibility the relationship between humans and nature that forms the identity and culture of the region would change, and yet remain true to the region. In the SoJ, the time is long past when nature was inexhaustible and immense, or when "man was king" and ended up harvesting most of the old-growth forest in the region; in this possible future of re-remoting the region and lessening the scale of human activity, there lies a potential for a new symbiotic and sustainable relationship to emerge. The small, impermanent, and decentered recreational vehicle in the "Confluence of the Rogue and Illinois Rivers, Oregon" suggests one manifestation of that new relationship (see Figure 13).



Figure 13. "Confluence of the Rogue and Illinois Rivers, Oregon" (Johnson, 2009, p. 27; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006570/full>).

Similarly, “Scrapped Train, Arlington, Washington” (Johnson, 2009, p. 47³⁴) shows abandoned rail cars, left to rust, rot, and decay in a swampy area. The scrapped train seems particularly relevant to the State of Jefferson; in any push to reestablish remoteness, some of a modern transportation web must be forgone and the human footprint rendered smaller.

Perhaps the best single summary photograph is the last one in the book, “Destruction Island” (see Figure 14), which reprises the narrative arc of “Starlite Drive-In.” Destruction Island’s name derived from the many shipwrecks on its rocks. So the settlers, to make seaborne trade viable, built a lighthouse on the island and installed a lighthouse keeper. The transformative human presence on the island decreased the danger presented by nature, giving the settlers the ability to harvest and transport natural resources, resulting in increased trade and wealth. But with the advent of modern technology, the manned lighthouse was replaced by an automatic light (just as the drive-ins screen has been replaced by electronic screens), and human beings abandoned the island (and the lighthouse keeper lost his job during this transformation). After the human beings left, nature returned—birds, nesting grounds, and possibly sea mammals on the rocks. Johnson’s notes on the photograph detail this history (2009, p. 139); in Johnson’s photograph, Destruction Island is distant and solitary, surrounded by a calm gray sea and a cloudy sky. The island is slightly off center to the left, and to the right the sun or the moon shines through the clouds, illuminating the water if not the island. The photograph evokes feelings of remoteness, the small automated light shows the limited size of human accomplishments against the extensive sea and infinite sky, a kind of natural sublime that reminds us to accomplish our purposes within the confines of nature, not as conquerors of it.



Figure 14. “Destruction Island, off the Coast of Washington” (Johnson, 2009, p. 124-125; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006475/full>).

Now that human beings have struck down the soaring power and exhausted the economic value of the original forests, these areas are once again being neglected in places. Homesteads are returning to wilderness. Jefferson is, in places, becoming remote once again. And this remoteness is now, more than anything, a marker of a sublime, for the remote can still provide a combination of pleasure, awe, and terror that is present in the sublime: the ability for nature to return, to turn the tables yet again on human beings, and to transform an abandoned house or island into a place teeming with life. In this remoteness, the human is decentered, so that human beings act with but do not dominate over nature, keeping their RVs on the edge, farming in ways conducive to nature's diversity, and setting a light on an island but not imposing a further presence (Johnson, 2009, p. 139).

Johnson's photographs and their narrative arc contribute to our understandings and allow us to experience visually the transformations in the State of Jefferson. His images complement the social science and environmental studies that document the changes and suggest possible futures that can grow out of the present. To experience the photographs is to have an additional narrative and vivid particulars to illustrate the past, present, and future of Jefferson.

Endnotes

¹ We wrote this article together, in conversation and e-mail communication with each other. Peter G. Stillman taught a course on "Sawdust Mountain" at Vassar College, which supported a research trip to the PNW, for which he is grateful. Gordon Stillman, an MFA candidate and professional photographer, is responsible for most of the photographic interpretation, including the narrative arc. Eirik Johnson kindly gave us, along with the journal, permission to reprint his photographs (© Eirik Johnson). Johnson's photographs are cited to the page in Johnson (2009) and by URL to the reproductions on Johnson's website; the photographs' titles come from the book.

² This statement is from Johnson's website. Retrieved from <http://eirikjohnson.com/sawdustmountain/sawdustmountain>

³ Mapping where the Starlite Drive-In was located, we discovered it closed in 1997 and is literally next to I-5 and a rest area/truck stop.

⁴ In Douglas and Jackson counties, the drop has been more pronounced. From a high of 1,749,544 thousand board feet (MBF) in 1955, Douglas County's harvest stayed above 950,000 through 1989, and in 2004 stood at just under 500,000 MBF. From a high of more than 500,000 MBF in 1955, Jackson County's harvest dropped to 107,134 MBF in 2004. Of the seven Oregon counties that comprise the State of Jefferson, only Klamath County harvested about as much timber in the 1950s as in the decade from 1995 to 2004, but that apparent stability masks a notable burst—about a doubling—of timber production from 1971 to 1975 (Andrews & Kutara, 2005). From one perspective, Johnson's photographs are an interpretation of the meaning of these declines in timber production.

⁵ According to Beleiciks and Krumenauer (2012), "The most challenging economic structural change faced by rural Oregon has been the reduction in logging jobs, and the shift away from wood product manufacturing jobs. In 1979, roughly two of every three manufacturing jobs in rural Oregon belonged in wood product manufacturing. By 2010, wood products accounted for one out of three rural manufacturing jobs. The mix of Oregon's manufacturing jobs shifted away from 'traditional' manufacturing jobs in non-metro areas to manufacturing jobs in the metro areas, many of which require workers with completely different sets of skills. In 1979, Oregon's metropolitan areas—including counties that would become MSAs in later years—accounted for about seven out of every 10 manufacturing jobs. Now, about nine out of every 10 jobs in manufacturing is in a metropolitan area."

⁶ For good Oregon-wide historical data on wages as well as employment, timber harvest, and wood products as a percentage of Oregon GDP, see Lehner (2012).

⁷ For excellent data that unfortunately have not been updated, see Gharrett and Hodges (1950). "Plummet" is not too strong a word, as the authors explain: "Total landings [of spring Chinook Salmon] have dropped from 900,000

pounds landed in 1923 to 5,000 pounds in 1947... By far the majority of these fish were taken from the Rogue and Umpqua Rivers” (p. 8) in Jefferson.

⁸ Statements attributed to Johnson in this paragraph and the next come from his lecture at Vassar College on September 7, 2012 on the occasion of the opening of “Sawdust Mountain.”

⁹ Brown is the chief curator of the Henry Art Gallery in Seattle, Washington. That the framing material is written by a curator, an essayist (and poet and short-story writer), and a poet indicates that understanding the transitions in the PNW is a multidisciplinary project, whose interpretations look to social science data on productions, jobs, and wages for a validating baseline.

¹⁰ The Yosemite Act was approved June, 30, 1864 (13 Stat. 325); for its long-term significance, see Dilsaver (1994). Watkins’s photographs can be found at <http://www.carletonwatkins.org/index.php>

¹¹ Many of Kinsey’s photographs are available at the University of Washington Library and online at <http://content.lib.washington.edu/clarkkinseyweb/index.html>

¹² Johnson is not going back to the wilderness as an original nature; he recognizes that “nature” always includes the results of human action. See Cronon (1995).

¹³ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006486/full>

¹⁴ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006531/full>

¹⁵ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006529/full>

¹⁶ Johnson’s sense of irony or a dry, bleak, or knowing humor appears in his only photograph of a substantial stand of large trees: a photograph of a picture that depicts a steep hillside populated with large evergreens; the picture is made from multicolored dryer lint (“Missy Barlow’s Dryer Lint Landscape, Lower Hoh River, Washington” (Johnson, 2009, p. 33; reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain#/id/i5006562/full>). Few such extensive stands of trees exist except in reproductions. The presence of the trees in the lint hints at the absence of the trees in the forests.

¹⁷ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006513/full>

¹⁸ Learning and knowing through work is a central theme of Richard White’s (1995) history of the Columbia River.

¹⁹ As early as 1900, Oregon shifted “from a predominantly rural to a numerically urban society,” with the result that many dams were built for electricity on rivers that had had salmon runs (Taylor, 1999, pp. 173-174). By 1930, 51.3% of Oregon’s population lived in urban areas, including cities in the SoJ such as Medford, Grants Pass, and Roseburg, all on Highway 99/I-5 corridor. Since World War II, urbanization has continued (Taylor, 1999, p. 172).

²⁰ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006548/full>

²¹ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006559/full>

²² The “spatial turn” in geography and history, with its emphasis on place as the interaction between human beings and the particular natural and cultural features of the location they inhabit, runs parallel with Johnson’s intense concern with place and identity; see Withers (2009).

²³ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006554/full>

²⁴ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006574/full>

²⁵ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain - /id/i5006483/full>

- ²⁶ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006480/full
- ²⁷ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006511/full
- ²⁸ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006506/full
- ²⁹ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006504/full
- ³⁰ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006550/full
- ³¹ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006498/full
- ³² Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006500/full
- ³³ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006484/full
- ³⁴ Reproduction of image accessible at <http://eirikjohnson.com/sawdustmountain/sawdustmountain> - /id/i5006546/full
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References

- Andrews, A., & Kutara, K. (2005). *Oregon's timber harvest: 1849-2004*. Salem, OR: Oregon Department of Forestry. Retrieved from http://www.oregon.gov/odf/state_forests/frp/docs/oregonstimmerharvests.pdf
- Beleiciks, N., & Krumenauer, G. (2012, November 19). Key workforce challenges: More severe in Oregon's rural areas. *Qualityinfo.org* [Oregon Employment Department]. Retrieved from <http://www.qualityinfo.org/olmisj/ArticleReader?itemid=00008442>
- Brier, H. M. (1958). *Sawdust empire: The Pacific Northwest*. New York, NY: Knopf.
- Crane, J. (2011). *Finding the river: An environmental history of the Elwha*. Corvallis, OR : Oregon State University Press.
- Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground: Rethinking the human place in nature* (69-90). New York, NY: W. W. Norton and Company.
- Dilsaver, L. (1994). *America's national park system: The critical documents*. Lanham, MD: Rowman & Littlefield Publishers.
- Gharrett, J. T., & Hodges, J. I. (1950, December). Salmon fisheries of the coastal rivers of Oregon south of the Columbia. Portland, OR: Oregon Fish Commission. Retrieved from http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/2950/Salmon_Fisheries_South_Columbia_ocr.pdf;jsessionid=9B39FE7BD928BCBA5E96491CD2954298?sequence=1
- Johnson, E. (2009). *Sawdust mountain*. New York, NY: Aperture. Photographs retrieved from <http://eirikjohnson.com/sawdustmountain/sawdustmountain>

- Lehner, J. (2012, January 23). Historical look at Oregon's wood product industry. *Oregon.gov* [Oregon Office of Economic Analysis]. Retrieved from <http://oregoneconomicanalysis.com/2012/01/23/historical-look-at-oregons-wood-product-industry/>
- Robbins, W. G. (1988). *Hard times in paradise: Coos Bay, Oregon, 1850-1986*. Seattle, WA: University of Washington Press.
- Taylor, III, J. E. (1999). *Making salmon: An environmental history of the northwest fisheries crisis*. Seattle, WA: University of Washington Press.
- White, R. (1995). *The organic machine*. New York, NY: Hill and Wang.
- Withers, C. W. J. (2009). Place and the "spatial turn" in geography and history. *Journal of the History of Ideas*, 70(4), 637-658.